# *Trends in Telephone Service*


*Industry Analysis and Technology Division*
*Wireline Competition Bureau*

*May 2002*

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**Publication:** ***Trends in Telephone Service – May* 2002**

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# Table of Contents

# Introduction

*Trends in Telephone Service* is published by the Industry Analysis and Technology Division (formerly the Industry Analysis Division) of the Federal Communication Commission's Wireline Competition Bureau (formerly the Common Carrier Bureau).[1] We have designed this report to provide answers to some of the most frequently asked questions about the telephone industry -- questions asked by consumers, members of Congress, other government agencies, telecommunications carriers, and members of the business and academic communities. To this end, the report contains summary information about the size, growth, and development of the telephone industry, including data on market shares, minutes of calling, number of lines, and telephone subscribership. The report also provides information about access charges, advanced telecommunications, consumer expenditures for service, infrastructure, international telephone traffic, local telephone competition, long distance carriers, telephone rates and price changes, and universal service support.

*Trends in Telephone Service* summarizes a variety of information contained in other reports that are published periodically by the Industry Analysis and Technology Division.[2] In most cases, these other reports give much more detailed information than that provided here. These reports can be accessed from our Internet site, **FCC-State Link**, at www.fcc.gov/wcb/stats. In addition, to facilitate further information gathering by consumers and others, we have listed additional sources of information in Appendix B, and we have provided information on contacting the authors of this report in Appendix C.

Highlights from sections in the report on advanced telecommunications services, international calling, local competition, telephone rates, subscribership, and toll-free numbers are shown below.

**Advanced Telecommunications Services**

- High-speed lines (over 200 Kbps in at least one direction) connecting homes and businesses to the Internet increased by 36% during the first half of 2001, to a total of 9.6 million lines (or wireless channels) in service from about 7.1 million at the end of December 2000.

- About 5.9 million high-speed lines provided speed of over 200 Kbps in both directions, and thus met the Commission's definition of advanced services, compared to about 4.3 million at the end of December 2000.

**International Calling**

- The number of calls made from the United States to other countries increased from 200 million in 1980 to 6.6 billion in 2000.

[1] *Trends in Telephone Service* was last published in August 2001.

[2] See Appendix A for a list of these publications.

- In 2000, Americans spent about $14.9 billion on international calls. On average, carriers billed 51 cents per minute for international calls in 2000, a decline of more than 60% since 1980.

**Local Telephone Competition**

- As of June 2001, Competitive Local Exchange Carriers (CLECs) provided 17.3 million (or 9.0%) of the approximately 192 million nationwide local telephone lines that were in service to end users as opposed to 14.9 million (or 7.7%) of nationwide local telephone lines at the end of 2000.

- About one-third of CLEC end-user lines are served over local loop facilities that the CLECs own.

- Incumbent local exchange carriers (ILECs) reported providing other carriers about 4.4 million lines on a resale basis as of June 30, 2001, compared to about 5.4 million lines six months earlier. ILECs provided about 7.9 million unbundled network element (UNE) loops as of June 30, 2001, compared to about 5.3 million loops six months earlier.

**Telephone Rates**

- Local phone rates have remained steady over the last decade. The average monthly local residential charge for service was $21.84 in October 2001 as compared to $19.24 in 1990. For a business with a single phone line, the representative charge for service was $42.18 in October 2001 as compared to $41.21 in October 1990.

**Subscribership**

- More than twenty-three million households have been added to the nation's telephone system since November 1983. As of November 2001, 102.2 million households had telephone service.

**Toll-Free Numbers**

- There are currently four toll-free prefixes in use - 800, 888, 877, and 866 - with almost 24.5 million toll-free numbers assigned as of the end of April 2002.

# 1 Access Charges

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

In the early 1980s, AT&T provided about three-quarters of the nation's local telephone service and almost all interstate long distance service. Because revenue sharing was largely an internal process for AT&T, it was able to charge prices above true economic cost for long distance calls and share the revenues with local telephone companies. These transfers, while reducing the pressures on the local companies to raise monthly rates, contributed to inefficiently high long distance rates. The high rates were responsible for suppressing demand for long distance calls and inducing large corporations to bypass the public switched network. Moreover, while such revenue sharing arrangements were sustainable in an industry where one firm monopolized both long distance and local service, they were not compatible with a competitive long distance industry.

In mid-1984 the FCC, in cooperation with a Federal-State Joint Board composed of both federal and state regulators, introduced sweeping changes in the way that local telephone companies charged for their services. The historic method of sharing revenues was replaced with a new system of access charges that provided a uniform method for local telephone companies to charge long distance carriers for the origination and termination of interstate traffic on their local networks. In addition, monthly subscriber line charges (SLCs) were introduced to recover a portion of the fixed costs of the local telephone companies' loops directly from end users on a per-line basis.[1] Since local telephone companies were required to reduce their charges to long distance carriers -- dollar for dollar -- as SLCs were introduced, the pricing changes reduced the implicit subsidy from long distance use to local service. The rebalancing of prices between local service and interstate long distance calls during the 1980s had a fundamental impact on the telephone industry as the price of long distance service fell and the volume of long distance calling surged.

In mid-1997, as part of its implementation of the 1996 Telecommunications Act, the FCC introduced further interstate access charge reform. Prior to the 1997 reform, local carriers continued to recover part of their fixed costs in per-minute charges (from long distance carriers) and part from end users (in SLCs.) Presubscribed interexchange carrier charges (PICCs) were created in order to allow local carriers to recover the remaining portion of their fixed loop costs from long distance carriers on a per-line, instead of a per-minute, basis.

[1] Under the Commission's nomenclature, SLCs are called access charges even though they are collected from customers (end users) rather than long distance carriers.

As part of access charge reform in May of 2000, the FCC eliminated PICCs and consolidated them with SLCs, and all price-cap local exchange carriers implemented lower access charges paid by long distance carriers. In October of 2001, the FCC modified its interstate access charge rules for rate-of-return incumbent local exchange carriers. These changes for the rate-of-return carriers were designed to align the interstate access rate structure more closely with the manner in which costs are incurred by driving per-minute access charges towards lower, more cost-based levels.

Average monthly SLCs and PICCs are shown in Table 1.1, and average per-minute rates charged to long distance carriers are shown in Table 1.2. Both tables report historical averages for all local exchange carriers (LECs) that file access tariffs subject to price-cap regulation and all LECs in the National Exchange Carrier Association (NECA) pool. These LECs control over 98% of the industry's access lines. Current per-line charges and per-minute charges are reported for each of the carriers in Tables 1.3 and 1.4, respectively.

The data in Table 1.2 clearly illustrate the effectiveness of access reform in reducing the prices long distance carriers pay per minute for access to the local telephone companies' networks. Per-minute access prices have continually decreased over time, a trend that continues with implementation of the 1997 and 2000 reforms.

# Table 1.1
## Interstate Per-Line Access Charges
## (National Average per Month per Line) 1/

| Rates in Effect | | Charged to End Users 2/ (Subscriber Line Charges) | | | Charged to Long Distance Carriers 3/ (Presubscribed Interexchange Carrier Charges) | | | |
|---|---|---|---|---|---|---|---|---|
| From | To | Residential and Single-Line Business | Non-Primary Residential | Multiline Business and Centrex | Residential and Single-Line Business | Non-Primary Residential | Multiline Business | Centrex |
| 05/26/84 | 05/31/85 | $0.00 | | $4.99 | | | | |
| 06/01/85 | 09/30/85 | 1.00 | | 4.99 | | | | |
| 10/01/85 | 05/31/86 | 1.00 | | 4.97 | | | | |
| 06/01/86 | 12/31/86 | 2.00 | | 4.97 | | | | |
| 01/01/87 | 06/30/87 | 2.00 | | 5.12 | | | | |
| 07/01/87 | 12/31/87 | 2.60 | | 5.12 | | | | |
| 01/01/88 | 11/30/88 | 2.60 | | 5.01 | | | | |
| 12/01/88 | 03/31/89 | 3.20 | | 5.01 | | | | |
| 04/01/89 | 12/31/89 | 3.50 | | 4.94 | | | | |
| 01/01/90 | 06/30/90 | 3.48 | | 4.84 | | | | |
| 07/01/90 | 12/31/90 | 3.48 | | 4.83 | | | | |
| 01/01/91 | 06/30/91 | 3.48 | | 4.77 | | | | |
| 07/01/91 | 11/27/91 | 3.49 | | 4.74 | | | | |
| 11/28/91 | 06/30/92 | 3.49 | | 4.76 | | | | |
| 07/01/92 | 06/30/93 | 3.49 | | 4.68 | | | | |
| 07/01/93 | 06/30/94 | 3.50 | | 5.37 | | | | |
| 07/01/94 | 06/30/95 | 3.50 | | 5.45 | | | | |
| 07/01/95 | 06/30/96 | 3.50 | | 5.50 | | | | |
| 07/01/96 | 06/30/97 | 3.50 | | 5.53 | | | | |
| 07/01/97 | 12/31/97 | 3.50 | | 5.68 | | | | |
| 01/01/98 | 06/30/98 | 3.50 | $4.98 | 6.92 | $0.49 | $1.50 | $2.52 | $0.35 |
| 07/01/98 | 12/31/98 | 3.50 | 4.99 | 7.11 | 0.49 | 1.38 | 2.38 | 0.38 |
| 01/01/99 | 06/30/99 | 3.50 | 5.88 | 7.05 | 0.49 | 1.38 | 2.22 | 0.32 |
| 07/01/99 | 12/31/99 | 3.50 | 5.84 | 6.94 | 0.95 | 1.77 | 2.78 | 0.42 |
| 01/01/00 | 06/30/00 | 3.50 | 5.81 | 6.94 | 0.92 | 1.70 | 2.44 | 0.35 |
| 08/11/00 | 06/30/01 4/ | 4.28 | 5.99 | 6.88 | 0.00 | 0.00 | 2.30 | 0.37 |
| 07/01/01 | 12/31/01 | 4.78 | 5.93 | 6.66 | 0.00 | 0.00 | 1.35 | 0.22 |
| 01/01/02 | 06/30/02 | 4.92 | 5.93 | 6.79 | 0.00 | 0.00 | 1.35 | 0.22 |

1/ This table shows average rates (weighted by access lines) for all local exchange carriers (LECs) that file access tariffs subject to price-cap regulation and all LECs in the National Exchange Carrier Association (NECA) pool.

2/ Prior to 1/01/98, carriers did not charge separate subscriber line charge (SLC) rates for primary and non-primary residential lines. Therefore, the residential and single-line business average SLCs reported prior to 1/01/98 include all residential SLC charges. The average residential and single-line business SLC rate as of 1/01/98 excludes non-primary residential SLCs. Non-primary SLCs are now reported separately, except for the LECs in the NECA pool, which continue to charge a single residential SLC. Under price-cap regulation, as of July 1, 2001, the caps on SLCs for primary residential and single-line business, non-primary residential, and multiline business and Centrex lines equal $5.00, $7.00, and $9.20, respectively. For NECA pool companies, the residential SLC cap is $3.50, while the multiline business and Centrex SLC cap equals $6.00.

3/ On 1/01/98, price-cap carriers began to charge presubscribed interexchange carrier charges (PICCs). The reported PICCs are averages per line including both price-cap and NECA pool lines. While carriers did not charge different rates for Centrex and multiline business SLCs, they did charge different PICC rates for these lines. Therefore, the average multiline business and Centrex PICC rates are reported separately. However, multiline business line counts, used to compute average PICC rates, include Centrex lines for LECs in the NECA pool, which do not charge PICCs or distinguish in access filings between the two line types. On 7/01/00, price-cap carriers stopped charging residential and single-line business PICCs. PICCs for other business lines have remained unchanged since that time. The cap on PICCs for multiline business lines is $4.31. Centrex groups of 9 or fewer lines are capped at the multiline business PICC rate of $4.31 per group, and Centrex groups with more than 9 lines are capped at $0.48 per line (1/9th the multiline business rate).

4/ Although the charges took effect on July 1, 2000, some companies made adjustments to the tariffs which did not take effect until August 11, 2000.

Source: Industry Analysis Division, Common Carrier Bureau, *October 2001 Monitoring Report* (November 2001) and access tariff filings.

# Table 1.2
## Interstate Per-Minute Access Charges
## (National Average in Cents per Minute) 1/

| Rates in Effect | | Interstate Charges for Switched Access Service | | | | |
|---|---|---|---|---|---|---|
| From | To | Carrier Common Line per Originating Access Minute 1/ | Carrier Common Line per Terminating Access Minute 1/ | Traffic Sensitive per Switched Minute | Non-Traffic Sensitive per Switched Minute 2/ | Total Charge per Conversation Minute 3/ |
| 05/26/84 | 01/14/85 | 5.24 ¢ | 5.24 ¢ | 3.10 ¢ | | 17.26 ¢ |
| 01/15/85 | 05/31/85 | 5.43 | 5.43 | 3.10 | | 17.66 |
| 06/01/85 | 09/30/85 | 4.71 | 4.71 | 3.10 | | 16.17 |
| 10/01/85 | 05/31/86 | 4.33 | 4.33 | 3.10 | | 15.38 |
| 06/01/86 | 12/31/86 | 3.04 | 4.33 | 3.10 | | 14.00 |
| 01/01/87 | 06/30/87 | 1.55 | 4.33 | 3.10 | | 12.41 |
| 07/01/87 | 12/31/87 | 0.69 | 4.33 | 3.10 | | 11.49 |
| 01/01/88 | 11/30/88 | 0.00 | 4.14 | 3.10 | | 10.56 |
| 12/01/88 | 02/14/89 | 0.00 | 3.39 | 3.00 | | 9.60 |
| 02/15/89 | 03/31/89 | 0.00 | 3.25 | 3.00 | | 9.46 |
| 04/01/89 | 12/31/89 | 1.00 | 1.83 | 3.00 | | 9.11 |
| 01/01/90 | 06/30/90 | 1.00 | 1.53 | 2.50 | | 7.78 |
| 07/01/90 | 12/31/90 | 1.00 | 1.23 | 2.50 | | 7.48 |
| 01/01/91 | 06/30/91 | 1.00 | 1.14 | 2.40 | | 7.18 |
| 07/01/91 | 06/30/92 | 0.88 | 1.06 | 2.40 | | 6.97 |
| 07/01/92 | 06/30/93 | 0.79 | 0.95 | 2.40 | | 6.76 |
| 07/01/93 | 06/30/94 | 0.88 | 1.16 | 2.20 | | 6.66 |
| 07/01/94 | 06/30/95 | 0.84 | 1.08 | 2.10 | 0.28 ¢ | 6.89 |
| 07/01/95 | 06/30/96 | 0.74 | 0.89 | 1.96 | 0.21 | 6.16 |
| 07/01/96 | 06/30/97 | 0.72 | 0.89 | 1.95 | 0.17 | 6.04 |
| 07/01/97 | 12/31/97 | 0.64 | 0.84 | 1.63 | 0.14 | 5.18 |
| 01/01/98 | 06/30/98 | 0.68 | 0.23 | 1.29 | 0.21 | 4.04 |
| 07/01/98 | 12/31/98 | 0.91 | 0.20 | 0.99 | 0.30 | 3.82 |
| 01/01/99 | 06/30/99 | 0.82 | 0.16 | 0.98 | 0.32 | 3.71 |
| 07/01/99 | 12/31/99 | 0.37 | 0.10 | 0.86 | 0.28 | 2.82 |
| 01/01/00 | 06/30/00 | 0.32 | 0.10 | 0.86 | 0.31 | 2.85 |
| 08/11/00 | 06/31/01 4/ | 0.23 | 0.07 | 0.52 | 0.26 | 1.91 |
| 07/01/01 | 12/31/01 | 0.15 | 0.07 | 0.48 | 0.24 | 1.71 |
| 01/01/02 | 06/30/02 | 0.15 | 0.07 | 0.47 | 0.24 | 1.69 |

1/ This table shows average rates (weighted by minutes of use) for all local exchange carriers (LECs) that file access tariffs subject to price-cap regulation and all LECs in the National Exchange Carrier Association (NECA) pool. The average rates reported here do not include the average revenue per minute from subscriber line charges (SLCs) or primary interexchange carrier charges (PICCs), both of which are reported in Table 1.1.

2/ Non-traffic-sensitive charges include charges assessed on a per-month, per-unit basis. Prior to 07/01/94, these charges were included in the average traffic-sensitive rates.

3/ The total charge per conversation minute consists of charges on the originating end of the call, which are adjusted for dialing and call setup time, plus charges on the terminating end. Originating charges per conversation minute equal the carrier common line charge per originating access minute plus the traffic-sensitive charge per switched minute, both multiplied by 1.07 to account for dialing and call setup time, plus the non-traffic-sensitive charge per switched minute. Terminating charges per conversation minute equal carrier common line charges per terminating access minute plus both traffic-sensitive and non-traffic-sensitive charges per switched minute.

4/ Although the charges took effect on July 1, 2000, some companies made adjustments to the tariffs which did not take effect until August 11, 2000.

Source: Industry Analysis Division, Common Carrier Bureau, *October 2001 Monitoring Report* (November 2001) and access tariff filings.

## Table 1.3
## Interstate Per-Line Access Charges by Carrier
## (In Dollars per Month per Line) 1/

| Company | Rates Effective from 01/01/02 to 06/30/02 | | | | | | | 2000 Average Monthly Access Lines 2/ (Thousands) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Subscriber Line Charges | | | Presubscribed Interexchange Carrier Charges | | | | | | |
| | Residential and Single-Line Business | Non-Primary Residential | Multiline Business and Centrex | Residential and Single-Line Business | Non-Primary Residential | Multiline Business | Centrex | Residential and Single-Line Business | Non-Primary Residential | Multiline Business and Centrex |
| BellSouth | $5.00 | $6.95 | $7.84 | $0.00 | $0.00 | $2.94 | $0.32 | 15,105 | 2,615 | 6,675 |
| Cincinnati Bell | 5.00 | 6.07 | 5.32 | 0.00 | 0.00 | 0.00 | 0.00 | 653 | 86 | 293 |
| Citizens | 4.97 | 6.80 | 8.56 | 0.00 | 0.00 | 2.90 | 0.46 | 1,379 | 111 | 407 |
| Global Crossing | 4.71 | 5.91 | 8.03 | 0.00 | 0.00 | 1.02 | 0.28 | 644 | 93 | 264 |
| Iowa Telecom | 5.00 | 7.00 | 9.20 | 0.00 | 0.00 | 4.31 | 0.59 | 99 | 5 | 19 |
| Qwest | 4.97 | 6.53 | 7.87 | 0.00 | 0.00 | 0.69 | 0.18 | 10,031 | 1,864 | 4,763 |
| SBC | 4.75 | 4.84 | 5.21 | 0.00 | 0.00 | 0.19 | 0.04 | 30,776 | 6,991 | 18,550 |
| Sprint | 4.91 | 6.38 | 7.95 | 0.00 | 0.00 | 2.37 | 0.44 | 5,281 | 828 | 1,850 |
| Verizon | 4.99 | 6.39 | 7.37 | 0.00 | 0.00 | 2.19 | 0.56 | 33,959 | 7,059 | 16,595 |
| Price Caps | 4.91 | 5.93 | 6.69 | 0.00 | 0.00 | 1.41 | 0.22 | 97,927 | 19,652 | 49,416 |
| NECA | 5.00 | NA | 9.20 | NA | NA | 0.00 | NA | 9,642 | NA | 2,163 |
| Price Caps and NECA | $4.92 | $5.93 | $6.79 | $0.00 | $0.00 | $1.35 | $0.22 | 107,569 | 19,652 | 51,579 |

NA - Not available.

1/ This table shows average rates (weighted by access lines) for all local exchange carriers (LECs) that file access tariffs subject to price-cap regulation and all LECs in the National Exchange Carrier Association (NECA) pool. Rates are composites of all regions and subsidiaries of each local exchange carrier. No information is available for those carriers that are not in the NECA pool, but are subject to rate-of-return regulation.

2/ Access line counts measure lines that companies report as qualified to receive subscriber line charges (SLCs). ISDN-BRI lines, which are charged non-primary SLC and PICC rates, are included in the non-primary residential line counts. ISDN-PRI lines, which are charged rates equal to five times the multiline business SLC and PICC rates, are multiplied by five and added to multiline business counts.

Source: Access tariff filings.

## Table 1.4
## Interstate Per-Minute Access Charges by Carrier
## (In Cents per Minute) 1/

| Company | Rates Effective from 01/01/02-06/30/02 | | | | | Year 2000 Minutes of Use (Millions) | | |
|---|---|---|---|---|---|---|---|---|
| | Carrier Common Line per Originating Access Minute | Carrier Common Line per Terminating Access Minute | Switched Traffic Sensitive per Access Minute | Switched Non-Traffic Sensitive per Access Minute 2/ | Total Charge per Conversation Minute 3/ | CCL Originating | CCL Terminating | Local Switching |
| BellSouth | 0.00 ¢ | 0.00 ¢ | 0.36 ¢ | 0.18 ¢ | 1.10 ¢ | 27,845 | 57,012 | 83,187 |
| Cincinnati Bell | 0.00 | 0.00 | 0.51 | 0.21 | 1.49 | 1,042 | 2,162 | 3,215 |
| Citizens | 0.57 | 0.00 | 0.87 | 0.65 | 3.69 | 2,747 | 2,865 | 5,680 |
| Global Crossing | 0.05 | 0.00 | 0.61 | 0.41 | 2.15 | 575 | 1,583 | 2,160 |
| Iowa Telecom | 0.81 | 0.00 | 0.84 | 0.15 | 2.90 | 134 | 185 | 331 |
| Qwest | 0.00 | 0.00 | 0.54 | 0.18 | 1.47 | 21,018 | 39,686 | 61,107 |
| SBC | 0.00 | 0.00 | 0.43 | 0.21 | 1.30 | 64,610 | 92,623 | 158,985 |
| Sprint | 0.03 | 0.00 | 0.63 | 0.17 | 1.68 | 10,375 | 15,681 | 26,235 |
| Verizon | 0.20 | 0.00 | 0.44 | 0.21 | 1.54 | 58,300 | 131,143 | 190,087 |
| Price Caps | 0.07 | 0.00 | 0.45 | 0.21 | 1.42 | 186,646 | 342,940 | 530,987 |
| NECA | 1.00 | 1.50 | 1.12 | 1.43 | 7.75 | 16,085 | 17,824 | 17,354 |
| All Price Caps and NECA | 0.15 ¢ | 0.07 ¢ | 0.47 ¢ | 0.24 ¢ | 1.69 ¢ | 202,731 | 360,764 | 548,341 |

1/ This table shows average rates (weighted by minutes of use) for all local exchange carriers (LECs) that file access tariffs subject to price-cap regulation and all LECs in the National Exchange Carrier Association (NECA) pool. Rates are composites of all regions and subsidiaries of each local exchange carrier. No information is available for those carriers that are not in the NECA pool, but are subject to rate-of-return regulation. The average rates reported here do not include the average revenue per minute from subscriber line charges (SLCs) or primary interexchange carrier charges (PICCs), both of which are reported in Table 1.1.

2/ Non-traffic-sensitive charges include charges assessed on a per-month, per-unit basis. Prior to 07/01/94 these charges were included in the average traffic-sensitive rates.

3/ The total charge per conversation minute consists of charges on the originating end of the call, which are adjusted for dialing and call setup time, plus charges on the terminating end. Originating charges per conversation minute equal the carrier common line charge per originating access minute plus the traffic-sensitive charge per switched minute, both multiplied by 1.07 to account for dialing and call setup time, plus the non-traffic-sensitive charge per switched minute. Terminating charges per conversation minute equal carrier common line charges per terminating access minute plus both traffic-sensitive and non-traffic-sensitive charges per switched minute.

Source: Access tariff filings.

# 2 Advanced Telecommunications

Congress directed the Commission and the states, in section 706 of the Telecommunications Act of 1996, to encourage deployment of advanced telecommunications capability in the United States on a reasonable and timely basis. To assist in its evaluation of such deployment, the Commission launched a formal data collection program (FCC Form 477) to gather standardized information about subscribership to high-speed services, including advanced services, from wireline telephone companies, cable TV companies, terrestrial wireless providers, satellite providers, and any other facilities-based providers of advanced telecommunications capability.

A facilities-based provider of high-speed service lines (or wireless channels) in a given state reports to the Commission basic information about its service offerings and customers if the provider has at least 250 such lines in service in that state. While providers not meeting the reporting threshold may provide information on a voluntary basis, as some have done, we have no assurance that all such providers have reported data.

Table 2.1 shows high-speed lines (over 200 Kbps in at least one direction) for the following types of technology: Asymmetric digital subscriber lines (ADSL), wireline other than ADSL, coaxial cable, fiber, and satellite and fixed wireless. ADSL technologies provide speed in one direction greater than speed in the other direction. Wireline technologies other than ADSL include traditional telephone company high-speed services and symmetric DSL services that provide equivalent functionality. Coaxial cable includes the typical hybrid fiber-coax (HFC) architecture of upgraded cable TV systems. Fiber technologies are those optical fiber technologies deployed to the subscriber's premises (fiber-to-the-home, or FTTH). Satellite and fixed terrestrial wireless systems use radio spectrum to communicate with a radio transmitter located at the subscriber's premises.

Table 2.2 shows advanced services lines (over 200 Kbps in both directions) by the above technologies.

Table 2.3 and Table 2.4 show comparable data with respect to residential and small business customers only.

Table 2.5 shows high-speed lines by state for the above technologies.

## Table 2.1
## High-Speed Lines 1/
## (Over 200 Kbps in at Least One Direction)

| Types of Technology 2/ | December 1999 | June 2000 | December 2000 | June 2001 | Percent Change | |
|---|---|---|---|---|---|---|
| | | | | | Jun 2000 - Dec 2000 | Dec 2000 - Jun 2001 |
| ADSL | 369,792 | 951,583 | 1,977,101 | 2,693,834 | 108 % | 36 % |
| Other Wireline | 609,909 | 758,594 | 1,021,291 | 1,088,066 | 35 | 7 |
| Coaxial Cable | 1,411,977 | 2,284,491 | 3,582,874 | 5,184,141 | 57 | 45 |
| Fiber | 312,204 | 307,151 | 376,203 | 455,593 | 22 | 21 |
| Satellite or Fixed Wireless | 50,404 | 65,615 | 112,405 | 194,707 | 71 | 73 |
| Total Lines | 2,754,286 | 4,367,434 | 7,069,874 | 9,616,341 | 62 % | 36 % |

## Table 2.2
## Advanced Services Lines 1/
## (Over 200 Kbps in Both Directions)

| Types of Technology 2/ | December 1999 | June 2000 | December 2000 | June 2001 | Percent Change | |
|---|---|---|---|---|---|---|
| | | | | | Jun 2000 - Dec 2000 | Dec 2000 - Jun 2001 |
| ADSL | 185,950 | 326,816 | 675,366 | 998,883 | 107 % | 48 % |
| Other Wireline | 609,909 | 758,594 | 1,021,291 | 1,088,066 | 35 | 7 |
| Coaxial Cable | 877,465 | 1,469,130 | 2,193,609 | 3,329,976 | 49 | 52 |
| Fiber | 307,315 | 301,143 | 376,197 | 455,549 | 25 | 21 |
| Satellite or Fixed Wireless | 7,816 | 3,649 | 26,906 | 73,476 | NM | 173 |
| Total Lines | 1,988,455 | 2,859,332 | 4,293,369 | 5,945,950 | 50 % | 38 % |

NM - Not meaningful due to inconsistencies in reported data (note divergence of some data from trend), which may be due to misinterpretation of reporting instructions by some filers.

1/ Some previously published data have been revised.

2/ The mutually exclusive types of technology are, respectively: Asymmetric digital subscriber line (ADSL) technologies, which provide speeds in one direction greater than speeds in the other direction; wireline technologies other than ADSL, including traditional telephone company high-speed services and symmetric DSL services that provide equivalent functionality; coaxial cable, including the typical hybrid fiber-coax (HFC) architecture of upgraded cable TV systems; optical fiber to the subscriber's premises (e.g., fiber-to-the-home, or FTTH); and satellite and (terrestrial) fixed wireless systems, which use radio spectrum to communicate with a radio transmitter at the subscriber's premises.

Source: Industry Analysis Division, Common Carrier Bureau, *High-Speed Services for Internet Access: Subscribership as of June 30, 2001* (February 2002).

## Table 2.3
## Residential and Small Business High-Speed Lines 1/
## (Over 200 Kbps in at Least One Direction)

| Types of Technology 2/ | December 1999 | June 2000 | December 2000 | June 2001 | Percent Change | |
|---|---|---|---|---|---|---|
| | | | | | Jun 2000 - Dec 2000 | Dec 2000 - Jun 2001 |
| ADSL | 291,757 | 772,272 | 1,594,879 | 2,490,740 | 107 % | 56 % |
| Other Wireline | 46,856 | 111,490 | 176,520 | 138,307 | NM | NM |
| Coaxial Cable | 1,402,394 | 2,215,259 | 3,294,546 | 4,998,540 | 49 | 52 |
| Fiber | 1,023 | 325 | 1,994 | 2,623 | NM | NM |
| Satellite or Fixed Wireless | 50,189 | 64,320 | 102,432 | 182,165 | 59 | 78 |
| Total Lines | 1,792,219 | 3,163,666 | 5,170,371 | 7,812,375 | 63 % | 51 % |

## Table 2.4
## Residential and Small Business Advanced Services Lines
## (Over 200 Kbps in Both Directions)

| Types of Technology 2/ | December 1999 | June 2000 | December 2000 | June 2001 | Percent Change | |
|---|---|---|---|---|---|---|
| | | | | | Jun 2000 - Dec 2000 | Dec 2000 - Jun 2001 |
| ADSL | 116,994 | 195,324 | 393,246 | 916,364 | 101 % | 133 % |
| Other Wireline | 46,856 | 111,490 | 176,520 | 138,307 | NM | NM |
| Coaxial Cable | 872,024 | 1,401,434 | 2,177,328 | 3,146,953 | 55 | 45 |
| Fiber | 138 | 325 | 1,992 | 2,617 | NM | NM |
| Satellite or Fixed Wireless | 7,682 | 2,916 | 17,043 | 60,988 | NM | NM |
| Total Lines | 1,043,694 | 1,711,488 | 2,766,130 | 4,265,229 | 62 % | 54 % |

NM - Not meaningful due to inconsistencies in reported data which may be due to misinterpretation of reporting instructions by some filers, or to the small number of lines reported in particular categories.

Note: Residential and small business advanced services lines are estimated based on data from FCC Form 477.

1/ Some previously published have been revised.

2/ The mutually exclusive types of technology are, respectively: Asymmetric digital subscriber line (ADSL) technologies, which provide speeds in one direction greater than speeds in the other direction; wireline technologies other than ADSL, including traditional telephone company high-speed services and symmetric DSL services that provide equivalent functionality; coaxial cable, including the typical hybrid fiber-coax (HFC) architecture of upgraded cable TV systems; optical fiber to the subscriber's premises (e.g., fiber-to-the-home, or FTTH); and satellite and (terrestrial) fixed wireless systems, which use radio spectrum to communicate with a radio transmitter at the subscriber's premises.

Source: Industry Analysis Division, Common Carrier Bureau, *High-Speed Services for Internet Access: Subscribership as of June 30, 2001* (February 2002).

## Table 2.5
## High-Speed Lines by Technology 1/
## (Over 200 Kbps in at Least One Direction)

| | Dec 1999 | Jun 2000 | Dec 2000 | Jun 2001 | | | | Percentage Change | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | Total | Total | ADSL | Coaxial Cable | Other 2/ | Total | Jun 2000 - Dec 2000 | Dec 2000 - Jun 2001 |
| Alabama | 19,796 | 32,756 | 63,334 | * | 47,325 | * | 86,234 | 93 % | 36 % |
| Alaska | * | * | 934 | * | 0 | * | 20,906 | NA | 2,138 |
| Arizona | 58,825 | 111,678 | 153,500 | 39,828 | * | * | 158,122 | 37 | 3 |
| Arkansas | 8,155 | 15,539 | 28,968 | * | * | 5,154 | 40,803 | 86 | 41 |
| California | 547,179 | 910,006 | 1,386,625 | 735,677 | 609,174 | 360,963 | 1,705,814 | 52 | 23 |
| Colorado | 36,726 | 64,033 | 104,534 | 52,617 | * | * | 147,220 | 63 | 41 |
| Connecticut | 36,488 | 63,772 | 111,792 | 30,142 | 106,019 | 12,896 | 149,057 | 75 | 33 |
| Delaware | 1,558 | 3,660 | 7,492 | * | * | * | 12,771 | 105 | 70 |
| District of Columbia | 13,288 | 16,926 | 27,757 | 16,313 | * | * | 39,101 | 64 | 41 |
| Florida | 190,700 | 244,678 | 460,795 | 170,702 | 372,190 | 108,275 | 651,167 | 88 | 41 |
| Georgia | 75,870 | 130,292 | 203,855 | 106,649 | 109,922 | 86,027 | 302,598 | 56 | 48 |
| Hawaii | * | * | * | * | * | * | * | NA | NA |
| Idaho | * | 8,070 | 15,908 | * | * | 2,441 | 20,233 | 97 | 27 |
| Illinois | 77,672 | 166,933 | 242,239 | 89,080 | 144,872 | 116,289 | 350,241 | 45 | 45 |
| Indiana | 20,059 | 49,702 | 60,494 | 2,375 | 56,441 | 21,548 | 80,364 | 22 | 33 |
| Iowa | 19,258 | 49,159 | 58,199 | 9,532 | 59,253 | 3,798 | 72,583 | 18 | 25 |
| Kansas | 26,179 | 42,679 | 68,743 | * | 74,337 | * | 101,734 | 61 | 48 |
| Kentucky | 23,570 | 24,237 | 32,731 | 20,256 | * | * | 39,297 | 35 | 20 |
| Louisiana | 28,133 | 43,294 | 74,950 | 37,444 | 64,219 | 20,022 | 121,685 | 73 | 62 |
| Maine | 19,878 | 17,864 | 26,266 | 6,877 | * | * | 38,149 | 47 | 45 |
| Maryland | 52,749 | 71,005 | 124,465 | 51,051 | 97,466 | 32,504 | 181,021 | 75 | 45 |
| Massachusetts | 114,116 | 185,365 | 289,447 | 82,699 | 243,670 | 30,887 | 357,256 | 56 | 23 |
| Michigan | 81,223 | 135,318 | 198,230 | 41,428 | 301,842 | 52,313 | 395,583 | 46 | 100 |
| Minnesota | 38,268 | 65,272 | 117,283 | 51,640 | 80,259 | 16,113 | 148,012 | 80 | 26 |
| Mississippi | * | 6,514 | 12,305 | * | * | 7,551 | 21,517 | 89 | 75 |
| Missouri | 23,347 | 46,903 | 100,403 | 53,250 | 51,733 | 18,932 | 123,915 | 114 | 23 |
| Montana | * | * | 7,378 | 2,842 | * | * | 10,446 | NA | 42 |
| Nebraska | 36,748 | 44,188 | 54,085 | 9,293 | 37,168 | 8,727 | 55,188 | 22 | 2 |
| Nevada | 23,514 | 40,582 | 59,879 | * | * | 16,691 | 78,535 | 48 | 31 |
| New Hampshire | 22,807 | 33,045 | 42,364 | 5,651 | * | * | 55,658 | 28 | 31 |
| New Jersey | 101,832 | 144,203 | 285,311 | 102,430 | * | * | 428,514 | 98 | 50 |
| New Mexico | * | 2,929 | 28,497 | 7,578 | * | * | 20,482 | 873 | -28 |
| New York | 186,504 | 342,743 | 603,487 | 197,135 | 564,423 | 131,474 | 893,032 | 76 | 48 |
| North Carolina | 57,881 | 81,998 | 136,703 | 41,332 | 115,949 | 48,335 | 205,616 | 67 | 50 |
| North Dakota | * | 2,437 | 4,227 | * | * | * | 6,277 | 73 | 48 |
| Ohio | 160,792 | 156,980 | 230,525 | 87,567 | 213,606 | 57,792 | 358,965 | 47 | 56 |
| Oklahoma | 96,730 | 163,703 | 95,138 | 31,321 | * | * | 92,947 | NM | NM |
| Oregon | 27,062 | 44,186 | 76,839 | 25,877 | * | * | 93,242 | 74 | 21 |
| Pennsylvania | 71,926 | 79,892 | 176,670 | 89,595 | 131,119 | 42,522 | 263,236 | 121 | 49 |
| Puerto Rico | * | * | * | * | 0 | * | * | NA | NA |
| Rhode Island | * | 20,628 | 30,919 | * | * | 1,908 | 49,215 | 50 | 59 |
| South Carolina | 25,229 | 32,824 | 63,914 | 9,704 | 68,487 | 18,648 | 96,839 | 95 | 52 |
| South Dakota | * | 3,516 | 2,839 | 1,652 | * | * | 5,448 | -19 | 92 |
| Tennessee | 66,307 | 87,317 | 122,391 | 22,902 | 96,119 | 33,489 | 152,510 | 40 | 25 |
| Texas | 152,518 | 276,087 | 522,538 | 197,668 | 328,900 | 120,271 | 646,839 | 89 | 24 |
| Utah | 11,635 | 19,612 | 35,970 | 23,476 | * | * | 55,103 | 83 | 53 |
| Vermont | * | 1,551 | 7,773 | * | * | * | 16,230 | 401 | 109 |
| Virgin Islands | 0 | * | * | * | 0 | * | * | NA | NA |
| Virginia | 51,305 | 72,436 | 139,915 | 39,114 | 131,553 | 42,141 | 212,808 | 93 | 52 |
| Washington | 71,930 | 118,723 | 195,628 | 64,812 | * | * | 227,066 | 65 | 16 |
| West Virginia | * | 1,835 | 6,498 | * | * | 2,062 | 16,697 | 254 | 157 |
| Wisconsin | 18,599 | 34,262 | 76,257 | 17,800 | * | * | 127,755 | 123 | 68 |
| Wyoming | * | * | * | * | * | * | * | NA | NA |
| Nationwide Reported Total | 2,754,286 | 4,367,434 | 7,069,874 | 2,693,834 | 5,184,141 | 1,738,366 | 9,616,341 | 62 % | 36 % |

NA - Not available.

NM - Not meaningful due to inconsistencies in reported data due to misinterpretation of reporting instructions by some filers.

* Data withheld to maintain firm confidentiality.

1/ Some previously published data have been revised.

2/ Other includes wireline technologies other than asymmetric digital subscriber line (ADSL), optical fiber to the subscriber's premises, satellite, and (terrestrial) fixed wireless systems.

Source: Industry Analysis Division, Common Carrier Bureau, *High-Speed Services for Internet Access: Subscribership as of June 30, 2001* (February 2002).

# 3 Consumer Expenditures

The Bureau of Labor Statistics conducts surveys of consumer expenditures, in part, to develop weights for CPI indices. Table 3.1 shows expenditures for telephone service for all consumer units.

About 2% of all consumer expenditures are devoted to telephone service. This percentage has remained virtually unchanged over the past fifteen years, despite major changes in the telephone industry and in telephone usage. Average annual expenditures on telephone service increased from $360 per household in 1981 to $877 in 2000.

Bill harvesting data collected by TNS Telecoms provide information on the telecommunications expenditures of households. Expenditures can be classified by the type of carrier providing the service. Table 3.2 presents average monthly household expenditures for local exchange, long distance and wireless carriers for 1995 through 2000. Further information on TNS Telecoms and the bill harvesting data can be found in Section 15.

**Table 3.1**

**Household Expenditures for Telephone Service**

| Year | Annual Expenditures for All Households | | Telephone Expenditures as a Percent of All Expenditures |
|---|---|---|---|
| | All Expenditures | Telephone Expenditures | |
| 1981 | $17,558 | $360 | 2.1 % |
| 1982 | 18,071 | 375 | 2.1 |
| 1983 | 19,692 | 415 | 2.1 |
| 1984 | 21,975 | 435 | 2.0 |
| 1985 | 23,490 | 455 | 1.9 |
| 1986 | 23,866 | 471 | 2.0 |
| 1987 | 24,414 | 499 | 2.0 |
| 1988 | 25,892 | 537 | 2.1 |
| 1989 | 27,810 | 567 | 2.0 |
| 1990 | 28,381 | 592 | 2.1 |
| 1991 | 29,614 | 618 | 2.1 |
| 1992 | 29,846 | 623 | 2.1 |
| 1993 | 30,692 | 658 | 2.1 |
| 1994 | 31,731 | 690 | 2.2 |
| 1995 | 32,264 | 708 | 2.2 |
| 1996 | 33,797 | 772 | 2.3 |
| 1997 | 34,819 | 809 | 2.3 |
| 1998 | 35,535 | 830 | 2.3 |
| 1999 | 36,995 | 849 | 2.3 |
| 2000 | 38,045 | 877 | 2.3 |

Source: Bureau of Labor Statistics, Consumer Expenditure Survey.

**Chart 3.1**

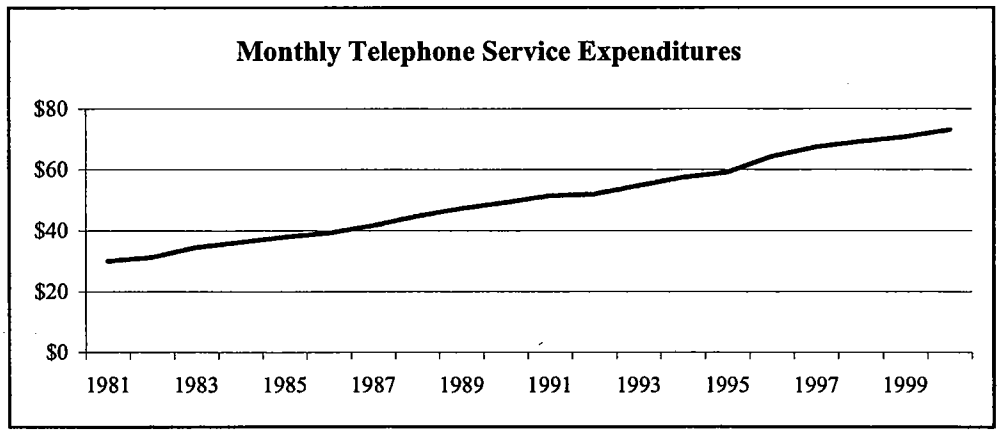


**Table 3.2**
**Average Monthly Household Telecommunications**
**To Local and Long Distance Providers 1/**

| | Local Exchange Carriers 2/ | Long Distance Carriers |
|---|---|---|
| **1995** | $30 | $21 |
| **1996** | 30 | 21 |
| **1997** | 32 | 25 |
| **1998** | 33 | 23 |
| **1999** | 34 | 21 |
| **2000** | 35 | 18 |

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.

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

# 4 Earnings

Beginning in the mid-1980s, local exchange carriers that file access tariffs with the Commission were required to file rate-of-return reports (FCC Form 492). The first reports were filed for the monitoring period October 1, 1985 - December 31, 1986. Carriers filed reports for each subsequent two-year monitoring period (1987-88 and 1989-90).

In 1991, carriers that became subject to price-cap incentive regulation began filing reports on a yearly basis. Non-price-cap carriers continued to file reports for each two-year monitoring period (1991-1992, 1993-1994, 1995-1996, 1997-1998, and 1999-2000), as well as annual reports for 1991, 1993, 1995, 1997, 1999, 2000, and 2001. Rate-of-return reports were previously required for AT&T but have been discontinued. Table 4.1 is a summary of rates of return for 1997-2001 for price-cap carriers. Rates of return for 1991-1996 can be found in the August 2001 *Trends* report.

The rates of return were posted at the time of the carriers' individual FCC Form 492 filings. They do not reflect revisions filed by the carriers at a later date. Thus, they are not necessarily the official versions for regulatory purposes, but they do illustrate general industry trends. Summaries of the filings can be found on the **FCC-State Link** web site at www.fcc.gov/wcb/stats. Copies of the FCC Form 492 reports are on file in the FCC's Reference Information Center, Courtyard Level, 445 12th Street S.W., Washington, D.C. 20554.

# Table 4.1

## Interstate Rate of Return Summary *
## Years 1997 through 2001
## Price-Cap Companies Reporting FCC Form 492A
### (Final Reports for 1997 Through 2000 and Initial Report for 2001) 1/

| | Reporting Entity | 2001 | 2000 | 1999 | 1998 | 1997 |
|---|---|---|---|---|---|---|
| 1 | **BellSouth Telecommunications, Inc.** | 21.22 % | 22.83 % | 20.99 % | 20.80 % | 17.91 % |
| 2 | **Qwest Corporation, Including Malheur and El Paso** | 22.13 | 19.93 | 19.06 | 16.56 | 15.41 |
| | **SBC Communications, Inc.** | | | | | |
| 3 | Southwestern Bell Telephone Company | 18.47 | 15.17 | 10.22 | 9.91 | 10.32 |
| 4 | Ameritech Operating Companies | 24.41 | 30.24 | 28.93 | 22.59 | 18.22 |
| 5 | Nevada Bell | 20.47 | 21.55 | 19.26 | 16.02 | 19.47 |
| 6 | Pacific Bell | 22.89 | 19.20 | 21.01 | 16.50 | 11.98 |
| 7 | Southern New England Telephone Company | 22.35 | 18.21 | 12.12 | 10.99 | 12.70 |
| | **Verizon Telephone Companies** | | | | | |
| 8 | Verizon Telephone Companies (Verizon FCC Tariff No. 1) | 12.96 | 13.36 | 13.66 | | |
| | **(Former Bell Atlantic Companies)** | | | | | |
| | Bell Atlantic | | | | 13.88 | 14.73 |
| | Bell Atlantic (NYNEX) | | | | 11.40 | 13.72 |
| | New England Telephone and Telegraph Co. | | | | | |
| | New York Telephone | | | | | |
| | **Verizon - West (Former GTE Companies)** | | | | | |
| 9 | GTE California Inc. (California - GTCA) | 28.73 | 25.87 | 22.01 | 17.19 | 17.68 |
| 10 | GTE California, Inc. (California - COCA) | 29.78 | 28.74 | 28.28 | 22.71 | 19.16 |
| 11 | GTE California, Inc. (Arizona - COAZ) | 13.19 | 10.90 | 15.57 | 13.80 | 14.17 |
| 12 | GTE California, Inc. (Nevada - CONV) | 26.57 | 28.82 | 20.57 | 24.01 | 31.44 |
| 13 | GTE Florida Inc. (Florida - GTFL) | 29.50 | 21.90 | 18.93 | 14.58 | 19.14 |
| 14 | GTE Hawaiian Telephone Co. Inc. (Hawaii - GTHI) | 17.02 | 17.87 | 17.62 | 15.64 | 10.55 |
| 15 | GTE Midwest Inc. (Missouri - COMO + COCM + COEM = COMT) | 20.79 | 17.06 | 15.29 | 12.56 | 12.39 |
| 16 | GTE Midwest Inc. (Missouri - GTMO) | 24.14 | 19.15 | 11.82 | 16.08 | 17.88 |
| 17 | GTE North Inc. (COPA + COQS = COPT) | 40.77 | 41.05 | 39.58 | 45.97 | 36.83 |
| 18 | GTE North Inc. (Illinois - COIL) | 54.92 | 44.51 | 41.03 | 14.11 | 41.14 |
| 19 | GTE North Inc. (Indiana - COIN) | 46.65 | 47.67 | 41.40 | 34.61 | 33.26 |
| 20 | GTE North Inc. (Ohio - GTOH) | 21.39 | 21.88 | 21.70 | 21.83 | 24.37 |
| 21 | GTE North Inc. (Pennsylvania - GTPA) | 23.20 | 21.95 | 21.41 | 14.67 | 20.62 |
| 22 | GTE North Inc. (Wisconsin - GTWI) | 13.84 | 16.99 | 17.85 | 16.08 | 18.75 |
| 23 | GTE North/Contel Systems of South (GTIN + GLIN = GAIN) | 32.88 | 33.00 | 32.47 | 29.06 | 23.61 |
| 24 | GTE North/Contel Systems of South (GTMI + GLMI = GAMI) | 17.63 | 16.45 | 15.75 | 13.17 | 15.33 |
| 25 | GTE North/GTE South (GTIL + GLIL = GAIL) | 23.56 | 23.90 | 22.35 | 23.07 | 21.59 |
| 26 | GTE Northwest Inc. (Oregon - GTOR) | 31.83 | 30.95 | 31.56 | 27.03 | 28.23 |
| 27 | GTE Northwest Inc. (West Coast CA - GNCA) | 3.22 | (8.35) | (9.93) | (6.85) | (25.83) |
| 28 | GTE Northwest Inc. (Washington - COWA) | 39.37 | 39.49 | 39.17 | 30.41 | 31.85 |
| 29 | GTE Northwest Inc. (Washington - GTWA) | 34.06 | 33.26 | 32.91 | 27.33 | 24.41 |
| 30 | GTE Northwest Inc. (Idaho - GTID) | 38.48 | 34.17 | 32.24 | 30.89 | 30.52 |
| 31 | GTE South Inc. (Alabama - GTAL) | 24.03 | 20.24 | 22.23 | 17.59 | 23.49 |
| 32 | GTE South Inc. (Kentucky - COKY) | 30.92 | 20.60 | 9.55 | 5.97 | 6.62 |
| 33 | GTE South Inc. (Kentucky - GTKY) | 27.27 | 25.07 | 24.03 | 22.34 | 20.57 |
| 34 | GTE South Inc. (North Carolina - GTNC) | 29.96 | 26.44 | 24.85 | 27.92 | 24.48 |
| 35 | GTE South Inc. (N. Carolina - CONC) | 20.53 | 17.75 | 19.87 | 12.78 | 16.63 |
| 36 | GTE South Inc. (GTSC + COSC = GTST) | 32.69 | 31.19 | 30.70 | | |
| | GTE South Inc. (South Carolina - GTSC) | | | | 30.62 | 24.06 |
| | GTE South Inc. (S. Carolina - COSC) | | | | 26.14 | 25.09 |
| 37 | GTE South Inc. (Virginia - COVA) | 40.66 | 40.85 | 34.74 | 35.19 | 33.65 |
| 38 | GTE South Inc. (Virginia - GTVA) | 13.37 | 6.62 | 9.94 | 20.56 | 23.76 |
| 39 | GTE Southwest Inc. (Texas - COTX) | 12.46 | 12.17 | 17.13 | 14.96 | 18.10 |
| 40 | GTE Southwest Inc. (Texas - GTTX) | 24.70 | 21.65 | 21.42 | 16.43 | 14.81 |
| 41 | GTE Systems of The South (Alabama - COAL) | 15.95 | 14.93 | 10.88 | 7.97 | 15.31 |
| 42 | Micronesian Telecomms. Corp. (N. Mariana Islands - GTMC) | 21.83 | 23.58 | 29.24 | 34.45 | 21.17 |

# Table 4.1

## Interstate Rate of Return Summary *
## Years 1997 through 2001
## Price-Cap Companies Reporting FCC Form 492A - Continued
### (Final Reports for 1997 Through 2000 and Initial Report for 2001) 1/

| | Reporting Entity | 2001 | 2000 | 1999 | 1998 | 1997 |
|---|---|---|---|---|---|---|
| | **Sprint** | | | | | |
| 43 | Central Telephone - Nevada | 17.95 % | 19.29 % | 21.15 % | 17.79 % | 17.07 % |
| 44 | Sprint - Florida | 25.89 | 27.38 | 27.17 | 26.14 | 20.05 |
| 45 | Sprint Local Telephone Cos. - Eastern (NJ & PA) | 26.21 | 25.62 | 20.87 | 14.59 | 17.36 |
| 46 | Sprint Local Telephone Cos. - Midwest (MO, KS, MN, NE, WY, TX) | 16.63 | 18.88 | 17.69 | 19.66 | 19.97 |
| 47 | Sprint Local Telephone Cos. - North Carolina | 25.52 | 22.23 | 15.92 | 12.55 | 16.54 |
| 48 | Sprint Local Telephone Cos. - Northwest (OR & WA) | 31.55 | 32.77 | 31.86 | 32.54 | 30.59 |
| 49 | Sprint Local Telephone Cos. - Southeast (TN, VA & SC) | 25.33 | 23.32 | 17.50 | 15.87 | 17.62 |
| 50 | United Telephone Co. of Indiana, Inc. | 35.19 | 38.21 | 28.98 | 24.19 | 26.13 |
| 51 | United Telephone Co. of Ohio | 27.71 | 20.03 | 20.16 | 17.33 | 13.91 |
| | Central Telephone of Illinois | | | | | 18.92 |
| | **All Other Companies** | | | | | |
| 52 | Aliant Communications Inc. (ALLTEL) | 12.57 | 12.99 | 19.27 | 15.02 | 12.27 |
| 53 | Cincinnati Bell Telephone Company | 30.09 | 28.95 | 25.45 | 17.81 | 20.04 |
| 54 | Citizens Telecommunications Cos. (Tariff 1) | 15.73 | 19.68 | 16.71 | 17.87 | 9.77 |
| 55 | Citizens Telecommunications Cos. (Tariff 2) | 17.30 | 24.05 | 15.74 | 14.29 | 13.25 |
| 56 | Citizens Telecommunications Cos. (Tariff 3) | 4.52 | 16.12 | 15.56 | | |
| 57 | Citizens Telecommunications Cos. (Tariff 4) | 13.08 | 30.94 | | | |
| 58 | Citizens Telecommunications Cos. (Tariff 5) | 2.03 | (11.23) | | | |
| 59 | Frontier Telephone of Rochester, Inc. | 12.32 | 18.91 | 16.77 | 18.37 | 13.19 |
| 60 | Frontier Tier 2 Concurring Companies | 41.81 | 38.95 | 43.42 | 45.45 | 31.93 |
| 61 | Frontier Communications of Minnesota & Iowa | 25.24 | 33.16 | 35.40 | 29.28 | 28.26 |
| 62 | Iowa Telecom Service Group (SAC 351167) | 13.07 | | | | |
| 63 | Iowa Telecom Systems Service Group (SAC 351170 & 351178) | 18.45 | | | | |
| 64 | Valor New Mexico #1164 | 8.39 | 20.67 | | | |
| 65 | Valor New Mexico #1193 | 11.45 | 13.35 | | | |
| 66 | Valor Oklahoma | 11.65 | 11.22 | | | |
| 67 | Valor Texas | 5.70 | 5.24 | | | |

| | | | | | |
|---|---|---|---|---|---|
| Maximum Rate of Return | 54.92 % | 47.67 % | 43.42 % | 47.21 % | 48.69 % |
| Minimum Rate of Return | 2.03 | (11.23) | (9.93) | (6.85) | (25.83) |
| Weighted Arithmetic Mean | 19.78 | 18.04 | 18.50 | 16.52 | 15.60 |
| Standard Deviation | 5.70 | 5.17 | 5.96 | 5.13 | 3.96 |

* The interstate rates of return reported by carriers on the FCC Form 492A may not necessarily agree with the interstate rates of return reported by the carriers on other Commission forms. For example, price-cap carriers also report interstate rates of of return on the Commission's Automated Reporting Management Information System's (ARMIS) 43-01 report. The interstate rates of return reported by carriers on the ARMIS 43-01 include revenues and costs for non-price-cap services. In addition, they exclude adjustments, if any, for the previous year's sharing obligation or low-end adjustment.

1/ For years 1991 - 1996, see Industry Analysis Division, Common Carrier Bureau, *Trends in Telephone Service* (August 2001).

# 5 Employment and Labor Productivity

The Bureau of Labor Statistics (BLS) publishes monthly data regarding the total number of employed workers in the communications industry. Specifically, BLS compiles employment statistics for the entire telephone communications industry using the Standard Industrial Classification (SIC) 481 and for a subset of this industry, telephone communications minus radiotelephone (SIC 4813). The difference between these two figures yields the number of employees in the radiotelephone industry (SIC 4812).

SIC 4813 includes establishments primarily engaged in furnishing telephone voice and data communications, except radiotelephone and telephone answering services. SIC 4812 includes establishments primarily engaged in providing two-way radiotelephone communication services, such as cellular telephone service. It also includes telephone paging and beeper services. Neither of these categories includes employees from establishments primarily engaged in furnishing telephone answering services, manufacturing equipment, or engineering and research services.

Table 5.1 and the associated graph show the annual average employment figures in the telephone communications industry separately for SIC 4812 and SIC 4813 from 1951 to 2001. Since 1990, employment in the telephone communications industry has grown modestly. Most of the growth in employment over this period is the result of substantial increases in the radiotelephone industry, which grew at an annual average growth rate of approximately 20%.

BLS also calculates an annual telecommunications industry labor productivity index. The BLS index of labor productivity relates output to the employee hours expended in producing that output. This index, presented in Table 5.2, rose an average 6.0% per year from 1951 to 1999, with 1999 being the most recent data available. This average labor productivity factor is higher than the average in other industries (typically somewhere around 3 to 4%). This higher than average annual growth rate may be the result of telephone companies utilizing more efficient, advanced technology and increases in human capital. Table 5.2 and the associated graph illustrate the rising trend in telecommunications labor productivity since 1951.

Table 5.3 presents estimates of the number of telecommunications service providers that are small businesses as defined by the Small Business Administration's Office of Size Standards (i.e., 1,500 or fewer employees, including all affiliates).

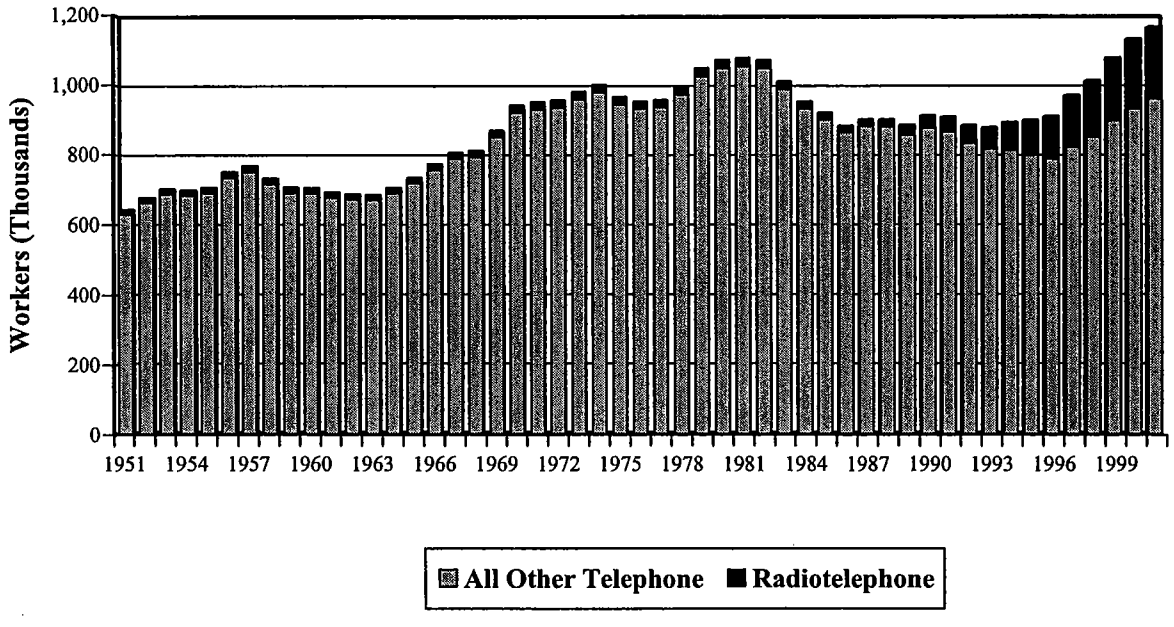
## Table 5.1
## Annual Average Number of Employees in the Telephone Communications Industry
## (In Thousands)

| Year | Radiotelephone | All Other Telephone | Year | Radiotelephone | All Other Telephone | Year | Radiotelephone | All Other Telephone |
|---|---|---|---|---|---|---|---|---|
| 1951 | 15.2 | 628.8 | 1969 | 20.5 | 849.5 | 1987 | 21.1 | 880.8 |
| 1952 | 16.0 | 662.4 | 1970 | 22.2 | 919.9 | 1988 | 23.2 | 877.9 |
| 1953 | 16.6 | 685.6 | 1971 | 22.4 | 929.2 | 1989 1/ | 29.9 | 856.0 |
| 1954 | 16.5 | 682.3 | 1972 | 22.5 | 933.6 | 1990 | 38.2 | 874.8 |
| 1955 | 16.6 | 690.1 | 1973 | 23.2 | 958.0 | 1991 | 45.6 | 863.6 |
| 1956 | 17.7 | 733.5 | 1974 | 23.6 | 977.2 | 1992 | 53.1 | 832.1 |
| 1957 | 18.1 | 750.1 | 1975 | 22.8 | 943.8 | 1993 | 63.1 | 815.9 |
| 1958 | 17.2 | 714.9 | 1976 | 22.5 | 930.7 | 1994 | 81.0 | 812.4 |
| 1959 | 16.7 | 690.4 | 1977 | 22.6 | 934.7 | 1995 | 102.5 | 797.2 |
| 1960 | 16.6 | 689.4 | 1978 | 23.4 | 971.4 | 1996 | 124.9 | 786.1 |
| 1961 | 16.3 | 677.0 | 1979 | 24.8 | 1,023.4 | 1997 | 150.7 | 820.3 |
| 1962 | 16.2 | 671.3 | 1980 | 25.3 | 1,046.9 | 1998 | 164.3 | 848.5 |
| 1963 | 16.2 | 669.3 | 1981 | 25.3 | 1,052.0 | 1999 | 182.7 | 892.4 |
| 1964 | 16.6 | 689.5 | 1982 | 25.3 | 1,046.5 | 2000 | 204.4 | 929.5 |
| 1965 | 17.3 | 717.9 | 1983 1/ | 23.8 | 986.5 | 2001 | 208.1 | 958.6 |
| 1966 | 18.3 | 755.1 | 1984 | 22.4 | 931.0 | | | |
| 1967 | 19.0 | 787.5 | 1985 | 21.6 | 899.1 | | | |
| 1968 | 19.2 | 793.2 | 1986 1/ | 20.7 | 862.7 | | | |

1/ Due to Bell operating company employee strikes in 1983, 1986, and 1989, which lasted one month each, the reported annual a of workers for those particular years is an average of the eleven months in which workers did not strike.

Source: Bureau of Labor Statistics.

## Chart 5.1
## Annual Average Number of Employees in the Telephone Communications Industry
## 1951 - 2001

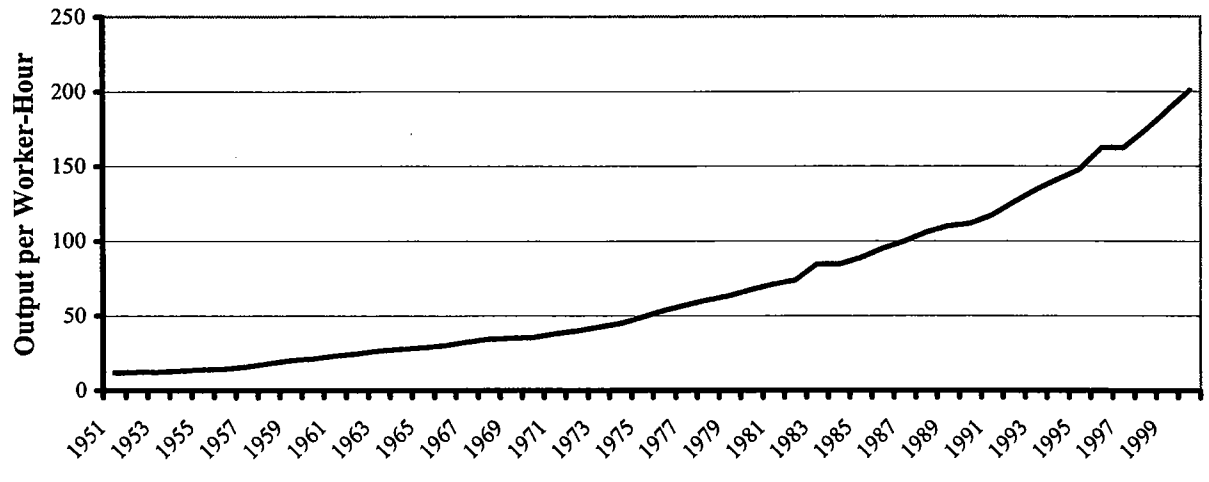


## Table 5.2
## Labor Productivity Index for the Telephone Communications Industry Measured in Output per Hour (OPH)
### (Base Year 1987=100)

| Year | OPH Index | Year | OPH Index | Year | OPH Index |
|---|---|---|---|---|---|
| 1951 | 12.0 | 1968 | 34.7 | 1985 | 88.9 |
| 1952 | 12.4 | 1969 | 35.3 | 1986 | 95.0 |
| 1953 | 12.6 | 1970 | 35.6 | 1987 | 100.0 |
| 1954 | 13.2 | 1971 | 38.3 | 1988 | 105.9 |
| 1955 | 14.3 | 1972 | 40.1 | 1989 | 110.3 |
| 1956 | 14.6 | 1973 | 42.7 | 1990 | 111.9 |
| 1957 | 16.1 | 1974 | 45.0 | 1991 | 117.5 |
| 1958 | 18.2 | 1975 | 49.3 | 1992 | 126.1 |
| 1959 | 20.3 | 1976 | 53.6 | 1993 | 134.5 |
| 1960 | 21.4 | 1977 | 57.3 | 1994 | 141.5 |
| 1961 | 23.3 | 1978 | 60.6 | 1995 | 148.1 |
| 1962 | 24.8 | 1979 | 63.5 | 1996 | 162.5 |
| 1963 | 26.6 | 1980 | 67.6 | 1997 | 162.5 |
| 1964 | 27.8 | 1981 | 71.1 | 1998 | 174.4 |
| 1965 | 28.9 | 1982 | 73.8 | 1999 | 187.2 |
| 1966 | 30.3 | 1983 | 84.6 | 2000 | 200.8 |
| 1967 | 32.6 | 1984 | 84.5 | | |

Source: Bureau of Labor Statistics.

## Chart 5.2
## Telephone Communications Industry (SIC 481) Labor Productivity Index



## Table 5.3
## Number of Telecommunications Service Providers That Are Small Businesses (As of December 31, 2000)

| Service Provider Category | Number of FCC Form 499-A Filers | Filers That in Combination with Affiliates Have | |
|---|---|---|---|
| | | 1,500 or Fewer Employees[1] | More Than 1,500 Employees[1] |
| Incumbent Local Exchange Carriers (ILECs) | 1,329 | 1,024 | 305 |
| Competitive Access Providers (CAPs) and Competitive Local Exchange Carriers (CLECs) | 532 | 411 | 121 |
| Local Resellers | 134 | 131 | 3 |
| Other Local Exchange Carriers | 55 | 53 | 2 |
| All Competitors of ILECs | 721 | 595 | 126 |
| Total: Fixed Local Service Providers | 2,050 | 1,619 | 431 |
| Total: Payphone Providers | 936 | 933 | 3 |
| Wireless Telephony Including Cellular, Personal Communications Service (PCS) and SMR Telephony Carriers | 858 | 291 | 567 |
| Paging & Messaging Service | 576 | 557 | 19 |
| Specialized Mobile Radio (SMR) Dispatch | 289 | 289 | 0 |
| Wireless Data Service Providers | 6 | 6 | 0 |
| Other Mobile Service Providers | 32 | 32 | 0 |
| Total: Wireless Service Providers | 1,761 | 1,175 | 586 |
| Interexchange Carriers (IXCs) | 229 | 181 | 48 |
| Operator Service Providers (OSPs) | 22 | 20 | 2 |
| Prepaid Calling Card Providers | 32 | 31 | 1 |
| Satellite Service Carriers | 31 | 25 | 6 |
| Toll Resellers | 576 | 538 | 38 |
| Other Toll Carriers | 42 | 37 | 5 |
| Total: Toll Service Providers | 932 | 832 | 100 |
| All Filers | 5,679 | 4,559 | 1,120 |

Note: While FCC Form 499-A filings are not publically available, filer registration information is published by the Industry Analysis Division, Common Carrier Bureau, in the *Telecommunications Provider Locator* (November, 2001). This same information is searchable online at http://gullfoss2.fcc.gov/cib/form499/499a.cfm.

[1] Estimates are based on gross revenue data filed April 1, 2001 on FCC Form 499-A worksheets, combined with public employment data from FCC ARMIS filings and Securities and Exchange Commission filings. Filers were considered affiliated based on information from their FCC Form 499-A filings. These estimates do not reflect affiliates that do not provide telecommunications service or that operate solely outside the United States.

Source: FCC Form 499-A filings and FCC staff estimates.

# 6 International Telephone Service

International telecommunications has become an increasingly important segment of the telecommunications market. International telephone calling -- propelled by technological innovation, increased international trade and travel, and stable or declining international telephone rates -- has skyrocketed. The number of calls made from the United States to other countries increased from 200 million in 1980 to 6.6 billion in 2000. Americans spent about $14.9 billion on international calls in 2000. On average, carriers billed 51 cents per minute for international calls in 2000, a decline of more than 60% since 1980. 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 6.1.

U.S. and foreign carriers compensate each other when one carries traffic that the other bills. Since 1980, 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 from the United States to other countries were $5.5 billion in 2000. Trends in settlement payments are shown in Table 6.2.

International traffic data are available on a country-by-country basis. Table 6.3 summarizes traffic by region of the world. Five markets -- Canada, Mexico, the United Kingdom, Germany, and Japan -- currently account for about 47% of the international calls billed in the United States.

Since 1985, when MCI began to compete with AT&T for international calls, numerous carriers have begun to provide international service. Fifty-two carriers provided international telecommunications service in 2000 by using their own facilities or lines leased from other carriers. These carriers provided $14.2 billion of international telephone service between the U.S. and foreign points and $1.5 billion of international private line service. Table 6.4 shows the U.S.-billed revenues for each of the 52 carriers. Together, AT&T, WorldCom, and Sprint, accounted for 93% of the international service billed in the United States.

In addition to the 52 carriers that owned or leased facilities, 410 carriers reported the resale of international message telephone service. These carriers reported $7.6 billion of resale revenues in 2000. The revenues of the fifty largest resellers are shown in Table 6.5.

The data compiled in Tables 6.1 - 6.5 are filed pursuant to Section 43.61 of the Commission's rules. Preliminary data are filed July 31st of each year and final data are filed October 31st. Additional information can be found in a number of international reports on the **FCC-State Link** web page.

# Table 6.1
## International Service from the United States
## (Minute, Message, and Revenue Amounts Shown in Millions)

| | Telephone Service | | | | | Other Services | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Billed Revenues | | | Billed Revenues | | | |
| | Minutes | Messages | Total End-user 1/ | Per Minute 2/ | Per Call | Telex | Telegraph | Private Line | Misc. Services |
| 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 | 3,446 | 425 | 3,487 | 1.01 | 8.20 | 415 | 45 | 172 | |
| 1986 | 4,126 | 515 | 4,004 | 0.97 | 7.77 | 390 | 42 | 175 | |
| 1987 | 4,819 | 625 | 4,751 | 0.99 | 7.60 | 360 | 35 | 191 | |
| 1988 | 5,679 | 767 | 5,806 | 1.02 | 7.57 | 310 | 30 | 194 | |
| 1989 | 6,751 | 941 | 6,912 | 1.02 | 7.35 | 243 | 27 | 208 | |
| 1990 | 8,030 | 984 | 8,059 | 1.00 | 8.19 | 196 | 24 | 201 | |
| 1991 | 9,072 | 1,384 | 9,263 | 1.02 | 6.69 | 200 | 15 | 309 | $23 |
| 1992 | 10,294 | 1,663 | 10,382 | 1.01 | 6.25 | 155 | 16 | 323 | 24 |
| 1993 | 11,513 | 1,945 | 11,564 | 1.00 | 5.95 | 135 | 12 | 366 | 23 |
| 1994 | 13,616 | 2,347 | 12,543 | 0.92 | 5.35 | 123 | 12 | 441 | 25 |
| 1995 | 15,889 | 2,830 | 14,335 | 0.90 | 5.07 | 119 | 6 | 514 | 48 |
| 1996 | 19,325 | 3,520 | 14,598 | 0.76 | 4.15 | 119 | 5 | 661 | 26 |
| 1997 | 22,753 | 4,259 | 15,662 | 0.69 | 3.68 | 110 | 4 | 851 | 28 |
| 1998 | 24,250 | 4,477 | 14,726 | 0.61 | 3.29 | 50 | 3 | 921 | 36 |
| 1999 | 28,515 | 5,305 | 14,980 | 0.53 | 2.82 | 57 | 2 | 1,216 | 31 |
| 2000 | 29,216 | 6,627 | 14,901 | 0.51 | 2.25 | 33 | 1 | 1,480 | 251 |

Note: Data represent traffic and circuits from all U.S. points.

1/ Billed revenue in Table 6.1 differs from billed revenue in Table 6.3. The amounts shown here represent charges to end-user customers and equal the amounts billed by underlying carriers plus estimated reseller markups. The amounts shown in Table 6.3 are the amounts reported by the underlying carriers.

2/ Billed revenue per minute for international service differs in Table 6.1 and Table 14.3. Data in Table 6.1 are calculated using all U.S. billed minutes and revenues. Data for Table 14.3 represent charges for most U.S. billed calls that originate or terminate in the United States. International-to-international revenues and reorigination, country-beyond and country-direct minutes are not included in that table.

Source: Industry Analysis Division, Common Carrier Bureau *Trends in the International Telecommunications Industry* (April 2001). Year 2000 data from Industry Analysis Division, Common Carrier Bureau *2000 International Telecommunications Data* (December 2001).

## Table 6.2
## International Telephone Service Settlements
## (Revenue Amounts Shown in Millions)

| | End-user Billed Revenues 1/ | Owed to Foreign Carriers | Retained End-user Revenues 1/ | Due from Foreign Carriers | Net Settlements | Net End-user Revenues 1/ | Average per Minute: Settlement Owed to Foreign Carriers for U.S. Billed Calls | Average per Minute: Settlement Due from Foreign Carriers for Foreign Billed Calls | Average per Minute: U.S. Carrier Net End-user Revenues 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 | 3,487 | 2,298 | 1,189 | 1,243 | (1,055) | 2,432 | 0.67 | 0.55 | 0.43 |
| 1986 | 4,004 | 2,461 | 1,544 | 1,396 | (1,065) | 2,939 | 0.60 | 0.55 | 0.44 |
| 1987 | 4,751 | 2,978 | 1,773 | 1,671 | (1,308) | 3,443 | 0.62 | 0.57 | 0.44 |
| 1988 | 5,806 | 3,594 | 2,212 | 1,906 | (1,688) | 4,118 | 0.63 | 0.55 | 0.45 |
| 1989 | 6,912 | 4,261 | 2,651 | 2,213 | (2,049) | 4,864 | 0.63 | 0.53 | 0.45 |
| 1990 | 8,059 | 4,954 | 3,105 | 2,426 | (2,528) | 5,531 | 0.62 | 0.56 | 0.45 |
| 1991 | 9,263 | 5,792 | 3,304 | 2,536 2/ | (3,298) | 5,965 | 0.64 | 0.51 | 0.42 3/ |
| 1992 | 10,382 | 5,945 | 4,437 | 2,650 2/ | (3,547) | 6,835 | 0.58 | 0.46 | 0.43 3/ |
| 1993 | 11,564 | 6,327 | 5,237 | 2,667 2/ | (3,860) | 7,704 | 0.55 | 0.43 | 0.43 3/ |
| 1994 | 12,543 | 6,947 | 5,596 | 2,719 2/ | (4,577) | 7,966 | 0.51 | 0.39 | 0.39 3/ |
| 1995 | 14,335 | 7,559 | 6,777 | 2,631 2/ | (5,281) | 9,054 | 0.48 | 0.35 | 0.39 3/ |
| 1996 | 14,598 | 8,206 | 6,392 | 2,594 2/ | (6,164) | 8,434 | 0.42 | 0.30 | 0.30 3/ |
| 1997 | 15,662 | 8,016 | 7,646 | 2,602 2/ | (5,971) | 9,691 | 0.35 | 0.27 | 0.30 3/ |
| 1998 | 14,726 | 6,985 | 7,742 | 2,538 2/ | (5,045) | 9,681 | 0.29 | 0.21 | 0.27 3/ |
| 1999 | 14,980 | 6,329 | 8,651 | 1,782 2/ | (5,111) | 9,869 | 0.22 | 0.15 | 0.24 3/ |
| 2000 | 14,901 | 5,529 | 9,372 | 1,602 2/ | (4,663) | 10,237 | 0.19 | 0.11 | 0.24 3/ |

Note: Data represent traffic to and from all U.S. points.

1/ Billed revenue in Table 6.2 differs from billed revenue in Table 6.3. The amounts shown here represent charges to end-user customers and equal the amounts billed by underlying carriers plus estimated markups, where service was provided through resellers. The amounts shown in Table 6.3 are the amounts reported by the underlying carriers. Similar differences exist for retained end-user and net revenues.

2/ Includes net settlement receipts for transiting traffic.

3/ Includes transiting traffic.

Source: Industry Analysis Division, Common Carrier Bureau *Trends in the International Telecommunications Industry* (April 2001). Year 2000 data from Industry Analysis Division, Common Carrier Bureau *2000 International Telecommunications Data* (December 2001).

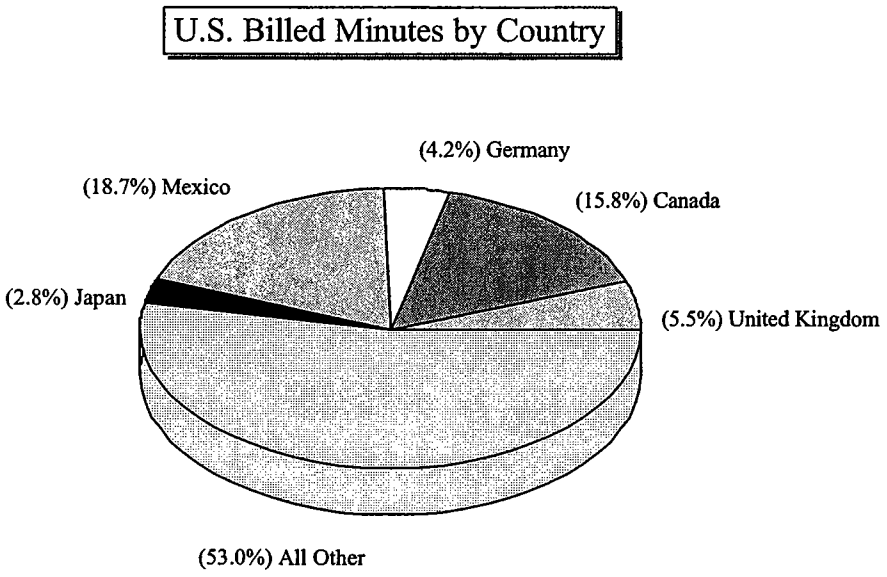
## Table 6.3
## International Message Telephone Service for 2000
### (Figures Rounded to the Nearest Million)

| Region of the World 1/ | Traffic Billed in the United States | | | | | Traffic Billed in Foreign Countries | | | | Total U.S. Carrier Retained Revenues |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Originating or Terminating in the United States | | | Transiting | |
| | Number of Messages | Number of Minutes | U.S. Carrier Revenues | Owed to Foreign Carriers | Retained Revenues | Number of Messages | Number of Minutes | Due from Foreign Carriers | Retained Revenues | |
| Africa | 217 | 672 | $418 | $261 | $157 | 34 | 135 | $49 | $31 | $236 |
| Asia | 1,366 | 5,569 | 3,196 | 1,633 | 1,562 | 232 | 1,211 | 248 | 37 | 1,847 |
| Caribbean | 364 | 1,734 | 797 | 453 | 344 | 87 | 482 | 116 | 5 | 464 |
| Eastern Europe | 250 | 919 | 504 | 180 | 324 | 29 | 124 | 24 | 5 | 353 |
| Middle East | 225 | 753 | 519 | 264 | 256 | 68 | 373 | 69 | 16 | 341 |
| North and Central America | 2,070 | 11,056 | 4,750 | 1,585 | 3,165 | 1,734 | 6,979 | 580 | 19 | 3,764 |
| Oceania | 158 | 643 | 369 | 191 | 179 | 50 | 388 | 65 | 16 | 260 |
| South America | 521 | 2,076 | 1,033 | 482 | 551 | 117 | 551 | 106 | 10 | 667 |
| Western Europe | 1,451 | 5,758 | 2,562 | 465 | 2,097 | 551 | 2,635 | 183 | 22 | 2,302 |
| Other Regions | * | 1 | 5 | 10 | (5) | * | * | * | (*) | (5) |
| Total for Foreign Points | 6,604 | 29,084 | 14,145 | 5,511 | 8,634 | 2,886 | 12,770 | 1,426 | 161 | 10,221 |
| Total for U.S. Points | 23 | 132 | 19 | 18 | 1 | 18 | 118 | 15 | * | 17 |
| Total for All International Points | 6,627 | 29,216 | $14,164 | $5,529 | $8,635 | 2,904 | 12,888 | $1,441 | $161 | $10,237 |

* Denotes values that are less than half a million.

1/ The region totals include all international traffic reported by carriers serving domestic U.S. points including Guam and the U.S. Virgin Islands. Most traffic between Guam, the U.S. Virgin Islands, American Samoa and Northern Mariana Islands and other U.S. points are shown separately as the total for U.S. points, and also are included in the total for all international points. The total for all international poir also includes all traffic originating in American Samoa and the Northern Mariana Islands, which is excluded from the region totals.

## Chart 6.1




Source: Industry Analysis Division, Common Carrier Bureau, *2000 International Telecommunications Data* (December 2001).

## Table 6.4
## U.S. Billed Revenues of Facilities-Based and Facilities-Resale Carriers in 2000 1/
## (Revenue Amounts Shown in Millions)

| | International Service | | | Total International Billed Revenues |
|---|---|---|---|---|
| | Telephone | Private Line | Telex, Telegraph, and Other Miscellaneous | |
| ABS-CBN Telecom North America, Inc. | $9 | | | $9 |
| AM Telecom, LLC | | | | |
| American Samoa Telecommunications Authority | 2 | | | 2 |
| American Tower Corporation | | $172 | | 172 |
| Andrew Telecom, Inc. | | 1 | | 1 |
| AT&T Corp. & Concert Global Networks. USA LLC | 5,444 | 694 | $31 | 6,170 |
| BellSouth Corporation | 18 | | | 18 |
| Bestel (USA) | 2 | | | 2 |
| Cable & Wireless USA, Inc. | 66 | 18 | | 84 |
| Deutsche Telekom, Inc. | | 1 | | 1 |
| Energis (Switzerland) AG | | 2 | | 2 |
| FedEx Internet Technologies Corporation | | * | | * |
| GE American Communications, Inc. | | 9 | | 9 |
| Genuity Telecom Inc. | | * | | * |
| Geocomm Corporation | | * | | * |
| Global Crossing, Ltd. | 4 | 30 | | 34 |
| Hanaro Telecom America, Inc. | | 1 | | 1 |
| Harris Corporation/MCS | * | | | * |
| IDT Corporation | 21 | | | 21 |
| IMPSAT USA, Inc. | | 28 | | 28 |
| International Telnet, Inc. | | | 2 | 2 |
| Iridium North America | | | 2 | 2 |
| IT&E Overseas, Inc. | 15 | 3 | | 18 |
| Japan Telecom America, Inc. | 2 | * | | 2 |
| KDD America, Inc. | 3 | 3 | | 6 |
| KPN-INS, Inc. | 12 | | | 12 |
| LC Communications - International Telecom Inc. | 4 | | | 4 |
| Level 3 Communications, LLC | | 10 | | 10 |
| Local Communications Network, Inc. | | 4 | | 4 |
| Lockheed Martin Corporation | | 44 | | 44 |
| MCI WorldCom, Inc. | 6,818 | 331 | 12 | 7,161 |
| Medley International Teleport, Inc. | | | 3 | 3 |
| Melbourne International Communications, Ltd. | * | 3 | | 3 |
| Metronet Communications | | * | | * |
| Norlight Telecommunications, Inc. | | * | | * |
| NTT America, Inc. | | 5 | | 5 |
| PanAmSat Carrier Services, Inc. | | * | | * |
| Primus Telecommunications, Inc. | 204 | | | 204 |
| PSO, Inc. d/b/a Canal Uno | | | * | * |
| RSL Communications, Ltd. | 80 | | | 80 |
| Satellite Communication Systems, Inc. | * | 5 | | 6 |
| SBC Telecommunications, Inc. | 7 | 7 | | 15 |
| Sprint | 1,188 | 103 | 227 | 1,519 |
| Startec Global Communications Corp. | 91 | | | 91 |
| Telecomunicaciones Ultramarinas-Puerto Rico | | 1 | | 1 |
| Telefonica Larga Distancia, Inc. (TLD) | 13 | * | | 13 |
| Telstra Incorporated | 20 | | | 20 |
| TRICOM USA, Inc. | 53 | | | 53 |
| V-SAT Telecom, Inc. | * | * | | * |
| Verizon Communications, Inc. | 55 | 4 | | 58 |
| Williams Communications, Inc. | | | 7 | 7 |
| World Access, Inc. | 33 | | | 33 |
| Total All Carriers 2/ | $14,164 | $1,480 | $285 | $16,041 3/ |

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

1/ Totals exclude pure resale services. Data do not show settlement receipts for terminating foreign billed traffic.

2/ Includes revenues for American Samoa, Guam, the Northern Mariana Islands, and the U.S. Virgin Islands. Other tables in this section exclude this traffic. The data shown in this table include $42 million of revenues billed in these points, as well as $10 million of revenues for calls between the domestic United States and these points.

3/ Includes $113 million of telephone, private line, and miscellaneous service revenues for 6 carriers that requested confidential treatment.

Source: Industry Analysis Division, Common Carrier Bureau, *2000 International Telecommunications Data* (December 2001).

## Table 6.5
## Top Providers of Pure Resale International MTS in 2000

| | Number of Messages | Number of Minutes | U.S. Carrier Revenues | Percent of Total IMTS Resale Revenues |
|---|---|---|---|---|
| ALLTEL Corporation | 1,559,281 | 12,252,978 | $5,838,683 | 0.08 % |
| AT&T Corp. | 353,474,662 | 2,298,455,743 | 2,484,132,557 | 32.69 |
| Bell Canada Enterprises, Inc. | 71,427,372 | 217,973,289 | 155,935,865 | 2.05 |
| BellSouth Corporation | 25,196,714 | 70,606,702 | 13,917,569 | 0.18 |
| Broadwing, Incorporated | 145,719,704 | 631,357,576 | 89,788,377 | 1.18 |
| Business Telecom, Inc. (BTI) | 10,594,567 | 59,362,769 | 11,108,130 | 0.15 |
| Cable & Wireless USA, Inc. | 114,712,701 | 531,782,404 | 158,488,556 | 2.09 |
| Cingular Wireless | 14,520,524 | 51,714,209 | 26,625,853 | 0.35 |
| Claircom Networks, Inc. | 9,509,804 | 40,416,503 | 13,592,660 | 0.18 |
| Covista, Inc. | 39,098,373 | 65,163,956 | 7,819,675 | 0.10 |
| Cox Communications, Inc. | 454,386 | 3,714,101 | 7,449,070 | 0.10 |
| Deutsche Telekom AG | 7,758,797 | 19,383,682 | 9,574,419 | 0.13 |
| Elephant Talk, Inc. | 5,747,789 | 86,216,839 | 16,581,775 | 0.22 |
| Empire One Telecommunications, Inc. | 2,386,653 | 20,154,715 | 4,098,729 | 0.05 |
| Genesis Communications International, Inc. | 1,546,829 | 11,885,932 | 4,257,934 | 0.06 |
| Global Crossing Telecommunications, Inc. | 133,167,669 | 545,778,826 | 433,799,186 | 5.71 |
| Heritage Communications Corporation | 20,987,412 | 218,269,084 | 24,690,582 | 0.32 |
| IDT Corporation | 677,226,155 | 5,434,277,546 | 890,749,964 | 11.72 |
| Intellicall Operator Services, Inc. d/b/a ILD | 4,796,962 | 74,915,296 | 15,378,121 | 0.20 |
| Intermedia Communications, Inc. | 1,360,710 | 27,214,202 | 8,504,438 | 0.11 |
| International Talk.com d/b/a Vonova Corporation | 12,294,556 | 73,767,336 | 5,719,852 | 0.08 |
| Internationl Exchange Communications, Inc. | 7,635,576 | 77,730,105 | 25,033,469 | 0.33 |
| Lightyear Communications, Inc. | 10,918,107 | 37,884,869 | 11,279,904 | 0.15 |
| Long Distance of Michigan, Inc. d/b/a LDMI & FoneTel | 383,370 | 17,565,173 | 7,532,162 | 0.10 |
| MCI WorldCom, Inc. | 276,526,799 | 1,393,968,829 | 428,861,480 | 5.64 |
| McLeodUSA | 40,375,192 | 304,934,396 | 64,259,838 | 0.85 |
| Mpower Communications Corp. | 1,190,500 | 3,571,501 | 4,464,420 | 0.06 |
| Natel, LLC | 2,969,460 | 32,328,437 | 6,210,580 | 0.08 |
| Network Communications International Corporation | 602,192 | 4,678,608 | 22,511,210 | 0.30 |
| Network Plus, Inc. | 52,349,790 | 285,783,529 | 123,965,138 | 1.63 |
| NOS Communications, Inc. | 212,290,432 | 1,472,891,113 | 165,120,818 | 2.17 |
| PT-1 Long Distance, Inc. | 78,541,109 | 757,991,006 | 157,698,970 | 2.07 |
| Qwest Communications International, Inc. | 171,136,482 | 896,913,622 | 269,322,437 | 3.54 |
| RSL Communications, Ltd. | 76,559,675 | 494,779,123 | 87,753,004 | 1.15 |
| SBC Communications, Inc. | 155,892,803 | 958,935,045 | 245,482,309 | 3.23 |
| Sprint | 128,787,531 | 535,675,084 | 187,301,965 | 2.46 |
| Startec Global Communications Corporation | 182,387,847 | 1,137,904,906 | 238,480,277 | 3.14 |
| Talk America Inc. | 34,109,422 | 269,946,745 | 78,519,215 | 1.03 |
| Teligent, Inc. | 4,685,446 | 13,874,197 | 3,997,173 | 0.05 |
| Telstar International, Inc. | 21,823,718 | 190,597,808 | 46,551,474 | 0.61 |
| Touch America, Inc. | 20,351,438 | 243,045,764 | 24,813,137 | 0.33 |
| UniPlex Telecom Technologies, Inc. | 4,828,535 | 30,157,186 | 10,799,817 | 0.14 |
| United States Cellular Corporation | 9,797,601 | 20,165,187 | 9,878,144 | 0.13 |
| VarTec Telecom, Inc. | 18,093,124 | 187,784,142 | 53,050,742 | 0.70 |
| Verizon Communications Inc. | 64,946,810 | 520,319,844 | 181,046,023 | 2.38 |
| Williams Communications, Inc. | 11,296,351 | 53,638,988 | 7,790,919 | 0.10 |
| Working Assets Funding Services, Inc. | 3,141,010 | 26,757,273 | 15,153,957 | 0.20 |
| World Access, Inc. d/b/a WorldxChange Communications | 211,484,789 | 1,438,252,965 | 212,997,969 | 2.80 |
| XO Communications Inc. | 5,214,205 | 18,687,993 | 5,638,085 | 0.07 |
| Z-Tel Communications, Inc. | 1,774,001 | 35,480,017 | 11,087,505 | 0.15 |
| Total for 360 Companies Not Shown Above 1/ | 512,482,037 | 1,610,393,535 | 505,469,722 | 6.65 |
| Total for all Reporting Carriers | 3,976,116,972 | 23,567,300,678 | 7,600,123,858 | 100.00 % |

1/ Data are consolidated for affiliated carriers. A total of 410 companies made a total of 471 filings.

Source: Industry Analysis Division, Common Carrier Bureau, *2000 International Telecommunications Data* (December 2001).

# 7 Lifeline and LinkUp Programs

In 1984, the FCC, in conjunction with the states and local telephone companies, established a Lifeline program designed to promote universal service by providing low-income individuals with monthly discounts on the monthly cost of telephone service. In 1987, the FCC adopted LinkUp America, a program designed to help low-income households pay the initial costs of commencing telephone service. In June 2000, the Commission further expanded the Lifeline and LinkUp programs to address the needs of those individuals living on tribal lands.

The LinkUp America program, which supports affordable connection to the network, has added 12.2 million telephone subscribers since 1987. In 2001, an estimated 6.2 million subscribers paid reduced local rates under the Lifeline program.

The Commission's rules are designed to satisfy the 1996 Telecommunications Act which mandates "affordable" rates for "low-income consumers" in all regions of the nation. The rules also make the contribution and distribution of low-income support competitively and technologically neutral by requiring equitable and nondiscriminatory contributions from all providers of interstate telecommunications services, and by allowing all eligible telecommunications carriers to receive support for offering Lifeline and LinkUp service.

### 1. Lifeline and LinkUp Support

In states that provide state Lifeline support, Lifeline and LinkUp are available to all low-income consumers who meet the eligibility criteria established by the state. These criteria must be based solely on income or factors directly related to income. In addition, a state commission must ensure that its qualification criteria are reasonably designed to reach eligible residents of tribal lands within the state. To receive Lifeline and LinkUp in a state that does not mandate state Lifeline support, consumers must certify, under penalty of perjury, that they participate in one of the following five federal programs: Medicaid, food stamps, Supplemental Security Income (SSI), federal public housing assistance, or the Low-Income Home Energy Assistance Program (LIHEAP).

Eligible consumers living on tribal lands qualify to receive federal Lifeline support if (a) they qualify under state criteria in a state that provides Lifeline support; (b) they certify, under penalty of perjury, that they receive benefits from one of the five federal programs listed above; or (c) they participate in one of the following federal assistance programs: Bureau of Indian Affairs (BIA) general assistance program, tribally administered Temporary Assistance for Needy Families (TANF), National School Lunch Program's free lunch program, or Head Start (meeting the income-qualifying standard).

## 2. Lifeline Support

Under the Commission's rules, there are four tiers of federal Lifeline support. The first tier represents a monthly waiver of the federal subscriber line charge. The maximum federal subscriber line charge is currently $5.00 per month. All eligible subscribers receive first-tier support. Second-tier support is a $1.75 per month reduction in the basic local rate, and it is available if all relevant non-federal regulatory authorities approve such a reduction. (All fifty states have approved.)

The third tier of federal support is based on the amount of additional state support mandated by the relevant state or otherwise provided by carriers. Federal support is available to match one-half of the non-federal support provided, up to a maximum of $1.75 in federal support, assuming that the carrier has all necessary approvals to pass on the full amount of this support in discounts to subscribers.

Eligible subscribers living on tribal lands also qualify to receive a fourth tier of Lifeline support if they meet the eligibility standards described above. Tier-four support provides up to an additional $25 per month towards reducing basic local service rates. This enhanced support should bring basic monthly rates down to $1 for most Lifeline customers on tribal lands.

## 3. LinkUp Support

The Commission's LinkUp program provides qualified low-income individuals with a federally financed 50% discount (up to a maximum $30 discount) on initial connection charges. These subscribers also may choose to schedule deferred payments of up to $200 over a one-year period, with the customary interest charges paid through federal support.

Eligible residents of tribal lands may receive up to $100 in discounts on initial connection charges. The $100 maximum is based on the sum of the federally financed 50% discount (up to the $30 maximum) available to all qualified low-income individuals, plus a dollar-for-dollar match (up to $70) for connection charges above $60.

## 4. Services

Basic service must include, at a minimum: single-party service, voice-grade access to the public switched telephone network, dual-tone multifrequency signaling or its functional digital equivalent, access to emergency services, access to operator services, access to interexchange service, access to directory assistance, and toll-limitation. The federal program compensates eligible telecommunications carriers for toll-limitation based on the carrier's incremental cost of providing toll-limitation services (TLS).

The FCC monitors subscriber participation and telephone usage to determine program benefits and costs. Historical tables by state can be downloaded from the *Monitoring Report's* section of the **FCC-State Link** web site, www.fcc.gov/wcb/stats.

Table 7.1 reports Lifeline monthly support by state or jurisdiction as of April 2001. The table shows both federal and state support, and indicates the additional contribution from the federal program to reduce local rates where states have authorized statewide or carrier specific intrastate local rate reductions. Table 7.1 indicates both the federal and state combined minimum local rate reduction. This table does not reflect changes in support that resulted from the implementation of the *CALLS* order.

Table 7.2 reports annual historical Lifeline subscriber data by state or jurisdiction for years 1990 through 2001. Historical data from the inception of the program in 1985 through 1989 may be found in the *Monitoring Report's* section of the **FCC-State Link** web site, as mentioned above.

Table 7.3 reports annual tribal and non-tribal subscriber data by state or jurisdiction starting in year 2000, when the expanded Lifeline assistance program addressed the needs of Native Americans who live on tribal lands.

Table 7.4 reports annual historical LinkUp subscriber data by state or jurisdiction for years 1990 through 2001. LinkUp program participation was first certified in 1987. Historical data for 1987 through 1989 are available in the *Monitoring Report's* section of the **FCC-State Link** web site, as mentioned above.

Table 7.5 reports annual tribal and non-tribal LinkUp subscriber data by state or jurisdiction starting in year 2000, when the expanded LinkUp assistance program addressed the needs of Native Americans who live on tribal lands.

Table 7.6 reports annual historical Lifeline payments to carriers in each state or jurisdiction and shows total reimbursements to each state or jurisdiction. The report provides Lifeline support totals for payments made to subscribers through local rate discounts. The payments shown in these tables include TLS and PICC data; however, these tables do not include state or local rate contributions.

Table 7.7 reports annual historical data for the LinkUp connection assistance payments to carriers in each state or jurisdiction. The LinkUp program includes connection discounts reflected in the reimbursements to local carriers.

Table 7.8 reports low-income support, by state or jurisdiction, for Lifeline and LinkUp payments between January 1998 and December 2001. Total carrier payments data include local rate reductions for the presubscribed interexchange carrier charges (PICCs), and the carrier's incremental cost of providing toll-limitation services (TLS) in each state or jurisdiction. American Indian and Native American tribal data are also reported in this table showing the 2000 and 2001 data. (Data are not available for previous years.) Data will appear only for states where eligible subscribers living on tribal lands qualify to receive low-income support.

**Table 7.1**
**Lifeline Monthly Support**
**By State or Jurisdiction**
**(As of December 2001)***

| State or Jurisdiction | Basic Federal Support | Additional State Support | Federal Match | Total Federal Support | Total Federal and State Support |
|---|---|---|---|---|---|
| Alabama | $6.75 | $3.50 | $1.75 | $8.50 | $12.00 |
| Alaska | 6.75 | 3.50 | 1.75 | 8.50 | 12.00 |
| American Samoa | 6.75 | 0.00 | 0.00 | 6.75 | 6.75 |
| Arizona | 6.75 | 3.50 | 1.75 | 8.50 | 12.00 |
| Arkansas | 6.75 | 0.00 | 0.00 | 6.75 | 6.75 |
| California | 6.15/6.75 [1] | 3.50 | 1.75 | 7.90/8.50 | 11.40/12.00 |
| Colorado | 6.75 | 3.50 | 1.75 | 8.50 | 12.00 |
| Connecticut | 6.75 | 1.17 | 0.58 | 7.33 | 8.50 |
| Delaware | 6.75 | 0.00 | 0.00 | 6.75 | 6.75 |
| District of Columbia | 5.56 | 3.50 | 1.75 | 7.31 | 10.81 |
| Florida | 6.75 | 3.50 | 1.75 | 8.50 | 12.00 |
| Georgia | 6.75 | 3.50 | 1.75 | 8.50 | 12.00 |
| Guam | 6.75 | 3.50 | 1.75 | 8.50 | 12.00 |
| Hawaii | 6.75 | 0.00 | 0.00 | 6.75 | 6.75 |
| Idaho | 6.75 | 3.50 | 1.75 | 8.50 | 12.00 |
| Illinois | 6.75 | 1.50 | 0.75 | 7.50 | 9.00 |
| Indiana | 6.75 | 0.00 | 0.00 | 6.75 | 6.75 |
| Iowa | 6.75 | 0.00 | 0.00 | 6.75 | 6.75 |
| Kansas | 6.75 | 3.50 | 1.75 | 8.50 | 12.00 |
| Kentucky | 6.75 | 3.50 | 1.75 | 8.50 | 12.00 |
| Louisiana | 6.75 | 0.00 | 0.00 | 6.75 | 6.75 |
| Maine | 6.75 | 3.50 | 1.75 | 8.50 | 12.00 |
| Maryland | 6.75 | 3.50 | 1.75 | 8.50 | 12.00 |
| Massachusetts | 6.75 | 6.00 | 1.75 | 8.50 | 14.50 |
| Michigan | 6.75 | 2.00 | 1.00 | 7.75 | 9.75 |
| Minnesota | 6.75 | 0.00 | 0.00 | 6.75 | 6.75 |
| Mississippi | 6.75 | 3.50 | 1.75 | 8.50 | 12.00 |
| Missouri | 6.75 | 0.00 | 0.00 | 6.75 | 6.75 |
| Montana | 6.75 | 3.50 | 1.75 | 8.50 | 12.00 |
| Nebraska | 6.75 | 3.50 | 1.75 | 8.50 | 12.00 |
| Nevada | 5.78/6.75 [1] | 3.50 | 1.75 | 7.53/8.50 | 11.03/12.00 |
| New Hampshire | 6.75 | 0.00 | 0.00 | 6.75 | 6.75 |
| New Jersey | 6.75 | 0.00 | 0.00 | 6.75 | 6.75 |
| New Mexico | 6.75 | 3.50 | 1.75 | 8.50 | 12.00 |
| New York | 6.75 | 3.50 | 1.75 | 8.50 | 12.00 |
| North Carolina | 6.75 | 3.50 | 1.75 | 8.50 | 12.00 |
| North Dakota | 6.75 | 3.50 | 1.75 | 8.50 | 12.00 |
| Northern Mariana Islands | 6.75 | 0.00 | 0.00 | 6.75 | 6.75 |
| Ohio | 6.75 | 0.00 | 0.00 | 6.75 | 6.75 |
| Oklahoma | 6.75 | 1.17 | 0.58 | 7.33 | 8.50 |
| Oregon | 6.75 | 3.50 | 1.75 | 8.50 | 12.00 |
| Pennsylvania | 6.75 | 2.50 | 1.25 | 8.00 | 10.50 |
| Puerto Rico | 6.75 | 0.00 | 0.00 | 6.75 | 6.75 |
| Rhode Island | 6.75 | 3.50 | 1.75 | 8.50 | 12.00 |
| South Carolina | 6.75 | 3.50 | 1.75 | 8.50 | 12.00 |
| South Dakota | 6.75 | 0.00 | 0.00 | 6.75 | 6.75 |
| Tennessee | 6.75 | 3.50 | 1.75 | 8.50 | 12.00 |
| Texas | 6.75 | 3.50 | 1.75 | 8.50 | 12.00 |
| Utah | 6.75 | 3.50 | 1.75 | 8.50 | 12.00 |
| Vermont | 6.75 | 3.50 | 1.75 | 8.50 | 12.00 |
| Virginia | 6.75 | 3.50 | 1.75 | 8.50 | 12.00 |
| Virgin Islands | 6.75 | 7.05 | 1.75 | 8.50 | 15.55 |
| Washington | 6.75 | 3.50 | 1.75 | 8.50 | 12.00 |
| West Virginia | 6.75 | 2.00 | 1.00 | 7.75 | 9.75 |
| Wisconsin | 6.75 | 1.17 | 0.58 | 7.33 | 8.50 |
| Wyoming | 6.75 | 3.50 | 1.75 | 8.50 | 12.00 |

* Basic support changed for some companies on January 1, 2002.

[1] Pacific Bell Telephone Company in California waived $4.40 and Sprint in Nevada waived $5.78.

Source: Universal Service Administrative Company (USAC).

# Table 7.2
## Lifeline Assistance Subscribers
## By State or Jurisdiction

| State or Jurisdiction | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | 0 | 0 | 0 | 0 | 0 | 2,648 | 11,052 | 14,346 | 17,201 | 18,676 | 21,493 | 23,921 |
| Alaska | 0 | 0 | 0 | 0 | 887 | 1,445 | 1,684 | 1,761 | 2,530 | 4,321 | 9,291 | 15,846 |
| American Samoa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 156 | 427 | 657 | 822 |
| Arizona | 6,723 | 6,214 | 5,748 | 7,587 | 9,146 | 9,820 | 10,679 | 9,438 | 21,461 | 22,118 | 25,283 | 38,164 |
| Arkansas | 6,703 | 7,295 | 7,479 | 7,370 | 6,859 | 7,988 | 9,730 | 8,926 | 8,870 | 8,843 | 9,228 | 7,495 |
| California | 1,578,458 | 1,792,884 | 2,000,234 | 2,327,740 | 2,534,160 | 2,817,982 | 3,032,960 | 3,000,571 | 3,105,855 | 3,157,706 | 3,196,657 | 3,245,315 |
| Colorado | 9,897 | 17,871 | 20,110 | 18,814 | 18,136 | 16,992 | 22,195 | 22,452 | 21,950 | 23,995 | 26,645 | 26,818 |
| Connecticut | 0 | 0 | 0 | 15,294 | 50,510 | 62,982 | 62,610 | 61,683 | 59,547 | 61,437 | 64,745 | 60,846 |
| Delaware | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 368 | 606 | 756 | 1,178 |
| District of Columbia | 2,894 | 2,866 | 5,422 | 12,344 | 11,572 | 10,252 | 9,888 | 7,580 | 9,404 | 10,593 | 11,236 | 11,957 |
| Florida | 0 | 0 | 0 | 0 | 61,442 | 108,431 | 134,258 | 129,723 | 131,749 | 129,980 | 134,263 | 140,288 |
| Georgia | 0 | 31,681 | 58,497 | 67,112 | 72,548 | 79,545 | 79,606 | 75,341 | 73,660 | 74,825 | 73,037 | 70,272 |
| Guam | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 313 | 905 | 2,033 | 2,474 |
| Hawaii | 6,081 | 5,950 | 5,862 | 6,005 | 6,200 | 6,444 | 6,731 | 6,465 | 9,008 | 12,590 | 15,381 | 14,735 |
| Idaho | 8,186 | 8,411 | 8,149 | 8,212 | 7,090 | 7,347 | 7,526 | 7,408 | 6,907 | 14,780 | 19,696 | 24,373 |
| Illinois | 0 | 0 | 0 | 26 | 0 | 0 | 0 | 0 | 29,104 | 49,347 | 57,816 | 69,029 |
| Indiana | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12,439 | 19,058 | 21,363 | 30,728 |
| Iowa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,460 | 6,105 | 11,862 | 13,884 |
| Kansas | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,260 | 5,591 | 8,564 | 12,857 |
| Kentucky | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,044 | 25,040 | 39,560 | 45,072 |
| Louisiana | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,838 | 10,435 | 15,476 | 19,051 |
| Maine | 44,392 | 53,020 | 63,411 | 70,029 | 68,482 | 62,949 | 61,177 | 63,553 | 63,407 | 67,401 | 76,367 | 82,672 |
| Maryland | 5,465 | 5,203 | 5,395 | 5,228 | 5,226 | 4,663 | 4,028 | 3,964 | 3,784 | 3,885 | 3,948 | 3,977 |
| Massachusetts | 87,285 | 131,635 | 143,216 | 160,221 | 165,723 | 167,182 | 162,384 | 156,294 | 161,657 | 167,699 | 165,519 | 161,436 |
| Michigan | 66,053 | 96,044 | 116,398 | 130,586 | 138,870 | 135,599 | 131,786 | 129,337 | 129,208 | 132,432 | 141,541 | 132,788 |
| Minnesota | 57,529 | 57,075 | 51,151 | 55,380 | 59,431 | 51,089 | 48,494 | 47,575 | 49,073 | 54,787 | 56,977 | 51,108 |
| Mississippi | 0 | 2,153 | 2,405 | 4,493 | 8,438 | 9,717 | 9,282 | 8,321 | 10,471 | 13,370 | 16,694 | 19,861 |
| Missouri | 14,639 | 16,980 | 17,295 | 17,356 | 15,807 | 13,897 | 11,272 | 10,368 | 7,885 | 10,709 | 18,982 | 30,893 |
| Montana | 5,507 | 5,405 | 5,698 | 6,617 | 6,744 | 6,813 | 8,031 | 7,613 | 7,963 | 9,570 | 11,125 | 14,253 |
| Nebraska | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9,650 | 11,434 | 14,462 | 14,657 |
| Nevada | 5,702 | 5,748 | 6,339 | 7,528 | 8,927 | 9,408 | 8,472 | 9,284 | 3,438 | 10,551 | 17,486 | 24,164 |
| New Hampshire | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,581 | 5,205 | 6,453 | 6,943 |
| New Jersey | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,478 | 6,434 | 29,095 | 41,590 |
| New Mexico | 12,770 | 15,190 | 18,660 | 28,742 | 32,244 | 28,380 | 30,075 | 30,314 | 30,816 | 32,843 | 36,863 | 38,974 |
| New York | 327,808 | 393,684 | 456,174 | 522,684 | 592,705 | 705,871 | 756,657 | 698,267 | 703,001 | 657,267 | 586,579 | 511,624 |
| North Carolina | 14,996 | 15,812 | 21,208 | 23,496 | 23,446 | 22,791 | 23,086 | 22,595 | 29,640 | 44,434 | 62,507 | 80,658 |
| North Dakota | 10,037 | 10,610 | 10,664 | 10,029 | 9,411 | 8,657 | 7,146 | 7,369 | 10,895 | 11,968 | 13,440 | 15,309 |
| Northern Mariana Isls. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 192 | 494 | 427 | 445 |
| Ohio | 14,885 | 15,712 | 33,450 | 44,801 | 47,126 | 54,706 | 58,392 | 60,366 | 69,358 | 109,202 | 167,213 | 227,465 |
| Oklahoma | 0 | 0 | 0 | 0 | 0 | 0 | 532 | 532 | 1,521 | 2,454 | 17,768 | 63,872 |
| Oregon | 21,551 | 23,064 | 25,229 | 28,305 | 30,475 | 35,820 | 34,804 | 31,213 | 27,953 | 28,934 | 30,374 | 31,196 |
| Pennsylvania | 0 | 0 | 0 | 0 | 0 | 0 | 4,797 | 7,114 | 23,202 | 40,168 | 49,146 | 63,459 |
| Puerto Rico | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10,168 | 16,895 | 17,720 | 17,898 |
| Rhode Island | 15,757 | 23,765 | 26,906 | 38,672 | 39,992 | 40,835 | 42,524 | 43,881 | 45,066 | 46,244 | 47,412 | 46,539 |
| South Carolina | 0 | 0 | 0 | 0 | 0 | 10,624 | 16,498 | 18,386 | 22,222 | 21,091 | 20,820 | 21,142 |
| South Dakota | 4,764 | 4,924 | 5,018 | 5,076 | 3,561 | 3,690 | 3,718 | 3,708 | 10,698 | 11,532 | 13,442 | 17,430 |
| Tennessee | 0 | 0 | 18,749 | 20,419 | 20,721 | 19,934 | 19,926 | 18,819 | 22,915 | 30,347 | 38,884 | 45,587 |
| Texas | 33,698 | 48,453 | 96,405 | 103,232 | 136,352 | 165,609 | 190,095 | 193,444 | 210,672 | 236,934 | 258,812 | 296,551 |
| Utah | 16,006 | 21,565 | 27,717 | 28,379 | 28,157 | 26,930 | 24,088 | 22,625 | 20,096 | 19,237 | 19,394 | 19,762 |
| Vermont | 18,044 | 20,661 | 21,895 | 22,973 | 24,322 | 25,624 | 24,791 | 25,356 | 26,475 | 28,464 | 29,740 | 30,428 |
| Virgin Islands | 0 | 0 | 0 | 316 | 594 | 253 | 296 | 471 | 567 | 402 | 511 | 0 |
| Virginia | 16,201 | 17,365 | 19,143 | 21,293 | 22,100 | 20,744 | 22,180 | 23,187 | 22,040 | 22,306 | 21,658 | 20,611 |
| Washington | 49,985 | 68,235 | 74,879 | 85,571 | 90,148 | 87,276 | 84,149 | 63,965 | 61,563 | 61,809 | 68,143 | 78,781 |
| West Virginia | 4,490 | 4,262 | 4,115 | 4,160 | 4,704 | 4,230 | 4,336 | 5,164 | 5,320 | 5,546 | 5,294 | 5,036 |
| Wisconsin | 7 | 54,137 | 55,829 | 54,576 | 59,744 | 58,071 | 50,714 | 50,894 | 42,514 | 59,331 | 62,798 | 64,617 |
| Wyoming | 0 | 416 | 1,366 | 1,271 | 1,119 | 818 | 776 | 864 | 1,113 | 1,337 | 1,363 | 1,728 |
| Industry Total | 2,466,513 | 2,984,290 | 3,440,216 | 3,971,937 | 4,423,119 | 4,914,056 | 5,233,425 | 5,110,537 1/ | 5,380,726 | 5,640,094 | 5,893,999 2/ | 6,158,579 2/ |

1/ Subscriber data were not actually collected in 1997. USAC used an estimated number of subscribers for all states.

2/ Average number of subscribers reported for 2000 and 2001 for companies requesting reimbursement (includes true-ups through December 2001). Ninety-nine percent of all eligible companies have reported to USAC for reimbursement at this time.

Source: Universal Service Administrative Company (USAC).

## Table 7.3
## Lifeline Assistance Subscribers for Tribal and Non-Tribal Areas
## By State or Jurisdiction

| State or Jurisdiction | 2000 Non-Tribal | 2000 Tribal | 2001 Non-Tribal | 2001 Tribal |
|---|---|---|---|---|
| Alabama | 21,493 | 0 | 23,921 | 0 |
| Alaska | 6,176 | 3,115 | 8,444 | 7,402 |
| American Samoa | 657 | 0 | 822 | 0 |
| Arizona | 23,971 | 1,312 | 31,190 | 6,974 |
| Arkansas | 9,228 | 0 | 7,495 | 0 |
| California | 3,196,638 | 19 | 3,245,220 | 95 |
| Colorado | 26,643 | 2 | 26,814 | 4 |
| Connecticut | 64,745 | 0 | 60,846 | 0 |
| Delaware | 756 | 0 | 1,178 | 0 |
| District of Columbia | 11,236 | 0 | 11,957 | 0 |
| Florida | 134,262 | 1 | 140,288 | 0 |
| Georgia | 73,037 | 0 | 70,272 | 0 |
| Guam | 2,033 | 0 | 2,474 | 0 |
| Hawaii | 15,381 | 0 | 14,735 | 0 |
| Idaho | 19,691 | 5 | 24,318 | 55 |
| Illinois | 57,816 | 0 | 69,029 | 0 |
| Indiana | 21,363 | 0 | 30,728 | 0 |
| Iowa | 11,862 | 0 | 13,884 | 0 |
| Kansas | 8,564 | 0 | 12,857 | 0 |
| Kentucky | 39,560 | 0 | 45,072 | 0 |
| Louisiana | 15,476 | 0 | 19,051 | 0 |
| Maine | 76,356 | 11 | 82,261 | 411 |
| Maryland | 3,948 | 0 | 3,977 | 0 |
| Massachusetts | 165,519 | 0 | 161,436 | 0 |
| Michigan | 141,540 | 1 | 132,637 | 151 |
| Minnesota | 56,929 | 48 | 50,939 | 169 |
| Mississippi | 16,694 | 0 | 19,861 | 0 |
| Missouri | 18,982 | 0 | 30,891 | 2 |
| Montana | 10,138 | 987 | 12,244 | 2,009 |
| Nebraska | 14,361 | 101 | 14,500 | 157 |
| Nevada | 17,432 | 54 | 24,084 | 80 |
| New Hampshire | 6,453 | 0 | 6,943 | 0 |
| New Jersey | 29,095 | 0 | 41,590 | 0 |
| New Mexico | 36,546 | 317 | 37,921 | 1,053 |
| New York | 586,576 | 3 | 511,602 | 22 |
| North Carolina | 62,506 | 1 | 80,655 | 3 |
| North Dakota | 12,979 | 461 | 14,313 | 996 |
| Northern Mariana Islands | 427 | 0 | 445 | 0 |
| Ohio | 167,213 | 0 | 227,465 | 0 |
| Oklahoma | 7,138 | 10,630 | 36,773 | 27,099 |
| Oregon | 30,368 | 6 | 31,155 | 41 |
| Pennsylvania | 49,146 | 0 | 63,459 | 0 |
| Puerto Rico | 17,720 | 0 | 17,898 | 0 |
| Rhode Island | 47,412 | 0 | 46,539 | 0 |
| South Carolina | 20,817 | 3 | 21,137 | 5 |
| South Dakota | 12,223 | 1,219 | 14,635 | 2,795 |
| Tennessee | 38,884 | 0 | 45,586 | 1 |
| Texas | 258,810 | 2 | 296,172 | 379 |
| Utah | 19,386 | 8 | 19,734 | 28 |
| Vermont | 29,740 | 0 | 30,428 | 0 |
| Virgin Islands | 511 | 0 | 0 | 0 |
| Virginia | 21,658 | 0 | 20,611 | 0 |
| Washington | 67,792 | 351 | 77,002 | 1,779 |
| West Virginia | 5,294 | 0 | 5,036 | 0 |
| Wisconsin | 62,785 | 13 | 64,550 | 67 |
| Wyoming | 1,345 | 18 | 1,642 | 86 |
| Industry Total | 5,875,311 | 18,688 | 6,106,716 | 51,863 |

Note: The average number of subscribers reported for 2000 and 2001 includes true-ups through December 2001. Starting in October 2000, low-income subscribers are listed as either tribal or non-tribal due to implementation of the *Tribal Order*. Ninety-nine percent of all eligible telecommunications carriers (ETCs) have reported to date.

Source: Universal Service Administrative Company (USAC).

## Table 7.4
## LinkUp Assistance Subscribers
## By State or Jurisdiction

| State or Jurisdiction | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | 1,927 | 2,182 | 1,381 | 736 | 308 | 276 | 362 | NA | 2,277 | 1,590 | 1,469 | 1,339 |
| Alaska | 0 | 0 | 0 | 0 | 395 | 777 | 732 | NA | 917 | 982 | 774 | 1,861 |
| American Samoa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | NA | 122 | 89 | 53 | 54 |
| Arizona | 416 | 206 | 88 | 257 | 367 | 387 | 906 | NA | 528 | 4,805 | 4,883 | 13,134 |
| Arkansas | 5,240 | 6,522 | 7,067 | 12,082 | 16,124 | 8,549 | 11,577 | NA | 8,183 | 5,395 | 3,270 | 2,488 |
| California | 180 | 0 | 0 | 0 | 0 | 0 | 0 | NA | 1,542,297 | 1,325,904 | 1,216,709 | 1,074,525 |
| Colorado | 585 | 1,749 | 1,614 | 1,257 | 859 | 593 | 2,216 | NA | 2,537 | 1,278 | 1,115 | 1,081 |
| Connecticut | 3,499 | 6,661 | 9,164 | 10,316 | 17,176 | 18,410 | 13,934 | NA | 8,938 | 6,829 | 4,442 | 3,413 |
| Delaware | 0 | 0 | 0 | 0 | 0 | 7 | 406 | NA | 132 | 62 | 48 | 306 |
| District of Columbia | 514 | 510 | 1,145 | 1,863 | 1,675 | 1,920 | 1,784 | NA | 26 | 28 | 3 | 0 |
| Florida | 3,342 | 3,824 | 4,690 | 2,811 | 2,290 | 1,639 | 3,831 | NA | 9,799 | 9,266 | 9,652 | 9,083 |
| Georgia | 0 | 13,052 | 28,108 | 21,446 | 20,753 | 20,656 | 15,368 | NA | 10,701 | 8,723 | 4,349 | 3,339 |
| Guam | 0 | 0 | 0 | 0 | 0 | 0 | 0 | NA | 201 | 703 | 787 | 976 |
| Hawaii | 905 | 1,326 | 1,708 | 2,047 | 2,746 | 3,989 | 3,276 | NA | 6,408 | 10,126 | 10,511 | 8,290 |
| Idaho | 240 | 362 | 396 | 465 | 658 | 571 | 671 | NA | 793 | 1,231 | 2,169 | 1,356 |
| Illinois | 23,213 | 11,721 | 0 | 21,278 | 24,365 | 15,794 | 10,077 | NA | 12,304 | 12,934 | 13,052 | 25,753 |
| Indiana | 1,475 | 2,747 | 4,939 | 4,782 | 5,010 | 3,001 | 4,318 | NA | 4,605 | 5,507 | 5,978 | 11,754 |
| Iowa | 6,228 | 5,522 | 5,221 | 4,784 | 4,382 | 3,249 | 2,575 | NA | 2,093 | 1,449 | 1,159 | 1,012 |
| Kansas | 722 | 582 | 635 | 557 | 493 | 435 | 421 | NA | 1,385 | 1,483 | 3,020 | 3,492 |
| Kentucky | 6,633 | 8,931 | 11,660 | 10,963 | 11,819 | 13,902 | 14,173 | NA | 7,550 | 9,815 | 8,375 | 7,062 |
| Louisiana | 28,356 | 18,693 | 12,992 | 7,053 | 4,943 | 3,275 | 1,571 | NA | 3,911 | 1,358 | 989 | 709 |
| Maine | 10,128 | 12,132 | 5,576 | 14,450 | 19,363 | 14,798 | 20,783 | NA | 21,640 | 25,887 | 26,224 | 20,402 |
| Maryland | 4,985 | 3,540 | 3,168 | 2,772 | 2,837 | 2,613 | 2,091 | NA | 1,264 | 908 | 637 | 402 |
| Massachusetts | 8,569 | 4,366 | 4,661 | 17,390 | 19,464 | 18,601 | 11,727 | NA | 5,864 | 10,036 | 6,795 | 4,431 |
| Michigan | 23,675 | 36,639 | 40,339 | 36,512 | 34,640 | 26,198 | 20,097 | NA | 18,587 | 19,501 | 19,215 | 21,832 |
| Minnesota | 949 | 787 | 427 | 443 | 1,871 | 834 | 832 | NA | 1,058 | 521 | 356 | 278 |
| Mississippi | 1,663 | 1,369 | 932 | 2,371 | 4,236 | 4,151 | 2,974 | NA | 1,819 | 1,224 | 952 | 815 |
| Missouri | 1,105 | 840 | 766 | 735 | 1,633 | 742 | 627 | NA | 4,777 | 1,150 | 6,510 | 7,669 |
| Montana | 1,607 | 1,157 | 1,181 | 1,291 | 1,253 | 988 | 1,909 | NA | 1,676 | 1,539 | 2,014 | 1,857 |
| Nebraska | 526 | 688 | 878 | 650 | 522 | 496 | 331 | NA | 707 | 1,181 | 1,947 | 2,576 |
| Nevada | 324 | 487 | 562 | 866 | 685 | 708 | 640 | NA | 117 | 3,284 | 3,577 | 3,459 |
| New Hampshire | 407 | 1,009 | 1,544 | 1,805 | 1,570 | 1,312 | 1,246 | NA | 1,315 | 1,374 | 827 | 542 |
| New Jersey | 524 | 580 | 696 | 565 | 567 | 342 | 237 | NA | 1,541 | 474 | 1,086 | 593 |
| New Mexico | 3,173 | 4,178 | 5,848 | 9,963 | 12,600 | 12,277 | 9,171 | NA | 7,894 | 7,552 | 3,157 | 2,553 |
| New York | 188,182 | 241,477 | 290,856 | 238,856 | 290,922 | 327,123 | 346,089 | NA | 199,181 | 53,961 | 41,683 | 23,888 |
| North Carolina | 2,100 | 2,348 | 2,175 | 1,762 | 1,207 | 841 | 569 | NA | 2,408 | 3,237 | 3,481 | 2,920 |
| North Dakota | 313 | 373 | 337 | 398 | 355 | 355 | 220 | NA | 1,446 | 1,026 | 1,220 | 1,627 |
| Northern Mariana Isls. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | NA | 1,475 | 3,891 | 225 | 84 |
| Ohio | 11,157 | 18,239 | 37,191 | 46,028 | 40,071 | 29,338 | 23,196 | NA | 19,058 | 25,880 | 47,868 | 55,425 |
| Oklahoma | 728 | 1,582 | 1,271 | 1,281 | 1,087 | 1,040 | 1,260 | NA | 3,121 | 1,496 | 3,899 | 11,011 |
| Oregon | 3,664 | 3,657 | 4,588 | 6,335 | 7,144 | 8,043 | 7,862 | NA | 5,901 | 4,863 | 8,335 | 7,081 |
| Pennsylvania | 79,532 | 85,695 | 97,585 | 94,897 | 100,651 | 99,105 | 92,128 | NA | 63,713 | 54,251 | 28,737 | 13,619 |
| Puerto Rico | 5,523 | 4,308 | 3,886 | 3,138 | 3,455 | 4,116 | 3,640 | NA | 3,870 | 1,783 | 1,210 | 772 |
| Rhode Island | 1,023 | 960 | 1,483 | 2,002 | 2,808 | 2,728 | 2,100 | NA | 1,766 | 1,565 | 1,375 | 591 |
| South Carolina | 1,535 | 2,265 | 1,897 | 2,113 | 2,053 | 1,495 | 1,158 | NA | 2,270 | 2,052 | 1,699 | 1,336 |
| South Dakota | 542 | 443 | 439 | 362 | 451 | 369 | 221 | NA | 2,330 | 1,698 | 2,099 | 2,303 |
| Tennessee | 3,278 | 5,418 | 4,126 | 5,203 | 5,004 | 3,561 | 3,684 | NA | 4,190 | 6,023 | 7,240 | 5,531 |
| Texas | 22,587 | 30,915 | 41,381 | 44,184 | 66,010 | 72,210 | 75,708 | NA | 121,794 | 121,925 | 118,092 | 80,253 |
| Utah | 387 | 1,781 | 6,286 | 4,843 | 3,758 | 3,525 | 5,584 | NA | 2,880 | 2,061 | 1,242 | 1,138 |
| Vermont | 1,349 | 2,073 | 2,104 | 2,217 | 2,485 | 2,074 | 1,396 | NA | 1,366 | 1,500 | 2,386 | 2,231 |
| Virgin Islands | 0 | 0 | 0 | 38 | 111 | 35 | 13 | NA | 199 | 106 | 100 | 0 |
| Virginia | 9,598 | 14,642 | 14,523 | 15,701 | 15,797 | 15,847 | 14,428 | NA | 10,261 | 7,702 | 4,619 | 2,392 |
| Washington | 3,787 | 30,134 | 34,413 | 37,419 | 43,429 | 41,462 | 45,284 | NA | 27,780 | 27,456 | 28,880 | 33,922 |
| West Virginia | 327 | 363 | 322 | 586 | 577 | 657 | 997 | NA | 488 | 865 | 759 | 442 |
| Wisconsin | 36,444 | 40,515 | 40,942 | 37,380 | 34,903 | 28,209 | 21,937 | NA | 25,933 | 27,187 | 20,404 | 19,183 |
| Wyoming | 169 | 95 | 94 | 109 | 82 | 56 | 17 | NA | 21 | 50 | 199 | 203 |
| Industry Total | 513,335 | 639,645 | 743,285 | 737,362 | 837,964 | 823,679 | 808,354 | NA 1/ | 2,195,417 | 1,834,766 | 1,691,856 2/ | 1,504,388 2/ |

NA - Not available.

1/ Subscriber data were not actually collected in 1997.

2/ Subscribers reported for 2000 and 2001 include true-ups through December 2001 for companies requesting reimbursement. Approximately ninety-nine percent of all eligible companies have reported at this time

Source: Universal Service Administrative Company (USAC).

## Table 7.5
## LinkUp Assistance Subscribers for Tribal and Non-Tribal Areas
## By State or Jurisdiction

| State or Jurisdiction | 2000 Non-Tribal | 2000 Tribal | 2001 Non-Tribal | 2001 Tribal |
|---|---|---|---|---|
| Alabama | 1,469 | 0 | 1,339 | 0 |
| Alaska | 599 | 175 | 929 | 932 |
| American Samoa | 53 | 0 | 54 | 0 |
| Arizona | 4,432 | 451 | 2,210 | 10,924 |
| Arkansas | 3,270 | 0 | 2,488 | 0 |
| California | 1,216,706 | 3 | 1,074,433 | 92 |
| Colorado | 1,115 | 0 | 1,080 | 1 |
| Connecticut | 4,442 | 0 | 3,413 | 0 |
| Delaware | 48 | 0 | 306 | 0 |
| District of Columbia | 3 | 0 | 0 | 0 |
| Florida | 9,652 | 0 | 9,083 | 0 |
| Georgia | 4,349 | 0 | 3,339 | 0 |
| Guam | 787 | 0 | 976 | 0 |
| Hawaii | 10,511 | 0 | 8,290 | 0 |
| Idaho | 2,169 | 0 | 1,355 | 1 |
| Illinois | 13,052 | 0 | 25,752 | 1 |
| Indiana | 5,978 | 0 | 11,753 | 1 |
| Iowa | 1,159 | 0 | 1,012 | 0 |
| Kansas | 3,020 | 0 | 3,492 | 0 |
| Kentucky | 8,375 | 0 | 7,062 | 0 |
| Louisiana | 989 | 0 | 709 | 0 |
| Maine | 26,206 | 18 | 19,735 | 667 |
| Maryland | 637 | 0 | 402 | 0 |
| Massachusetts | 6,795 | 0 | 4,431 | 0 |
| Michigan | 19,215 | 0 | 21,831 | 1 |
| Minnesota | 356 | 0 | 262 | 16 |
| Mississippi | 952 | 0 | 815 | 0 |
| Missouri | 6,510 | 0 | 7,668 | 1 |
| Montana | 1,549 | 465 | 894 | 963 |
| Nebraska | 1,940 | 7 | 2,541 | 35 |
| Nevada | 3,574 | 3 | 3,452 | 7 |
| New Hampshire | 827 | 0 | 542 | 0 |
| New Jersey | 1,086 | 0 | 593 | 0 |
| New Mexico | 2,953 | 204 | 1,769 | 784 |
| New York | 41,680 | 3 | 23,860 | 28 |
| North Carolina | 3,481 | 0 | 2,920 | 0 |
| North Dakota | 1,129 | 91 | 1,255 | 372 |
| Northern Mariana Islands | 225 | 0 | 84 | 0 |
| Ohio | 47,868 | 0 | 55,425 | 0 |
| Oklahoma | 3,780 | 119 | 9,458 | 1,553 |
| Oregon | 8,335 | 0 | 7,079 | 2 |
| Pennsylvania | 28,737 | 0 | 13,619 | 0 |
| Puerto Rico | 1,210 | 0 | 772 | 0 |
| Rhode Island | 1,375 | 0 | 591 | 0 |
| South Carolina | 1,699 | 0 | 1,336 | 0 |
| South Dakota | 1,977 | 122 | 2,129 | 174 |
| Tennessee | 7,240 | 0 | 5,531 | 0 |
| Texas | 118,092 | 0 | 80,241 | 12 |
| Utah | 1,240 | 2 | 1,123 | 15 |
| Vermont | 2,386 | 0 | 2,231 | 0 |
| Virgin Islands | 100 | 0 | 0 | 0 |
| Virginia | 4,619 | 0 | 2,392 | 0 |
| Washington | 28,525 | 355 | 32,071 | 1,851 |
| West Virginia | 759 | 0 | 442 | 0 |
| Wisconsin | 20,404 | 0 | 19,182 | 1 |
| Wyoming | 196 | 3 | 179 | 24 |
| Industry Total | 1,689,835 | 2,021 | 1,485,930 | 18,458 |

Note: Subscribers reported for 2000 and 2001 include true-ups through December 30, 2001. Starting Oct. 2000, low-income subscribers are listed as either tribal or non-tribal due to implementation of *Tribal Order*. About ninety-nine percent of all eligible telecommunications carriers (ETCs) have reported tc date.

Source: Universal Service Administrative Company (USAC).

## Table 7.6
## Lifeline Assistance Annual Payments
## By State or Jurisdiction

| State or Jurisdiction | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Cumulative Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | $0 | $0 | $0 | $0 | $0 | $56,744 | $372,371 | $602,521 | $1,449,303 | $1,590,349 | $1,910,638 | $2,272,765 | $8,254,691 |
| Alaska | 0 | 0 | 0 | 0 | 24,330 | 55,101 | 69,116 | 73,941 | 205,701 | 383,225 | 591,303 | 1,361,823 | 2,764,540 |
| American Samoa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8,167 | 26,893 | 41,388 | 53,089 | 129,537 |
| Arizona | 136,518 | 127,419 | 144,290 | 188,216 | 307,699 | 346,595 | 383,752 | 396,391 | 1,606,287 | 1,720,671 | 2,044,134 | 4,069,855 | 11,471,827 |
| Arkansas | 276,742 | 301,087 | 316,837 | 310,979 | 295,293 | 301,808 | 362,497 | 374,881 | 585,933 | 594,392 | 596,488 | 564,691 | 4,881,628 |
| California | 32,228,252 | 36,072,671 | 40,381,514 | 47,512,283 | 52,461,134 | 57,460,181 | 62,231,440 | 63,011,988 | 244,372,788 | 249,506,436 | 264,490,813 | 286,364,405 | 1,436,093,905 |
| Colorado | 173,248 | 751,056 | 843,519 | 802,077 | 775,750 | 727,801 | 829,354 | 942,972 | 1,861,235 | 2,077,456 | 2,408,134 | 2,639,957 | 14,832,559 |
| Connecticut | 0 | 0 | 0 | 57,033 | 1,493,569 | 2,586,972 | 2,660,608 | 2,590,702 | 3,660,711 | 4,344,924 | 4,896,000 | 4,869,725 | 27,160,244 |
| Delaware | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23,198 | 38,185 | 51,796 | 124,149 | 237,328 |
| District of Columbia | 99,980 | 90,500 | 128,348 | 312,684 | 429,396 | 313,998 | 293,322 | 318,368 | 769,414 | 876,337 | 952,218 | 1,009,723 | 5,594,288 |
| Florida | 0 | 0 | 0 | 0 | 1,290,282 | 4,396,137 | 5,191,213 | 5,448,368 | 10,368,040 | 10,962,971 | 11,943,361 | 13,752,992 | 63,353,364 |
| Georgia | 0 | 794,088 | 2,247,925 | 2,764,461 | 3,003,777 | 3,315,787 | 3,383,638 | 3,164,320 | 6,187,332 | 6,313,688 | 6,461,236 | 6,691,400 | 44,327,652 |
| Guam | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18,061 | 68,177 | 170,743 | 209,280 | 466,261 |
| Hawaii | 198,943 | 186,490 | 182,555 | 190,166 | 196,554 | 202,107 | 273,471 | 271,524 | 551,150 | 805,625 | 1,074,352 | 1,171,003 | 5,303,940 |
| Idaho | 347,270 | 358,515 | 355,127 | 349,344 | 328,583 | 321,830 | 320,845 | 311,156 | 576,367 | 1,306,602 | 1,823,477 | 2,479,591 | 8,878,707 |
| Illinois | 18 | 414,457 | 0 | 0 | 0 | 0 | 0 | 0 | 1,856,606 | 3,285,371 | 4,417,414 | 5,828,195 | 15,802,061 |
| Indiana | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 795,195 | 1,231,284 | 1,531,702 | 2,492,349 | 6,050,530 |
| Iowa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 161,566 | 409,513 | 751,594 | 1,059,018 | 2,381,691 |
| Kansas | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 340,226 | 474,877 | 781,349 | 1,223,347 | 2,819,837 |
| Kentucky | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 315,271 | 2,128,575 | 3,488,178 | 4,333,481 | 10,265,505 |
| Louisiana | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 379,066 | 681,067 | 1,071,618 | 1,456,293 | 3,588,044 |
| Maine | 1,720,591 | 2,165,485 | 2,605,855 | 2,902,206 | 2,959,351 | 2,652,482 | 2,737,366 | 2,669,234 | 5,338,338 | 5,711,223 | 6,799,162 | 7,971,659 | 46,232,952 |
| Maryland | 220,346 | 216,947 | 213,303 | 221,574 | 218,052 | 211,819 | 180,079 | 166,473 | 317,814 | 326,288 | 352,177 | 389,962 | 3,034,834 |
| Massachusetts | 2,552,254 | 5,126,895 | 5,996,798 | 6,598,801 | 7,064,939 | 7,146,757 | 6,952,050 | 6,564,336 | 13,628,125 | 14,207,842 | 14,821,387 | 15,962,385 | 106,622,569 |
| Michigan | 1,348,992 | 2,163,526 | 2,742,396 | 3,081,708 | 3,351,293 | 3,288,234 | 3,203,533 | 3,104,079 | 9,761,204 | 10,059,023 | 11,399,598 | 11,504,738 | 65,008,324 |
| Minnesota | 2,256,567 | 2,416,108 | 2,258,780 | 2,295,299 | 2,332,178 | 2,170,211 | 2,080,597 | 1,998,168 | 3,534,194 | 3,471,610 | 3,700,533 | 3,813,717 | 32,327,962 |
| Mississippi | 0 | 16,962 | 29,506 | 109,841 | 339,633 | 399,633 | 401,106 | 349,468 | 887,098 | 1,136,422 | 1,489,290 | 1,921,545 | 7,080,504 |
| Missouri | 620,605 | 648,102 | 711,138 | 699,011 | 653,539 | 590,212 | 486,547 | 435,466 | 551,102 | 754,501 | 1,466,051 | 2,512,230 | 10,128,504 |
| Montana | 234,696 | 228,885 | 234,046 | 266,870 | 281,441 | 290,312 | 328,627 | 319,745 | 677,995 | 824,313 | 932,470 | 1,346,336 | 5,965,736 |
| Nebraska | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 619,118 | 820,980 | 1,210,149 | 1,452,340 | 4,102,587 |
| Nevada | 122,289 | 134,038 | 147,595 | 172,658 | 194,440 | 206,654 | 196,662 | 215,016 | 214,714 | 754,020 | 1,319,500 | 2,075,091 | 5,752,677 |
| New Hampshire | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 162,362 | 331,956 | 443,561 | 535,222 | 1,473,101 |
| New Jersey | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 343,979 | 404,857 | 2,026,134 | 3,282,371 | 6,057,341 |
| New Mexico | 528,392 | 615,450 | 744,810 | 1,167,110 | 1,357,828 | 1,216,787 | 1,264,979 | 1,273,169 | 2,620,225 | 2,875,410 | 3,169,823 | 3,935,389 | 20,769,372 |
| New York | 11,253,994 | 15,649,754 | 18,295,637 | 20,970,135 | 23,844,744 | 27,188,016 | 30,924,772 | 29,327,216 | 54,776,809 | 51,473,090 | 48,395,880 | 46,009,957 | 378,110,004 |
| North Carolina | 637,444 | 647,593 | 875,130 | 962,905 | 1,003,092 | 922,046 | 972,403 | 948,969 | 2,443,601 | 3,755,587 | 5,636,402 | 8,181,624 | 26,986,796 |
| North Dakota | 299,829 | 438,302 | 447,187 | 421,896 | 412,255 | 378,733 | 333,434 | 309,496 | 876,274 | 960,538 | 1,013,354 | 1,358,491 | 7,249,789 |
| Northern Mariana Islands | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10,659 | 30,391 | 29,576 | 28,316 | 98,942 |
| Ohio | 643,996 | 650,084 | 1,304,827 | 1,963,353 | 2,293,070 | 2,409,791 | 2,366,359 | 2,535,383 | 5,390,963 | 8,113,627 | 13,117,956 | 19,235,008 | 60,024,417 |
| Oklahoma | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 900 | 106,526 | 173,816 | 813,355 | 6,259,728 | 7,354,335 |
| Oregon | 894,729 | 944,221 | 1,044,746 | 1,175,398 | 1,262,606 | 1,499,920 | 1,479,004 | 1,310,954 | 2,381,568 | 2,484,518 | 2,750,644 | 3,101,587 | 20,329,895 |
| Pennsylvania | 0 | 0 | 0 | 0 | 0 | 0 | 87,639 | 298,771 | 1,742,564 | 3,043,969 | 3,977,672 | 5,675,179 | 14,825,794 |
| Puerto Rico | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 587,156 | 1,064,389 | 1,116,360 | 1,123,709 | 3,891,614 |
| Rhode Island | 643,660 | 960,213 | 1,111,414 | 1,487,776 | 1,693,628 | 1,713,982 | 1,772,985 | 1,843,008 | 3,776,998 | 3,898,361 | 4,192,501 | 4,411,137 | 27,505,663 |
| South Carolina | 0 | 0 | 0 | 0 | 0 | 264,326 | 647,296 | 772,226 | 1,825,532 | 1,735,670 | 1,776,712 | 1,961,913 | 8,983,675 |
| South Dakota | 201,953 | 207,281 | 211,499 | 214,402 | 160,110 | 156,115 | 152,834 | 155,737 | 674,584 | 742,425 | 882,125 | 1,542,790 | 5,301,855 |
| Tennessee | 0 | 0 | 506,187 | 844,079 | 881,488 | 837,524 | 841,342 | 790,409 | 1,874,811 | 2,527,805 | 3,384,240 | 4,234,161 | 16,722,046 |
| Texas | 1,120,002 | 1,736,759 | 3,576,193 | 4,181,609 | 5,335,092 | 6,723,118 | 7,776,103 | 8,124,667 | 17,624,701 | 20,341,821 | 23,137,380 | 29,008,889 | 128,686,334 |
| Utah | 609,049 | 874,025 | 1,161,879 | 1,203,870 | 1,208,738 | 1,179,200 | 1,057,483 | 950,263 | 1,699,274 | 1,665,098 | 1,771,260 | 1,930,707 | 15,310,846 |
| Vermont | 755,646 | 858,766 | 924,333 | 979,697 | 1,041,838 | 1,094,178 | 1,039,649 | 1,064,932 | 2,214,987 | 2,403,381 | 2,646,801 | 2,931,131 | 17,955,339 |
| Virgin Islands | 0 | 0 | 0 | 5,753 | 29,075 | 22,459 | 14,293 | 19,779 | 49,229 | 40,225 | 44,910 | 9,300 | 235,023 |
| Virginia | 669,972 | 704,087 | 782,585 | 907,400 | 920,012 | 912,437 | 911,374 | 973,851 | 1,789,384 | 1,860,517 | 1,910,157 | 1,982,736 | 14,324,512 |
| Washington | 1,474,869 | 2,199,086 | 2,524,658 | 2,997,455 | 2,966,094 | 2,813,846 | 2,743,597 | 2,686,537 | 4,182,773 | 4,962,458 | 6,128,497 | 8,009,957 | 43,689,827 |
| West Virginia | 192,927 | 181,082 | 175,309 | 188,356 | 206,594 | 190,638 | 176,422 | 216,891 | 367,974 | 383,484 | 393,823 | 417,201 | 3,090,701 |
| Wisconsin | 234 | 217,958 | 482,544 | 521,821 | 617,261 | 676,880 | 653,204 | 610,732 | 2,768,442 | 3,882,741 | 4,704,920 | 5,370,143 | 20,506,880 |
| Wyoming | 0 | 5,833 | 57,652 | 54,640 | 49,077 | 36,101 | 33,007 | 36,306 | 93,464 | 113,024 | 122,227 | 188,484 | 789,815 |
| Industry Total | $62,464,007 1/ | $79,103,725 1/ | $93,766,122 1/ | $109,082,866 1/ | $123,283,835 1/ | $137,277,472 1/ | $148,186,383 1/ | $147,579,351 1/ | $422,006,158 1/ | $446,161,998 1/ | $488,574,523 2/ | $553,702,264 2/ | $2,811,188,704 |

1/ Payments are final and not subject to further adjustment.

2/ Dollars reported are for companies requesting reimbursement. Approximately 99% have reported at this time. Data include true-ups submitted through January 2002. Lifeline dollars, starting in 1998, include toll-limitation services (TLS) a presubscribed interexchange carrier charges (PICCs). PICC charges are valid only through July 2000.

Source: Universal Service Administrative Company (USAC)

## Table 7.7
## LinkUp Assistance Annual Payments
## By State or Jurisdiction

| State or Jurisdiction | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Cumulative Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | $41,125 | $47,246 | $30,322 | $16,881 | $7,021 | $5,467 | $6,661 | $9,738 | $37,868 | $28,882 | $28,604 | $28,461 | $288,276 |
| Alaska | 0 | 0 | 0 | 0 | 8,541 | 16,530 | 14,673 | 10,485 | 18,647 | 24,494 | 16,311 | 48,319 | 158,000 |
| American Samoa | NA | NA | NA | NA | NA | NA | NA | NA | 3,660 | 2,670 | 1,590 | 2,093 | 10,013 |
| Arizona | 9,260 | 4,792 | 2,054 | 6,000 | 8,533 | 23,340 | 22,359 | 23,234 | 12,473 | 112,999 | 106,010 | 293,740 | 624,794 |
| Arkansas | 102,651 | 128,727 | 152,380 | 304,253 | 337,111 | 164,617 | 232,383 | 221,128 | 142,354 | 101,090 | 61,903 | 53,169 | 2,001,766 |
| California | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28,628,622 | 24,003,283 | 20,961,600 | 20,220,150 | 93,813,655 |
| Colorado | 15,586 | 47,146 | 43,867 | 34,417 | 15,065 | 10,498 | 38,773 | 48,230 | 44,545 | 22,506 | 19,630 | 21,101 | 361,364 |
| Connecticut | 66,848 | 125,749 | 169,970 | 205,974 | 386,459 | 414,224 | 313,522 | 256,225 | 201,089 | 153,651 | 99,945 | 83,491 | 2,477,147 |
| Delaware | 0 | 0 | 0 | 0 | 0 | 126 | 7,308 | 8,268 | 2,376 | 1,116 | 864 | 7,984 | 28,042 |
| District of Columbia | 7,909 | 7,848 | 17,611 | 27,500 | 22,288 | 27,760 | 27,102 | 27,399 | 400 | 430 | 46 | 0 | 166,293 |
| Florida | 76,242 | 82,224 | 113,225 | 69,296 | 73,744 | 88,707 | 100,275 | 87,753 | 196,450 | 188,233 | 202,121 | 231,207 | 1,509,477 |
| Georgia | 0 | 277,968 | 604,321 | 461,379 | 449,418 | 444,097 | 330,076 | 146,239 | 204,709 | 167,716 | 85,560 | 69,675 | 3,241,158 |
| Guam | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,521 | 12,304 | 13,775 | 18,707 | 48,307 |
| Hawaii | 13,660 | 14,969 | 19,168 | 24,428 | 33,051 | 46,507 | 37,856 | 34,115 | 145,251 | 229,187 | 237,604 | 208,236 | 1,044,032 |
| Idaho | 4,136 | 5,860 | 6,407 | 7,418 | 10,578 | 8,985 | 9,861 | 18,754 | 11,539 | 16,029 | 31,135 | 22,793 | 153,495 |
| Illinois | 628,664 | 320,216 | 0 | 555,206 | 617,419 | 477,288 | 282,633 | 232,685 | 318,391 | 332,878 | 330,390 | 739,198 | 4,834,968 |
| Indiana | 35,646 | 63,398 | 119,317 | 112,484 | 117,045 | 71,478 | 40,189 | 58,703 | 103,940 | 127,536 | 140,547 | 304,835 | 1,295,118 |
| Iowa | 115,069 | 99,478 | 92,333 | 81,214 | 74,162 | 56,111 | 40,437 | 18,771 | 29,421 | 21,116 | 18,187 | 17,873 | 664,172 |
| Kansas | 14,320 | 10,914 | 11,530 | 10,673 | 9,573 | 8,141 | 8,429 | 35,655 | 26,737 | 28,662 | 58,505 | 74,150 | 297,289 |
| Kentucky | 174,698 | 191,793 | 245,518 | 233,258 | 262,990 | 263,666 | 274,776 | 175,728 | 143,852 | 186,399 | 155,683 | 146,138 | 2,454,499 |
| Louisiana | 838,721 | 551,215 | 386,163 | 210,409 | 147,015 | 76,603 | 38,121 | 15,288 | 74,074 | 26,208 | 20,876 | 16,350 | 2,401,043 |
| Maine | 222,351 | 271,175 | 120,532 | 321,595 | 430,941 | 327,363 | 461,108 | 522,810 | 477,470 | 574,103 | 581,375 | 617,295 | 4,928,118 |
| Maryland | 118,647 | 85,142 | 81,999 | 71,223 | 52,782 | 63,008 | 50,178 | 46,278 | 30,336 | 21,760 | 15,289 | 12,941 | 649,583 |
| Massachusetts | 140,028 | 76,355 | 86,415 | 322,410 | 366,427 | 344,862 | 217,417 | 131,948 | 108,720 | 186,067 | 123,288 | 46,067 | 2,150,004 |
| Michigan | 501,015 | 761,801 | 840,265 | 786,106 | 720,903 | 472,243 | 224,317 | 477,688 | 384,073 | 405,941 | 399,999 | 493,680 | 6,468,031 |
| Minnesota | 11,455 | 12,644 | 12,660 | 38,742 | 35,475 | 8,435 | 7,622 | 14,189 | 15,793 | 6,078 | 4,489 | 3,482 | 171,064 |
| Mississippi | 29,533 | 26,277 | 17,743 | 45,472 | 81,156 | 94,989 | 67,873 | 31,033 | 38,302 | 24,647 | 20,981 | 19,977 | 497,983 |
| Missouri | 19,760 | 14,615 | 17,047 | 27,775 | 23,702 | 12,190 | 10,308 | 9,880 | 83,766 | 18,640 | 116,109 | 152,411 | 506,203 |
| Montana | 35,615 | 25,154 | 25,074 | 26,475 | 19,726 | 13,413 | 24,502 | 24,304 | 22,356 | 20,819 | 29,283 | 36,044 | 302,765 |
| Nebraska | 7,964 | 11,267 | 15,382 | 11,950 | 9,001 | 6,892 | 5,253 | 4,391 | 9,542 | 17,312 | 28,909 | 41,744 | 169,607 |
| Nevada | 3,004 | 9,338 | 10,999 | 15,107 | 11,838 | 11,691 | 13,445 | 8,605 | 1,902 | 55,557 | 60,681 | 64,715 | 266,882 |
| New Hampshire | 8,510 | 21,420 | 36,328 | 44,199 | 42,146 | 32,147 | 30,530 | 31,583 | 26,155 | 26,750 | 16,111 | 14,279 | 330,158 |
| New Jersey | 10,755 | 12,054 | 14,502 | 11,745 | 11,814 | 8,106 | 4,995 | 3,844 | 33,071 | 10,043 | 22,951 | 18,257 | 162,137 |
| New Mexico | 79,198 | 107,467 | 152,371 | 304,961 | 262,693 | 131,859 | 137,238 | 128,193 | 116,668 | 114,304 | 44,331 | 39,755 | 1,619,038 |
| New York | 4,483,514 | 5,962,604 | 6,611,528 | 7,243,113 | 8,120,361 | 8,972,155 | 9,586,748 | 5,604,194 | 5,480,654 | 1,470,599 | 1,130,140 | 838,816 | 65,504,426 |
| North Carolina | 31,302 | 33,805 | 32,761 | 24,042 | 19,718 | 13,958 | 9,510 | 8,720 | 38,545 | 51,344 | 55,554 | 58,058 | 377,317 |
| North Dakota | 5,082 | 6,182 | 5,713 | 6,682 | 5,534 | 5,636 | 3,491 | 17,922 | 23,026 | 16,357 | 19,062 | 30,849 | 145,536 |
| Northern Mariana Islands | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,887 | 11,435 | 8,879 | 8,403 | 34,604 |
| Ohio | 204,433 | 311,997 | 650,806 | 775,582 | 690,334 | 515,674 | 394,796 | 374,183 | 322,012 | 422,074 | 806,836 | 1,098,844 | 6,567,571 |
| Oklahoma | 15,826 | 35,077 | 27,986 | 28,251 | 23,936 | 20,142 | 22,082 | 33,908 | 47,878 | 30,464 | 81,210 | 237,748 | 604,508 |
| Oregon | 23,262 | 22,801 | 31,834 | 46,035 | 54,485 | 57,728 | 53,338 | 51,816 | 46,222 | 39,955 | 76,668 | 70,835 | 574,979 |
| Pennsylvania | 1,592,565 | 1,743,115 | 1,976,702 | 1,904,903 | 2,022,887 | 1,969,372 | 1,850,064 | 1,735,564 | 1,257,631 | 1,043,649 | 531,678 | 372,587 | 18,000,717 |
| Puerto Rico | 91,784 | 72,561 | 65,986 | 54,826 | 57,950 | 69,244 | 76,381 | 83,138 | 68,116 | 31,208 | 22,598 | 20,827 | 714,619 |
| Rhode Island | 14,527 | 13,634 | 21,059 | 28,427 | 38,416 | 45,309 | 35,531 | 25,226 | 29,878 | 26,478 | 23,267 | 13,549 | 315,301 |
| South Carolina | 38,303 | 34,894 | 36,759 | 40,434 | 38,405 | 30,035 | 21,851 | 19,639 | 42,591 | 39,047 | 32,120 | 28,810 | 402,888 |
| South Dakota | 9,368 | 7,755 | 7,685 | 6,349 | 5,641 | 4,614 | 2,765 | 2,257 | 29,490 | 22,426 | 30,611 | 36,326 | 165,287 |
| Tennessee | 73,824 | 62,690 | 69,673 | 86,711 | 85,071 | 89,617 | 60,589 | 22,082 | 78,322 | 108,680 | 105,704 | 127,414 | 970,377 |
| Texas | 636,839 | 591,565 | 811,837 | 825,340 | 1,258,838 | 1,371,343 | 1,632,153 | 1,517,075 | 2,244,255 | 2,325,072 | 2,257,497 | 1,714,394 | 17,186,208 |
| Utah | 6,870 | 31,614 | 111,578 | 85,963 | 35,478 | 32,798 | 74,404 | 53,213 | 36,078 | 25,804 | 15,404 | 15,499 | 524,703 |
| Vermont | 22,132 | 34,041 | 34,358 | 36,314 | 40,478 | 34,039 | 24,863 | 19,126 | 24,174 | 26,545 | 42,256 | 53,315 | 391,641 |
| Virgin Islands | 0 | 0 | 0 | 1,012 | 2,584 | 1,001 | 317 | 1,392 | 2,005 | 1,004 | 1,763 | 364 | 11,442 |
| Virginia | 173,149 | 267,462 | 289,381 | 323,486 | 248,128 | 292,190 | 269,695 | 267,013 | 183,002 | 141,017 | 86,434 | 59,228 | 2,600,185 |
| Washington | 59,277 | 467,920 | 532,652 | 561,632 | 668,199 | 693,528 | 676,482 | 623,757 | 417,353 | 424,733 | 492,988 | 791,568 | 6,410,089 |
| West Virginia | 7,002 | 7,878 | 7,366 | 11,983 | 16,145 | 15,119 | 14,508 | 16,102 | 8,966 | 12,814 | 10,024 | 8,928 | 136,835 |
| Wisconsin | 526,066 | 581,758 | 569,079 | 537,514 | 490,668 | 426,278 | 356,626 | 370,939 | 378,836 | 450,289 | 543,690 | 570,611 | 5,802,354 |
| Wyoming | 3,510 | 1,865 | 1,934 | 2,180 | 1,449 | 938 | 342 | 400 | 338 | 893 | 3,609 | 4,267 | 21,725 |
| Industry Total | $11,351,005 1/ | $13,705,470 1/ | $15,342,180 1/ | $17,019,329 1/ | $18,573,322 1/ | $18,392,061 1/ | $18,246,756 1/ | $13,710,810 1/ | $42,463,332 1/ | $33,991,297 1/ | $30,432,674 2/ | $30,329,557 2/ | $263,557,793 |

NA - Not available.
1/ Payments are final and are not subject to further adjustment.
2/ Dollars reported are for companies requesting reimbursement. Approximately 99% have reported at this time. Data include true-ups through January 2002.
Source: Universal Service Administrative Company (USAC).

## Table 7.8
## Low-Income Support Payments
## (January 1998 - December 1998)

| State or Jurisdiction | Lifeline Non-Tribal | LinkUp Non-Tribal | TLS | PICCs | Total |
|---|---|---|---|---|---|
| Alabama | $1,430,879 | $37,868 | $2,119 | $16,305 | $1,487,171 |
| Alaska | 191,057 | 18,647 | 14,584 | 60 | 224,348 |
| American Samoa | 8,167 | 3,660 | 0 | 0 | 11,827 |
| Arizona | 1,591,648 | 12,473 | 13,621 | 1,018 | 1,618,760 |
| Arkansas | 579,956 | 142,354 | 2,837 | 3,140 | 728,287 |
| California | 241,532,455 | 28,628,622 | 2,077,337 | 762,996 | 273,001,410 |
| Colorado | 1,834,312 | 44,545 | 18,578 | 8,345 | 1,905,780 |
| Connecticut | 3,611,946 | 201,089 | 27,447 | 21,318 | 3,861,800 |
| Delaware | 23,198 | 2,376 | 0 | 0 | 25,574 |
| District of Columbia | 769,414 | 400 | 0 | 0 | 769,814 |
| Florida | 10,286,854 | 196,450 | 10,707 | 70,479 | 10,564,490 |
| Georgia | 6,129,384 | 204,709 | 8,052 | 49,896 | 6,392,041 |
| Guam | 18,061 | 3,521 | 0 | 0 | 21,582 |
| Hawaii | 551,000 | 145,251 | 0 | 150 | 696,401 |
| Idaho | 571,493 | 11,539 | 3,877 | 997 | 587,906 |
| Illinois | 1,838,320 | 318,391 | 995 | 17,291 | 2,174,997 |
| Indiana | 783,774 | 103,940 | 1,533 | 9,888 | 899,135 |
| Iowa | 148,518 | 29,421 | 11,232 | 1,816 | 190,987 |
| Kansas | 337,249 | 26,737 | 993 | 1,984 | 366,963 |
| Kentucky | 305,764 | 143,852 | 4,200 | 5,307 | 459,123 |
| Louisiana | 366,776 | 74,074 | 1,433 | 10,857 | 453,140 |
| Maine | 5,299,276 | 477,470 | 19,660 | 19,402 | 5,815,808 |
| Maryland | 317,814 | 30,336 | 0 | 0 | 348,150 |
| Massachusetts | 13,572,243 | 108,720 | 0 | 55,882 | 13,736,845 |
| Michigan | 9,678,929 | 384,073 | 8,773 | 73,502 | 10,145,277 |
| Minnesota | 3,530,029 | 15,793 | 3,233 | 932 | 3,549,987 |
| Mississippi | 876,569 | 38,302 | 1,234 | 9,295 | 925,400 |
| Missouri | 545,925 | 83,766 | 2,683 | 2,494 | 634,868 |
| Montana | 665,529 | 22,356 | 10,524 | 1,942 | 700,351 |
| Nebraska | 603,067 | 9,542 | 12,640 | 3,411 | 628,660 |
| Nevada | 214,291 | 1,902 | 410 | 13 | 216,616 |
| New Hampshire | 161,489 | 26,155 | 0 | 873 | 188,517 |
| New Jersey | 343,628 | 33,071 | 351 | 0 | 377,050 |
| New Mexico | 2,517,906 | 116,668 | 70,603 | 31,716 | 2,736,893 |
| New York | 53,807,308 | 5,480,654 | 74 | 969,427 | 60,257,463 |
| North Carolina | 2,427,820 | 38,545 | 2,416 | 13,365 | 2,482,146 |
| North Dakota | 861,146 | 23,026 | 10,603 | 4,525 | 899,300 |
| Northern Mariana Islands | 10,659 | 5,887 | 0 | 0 | 16,546 |
| Ohio | 5,270,380 | 322,012 | 21,328 | 99,255 | 5,712,975 |
| Oklahoma | 104,566 | 47,878 | 883 | 1,077 | 154,404 |
| Oregon | 2,351,543 | 46,222 | 19,739 | 10,286 | 2,427,790 |
| Pennsylvania | 1,741,674 | 1,257,631 | 90 | 800 | 3,000,195 |
| Puerto Rico | 587,156 | 68,116 | 0 | 0 | 655,272 |
| Rhode Island | 3,753,152 | 29,878 | 0 | 23,846 | 3,806,876 |
| South Carolina | 1,798,292 | 42,591 | 6,134 | 21,106 | 1,868,123 |
| South Dakota | 656,428 | 29,490 | 14,889 | 3,267 | 704,074 |
| Tennessee | 1,863,198 | 78,322 | 1,364 | 10,249 | 1,953,133 |
| Texas | 17,082,669 | 2,244,255 | 173,804 | 368,228 | 19,868,956 |
| Utah | 1,665,232 | 36,078 | 24,856 | 9,186 | 1,735,352 |
| Vermont | 2,211,542 | 24,174 | 487 | 2,958 | 2,239,161 |
| Virgin Islands | 49,229 | 2,005 | 0 | 0 | 51,234 |
| Virginia | 1,788,279 | 183,002 | 478 | 627 | 1,972,386 |
| Washington | 4,059,632 | 417,353 | 89,905 | 33,236 | 4,600,126 |
| West Virginia | 367,951 | 8,966 | 0 | 23 | 376,940 |
| Wisconsin | 2,716,657 | 378,836 | 3,037 | 48,748 | 3,147,278 |
| Wyoming | 92,881 | 338 | 456 | 127 | 93,802 |
| Industry Total | $416,504,314 | $42,463,332 | $2,700,199 | $2,801,645 | $464,469,490 |

Note: These dollars represent submitted claims to USAC for the time period January 1998 through December 1998, including true-ups reported to date. Verizon-NJ and Sprint-NJ were granted eligible telecommunications carrier (ETC) status retroactive to January 1998. Nevada Bell did not receive ETC status until December 1998 and began reporting Lifeline starting in January 1999.

Source: Universal Service Administration Company (USAC).

**Table 7.8**
**Low-Income Support Payments - Continued**
**(January 1999 - December 1999)**

| State or Jurisdiction | Lifeline Non-Tribal | LinkUp Non-Tribal | TLS | PICCs | Total |
|---|---|---|---|---|---|
| Alabama | $1,563,850 | $28,882 | $2,175 | $24,324 | $1,619,231 |
| Alaska | 353,682 | 24,494 | 29,075 | 468 | 407,719 |
| American Samoa | 26,893 | 2,670 | 0 | 0 | 29,563 |
| Arizona | 1,618,554 | 112,999 | 69,449 | 32,668 | 1,833,670 |
| Arkansas | 584,481 | 101,090 | 2,315 | 7,596 | 695,482 |
| California | 246,181,577 | 24,003,283 | 2,268,441 | 1,056,418 | 273,509,719 |
| Colorado | 2,015,411 | 22,506 | 37,514 | 24,531 | 2,099,962 |
| Connecticut | 4,298,141 | 153,651 | 22,820 | 23,963 | 4,498,575 |
| Delaware | 38,185 | 1,116 | 0 | 0 | 39,301 |
| District of Columbia | 876,337 | 430 | 0 | 0 | 876,767 |
| Florida | 10,838,023 | 188,233 | 16,581 | 108,367 | 11,151,204 |
| Georgia | 6,213,460 | 167,716 | 10,594 | 89,634 | 6,481,404 |
| Guam | 68,177 | 12,304 | 0 | 0 | 80,481 |
| Hawaii | 797,072 | 229,187 | 3,520 | 5,033 | 1,034,812 |
| Idaho | 1,264,737 | 16,029 | 24,355 | 17,510 | 1,322,631 |
| Illinois | 3,236,547 | 332,878 | 2,085 | 46,739 | 3,618,249 |
| Indiana | 1,204,783 | 127,536 | 2,801 | 23,700 | 1,358,820 |
| Iowa | 384,652 | 21,116 | 15,981 | 8,880 | 430,629 |
| Kansas | 465,671 | 28,662 | 2,279 | 6,927 | 503,539 |
| Kentucky | 2,091,160 | 186,399 | 9,103 | 28,312 | 2,314,974 |
| Louisiana | 656,564 | 26,208 | 1,985 | 22,518 | 707,275 |
| Maine | 5,646,395 | 574,103 | 8,086 | 56,742 | 6,285,326 |
| Maryland | 326,288 | 21,760 | 0 | 0 | 348,048 |
| Massachusetts | 14,086,751 | 186,067 | 0 | 121,091 | 14,393,909 |
| Michigan | 9,933,108 | 405,941 | 9,234 | 116,681 | 10,464,964 |
| Minnesota | 3,454,859 | 6,078 | 10,887 | 5,864 | 3,477,688 |
| Mississippi | 1,114,842 | 24,647 | 2,003 | 19,577 | 1,161,069 |
| Missouri | 740,625 | 18,640 | 4,310 | 9,566 | 773,141 |
| Montana | 800,802 | 20,819 | 18,143 | 5,368 | 845,132 |
| Nebraska | 797,127 | 17,312 | 15,183 | 8,670 | 838,292 |
| Nevada | 747,742 | 55,557 | 2,562 | 3,716 | 809,577 |
| New Hampshire | 327,542 | 26,750 | 0 | 4,414 | 358,706 |
| New Jersey | 404,504 | 10,043 | 353 | 0 | 414,900 |
| New Mexico | 2,727,036 | 114,304 | 80,826 | 67,548 | 2,989,714 |
| New York | 50,318,021 | 1,470,599 | 3,613 | 1,151,456 | 52,943,689 |
| North Carolina | 3,721,083 | 51,344 | 5,429 | 29,075 | 3,806,931 |
| North Dakota | 935,573 | 16,357 | 15,270 | 9,695 | 976,895 |
| Northern Mariana Islands | 30,391 | 11,435 | 0 | 0 | 41,826 |
| Ohio | 7,842,922 | 422,074 | 39,250 | 231,455 | 8,535,701 |
| Oklahoma | 169,874 | 30,464 | 1,166 | 2,776 | 204,280 |
| Oregon | 2,437,301 | 39,955 | 20,675 | 26,542 | 2,524,473 |
| Pennsylvania | 3,042,089 | 1,043,649 | 28 | 1,852 | 4,087,618 |
| Puerto Rico | 1,064,389 | 31,208 | 0 | 0 | 1,095,597 |
| Rhode Island | 3,851,306 | 26,478 | 0 | 47,055 | 3,924,839 |
| South Carolina | 1,696,546 | 39,047 | 10,849 | 28,275 | 1,774,717 |
| South Dakota | 723,332 | 22,426 | 9,546 | 9,547 | 764,851 |
| Tennessee | 2,491,886 | 108,680 | 7,171 | 28,748 | 2,636,485 |
| Texas | 19,380,081 | 2,325,072 | 203,308 | 758,432 | 22,666,893 |
| Utah | 1,615,497 | 25,804 | 31,258 | 18,343 | 1,690,902 |
| Vermont | 2,392,069 | 26,545 | 2,779 | 8,533 | 2,429,926 |
| Virgin Islands | 40,225 | 1,004 | 0 | 0 | 41,229 |
| Virginia | 1,858,516 | 141,017 | 751 | 1,250 | 2,001,534 |
| Washington | 4,782,832 | 424,733 | 105,612 | 74,014 | 5,387,191 |
| West Virginia | 382,514 | 12,814 | 871 | 99 | 396,298 |
| Wisconsin | 3,802,028 | 450,289 | 4,985 | 75,728 | 4,333,030 |
| Wyoming | 111,837 | 893 | 794 | 393 | 113,917 |
| Industry Total | $438,575,890 | $33,991,297 | $3,136,015 | $4,450,093 | $480,153,295 |

Note: These dollars represent submitted claims to USAC for the time period January 1999 through December 1999, including true-ups reported to date.

Source: Universal Service Administration Company (USAC).

## Table 7.8
## Low-Income Support Payments - Continued
## (January 2000 - December 2000)

| State or Jurisdiction | Lifeline | | LinkUp | | TLS | PICCs | Total |
|---|---|---|---|---|---|---|---|
| | Non-Tribal | Tribal | Non-Tribal | Tribal | | | |
| Alabama | $1,890,530 | $0 | $28,604 | $0 | $2,528 | $17,580 | $1,939,242 |
| Alaska | 507,874 | 63,848 | 12,188 | 4,123 | 18,949 | 632 | 607,614 |
| American Samoa | 41,388 | 0 | 1,590 | 0 | 0 | 0 | 42,978 |
| Arizona | 1,896,627 | 33,425 | 100,594 | 5,416 | 81,773 | 32,309 | 2,150,144 |
| Arkansas | 586,944 | 0 | 61,903 | 0 | 3,213 | 6,331 | 658,391 |
| California | 261,895,128 | 307 | 20,961,528 | 72 | 1,843,586 | 751,792 | 285,452,413 |
| Colorado | 2,359,272 | 68 | 19,630 | 0 | 27,949 | 20,845 | 2,427,764 |
| Connecticut | 4,852,944 | 0 | 99,945 | 0 | 27,660 | 15,396 | 4,995,945 |
| Delaware | 51,668 | 0 | 864 | 0 | 128 | 0 | 52,660 |
| District of Columbia | 952,110 | 0 | 46 | 0 | 108 | 0 | 952,264 |
| Florida | 11,844,957 | 4 | 202,121 | 0 | 21,765 | 76,635 | 12,145,482 |
| Georgia | 6,391,413 | 0 | 85,560 | 0 | 10,274 | 59,549 | 6,546,796 |
| Guam | 170,743 | 0 | 13,775 | 0 | 0 | 0 | 184,518 |
| Hawaii | 1,058,126 | 0 | 237,604 | 0 | 0 | 16,226 | 1,311,956 |
| Idaho | 1,767,680 | 126 | 31,135 | 0 | 38,090 | 17,581 | 1,854,612 |
| Illinois | 4,379,593 | 0 | 330,390 | 0 | 1,412 | 36,409 | 4,747,804 |
| Indiana | 1,513,003 | 0 | 140,547 | 0 | 2,268 | 16,431 | 1,672,249 |
| Iowa | 722,770 | 0 | 18,187 | 0 | 20,276 | 8,548 | 769,781 |
| Kansas | 769,030 | 0 | 58,505 | 0 | 5,349 | 6,970 | 839,854 |
| Kentucky | 3,446,167 | 0 | 155,683 | 0 | 16,605 | 25,406 | 3,643,861 |
| Louisiana | 1,051,428 | 0 | 20,876 | 0 | 2,500 | 17,690 | 1,092,494 |
| Maine | 6,730,343 | 228 | 580,972 | 403 | 17,403 | 51,188 | 7,380,537 |
| Maryland | 351,760 | 0 | 15,289 | 0 | 417 | 0 | 367,466 |
| Massachusetts | 14,724,979 | 0 | 123,288 | 0 | 72 | 96,336 | 14,944,675 |
| Michigan | 11,311,462 | 24 | 399,999 | 0 | 8,381 | 79,731 | 11,799,597 |
| Minnesota | 3,680,958 | 494 | 4,489 | 0 | 13,126 | 5,955 | 3,705,022 |
| Mississippi | 1,470,386 | 0 | 20,981 | 0 | 2,972 | 15,932 | 1,510,271 |
| Missouri | 1,426,495 | 0 | 116,109 | 0 | 19,758 | 19,798 | 1,582,160 |
| Montana | 886,521 | 19,611 | 21,911 | 7,372 | 22,405 | 3,933 | 961,753 |
| Nebraska | 1,174,734 | 1,639 | 28,824 | 85 | 26,709 | 7,067 | 1,239,058 |
| Nevada | 1,305,766 | 598 | 60,610 | 71 | 9,261 | 3,875 | 1,380,181 |
| New Hampshire | 439,221 | 0 | 16,111 | 0 | 157 | 4,183 | 459,672 |
| New Jersey | 2,025,566 | 0 | 22,951 | 0 | 568 | 0 | 2,049,085 |
| New Mexico | 3,027,978 | 11,411 | 43,561 | 770 | 80,765 | 49,669 | 3,214,154 |
| New York | 47,771,543 | 50 | 1,130,057 | 83 | 7,467 | 616,820 | 49,526,020 |
| North Carolina | 5,602,156 | 6 | 55,554 | 0 | 11,694 | 22,546 | 5,691,956 |
| North Dakota | 969,088 | 16,710 | 17,643 | 1,419 | 18,655 | 8,901 | 1,032,416 |
| Northern Mariana Islands | 29,576 | 0 | 8,879 | 0 | 0 | 0 | 38,455 |
| Ohio | 12,843,158 | 0 | 806,836 | 0 | 68,374 | 206,424 | 13,924,792 |
| Oklahoma | 507,634 | 292,627 | 80,030 | 1,180 | 9,947 | 3,147 | 894,565 |
| Oregon | 2,707,643 | 97 | 76,668 | 0 | 20,206 | 22,698 | 2,827,312 |
| Pennsylvania | 3,975,540 | 0 | 531,678 | 0 | 32 | 2,100 | 4,509,350 |
| Puerto Rico | 1,116,360 | 0 | 22,598 | 0 | 0 | 0 | 1,138,958 |
| Rhode Island | 4,155,000 | 0 | 23,267 | 0 | 564 | 36,937 | 4,215,768 |
| South Carolina | 1,744,499 | 99 | 32,120 | 0 | 13,455 | 18,659 | 1,808,832 |
| South Dakota | 809,235 | 49,980 | 25,579 | 5,032 | 14,455 | 8,455 | 912,736 |
| Tennessee | 3,343,946 | 0 | 105,704 | 0 | 17,450 | 22,844 | 3,489,944 |
| Texas | 22,365,201 | 38 | 2,257,497 | 0 | 181,143 | 590,998 | 25,394,877 |
| Utah | 1,724,107 | 62 | 15,395 | 9 | 32,202 | 14,889 | 1,786,664 |
| Vermont | 2,631,928 | 0 | 42,256 | 0 | 6,694 | 8,179 | 2,689,057 |
| Virgin Islands | 44,910 | 0 | 1,763 | 0 | 0 | 0 | 46,673 |
| Virginia | 1,906,937 | 0 | 86,434 | 0 | 1,992 | 1,228 | 1,996,591 |
| Washington | 5,933,152 | 14,823 | 457,488 | 35,500 | 112,892 | 67,630 | 6,621,485 |
| West Virginia | 390,479 | 0 | 10,024 | 0 | 3,271 | 73 | 403,847 |
| Wisconsin | 4,648,566 | 203 | 543,690 | 0 | 5,431 | 50,720 | 5,248,610 |
| Wyoming | 118,962 | 1,305 | 3,555 | 54 | 1,436 | 524 | 125,836 |
| Industry Total | $482,045,184 | $507,783 | $30,371,085 | $61,589 | $2,853,787 | $3,167,769 | $519,007,197 |

Note: These dollars represent submitted claims to USAC for the time period January 2000 through December 2000, including true-ups reported to date. The District of Columbia has, as of December 2000, been compensated for Lifeline programs, as eligible telecommunications carrier (ETC) status has finally been granted retroactive to January 1998.

Source: Universal Service Administration Company (USAC).

## Table 7.8
## Low-Income Support Payments - Continued
## (January 2001 - December 2001)

| State or Jurisdiction | Lifeline | | LinkUp | | TLS | Total |
|---|---|---|---|---|---|---|
| | Non-Tribal | Tribal | Non-Tribal | Tribal | | |
| Alabama | $2,270,105 | $0 | $28,461 | $0 | $2,660 | $2,301,226 |
| Alaska | 845,266 | 470,418 | 25,320 | 22,999 | 46,139 | 1,410,142 |
| American Samoa | 53,089 | 0 | 2,093 | 0 | 0 | 55,182 |
| Arizona | 2,960,886 | 992,182 | 82,407 | 211,333 | 116,787 | 4,363,595 |
| Arkansas | 560,529 | 0 | 53,169 | 0 | 4,162 | 617,860 |
| California | 284,294,635 | 5,168 | 20,219,219 | 931 | 2,064,602 | 306,584,555 |
| Colorado | 2,603,950 | 705 | 21,083 | 18 | 35,032 | 2,661,058 |
| Connecticut | 4,862,190 | 0 | 83,491 | 0 | 7,535 | 4,953,216 |
| Delaware | 124,014 | 0 | 1,984 | 0 | 135 | 132,133 |
| District of Columbia | 1,009,651 | 0 | 0 | 0 | 72 | 1,009,723 |
| Florida | 13,723,827 | 0 | 231,207 | 0 | 29,165 | 13,984,199 |
| Georgia | 6,680,552 | 0 | 69,675 | 0 | 10,848 | 6,761,075 |
| Guam | 209,280 | 0 | 18,707 | 0 | 0 | 227,987 |
| Hawaii | 1,171,003 | 0 | 208,236 | 0 | 0 | 1,379,239 |
| Idaho | 2,430,822 | 7,044 | 22,778 | 15 | 41,725 | 2,502,384 |
| Illinois | 5,824,334 | 0 | 739,188 | 10 | 3,861 | 6,567,393 |
| Indiana | 2,491,301 | 0 | 304,822 | 13 | 1,048 | 2,797,184 |
| Iowa | 1,041,483 | 0 | 17,873 | 0 | 17,535 | 1,076,891 |
| Kansas | 1,217,694 | 0 | 74,150 | 0 | 5,653 | 1,297,497 |
| Kentucky | 4,307,791 | 0 | 146,138 | 0 | 25,690 | 4,479,619 |
| Louisiana | 1,453,358 | 0 | 16,350 | 0 | 2,935 | 1,472,643 |
| Maine | 7,929,164 | 25,571 | 602,368 | 14,927 | 16,924 | 8,588,954 |
| Maryland | 389,594 | 0 | 12,941 | 0 | 368 | 402,903 |
| Massachusetts | 15,962,256 | 0 | 46,067 | 0 | 129 | 16,008,452 |
| Michigan | 11,473,609 | 25,219 | 493,669 | 11 | 5,910 | 11,998,418 |
| Minnesota | 3,791,806 | 10,744 | 3,245 | 237 | 11,167 | 3,817,199 |
| Mississippi | 1,918,135 | 0 | 19,977 | 0 | 3,410 | 1,941,522 |
| Missouri | 2,477,720 | 72 | 152,391 | 20 | 34,438 | 2,664,641 |
| Montana | 1,146,846 | 165,842 | 18,990 | 17,054 | 33,648 | 1,382,380 |
| Nebraska | 1,394,222 | 16,648 | 40,764 | 980 | 41,470 | 1,494,084 |
| Nevada | 2,061,258 | 3,943 | 64,533 | 182 | 9,890 | 2,139,806 |
| New Hampshire | 535,120 | 0 | 14,279 | 0 | 102 | 549,501 |
| New Jersey | 3,281,723 | 0 | 18,257 | 0 | 648 | 3,300,628 |
| New Mexico | 3,704,378 | 138,945 | 32,330 | 7,425 | 92,066 | 3,975,144 |
| New York | 46,000,790 | 1,958 | 838,041 | 775 | 7,209 | 46,848,773 |
| North Carolina | 8,161,075 | 85 | 58,058 | 0 | 20,464 | 8,239,682 |
| North Dakota | 1,235,178 | 104,002 | 23,972 | 6,877 | 19,311 | 1,389,340 |
| Northern Mariana Islands | 28,316 | 0 | 8,403 | 0 | 0 | 36,719 |
| Ohio | 19,145,754 | 0 | 1,098,844 | 0 | 89,254 | 20,333,852 |
| Oklahoma | 3,421,840 | 2,787,460 | 218,520 | 19,228 | 50,328 | 6,497,476 |
| Oregon | 3,078,857 | 3,464 | 70,823 | 12 | 19,266 | 3,172,422 |
| Pennsylvania | 5,675,048 | 0 | 372,587 | 0 | 131 | 6,047,766 |
| Puerto Rico | 1,123,709 | 0 | 20,827 | 0 | 0 | 1,144,536 |
| Rhode Island | 4,410,786 | 0 | 13,549 | 0 | 351 | 4,424,686 |
| South Carolina | 1,945,048 | 469 | 28,810 | 0 | 16,396 | 1,990,723 |
| South Dakota | 1,164,511 | 346,892 | 32,734 | 3,592 | 31,387 | 1,579,116 |
| Tennessee | 4,208,553 | 1 | 127,414 | 0 | 25,607 | 4,361,575 |
| Texas | 28,831,935 | 35,256 | 1,714,235 | 159 | 141,698 | 30,723,283 |
| Utah | 1,894,265 | 2,378 | 15,373 | 126 | 34,064 | 1,946,206 |
| Vermont | 2,926,391 | 0 | 53,315 | 0 | 4,740 | 2,984,446 |
| Virgin Islands | 9,300 | 0 | 364 | 0 | 0 | 9,664 |
| Virginia | 1,980,635 | 0 | 59,228 | 0 | 2,101 | 2,041,964 |
| Washington | 7,546,548 | 355,760 | 608,463 | 183,105 | 107,649 | 8,801,525 |
| West Virginia | 412,355 | 0 | 8,928 | 0 | 4,846 | 426,129 |
| Wisconsin | 5,358,910 | 6,004 | 570,590 | 21 | 5,229 | 5,940,754 |
| Wyoming | 162,379 | 22,706 | 3,763 | 504 | 3,399 | 192,751 |
| Industry Total | $544,923,874 | $5,528,936 | $29,839,003 | $490,554 | $3,249,454 | $584,031,821 |

Note: These dollars represent submitted claims to USAC for the time period January 2000 through December 2000, including true-ups reported to date. The District of Columbia has, as of December 2000, been compensated for Lifeline programs, as eligible telecommunications carrier (ETC) status has finally been granted retroactive to January 1998.

Source: Universal Service Administration Company (USAC).

# 8 Lines

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 reconcile data from different statistical series, they are not usually large enough to affect comparisons among companies or trends over time. Since 1970, over 90% of households and virtually all businesses have subscribed to telephone service. Line growth over time, averaging about 3% per year, has historically reflected growth in the population and the economy. In recent years, the growth in lines has increased as households have added additional lines.

Table 8.1 shows the nation's total number of telephone lines using three alternative measures. One measure is the number of local loops, which is a way of counting lines that is used to determine the amount of high-cost universal service support provided to local exchange carriers. A second measure is the number of presubscribed lines, which were collected before 1997 to determine the amount of payments by the interexchange carriers to support high-cost and Lifeline and LinkUp programs. The third measure, access lines, represents estimates for the whole industry based on data filed with the Commission by large local exchange carriers through the Automated Reporting Management Information System (ARMIS).

Table 8.2 shows the number of local exchange operating areas (study areas) and loops in each state, and shows breakdowns by loops for price-cap and average-schedule companies. Table 8.3 shows the number of loops by holding companies.

Table 8.4 compares the number of residential local loops with the number of households with telephone service. The difference between these series is an approximate measure of the number of additional residential access lines. Table 8.4 shows that the percentage of additional lines for households with telephone service has increased dramatically, from about 3% in 1988 to about 27% in 2000.

Long distance carriers are required to pay payphone owners $0.24 for every completed dial-around call (calls where the consumer chooses the long distance carrier over the payphone's presubscribed long distance carrier).[2] Because of this requirement, several long distance carriers employ the National Payphone Clearinghouse to administer payments on their behalf. On an annual basis, the National Payphone Clearinghouse supplies the FCC with data that allow the number of payphones in each state to be calculated. Table 8.5 shows the number of payphones owned by LECs and by independent payphone operators in each state at the end of the first quarter of 2001. Data for 1999 and 2000 can be found in the August 2001 edition of *Trends*. The number of payphones is broken down by whether the payphones are served by an RBOC or by another LEC.

[2] See *Third Report and Order and Order on Reconsideration of the 2nd Report and Order*, CC Docket 96-128, adopted Jan. 28, 1999.

## Table 8.1
## Total U.S. Telephone Lines

| Year End | Presubscribed Lines | Annual Growth (%) | Local Loops | Annual Growth (%) | Access Lines | Annual Growth (%) |
|---|---|---|---|---|---|---|
| 1980 | | | 102,216,367 | | | |
| 1981 | | | 105,559,222 | 3.3 % | | |
| 1982 | | | 107,519,214 | 1.9 | | |
| 1983 | | | 110,612,689 | 2.9 | | |
| 1984 | | | 112,550,739 | 1.8 | 113,880,538 | |
| 1985 | | | 115,985,813 | 3.1 | 117,434,802 | 3.1 % |
| 1986 | | | 118,289,121 | 2.0 | 120,781,565 | 2.8 |
| 1987 | 121,466,500 | | 122,789,249 | 3.8 | 124,678,710 | 3.2 |
| 1988 | 124,360,829 | 2.4 % | 127,086,765 | 3.5 | 126,953,616 | 1.8 |
| 1989 | 128,482,479 | 3.3 | 131,504,568 | 3.5 | 130,915,695 | 3.1 |
| 1990 | 132,408,608 | 3.1 | 136,114,201 | 3.5 | 134,743,029 | 2.9 |
| 1991 | 135,286,582 | 2.2 | 139,412,884 | 2.4 | 139,672,703 | 3.7 |
| 1992 | 138,725,040 | 2.5 | 143,341,581 | 2.8 | 142,428,028 | 2.0 |
| 1993 | 142,809,280 | 2.9 | 148,106,159 | 3.3 | 147,095,681 | 3.3 |
| 1994 | 148,479,328 | 4.0 | 153,447,946 | 3.6 | 151,607,529 | 3.1 |
| 1995 | 152,601,177 | 2.8 | 159,658,662 | 4.0 | 158,219,924 | 4.4 |
| 1996 | 158,672,243 | 4.0 | 166,445,580 | 4.3 | 165,420,650 | 4.6 |
| 1997 | NA | NA | 173,866,799 | 4.5 | 173,890,908 | 5.1 |
| 1998 | NA | NA | 179,849,181 | 3.4 | 180,471,261 | 3.8 |
| 1999 | NA | NA | 184,975,663 | 2.9 | 186,658,645 | 3.4 |
| 2000 | NA | NA | 188,497,257 | 1.9 | 188,626,589 | 1.1 |
| 2001 | NA | NA | NA | NA | 179,746,541 1/ | -4.7 |

NA - Not Available.

1/ Data for 2001 are preliminary from annual ARMIS (Automated Reporting Management Information System) filing, April 1, 2002, adjusted using the 2000 adjustment factor.

Source: Presubscribed lines and local loops: National Exchange Carrier Association.
Access Lines: 1984-2000: Industry Analysis Division, Common Carrier Bureau, *Statistics of Communications Common Carriers*, 2000/2001 edition (November 2001), Table 4.10, after inflating access lines of reporting carriers to represent the total industry.

## Table 8.2
## Telephone Loops of Incumbent Local Exchange Carriers by State
## (As of December 31, 2000)

| | | Price Cap | | Non-Price Cap | | |
|---|---|---|---|---|---|---|
| | Study Areas | Bell Company Loops 1/ | Other Company Loops | Average Schedule Company Loops | Other Company Loops | Total Loops |
| Alabama | 28 | 2,302,066 | 27,884 | 52,358 | 155,409 | 2,537,717 |
| Alaska | 25 | 0 | 0 | 236 | 455,775 | 456,011 |
| American Samoa | 1 | 0 | 0 | 0 | 9,978 | 9,978 |
| Arizona | 16 | 2,940,610 | 162,565 | 0 | 35,594 | 3,138,769 |
| Arkansas | 29 | 1,069,214 | 0 | 26,534 | 451,803 | 1,547,551 |
| California | 22 | 23,420,709 | 146,650 | 0 | 210,630 | 23,777,989 |
| Colorado | 28 | 2,872,354 | 0 | 1,067 | 131,456 | 3,004,877 |
| Connecticut | 2 | 2,527,459 | 0 | 25,155 | 0 | 2,552,614 |
| Delaware | 1 | 598,874 | 0 | 0 | 0 | 598,874 |
| District of Columbia | 1 | 924,593 | 0 | 0 | 0 | 924,593 |
| Florida | 12 | 9,139,046 | 2,154,289 | 0 | 192,375 | 11,485,710 |
| Georgia | 36 | 4,376,539 | 2,633 | 67,809 | 838,469 | 5,285,450 |
| Guam | 1 | 0 | 0 | 0 | 74,367 | 74,367 |
| Hawaii | 2 | 722,977 | 0 | 0 | 532 | 723,509 |
| Idaho | 21 | 699,233 | 21,751 | 5,141 | 43,752 | 769,877 |
| Illinois | 57 | 7,804,682 | 132,093 | 39,992 | 234,612 | 8,211,379 |
| Indiana | 42 | 3,278,399 | 264,276 | 97,216 | 70,736 | 3,710,627 |
| Iowa | 153 | 1,122,068 | 358,056 | 207,282 | 41,692 | 1,729,098 |
| Kansas | 39 | 1,454,785 | 146,290 | 7,773 | 123,961 | 1,732,809 |
| Kentucky | 19 | 1,823,334 | 202,619 | 97,904 | 101,692 | 2,225,549 |
| Louisiana | 20 | 2,418,203 | 0 | 7,322 | 187,119 | 2,612,644 |
| Maine | 20 | 724,630 | 0 | 38,175 | 111,130 | 873,935 |
| Maryland | 2 | 3,924,291 | 0 | 0 | 8,073 | 3,932,364 |
| Massachusetts | 3 | 4,527,199 | 0 | 0 | 4,233 | 4,531,432 |
| Michigan | 39 | 6,239,860 | 25,764 | 32,711 | 180,026 | 6,478,361 |
| Minnesota | 88 | 2,354,431 | 434,380 | 246,535 | 167,301 | 3,202,647 |
| Mississippi | 19 | 1,356,519 | 0 | 21,293 | 75,766 | 1,453,578 |
| Missouri | 44 | 3,103,505 | 270,350 | 20,063 | 302,249 | 3,696,167 |
| Montana | 18 | 381,611 | 9,018 | 4,355 | 164,554 | 559,538 |
| Nebraska | 41 | 510,773 | 390,527 | 21,270 | 92,555 | 1,015,125 |
| Nevada | 14 | 427,685 | 875,833 | 0 | 33,370 | 1,336,888 |
| New Hampshire | 10 | 801,344 | 0 | 2,252 | 56,999 | 860,595 |
| New Jersey | 3 | 6,692,681 | 223,764 | 0 | 10,959 | 6,927,404 |
| New Mexico | 16 | 860,898 | 103,234 | 0 | 45,071 | 1,009,203 |
| New York | 44 | 11,869,385 | 1,069,756 | 22,316 | 269,115 | 13,230,572 |
| North Carolina | 26 | 2,960,862 | 1,498,706 | 264,738 | 488,881 | 5,213,187 |
| North Dakota | 24 | 215,193 | 16,945 | 76,934 | 88,370 | 397,442 |
| Northern Mariana Islands | 1 | 20,990 | 0 | 0 | 0 | 20,990 |
| Ohio | 42 | 5,041,359 | 1,419,653 | 67,242 | 473,634 | 7,001,888 |
| Oklahoma | 39 | 1,737,875 | 126,260 | 5,943 | 240,315 | 2,110,393 |
| Oregon | 33 | 1,951,725 | 92,845 | 12,490 | 149,170 | 2,206,230 |
| Pennsylvania | 36 | 7,076,154 | 441,133 | 608,057 | 260,004 | 8,385,348 |
| Puerto Rico | 2 | 1,331,851 | 0 | 0 | 0 | 1,331,851 |
| Rhode Island | 1 | 660,645 | 0 | 0 | 0 | 660,645 |
| South Carolina | 27 | 1,747,811 | 104,993 | 60,017 | 474,949 | 2,387,770 |
| South Dakota | 31 | 276,180 | 0 | 77,592 | 74,789 | 428,561 |
| Tennessee | 25 | 2,754,858 | 356,105 | 149,781 | 212,394 | 3,473,138 |
| Texas | 58 | 12,096,308 | 715,095 | 10,443 | 602,027 | 13,423,873 |
| Utah | 13 | 1,152,656 | 23,711 | 5,005 | 31,976 | 1,213,348 |
| Vermont | 10 | 360,411 | 0 | 4,504 | 60,934 | 425,849 |
| Virgin Islands | 1 | 0 | 0 | 0 | 68,283 | 68,283 |
| Virginia | 21 | 4,309,367 | 413,279 | 92,898 | 27,141 | 4,842,685 |
| Washington | 23 | 3,467,139 | 87,790 | 4,320 | 269,855 | 3,829,104 |
| West Virginia | 10 | 871,569 | 152,142 | 8,565 | 7,902 | 1,040,178 |
| Wisconsin | 90 | 2,587,357 | 58,403 | 225,518 | 636,612 | 3,507,890 |
| Wyoming | 10 | 258,704 | 7,511 | 0 | 44,588 | 310,803 |
| Total | 1,439 | 164,148,971 | 12,536,303 | 2,718,806 | 9,093,177 | 188,497,257 |

1/ Includes loops formerly owned by GTE and Southern New England Telephone. SBC of Connecticut has 25,155 average schedule company loops that are not included in this total.

Source: NECA universal service filings.

## Table 8.3
## Telephone Loops of Incumbent Local Exchange Carriers
## By Holding Company 1/
## (As of December 31, 2000)

| Holding Companies | Loops | Percent of Loops |
|---|---|---|
| Verizon Communications, Inc. | 61,483,186 | 32.62 % |
| SBC Communications, Inc. | 60,044,161 | 31.85 |
| BellSouth Telecommunications, Inc. | 25,094,751 | 13.31 |
| Qwest Communications International, Inc. | 17,552,028 | 9.31 |
| Sprint Corporation | 7,972,288 | 4.23 |
| ALLTEL Corporation | 2,352,418 | 1.25 |
| CenturyTel, Inc. | 1,789,179 | 0.95 |
| Citizens Communications Company | 1,364,907 | 0.72 |
| Global Crossing Ltd. | 1,134,404 | 0.60 |
| Broadwing, Inc. | 984,281 | 0.52 |
| TDS Telecommunications Corporation | 611,355 | 0.32 |
| Valor Telecommunications, LLC | 540,076 | 0.29 |
| Alaska Communications Systems | 325,893 | 0.17 |
| C-TEC Corporation | 317,102 | 0.17 |
| Iowa Network Services, Inc. | 297,240 | 0.16 |
| FairPoint Communications, Inc. | 241,034 | 0.13 |
| Madison River Telephone Company | 192,601 | 0.10 |
| TXU Communications Telephone Company | 167,702 | 0.09 |
| North State Telephone Company | 139,233 | 0.07 |
| Rock Hill Telephone Company | 129,701 | 0.07 |
| Roseville Telephone Company | 124,676 | 0.07 |
| The Concord Telephone Company | 123,843 | 0.07 |
| Horry Telephone Cooperative, Inc. | 96,034 | 0.05 |
| McLeodUSA Telecommunications Services, Inc | 89,651 | 0.05 |
| Conestoga Enterprises, Inc. | 84,641 | 0.04 |
| North Pittsburgh Telephone Company | 82,041 | 0.04 |
| Guam Telephone Authority | 74,367 | 0.04 |
| Hargray Communications Group, Inc. | 73,877 | 0.04 |
| Virgin Islands Telephone Corporation | 68,283 | 0.04 |
| Denver & Ephrata Telephone Company | 62,024 | 0.03 |
| Farmers Telephone Cooperative, Inc. | 59,083 | 0.03 |
| Hickory Tech Corporation | 58,397 | 0.03 |
| Pioneer | 56,636 | 0.03 |
| Ntelos, Inc. | 51,079 | 0.03 |
| SRT Service Corporation | 49,531 | 0.03 |
| Lynch Interactive Corporation | 47,800 | 0.03 |
| Chorus Communications Group Ltd. | 44,843 | 0.02 |
| Hickory Tech Corporation | 43,148 | 0.02 |
| East Ascension Telephone Company, Inc. | 41,063 | 0.02 |
| Atlantic Telephone Membership Corporation | 40,898 | 0.02 |
| Guadalupe Valley Telephone Cooperative | 38,334 | 0.02 |
| The Chillicothe Telephone Company | 37,501 | 0.02 |
| Ben Lomand Rural Telephone Cooperative, Inc. | 37,229 | 0.02 |
| Golden West Telecommunications | 36,845 | 0.02 |
| Twin Lake Telephone Cooperative | 36,121 | 0.02 |
| Skyline Telephone Membership Corporation | 35,781 | 0.02 |
| Telephone Electronics Corporation | 35,679 | 0.02 |
| Lexington Communications | 34,756 | 0.02 |
| Smithville Telephone Company, Inc. | 34,612 | 0.02 |
| Great Plains Communication, Inc. | 33,904 | 0.02 |
| Eastex Telephone Cooperative, Inc. | 32,742 | 0.02 |
| Yadkin Valley Telephone | 32,309 | 0.02 |
| CEA Capital | 32,268 | 0.02 |
| Wood County Telephone Company | 30,955 | 0.02 |
| All Other Companies | 3,902,766 | 2.07 |
| Total | 188,497,257 | 100.00 % |

1/ Includes incumbent local exchange carrier's loops for holding companies with more than 30,000 loops.

Source: NECA universal service filings.

**Table 8.4**
**Additional Residential Lines**
**for Households with Telephone Service**
**(End-of-Year Data in Millions)**

| Year | Loops 1/ | | | Households with Telephone Service 2/ | Additional Residential Lines | Percentage of Additional Lines for Households with Telephones |
|---|---|---|---|---|---|---|
| | Residential | Non-Residential | Total Loops | | | |
| 1988 | 87.7 | 38.5 | 126.2 | 85.4 | 2.3 | 2.7 % |
| 1989 | 90.0 | 40.6 | 130.6 | 87.4 | 2.6 | 3.0 |
| 1990 | 92.2 | 42.9 | 135.1 | 88.4 | 3.9 | 4.4 |
| 1991 | 95.9 | 42.5 | 138.4 | 89.4 | 6.5 | 7.3 |
| 1992 | 99.3 | 43.0 | 142.3 | 91.0 | 8.3 | 9.1 |
| 1993 | 101.8 | 45.2 | 147.0 | 93.0 | 8.8 | 9.4 |
| 1994 | 105.1 | 47.2 | 152.3 | 93.7 | 11.4 | 12.2 |
| 1995 | 108.1 | 50.4 | 158.5 | 94.2 | 13.9 | 14.7 |
| 1996 | 111.1 | 54.3 | 165.5 | 95.1 | 16.0 | 16.8 |
| 1997 | 114.7 | 58.2 | 173.0 | 96.5 | 18.3 | 18.9 |
| 1998 | 117.3 | 62.7 | 180.0 | 98.0 | 19.3 | 19.7 |
| 1999 | 122.8 | 63.6 | 186.4 | 99.1 | 23.7 | 23.9 |
| 2000 | 126.7 | 66.0 | 192.8 | 100.2 | 26.6 | 26.5 |

1/ Total loops are from the Universal Service Fund subscriber line counts provided by the National Exchange Carrier Association. Guam, the Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands totals have been removed. Total loops have been divided between residential and non-residential using the ratio of residential to non-residential access lines reported in *Statistics of Communications Common Carriers.* Those totals also exclude Puerto Rico, but cover only the carriers that file ARMIS reports (of which there are none for Guam, the Northern Mariana Islands, and the U.S. Virgin Islands). Loop counts beginning in 1996 have been increased by estimated competitive local exchange carrier lines from the Association for Local Telecommunications Services (ALTS) and the report by Industry Analysis Division, Common Carrier Bureau, *Local Telephone Competition: Status as of June 30, 2001* (February 2002).

2/ *Current Population Survey* (U.S. Department of Commerce, Bureau of the Census).

Source: FCC staff estimates.

# Table 8.5
# Number of Payphones Owned by LECs and Independent Operators
# (As of March 31, 2001)

| State | RBOC Territories | | All Other LEC Territories | | Total | Total | Grand |
|---|---|---|---|---|---|---|---|
| | LEC Owned | Independent | LEC Owned | Independent | LEC Owned | Independent | Total |
| Alabama | 13,158 | 6,937 | 467 | 1,332 | 13,625 | 8,269 | 21,894 |
| Alaska | 0 | 0 | 1,217 | 3,377 | 1,217 | 3,377 | 4,594 |
| Arizona | 18,788 | 15,031 | 803 | 2,704 | 19,591 | 17,735 | 37,326 |
| Arkansas | 10,216 | 1,563 | 1,675 | 1,552 | 11,891 | 3,115 | 15,006 |
| California | 137,535 | 103,245 | 1,885 | 3,915 | 139,420 | 107,160 | 246,580 |
| Colorado | 15,380 | 9,363 | 196 | 924 | 15,576 | 10,287 | 25,863 |
| Connecticut | 19,835 | 4,360 | 0 | 2 | 19,835 | 4,362 | 24,197 |
| Delaware | 4,473 | 960 | 0 | 0 | 4,473 | 960 | 5,433 |
| District of Columbia | 7,362 | 1,273 | 0 | 0 | 7,362 | 1,273 | 8,635 |
| Florida | 42,019 | 45,822 | 7,714 | 11,658 | 49,733 | 57,480 | 107,213 |
| Georgia | 27,920 | 20,403 | 3,532 | 6,367 | 31,452 | 26,770 | 58,222 |
| Hawaii | 7,068 | 1,128 | 0 | 0 | 7,068 | 1,128 | 8,196 |
| Idaho | 3,623 | 2,304 | 260 | 248 | 3,883 | 2,552 | 6,435 |
| Illinois | 62,280 | 29,263 | 1,515 | 2,087 | 63,795 | 31,350 | 95,145 |
| Indiana | 26,901 | 7,766 | 2,187 | 1,260 | 29,088 | 9,026 | 38,114 |
| Iowa | 6,307 | 2,837 | 705 | 306 | 7,012 | 3,143 | 10,155 |
| Kansas | 11,707 | 2,272 | 950 | 952 | 12,657 | 3,224 | 15,881 |
| Kentucky | 9,055 | 8,021 | 2,263 | 1,905 | 11,318 | 9,926 | 21,244 |
| Louisiana | 13,370 | 11,343 | 156 | 1,421 | 13,526 | 12,764 | 26,290 |
| Maine | 5,937 | 682 | 50 | 311 | 5,987 | 993 | 6,980 |
| Maryland | 31,492 | 6,233 | 49 | 9 | 31,541 | 6,242 | 37,783 |
| Massachusetts | 39,148 | 10,581 | 8 | 1,239 | 39,156 | 11,820 | 50,976 |
| Michigan | 48,830 | 18,735 | 709 | 1,087 | 49,539 | 19,822 | 69,361 |
| Minnesota | 11,279 | 4,528 | 2,438 | 2,376 | 13,717 | 6,904 | 20,621 |
| Mississippi | 10,115 | 4,495 | 186 | 499 | 10,301 | 4,994 | 15,295 |
| Missouri | 23,827 | 6,842 | 2,906 | 2,968 | 26,733 | 9,810 | 36,543 |
| Montana | 2,615 | 1,426 | 609 | 1,023 | 3,224 | 2,449 | 5,673 |
| Nebraska | 3,187 | 1,703 | 637 | 4,012 | 3,824 | 5,715 | 9,539 |
| Nevada | 3,514 | 1,716 | 2,016 | 9,760 | 5,530 | 11,476 | 17,006 |
| New Hampshire | 5,963 | 1,565 | 103 | 220 | 6,066 | 1,785 | 7,851 |
| New Jersey | 66,213 | 16,991 | 1,937 | 1,392 | 68,150 | 18,383 | 86,533 |
| New Mexico | 5,951 | 3,455 | 302 | 670 | 6,253 | 4,125 | 10,378 |
| New York | 103,168 | 52,436 | 11,284 | 8,157 | 114,452 | 60,593 | 175,045 |
| North Carolina | 13,434 | 10,176 | 8,314 | 11,674 | 21,748 | 21,850 | 43,598 |
| North Dakota | 650 | 763 | 73 | 817 | 723 | 1,580 | 2,303 |
| Ohio | 41,298 | 10,924 | 9,458 | 7,170 | 50,756 | 18,094 | 68,850 |
| Oklahoma | 15,302 | 4,600 | 1,343 | 1,076 | 16,645 | 5,676 | 22,321 |
| Oregon | 10,676 | 7,580 | 486 | 2,038 | 11,162 | 9,618 | 20,780 |
| Pennsylvania | 52,279 | 20,595 | 6,765 | 4,570 | 59,044 | 25,165 | 84,209 |
| Rhode Island | 5,126 | 2,368 | 0 | 793 | 5,126 | 3,161 | 8,287 |
| South Carolina | 10,850 | 9,097 | 2,159 | 3,947 | 13,009 | 13,044 | 26,053 |
| South Dakota | 2,343 | 785 | 410 | 826 | 2,753 | 1,611 | 4,364 |
| Tennessee | 14,458 | 11,846 | 2,618 | 2,671 | 17,076 | 14,517 | 31,593 |
| Texas | 75,275 | 51,552 | 2,013 | 6,407 | 77,288 | 57,959 | 135,247 |
| Utah | 7,398 | 3,246 | 156 | 578 | 7,554 | 3,824 | 11,378 |
| Vermont | 2,865 | 398 | 44 | 286 | 2,909 | 684 | 3,593 |
| Virginia | 30,899 | 13,757 | 2,523 | 2,199 | 33,422 | 15,956 | 49,378 |
| Washington | 20,521 | 10,566 | 792 | 2,395 | 21,313 | 12,961 | 34,274 |
| West Virginia | 7,901 | 1,751 | 665 | 700 | 8,566 | 2,451 | 11,017 |
| Wisconsin | 19,454 | 5,578 | 1,552 | 6,039 | 21,006 | 11,617 | 32,623 |
| Wyoming | 2,412 | 917 | 269 | 167 | 2,681 | 1,084 | 3,765 |
| Totals | 1,131,377 | 571,778 | 88,399 | 128,086 | 1,219,776 | 699,864 | 1,919,640 |

Source: Raw data provided by National Payphone Clearinghouse. Rollups performed by the Industry Analysis and Technology Division of the FCC.

# 9 Local Telephone Competition

For most of the past century, households and businesses had no choice in selecting their local telephone company. In the 1980s, competitive access providers (CAPs) began to market to business customers access services provided over CAPs' wired networks. To some extent they also carried local telephone calls among their customers. In the 1990s, some CAPs and other companies, including affiliates of cable television companies and local service divisions of long distance companies, began to offer local telephone calling services to a broader range of customers. Companies with operations in larger cities added operations in smaller cities, where the typical customer is more likely to be a small or medium-sized business than a large business, and some new companies focused on smaller cities from the beginning. The newer competitors are often called competitive local exchange carriers (CLECs), although the terms CAPs and CLECs are sometimes used interchangeably.

The Telecommunications Act of 1996 (1996 Act) contemplated three vehicles for competitors to enter local telephone service markets. First, CLECs may resell the services of incumbent local exchange carriers (ILECs). Second, CLECs may make use of ILEC facilities, for example, by leasing ILEC unbundled network element (UNE) loops to use in combination with the CLECs' own switching capabilities, or by leasing the UNE-platform that combines the ILEC loop with ILEC switching services. Third, CLECs may build the complete set of facilities they need to compete. Individual competitors have used various combinations of these methods at different times.

## 1. CLEC Share of Switched Access Lines

Table 9.1 shows that CLECs provided 17.3 million (or 9.0%) of the approximately 192 million nationwide switched access lines in service to end-user customers at the end of June 2001, according to information reported on FCC Form 477. This represents a 16% growth of CLEC market size during the first half of 2001. Table 9.2 shows that about 55% of these CLEC lines served medium and large business, institutional, and government customers. By contrast, a reported 23% of ILEC switched access lines served such customers.

Table 9.3 shows that CLECs report providing about one-third of their switched access lines over their own local loop facilities. In the course of the semi-annual data collections, the percentage of these lines provisioned by reselling services has declined steadily (to 23% at the end of June 2001) and the percentage provisioned over acquired UNE loops, both stand-alone and with switching, has grown (to 44%). Data reported by ILECs, presented in Table 9.4, indicate that UNE loops provided with ILEC switching (including the UNE-platform) have increased faster than UNE loops provided without switching. These data also indicate that the observed decline in resold lines between December 2000 and June 2001 is due to CLECs switching their end-user customers to the UNE-platform.

Table 9.5 shows ILEC and CLEC switched access lines by state, and the CLEC share of total switched access lines by state, at the end of June 2001. Table 9.6 presents historical data on CLEC share by state.

## 2. CLEC Share of Local Telephone Service Revenues

Table 9.7 shows that carriers competing with the ILECs increased their local telephone service revenues by 70% from 1999 to 2000 – from $6.3 billion to $10.7 billion. The share of nationwide local telephone service revenues claimed by the competitors increased from 5.8% in 1999 to 8.9% in 2000.

## 3. Ported Telephone Numbers

Table 9.8 presents information on telephone numbers "ported" (transferred) from one telephone switch to another (usually between carriers). Telephone numbers are transferred between local switches for a variety of reasons. Most ported telephone numbers are ported because the end users changed local telephone carriers and retained their telephone number(s). Such quantities appear in the first set of columns in Table 9.8.

Other telephone numbers are ported from one carrier to another as part of a telephone-number conservation measure known as number pooling, which is where carriers with spare telephone numbers port large blocks of numbers to a carrier in need of numbers. Not all numbers within a block are transferred to the recipient carrier, however. Those numbers that will remain with the "donor" carrier are first ported from that donor carrier to itself as a prepooling measure, which ensures that the "donor" carrier retains those numbers. Carriers may also port numbers among their switches to use numbers more effectively. Numbers that carriers port to themselves appear in the second set of columns of Table 9.8. Quantities of telephone numbers that have been ported to another carrier for pooling reasons are in the third set of columns of Table 9.8.

Over 15.5 million telephone numbers were transferred due to customers changing carriers as of December 31, 2001. Most, but not all of those numbers, were ported from ILECs to CLECs, but some of them were ported from CLECs to ILECs, and others from CLECs to CLECs. In all, as of December 31, 2001, over 21.4 million telephone numbers had been transferred.

This information is developed from the telephone number porting database, managed by the Local Number Portability Administrator (currently NeuStar, Inc.). The database contains all telephone numbers that are ported at that point in time. (In order to protect consumer privacy, the Commission receives the information in such a way that prevents it from determining if a particular telephone number has been ported or not.) If a telephone number is ported a second time, the database contains only the information from the most recent port. Periodic "snapshots" of the database are taken, which allow the Commission to determine the number of telephone numbers that have been ported, the reason those numbers were ported, and the date that the telephone-number record in the database was created.

For most telephone-number records, the date reflects the date that the telephone number was most recently ported. Some records, however, have been affected by area-code changes, so the date reflects not the porting date, but the date the telephone-number record was updated to account for the area code change. Although not perfect, sequential snapshots of the database should help quantify both the number of customer lines served by competitive local telephone carriers over time, and telephone number churn. Table 9.9 shows the same information as of June 30, 2001.

Table 9.10 shows the quantity of telephone numbers in the database at the end of each quarter, from the second quarter of 1999 (when the FCC first began receiving the data) through the fourth quarter of 2001.

## Table 9.1
## End-User Switched Access Lines Reported 1/

| Date | ILEC Lines | CLEC Lines | Total | CLEC Share |
|---|---|---|---|---|
| December 1999 | 181,307,695 | 8,194,243 | 189,501,938 | 4.3 % |
| June 2000 | 179,761,930 | 11,557,381 | 191,319,311 | 6.0 |
| December 2000 | 177,683,672 | 14,871,409 | 192,555,081 | 7.7 |
| June 2001 | 174,485,706 | 17,274,728 | 191,760,434 | 9.0 |

1/ Some previously published data have been revised.

Source: Industry Analysis Division, Common Carrier Bureau, *Local Telephone Competition: Status as of June 30, 2001* (February 2002).

## Table 9.2
## End-User Switched Access Lines
## By Customer Type 1/

| Date | Reporting ILECs | | | Reporting CLECs | | |
|---|---|---|---|---|---|---|
| | Residential & Small Businesses | Other 2/ | % Residential & Small Businesses | Residential & Small Businesses | Other 2/ | % Residential & Small Businesses |
| December 1999 | 139,758,434 | 41,549,261 | 77.1 % | 3,368,702 | 4,825,541 | 41.1 % |
| June 2000 | 140,635,199 | 39,126,731 | 78.2 | 4,579,501 | 6,977,880 | 39.6 |
| December 2000 | 138,906,551 | 38,777,121 | 78.2 | 6,620,471 | 8,250,938 | 44.5 |
| June 2001 | 134,317,629 | 40,168,077 | 77.0 | 7,793,071 | 9,481,656 | 45.1 |

1/ Some previously published data have been revised.

2/ Medium and large businesses, institutional and government customers.

Source: Industry Analysis Division, Common Carrier Bureau, *Local Telephone Competition: Status as of June 30, 2001* (February 2002).

## Table 9.3
## Reporting Competitive Local Exchange Carriers 1/
### (End-User Switched Access Lines in Thousands)

| Date | CLECs Reporting | Total End-User Lines | Acquired Lines | | | | CLEC-Owned | |
|---|---|---|---|---|---|---|---|---|
| | | | Resold Lines 2/ | UNEs 3/ | Total Lines Acquired | Percent | Lines 4/ | Percent |
| Dec 1999 | 81 | 8,194 | 3,513 | 1,959 | 5,471 | 66.8 % | 2,723 | 33.2 % |
| Jun 2000 | 78 | 11,557 | 4,315 | 3,201 | 7,516 | 65.0 | 4,042 | 35.0 |
| Dec 2000 | 89 | 14,871 | 4,114 | 5,540 | 9,655 | 64.9 | 5,217 | 35.1 |
| Jun 2001 | 91 | 17,275 | 3,919 | 7,580 | 11,499 | 66.6 | 5,776 | 33.4 |

1/ Some previously published data have been revised.

2/ Lines acquired from other carrier under resale arrangements.

3/ Lines acquired from other carriers as UNE loops, either stand-alone or with switching (e.g., using the UNE-platform).

4/ Lines provided over CLEC-owned "last-mile" facilities.

Source: Industry Analysis Division, Common Carrier Bureau, *Local Telephone Competition: Status as of June 30, 2001* (February 2002).

## Table 9.4
## Reporting Incumbent Local Exchange Carriers 1/
### (End-User Switched Access Lines in Thousands)

| Date 2/ | ILECs Reporting | Total Lines | End-User Lines | Lines Provided to Other Carriers | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Resold Lines | UNEs without Switching 3/ | UNEs with Switching | Total UNEs | Total UNEs and Resold Lines | Percent of Total Lines |
| Dec 1997 | 9 | 159,008 | 157,132 | 1,743 | | | 133 | 1,876 | 1.2 % |
| Jun 1998 | 8 | 161,810 | 159,118 | 2,448 | | | 244 | 2,692 | 1.7 |
| Dec 1998 | 7 | 164,614 | 161,191 | 3,062 | | | 361 | 3,423 | 2.1 |
| Jun 1999 | 7 | 167,177 | 162,909 | 3,583 | | | 685 | 4,268 | 2.6 |
| Dec 1999 | 168 | 187,294 | 181,308 | 4,494 | 1,004 | 489 | 1,493 | 5,987 | 3.2 |
| Jun 2000 | 159 | 188,171 | 179,762 | 5,098 | 1,696 | 1,616 | 3,312 | 8,409 | 4.5 |
| Dec 2000 | 166 | 188,346 | 177,684 | 5,388 | 2,436 | 2,838 | 5,274 | 10,662 | 5.7 |
| Jun 2001 | 156 | 186,825 | 174,486 | 4,417 | 3,161 | 4,761 | 7,922 | 12,340 | 6.6 |

1/ Some previously published data have been revised.

2/ Data for December 1997 through June 1999 are from Common Carrier Bureau voluntary surveys. Starting with December 1999, data are from FCC Form 477 filings.

3/ UNE loops without switching includes UNE loops used for non-voice services, such as xDSL-provisional data services.

Source: Industry Analysis Division, Common Carrier Bureau, *Local Telephone Competition: Status as of June 30, 2001* (February 2002).

## Table 9.5
## End-User Switched Access Lines Served
## By Reporting Local Exchange Carriers
## (As of June 30, 2001)

| State | ILECs | CLECs | Total | CLEC Share |
|---|---|---|---|---|
| Alabama | 2,413,440 | 121,059 | 2,534,499 | 5 % |
| Alaska | 474,215 | * | * | * |
| Arizona | 3,062,586 | 231,777 | 3,294,363 | 7 |
| Arkansas | 1,412,863 | * | * | * |
| California | 23,103,077 | 1,668,232 | 24,771,309 | 7 |
| Colorado | 2,805,532 | 325,983 | 3,131,515 | 10 |
| Connecticut | 2,363,687 | 164,379 | 2,528,066 | 7 |
| Delaware | 567,381 | 0 | 567,381 | 0 |
| District of Columbia | 887,590 | 124,630 | 1,012,220 | 12 |
| Florida | 11,211,674 | 864,892 | 12,076,566 | 7 |
| Georgia | 4,905,002 | 515,730 | 5,420,732 | 10 |
| Hawaii | 739,979 | * | * | * |
| Idaho | 732,814 | * | * | * |
| Illinois | 7,558,613 | 1,113,112 | 8,671,725 | 13 |
| Indiana | 3,576,710 | 180,221 | 3,756,931 | 5 |
| Iowa | 1,379,872 | 164,637 | 1,544,509 | 11 |
| Kansas | 1,441,940 | 121,294 | 1,563,234 | 8 |
| Kentucky | 2,170,191 | * | * | * |
| Louisiana | 2,505,961 | 108,820 | 2,614,781 | 4 |
| Maine | 801,649 | * | * | * |
| Maryland | 3,599,027 | 211,499 | 3,810,526 | 6 |
| Massachusetts | 4,131,520 | 576,442 | 4,707,962 | 12 |
| Michigan | 6,027,730 | 583,653 | 6,611,383 | 9 |
| Minnesota | 2,861,684 | 353,246 | 3,214,930 | 11 |
| Mississippi | 1,356,136 | 51,496 | 1,407,632 | 4 |
| Missouri | 3,446,252 | 224,442 | 3,670,694 | 6 |
| Montana | 527,989 | * | * | * |
| Nebraska | 931,979 | * | * | * |
| Nevada | 1,366,124 | 144,453 | 1,510,577 | 10 |
| New Hampshire | 775,864 | 67,315 | 843,179 | 8 |
| New Jersey | 6,707,243 | 300,594 | 7,007,837 | 4 |
| New Mexico | 977,439 | * | * | * |
| New York | 10,689,293 | 3,138,133 | 13,827,426 | 23 |
| North Carolina | 4,664,775 | 323,594 | 4,988,369 | 6 |
| North Dakota | 312,573 | * | * | * |
| Ohio | 6,876,434 | 280,088 | 7,156,522 | 4 |
| Oklahoma | 1,923,027 | 125,912 | 2,048,939 | 6 |
| Oregon | 2,079,221 | 118,425 | 2,197,646 | 5 |
| Pennsylvania | 7,818,599 | 1,122,623 | 8,941,222 | 13 |
| Puerto Rico | 1,300,665 | * | * | * |
| Rhode Island | 604,128 | 69,237 | 673,365 | 10 |
| South Carolina | 2,239,383 | 90,241 | 2,329,624 | 4 |
| South Dakota | 338,834 | * | * | * |
| Tennessee | 3,352,224 | 272,211 | 3,624,435 | 8 |
| Texas | 11,496,247 | 1,891,131 | 13,387,378 | 14 |
| Utah | 1,149,667 | 145,603 | 1,295,270 | 11 |
| Vermont | 399,084 | * | * | * |
| Virgin Islands | 70,426 | 0 | 70,426 | 0 |
| Virginia | 4,203,412 | 402,528 | 4,605,940 | 9 |
| Washington | 3,751,683 | 229,693 | 3,981,376 | 6 |
| West Virginia | 980,575 | * | * | * |
| Wisconsin | 3,151,854 | 322,735 | 3,474,589 | 9 |
| Wyoming | 259,839 | * | * | * |
| Nationwide | 174,485,706 | 17,274,728 | 191,760,434 | 9 % |

Note: Carriers with under 10,000 lines in a state were not required to report.

* Data withheld to maintain firm confidentiality.

Source: Industry Analysis Division, Common Carrier Bureau, *Local Telephone Competition: Status as of June 30, 2001* (February 2002).

## Table 9.6
## Competitive Local Exchange Carrier Share of End-User Switched Access Lines 1/

| State | Dec 1999 | Jun 2000 | Dec 2000 | Jun 2001 |
|---|---|---|---|---|
| Alabama | 5 % | 3 % | 4 % | 5 % |
| Alaska | * | * | * | * |
| Arizona | * | 5 | 5 | 7 |
| Arkansas | * | * | * | * |
| California | 4 | 5 | 6 | 7 |
| Colorado | 5 | 7 | 9 | 10 |
| Connecticut | 3 | 5 | 6 | 7 |
| Delaware | * | * | * | 0 |
| District of Columbia | 7 | 7 | 9 | 12 |
| Florida | 6 | 6 | 6 | 7 |
| Georgia | 5 | 6 | 8 | 10 |
| Hawaii | * | * | 0 | * |
| Idaho | 0 | 0 | * | * |
| Illinois | 5 | 7 | 9 | 13 |
| Indiana | 3 | 4 | 5 | 5 |
| Iowa | * | 9 | 11 | 11 |
| Kansas | * | 5 | 7 | 8 |
| Kentucky | 2 | * | 3 | * |
| Louisiana | 3 | 2 | 3 | 4 |
| Maine | * | * | * | * |
| Maryland | 2 | 3 | 4 | 6 |
| Massachusetts | 6 | 8 | 11 | 12 |
| Michigan | 3 | 5 | 6 | 9 |
| Minnesota | 6 | 7 | 9 | 11 |
| Mississippi | 4 | * | 4 | 4 |
| Missouri | 3 | 5 | 6 | 6 |
| Montana | * | * | * | * |
| Nebraska | * | * | * | * |
| Nevada | * | * | * | 10 |
| New Hampshire | * | * | 6 | 8 |
| New Jersey | * | 4 | 5 | 4 |
| New Mexico | * | * | * | * |
| New York | 9 | 16 | 20 | 23 |
| North Carolina | 3 | 4 | 4 | 6 |
| North Dakota | * | * | * | * |
| Ohio | 4 | 4 | 4 | 4 |
| Oklahoma | * | * | 5 | 6 |
| Oregon | 2 | 3 | 5 | 5 |
| Pennsylvania | 5 | 8 | 10 | 13 |
| Puerto Rico | 0 | * | * | * |
| Rhode Island | * | * | * | 10 |
| South Carolina | * | * | 4 | 4 |
| South Dakota | * | * | * | * |
| Tennessee | 4 | 6 | 6 | 8 |
| Texas | 4 | 7 | 13 | 14 |
| Utah | 3 | 6 | 10 | 11 |
| Vermont | * | * | * | * |
| Virgin Islands | 0 | 0 | 0 | 0 |
| Virginia | 2 | 5 | 7 | 9 |
| Washington | 4 | 5 | 6 | 6 |
| West Virginia | * | * | * | * |
| Wisconsin | 5 | 7 | 8 | 9 |
| Wyoming | * | * | * | * |
| Nationwide | 4 % | 6 % | 8 % | 9 % |

Note: Carriers with under 10,000 lines in a state were not required to report.
* Data withheld to maintain firm confidentiality.
1/ Some previously published data have been revised.
Source: Industry Analysis Division, Common Carrier Bureau, *Local Telephone Competition: Status as of June 30, 2001* (February 2002).

## Table 9.7
## Nationwide Local Service Revenues and New Competitors' Share 1/
### (Dollar Amounts Shown in Millions)

| | TRS Data | | | | TRS & USF Data | | Form 499 Data | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | Prel. 2001 |
| **Number of Local Competitors 1/** | | | | | | | | | |
| RBOCs & Other Incumbent LECs | 1,281 | 1,347 | 1,347 | 1,376 | 1,410 | 1,348 | 1,335 | 1,327 | 1,329 |
| CAPs & CLECs | 20 | 30 | 57 | 94 | 129 | 212 | 349 | 485 | 532 |
| Local Resellers, Shared Tenant, Private Carriers, & Other Local | NA | NA | NA | 25 | 18 | 64 | 147 | 122 | 193 |
| All Other Carriers Reporting Local Exchange Service Revenues | NA | NA | NA | 74 | 109 | 133 | 143 | 229 | NA |
| Total | 1,301 | 1,377 | 1,404 | 1,569 | 1,666 | 1,757 | 1,974 | 2,163 | NA |
| **Local Service Revenues 2/** | | | | | | | | | |
| Incumbent LECs | | | | | | | | | |
| Bell Operating Companies 3/ | $58,838 | $61,415 | $65,485 | $70,290 | $68,028 | $69,801 | $76,586 | $93,135 | $94,540 |
| Other Incumbent LECs 3/ | 20,894 | 22,507 | 24,269 | 24,899 | 24,960 | 26,989 | 26,084 | 15,166 | 19,032 |
| Total 4/ | 79,732 | 83,922 | 89,754 | 95,189 | 92,988 | 96,790 | 102,670 | 108,301 | 113,572 |
| Local Service Competitors | | | | | | | | | |
| CAPs & CLECs | 174 | 269 | 595 | 949 | 1,556 | 2,393 | 4,505 | 7,552 | 9,056 |
| Local Resellers, Shared Tenant, Private Carriers, & Other Local | NA | NA | NA | NA | 224 | 329 | 522 | 914 | 1,096 |
| All Other Carriers (Local Exchange Service Revenues Only) 4/ | 46 | 32 | 56 | 59 | 381 | 809 | 1,319 | 2,028 | 2,193 |
| Total | 220 | 301 | 651 | 1,008 | 2,161 | 3,530 | 6,347 | 10,494 | 12,344 |
| Total | $79,952 | $84,224 | $90,405 | $96,197 | $95,149 | $100,320 | $109,016 | $118,795 | $125,916 |
| **Share of Local Service Revenues** | | | | | | | | | |
| Incumbent LECs | | | | | | | | | |
| Bell Operating Companies | 73.6% | 72.9% | 72.4% | 73.1% | 71.5% | 69.6% | 70.3% | 78.4% | 75.1% |
| Other Incumbent LECs | 26.1% | 26.7% | 26.8% | 25.9% | 26.2% | 26.9% | 23.9% | 12.8% | 15.1% |
| Total | 99.7% | 99.6% | 99.3% | 99.0% | 97.7% | 96.5% | 94.2% | 91.2% | 90.2% |
| Local Service Competitors | | | | | | | | | |
| CAPs & CLECs | 0.2% | 0.3% | 0.7% | 1.0% | 1.6% | 2.4% | 4.1% | 6.4% | 7.2% |
| Local Resellers, Shared Tenant, Private Carriers, & Other Local | NA | NA | NA | NA | 0.2% | 0.3% | 0.5% | 0.8% | 0.9% |
| All Other Carriers | 0.1% | 0.0% | 0.1% | 0.1% | 0.4% | 0.8% | 1.2% | 1.7% | 1.7% |
| Total | 0.3% | 0.4% | 0.7% | 1.0% | 2.3% | 3.5% | 5.8% | 8.8% | 9.8% |
| **Total Telecommunications Revenues** (Including Payphone, Mobile, & Toll Service) | | | | | | | | | |
| Incumbent LECs 3/ | $95,228 | $98,431 | $102,820 | $107,905 | $105,154 | $108,234 | $112,216 | $116,158 | $118,657 |
| Local Competitors | 191 | 274 | 637 | 1,012 | 2,481 | 4,034 | 6,508 | 10,945 | 12,667 |
| Ratio of ILEC Total Telecommunications Revenues to Local Competitor Total Telecommunications Revenues | 498 : 1 | 351 : 1 | 165 : 1 | 107 : 1 | 42 : 1 | 27 : 1 | 17 : 1 | 11 : 1 | 9 : 1 |

NA - Not available.

1/ Counts through 2000 are based on the numbers of carriers actually reporting revenues. Counts for 2001 include all filers who reported revenues for 2000 as well as new carriers that filed through September 2001. The 2001 figures may double count some firms that have been bought, sold or merged during 2001.

2/ For 1993 through 1996, for most categories of carriers, local service revenues include revenues from the following TRS reporting categories: local exchange, local private line, other local services, interstate access services, and intrastate access services. The amounts shown do not include pay telephone, mobile, or toll service revenues. See also footnote 3/. 1998 revenues for carriers that filed TRS worksheets but not universal service worksheets were estimated using 1998 TRS worksheets. These worksheets contain carrier revenue data for calendar year 1997. Revenues for 2001 are preliminary estimates based on FCC Form 499-Q filings.

3/ Incumbent LEC local service revenues for 1996 and prior years include significant amounts of yellow pages, billing and collection, and other revenues that were reported as other local service revenues. If these revenues were included in 1997, incumbent LECs would show significant revenue growth from 1996 to 1997. Inside wire maintenance was included in local service revenues in 1997 but not thereafter.

4/ Toll carriers typically provide resold special access and private line services as part of toll service operations. Accordingly, the table shows local exchange revenues rather than all local revenues for these carriers.

Sources: Data filed on FCC Forms 431, 457, 499-Q and 499-A worksheets. See also: Industry Analysis Division, Common Carrier Bureau, *Telecommunications Industry Revenues* (January 2002).

## Table 9.8
## Telephone Numbers Still Ported on December 31, 2001
## (By Quarter in Which They Were Ported)

| Ported During Year | Ported During Quarter | Numbers Ported Due to Customers Changing Carriers | | Numbers Ported for Pooling Reasons | | | | Total Numbers |
|---|---|---|---|---|---|---|---|---|
| | | | | Intra-Carrier[1] | | Pooled (Inter-Carrier) | | |
| | | Ported During Quarter | Cumulative | Ported During Quarter | Cumulative | Ported During Quarter | Cumulative | |
| 1997 | 4th | 80 | 80 | 0 | 0 | 0 | 0 | 80 |
| 1998 | 1st | 239 | 319 | 7 | 7 | 0 | 0 | 326 |
| | 2nd | 5,963 | 6,282 | 49 | 56 | 0 | 0 | 6,338 |
| | 3rd | 63,640 | 69,922 | 2,619 | 2,675 | 2,911 | 2,911 | 75,508 |
| | 4th | 279,418 | 349,340 | 33,459 | 36,134 | 3,947 | 6,858 | 392,332 |
| 1999 | 1st | 412,926 | 762,266 | 14,007 | 50,141 | 54,713 | 61,571 | 873,978 |
| | 2nd | 620,163 | 1,382,429 | 37,979 | 88,120 | 90,341 | 151,912 | 1,622,461 |
| | 3rd | 763,292 | 2,145,721 | 78,504 | 166,624 | 48,408 | 200,320 | 2,512,665 |
| | 4th | 965,403 | 3,111,124 | 115,232 | 281,856 | 42,296 | 242,616 | 3,635,596 |
| 2000 | 1st | 1,028,074 | 4,139,198 | 127,379 | 409,235 | 72,548 | 315,164 | 4,863,597 |
| | 2nd | 1,117,138 | 5,256,336 | 248,527 | 657,762 | 257,914 | 573,078 | 6,487,176 |
| | 3rd | 1,256,701 | 6,513,037 | 205,921 | 863,683 | 196,641 | 769,719 | 8,146,439 |
| | 4th | 1,540,340 | 8,053,377 | 204,563 | 1,068,246 | 248,464 | 1,018,183 | 10,139,806 |
| 2001 | 1st | 1,582,341 | 9,635,718 | 286,395 | 1,354,641 | 271,531 | 1,289,714 | 12,280,073 |
| | 2nd | 1,848,987 | 11,484,705 | 461,059 | 1,815,700 | 369,114 | 1,658,828 | 14,959,233 |
| | 3rd | 1,894,020 | 13,378,725 | 531,614 | 2,347,314 | 681,551 | 2,340,379 | 18,066,418 |
| | 4th | 2,140,686 | 15,519,411 | 441,513 | 2,788,827 | 766,211 | 3,106,590 | 21,414,828 |

[1] Not all numbers ported are ported to a different carrier, as carriers sometimes port numbers to themselves. This happens for a variety of reasons. For instance, pooling, which uses number porting technology, transfers telephone numbers from a carrier that does not immediately need them to a carrier with a more immediate need. Not all numbers within a block are transferred to the new carrier, however. Those numbers that will remain with the "donor" carrier are first ported from that carrier to itself as a prepooling measure, which ensures that the "donor" carrier retains those numbers. Carriers may also port numbers among switches to use numbers more effectively.

Source: Raw data from Local Number Portability Administrator (NeuStar, Inc.). Rollups performed by the Industry Analysis and Technology Division, Wireline Competition Bureau, FCC.

## Table 9.9
## Telephone Numbers Still Ported on June 30, 2001
## (By Quarter in Which They Were Ported)

| Ported During Year | Ported During Quarter | Numbers Ported Due to Customers Changing Carriers | | Numbers Ported for Pooling Reasons | | | | Total Numbers |
|---|---|---|---|---|---|---|---|---|
| | | | | Intra-Carrier[1] | | Pooled (Inter-Carrier) | | |
| | | Ported During Quarter | Cumulative | Ported During Quarter | Cumulative | Ported During Quarter | Cumulative | |
| 1997 | 4th | 80 | 80 | 0 | 0 | 0 | 0 | 80 |
| 1998 | 1st | 239 | 319 | 12 | 12 | 0 | 0 | 331 |
| | 2nd | 6,308 | 6,627 | 51 | 63 | 0 | 0 | 6,690 |
| | 3rd | 66,621 | 73,248 | 2,875 | 2,938 | 2,953 | 2,953 | 79,139 |
| | 4th | 301,518 | 374,766 | 34,243 | 37,181 | 3,947 | 6,900 | 418,847 |
| 1999 | 1st | 457,597 | 832,363 | 15,988 | 53,169 | 54,844 | 61,744 | 947,276 |
| | 2nd | 655,478 | 1,487,841 | 39,913 | 93,082 | 92,453 | 154,197 | 1,735,120 |
| | 3rd | 816,084 | 2,303,925 | 82,729 | 175,811 | 49,188 | 203,385 | 2,683,121 |
| | 4th | 1,033,832 | 3,337,757 | 126,291 | 302,102 | 42,837 | 246,222 | 3,886,081 |
| 2000 | 1st | 1,102,327 | 4,440,084 | 138,074 | 440,176 | 77,212 | 323,434 | 5,203,694 |
| | 2nd | 1,207,823 | 5,647,907 | 259,767 | 699,943 | 279,337 | 602,771 | 6,950,621 |
| | 3rd | 1,341,189 | 6,989,096 | 220,307 | 920,250 | 204,152 | 806,923 | 8,716,269 |
| | 4th | 1,634,721 | 8,623,817 | 216,812 | 1,137,062 | 292,102 | 1,099,025 | 10,859,904 |
| 2001 | 1st | 1,705,337 | 10,329,154 | 305,279 | 1,442,341 | 342,453 | 1,441,478 | 13,212,973 |
| | 2nd | 1,980,645 | 12,309,799 | 485,516 | 1,927,857 | 498,255 | 1,939,733 | 16,177,389 |

[1] Not all numbers ported are ported to a different carrier, as carriers sometimes port numbers to themselves. This happens for a variety of reasons. For instance, pooling, which uses number porting technology, transfers telephone numbers from a carrier that does not immediately need them to a carrier with a more immediate need. Not all numbers within a block are transferred to the new carrier, however. Those numbers that will remain with the "donor" carrier are first ported from that carrier to itself as a prepooling measure, which ensures that the "donor" carrier retains those numbers. Carriers may also port numbers among switches to use numbers more effectively.

Source: Raw data from Local Number Portability Administrator (NeuStar, Inc.). Rollups performed by the Industry Analysis and Technology Division, Wireline Competition Bureau, FCC.

**Table 9.10**
**Telephone Numbers in Porting Database**
**(At the End of the Quarter)**

| | | Numbers Ported Due to Customers Changing Carriers | Intra-Carrier Ports | Pooled (Inter-Carrier) |
|---|---|---|---|---|
| Year | Quarter | Quantity | Quantity | Quantity |
| 1999 | 2nd | 1,839,633 | 121,609 | 206,701 |
| | 3rd | 2,658,295 | 217,194 | 238,113 |
| | 4th | 3,853,834 | 365,500 | 267,493 |
| 2000 | 1st | 5,028,858 | 512,425 | 364,044 |
| | 2nd | 5,781,174 | 659,368 | 625,677 |
| | 3rd | 7,595,076 | 1,006,298 | 939,168 |
| | 4th | 9,145,985 | 1,216,008 | 1,193,525 |
| 2001 | 1st | 10,567,098 | 1,475,748 | 1,483,166 |
| | 2nd | 12,309,799 | 1,927,857 | 1,939,733 |
| | 3rd | 14,609,551 | 2,587,210 | 2,764,187 |
| | 4th | 15,519,411 | 2,788,827 | 3,106,590 |

[1] Not all numbers ported are ported to a different carrier, as carriers sometimes port numbers to themselves. This happens for a variety of reasons. For instance, pooling, which uses number porting technology, transfers telephone numbers from a carrier that does not immediately need them to a carrier with a more immediate need. Not all numbers within a block are transferred to the new carrier, however. Those numbers that will remain with the "donor" carrier are first ported from that carrier to itself as a prepooling measure, which ensures that the "donor" carrier retains those numbers. Carriers may also port numbers among switches to use numbers more

Source: Raw data from Local Number Portability Administrator (NeuStar, Inc.). Rollups performed by the Industry Analysis and Technology Division, Wireline Competition Bureau, FCC.

# 10 Long Distance Telephone Industry

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 began also to offer long distance service. With the gradual emergence of competition, basic rates dropped, calling 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 than many industries.

## 1. Toll Revenues

In 2000, the large long distance carriers (those with over $117 million in toll revenues) generated about $92 billion in toll revenues, local telephone companies provided $9 billion of toll service and all other carriers provided about $8 billion. When combined, the total long distance market was nearly $110 billion. (Local telephone companies provide toll service, primarily intrastate calls, and usually within their local service territories.) These revenues are shown in Table 10.1.

Toll calls can be divided into three jurisdictional categories—intrastate calls, domestic interstate calls, and international calls. The revenues for each of the three types are shown in Table 10.2. Of considerable interest is the enormous growth (more than 500%) in international revenues from 1984 to 2000.

Toll revenues can also be divided between residential and nonresidential services, as in Table 10.3. In 2000, residential customers generated about 40% of toll revenues.

## 2. Number of Companies

The number and types of carriers reporting long distance revenues are shown in Table 10.4. The Telecommunications Reporting Worksheet (Form 499-A) requires each filer to select one of 18 categories as best describing its primary line of business. 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, satellite service providers, and toll resellers.

In 2000, 782 filers classified themselves as toll carriers and 1,704 other carriers reported long distance revenues even though the provision of long distance service is not their primary line of business.

Carrier identification codes (CICs) 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.

CICs are currently assigned by the North American Numbering Plan Administration (NANPA), which is part of Neustar, Inc. Further information on such codes can be found on the Internet at www.nanpa.com.

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 10.5.

During the late 1980s and 1990s, alternative sources for developing counts of long distance carriers became available. Starting in 1987, information on the number of telephone lines presubscribed to each long distance carrier was collected by NECA because FCC rules required NECA to recover certain expenses from the larger long distance carriers. Pursuant to the 1996 Act, the FCC changed its rules on universal service, and as a result, NECA stopped collecting this information. Information for December 1996 is the last presubscribed line data collected by NECA. Table 10.6 shows several alternative measures of long distance carrier development.

### 3. Long Distance Market Shares

A generation ago, when the Bell System was still intact, AT&T's local telephone companies provided most local service. At that time, there were no good means of segregating true economic costs of local and long distance services of AT&T's integrated network. 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). Thus, they were precluded from offering toll service that crossed the boundaries of their service territories. As a result, two separate and distinct toll markets emerged.

At 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. It also included most intrastate toll calls as well. A second and much smaller market consisted of short distance toll calls that did not cross LATA boundaries. This intraLATA 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 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 were modified by the Telecommunications Act of 1996.

Long-term trends in toll revenues are shown in Table 10.7. Over time, AT&T and the operating companies that previously monopolized telephone service have lost market share to new entrants. By 2000, carriers not even in existence a generation ago accounted for more than half of all long distance telephone toll revenues.

Table 10.8 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. By 2000, AT&T's revenues had declined to less than 40% of those reported by all long distance carriers and since 1995, AT&T has not been regulated as a "dominant" carrier.

Table 10.9 shows market-share information based on all toll revenues, including the long distance services provided by local exchange carriers. This broader classification increasingly becomes the relevant classification 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.

**4. Residential Toll Revenues**

Bill Harvesting® data collected by TNS Telecoms (TNS) provide information allowing the calculation of market shares in the residential market. The Bill Harvesting® data also provide information used to calculate the market shares of long distance carriers by state. Section 15 gives further information on TNS and the bill harvesting data. Table 10.10, which is based on this information, presents nationwide market shares of access lines, residential toll revenue and direct dial minutes from 1995 to 2000; and Table 10.11 presents market shares of residential direct-dial minutes by state for 2000. These tables present long distance market shares for AT&T, MCI WorldCom, and Sprint.

**5. Section 271 Applications**

Section 271 of the Communications Act requires the regional Bell operating companies (RBOCs) to apply to the Commission, on a state-by-state basis, for authorization to provide in-region interLATA services. To obtain such authorization pursuant to section 271, the BOC must demonstrate that it satisfies the 14-point competitive checklist, that it will comply with the separate affiliate and nondiscrimination requirements of section 272, and that the requested authorization is consistent with the public interest, convenience, and necessity. After a BOC files a section 271 application with the Commission, the Commission has 90 days to determine whether a BOC has taken the statutorily required steps to open its local telecommunications

markets to competition.

A BOC applicant must demonstrate either that: A) one or more unaffiliated competing providers of local telephone service to residential and business subscribers is connected to the BOC's network, and that such local telephone service is being "offered by such competing providers either exclusively over their own telephone exchange service facilities or predominately over their own telephone exchange service facilities in combination with the resale of the telecommunications services of another carrier" (commonly referred to as "Track A"); or B) if no potential competing provider has requested to connect to a BOC's network, the BOC has a statement of generally available terms and conditions in place demonstrating that it is ready to allow potential competitors to connect to its facilities (commonly referred to as "Track B").

Table 10.12 shows the states in which the BOCs have filed section 271 applications, the date the application was filed, and the application's resolution date and outcome. At this time, nine BOC section 271 applications have been authorized in thirteen states. On December 12, 1999, the first regional Bell operating company's application (Bell Atlantic, which is now known as Verizon) was approved by the Commission to provide in-region interLATA service in the state of New York. The second application approved by the Commission was SBC for Texas, authorized on June 30, 2000. Kansas and Oklahoma became the third and fourth states to be approved, with the Commission authorizing their joint application on January 22, 2001. The approval of Verizon's application for Massachusetts on April 16, 2001 and for Connecticut on July 20, 2001 made them the fifth and sixth states to be approved. Pennsylvania became the seventh state to be approved for long distance when the Commission authorized Verizon's application on September 19, 2001; and Arkansas and Missouri were the eighth and ninth states to be approved, with the Commission authorizing their joint application on November 16, 2001. Rhode Island became the tenth state to be approved by the Commission when Verizon's application was authorized on March 22, 2002 and the authorization of Verizon's application for Vermont on April 17, 2002 made it the eleventh state to be approved. Louisiana and Georgia became the twelfth and thirteen states to be approved when the application for Louisiana/Georgia was approved on May 15, 2002.

As of May 15, 2002, there were two long distance applications pending before the Commission: Verizon's for New Jersey (filed March 26, 2002; pending, due June 24, 2002) and Verizon's for Maine (filed March 21, 2002; pending, due June 19, 2002).

The companies approved must continue to comply with the section 271 checklist requirements as the Commission has a number of enforcement tools at its disposal, including imposing penalties or suspension of approval. Additional information on section 271 applications can be found on the Commission's web site at www.fcc.gov/Bureaus/Common_Carrier/in-region_applications/.

## Table 10.1
## Total Toll Service Revenues by Carrier *
### (Dollar Amounts Shown in Millions)

| Company | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 |
|---|---|---|---|---|---|---|---|---|---|
| AT&T Companies1/ | | | | | | | | | |
| AT&T Communications, Inc. | $34,935 | $36,770 | $36,514 | $35,219 | $35,407 | $34,549 | $33,880 | $34,384 | $35,495 |
| Alascom, Inc. | 255 | 271 | 267 | 262 | 272 | 278 | 259 | 338 | 333 |
| Teleport Communications Group, Inc. | | | | | | | | | |
| ACC Long Distance Corp. | | | | | | | | | |
| WorldCom Companies 2/ 3/ | | | | | | | | | |
| WorldCom, Inc. | | | | | | | | | |
| MCI Telecommunications Corp. | 1,761 | 2,331 | 3,372 | 3,938 | 4,886 | 6,171 | 7,392 | 8,266 | 9,719 |
| Telecom*USA | 105 | 201 | 291 | 396 | 524 | 713 | | | |
| WorldCom, Inc. | | | | | | 110 | 154 | 263 | 801 |
| Advanced Telecommunications Corp. (ATC) | 72 | 86 | 124 | 162 | 178 | 326 | 342 | 356 | |
| Metromedia Communications Corp. | | | | | | 127 | 381 | 369 | 369 |
| ITT Communication Services, Inc. | 161 | 241 | 282 | 287 | 379 | 404 | | | |
| Comsystems Network Services | | | | | | | 130 | 131 | 135 |
| Wiltel, Inc. | | | | | | 300 | 376 | 405 | 494 |
| MFS Intelenet, Inc. | | | | | | | | | |
| Sprint Companies 4/ 5/ | | | | | | | | | |
| Sprint Communications Co. | | | 1,141 | 2,592 | 3,405 | 4,320 | 5,041 | 5,378 | 5,658 |
| GTE Sprint | 1,052 | 1,122 | 779 | | | | | | |
| US Telecom | | 387 | 212 | | | | | | |
| Qwest Companies 6/ | | | | | | | | | |
| LCI Int'l Telecom Corp. d/b/a Qwest Comm. Svcs. | | | | | | 197 | 215 | 208 | 243 |
| Qwest Communications Corp. | | | | | | | | | |
| USLD Communications, Inc. | | | | | | | | | |
| Concert Global Networks USA, LLC 7/ | | | | | | | | | |
| Global Crossing Companies 8/ | | | | | | | | | |
| Global Crossing Telecommunications Services, Inc | | 309 | 450 | 395 | 394 | 334 | 326 | 347 | 376 |
| Lexitel | | 127 | | | | | | | |
| Global Crossing Bandwidth, Inc. | | | | | | | | | |
| Global Crossing North American Networks, Inc. | | | | | | 104 | 142 | 155 | 168 |
| Frontier Comm. - North Central Region, Inc. | | | | | | | | | |
| International Exchange Networks, Ltd. (IXnet, Inc.) | | | | | | | | | |
| BCE (Bell Canada Enterprise) Companies 9/ | | | | | | | | | |
| Teleglobe USA, Inc. | | | | | | | | | |
| Excel Communications, Inc. | | | | | | | | | |
| Excel Telecommunications, Inc. | | | | | | | | | |
| Telco Communications Group, Inc. | | | | | | | | | |
| eMeritus Communications, Inc. | | | | | | | | | |
| Long Distance Wholesale Club | | | | | | | | | |
| Verizon Companies | | | | | | | | | |
| Bell Atlantic Comm, Inc. d/b/a Verizon Long Dist | | | | | | | | | |
| Verizon Select Services, Inc. | | | | | | | | | |
| IDT Corporation | | | | | | | | | |
| VarTec Telecom, Inc. | | | | | | | | | |
| World Access, Inc. 10/ | | | | | | | | | |
| WorldxChange Communications | | | | | | | | | |
| FaciliCom International | | | | | | | | | |
| Star Companies 11/ | | | | | | | | | |
| Star Telecommunications, Inc. | | | | | | | | | |
| PT-1 Communications, Inc. | | | | | | | | | |
| PT-1 Long Distance, Inc. | | | | | | | | | |
| Broadwing Companies 12/ | | | | | | | | | |
| Broadwing Communications Services, Inc | | | | | | | | | |
| Broadwing Telecommunications, Inc | | | | | | | | | |
| Cable & Wireless USA, Inc. | | 146 | 171 | 180 | 218 | 275 | 359 | 406 | 495 |
| Viatel Companies 13/ | | | | | | | | | |
| Viatel, Inc. | | | | | | | | | |
| Viatel Services, Inc. | | | | | | | | | |
| McLeodUSA Telecommunications, Inc. | | | | | | | | | |
| Intermedia Communications, Inc | | | | | | | | | |
| Talk.com Holding Corp. | | | | | | | | | |
| Williams Communications, LLC | | | | | | | | | |
| RSL Companies 14/ | | | | | | | | | |
| RSL Communications, Ltd. | | | | | | | | | |
| RSL COM USA, Inc. | | | | | | | | | |
| RSL COM Primecall, Inc. | | | | | | | | | |
| Westinghouse Communications | | | | | | | | | |
| Primus Companies 15/ | | | | | | | | | |
| Primus Telecommunications, Inc | | | | | | | | | |
| Telegroup, Inc. | | | | | | | | | |
| Trescom International, Inc. | | | | | | | | | |
| Pacific Gateway Exchange, Inc. 16/ | | | | | | | | | |
| Business Telecom, Inc. 17/ | | | | | | | | | |
| ITC^DeltaCom Communications, Inc | | | | | | | | | |
| Global One Communications, LLC | | | | | | | | | |
| NOSVA Limited Partnership | | | | | | | | | |
| Network Plus, Inc. | | | | | | | | | |
| Startec Global Operating Company | | | | | | | | | |
| General Communication, Inc. | | | | | | | | | |
| Evercom Systems, Inc. | | | | | | | | | |
| SNET America, Inc. | | | | | | | | | |
| Americatel Corporation | | | | | | | | | |
| Lightyear Communications, Inc | | | | | | | | | |
| ALLTEL Communications, Inc | | | | | | | | | |
| New Global Telecom, Inc. | | | | | | | | | |
| Electric Lightwave | | | | | | | | | |
| Touch America Services, Inc. | | | | | | | | | |
| Covista Communications, Inc. | | | | | | | | | |
| Working Assets Funding Service, Inc. | | | | | | | | | |
| Norlight Telecommunications, Inc | | | | | | | | | |
| Others 18/ | 414 | 639 | 992 | 1,352 | 1,823 | 2,976 | 3,105 | 3,437 | 4,082 |
| Total Non-LEC Carriers 18/ | 38,755 | 42,630 | 44,595 | 44,783 | 47,487 | 51,184 | 52,102 | 54,443 | 58,368 |
| Regional Bell Operating Companies | 9,037 | 9,026 | 9,599 | 10,268 | 10,668 | 10,549 | 10,578 | 10,066 | 9,718 |
| Other Incumbent Local Telephone Cos. 18/ | 3,364 | 3,159 | 3,274 | 3,468 | 4,445 | 4,291 | 4,112 | 4,049 | 3,897 |
| CAPs, CLECs, & Other Local Telephone Cos. 18/ | | | | | | | | | |
| Total Local Exchange Carriers | 12,401 | 12,185 | 12,873 | 13,736 | 15,113 | 14,840 | 14,690 | 14,115 | 13,615 |
| Total Toll Service Revenues | $51,156 | $54,815 | $57,468 | $58,519 | $62,600 | $66,024 | $66,792 | $68,558 | $71,983 |

* Includes intrastate, interstate and international toll revenues

See notes following table.

## Table 10.1
## Total Toll Service Revenues by Carrier - Continued *
### (Dollar Amounts Shown in Millions)

| Company | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|---|---|---|---|---|---|---|---|---|
| AT&T Companies1/ | | | | | | | | |
| AT&T Communications, Inc. | $35,731 | $37,166 | $38,069 | $39,264 | $39,470 | $40,551 | $39,680 | $37,646 |
| Alascom, Inc. | 320 | 329 | 325 | | | | | |
| Teleport Communications Group, Inc. | | | | | | | 284 | 464 |
| ACC Long Distance Corp. | | | | 118 | 122 | 123 | | |
| WorldCom Companies 2/ 3/ | | | | | | | | |
| WorldCom, Inc. | | | | | | 22,192 | 23,431 | 22,554 |
| MCI Telecommunications Corp. | 10,947 | 11,715 | 14,617 | 16,372 | 17,150 | | | |
| Telecom*USA | | | | | | | | |
| WorldCom, Inc. | 1,145 | 2,221 | 3,640 | 4,485 | 5,897 | | | |
| Advanced Telecommunications Corp. (ATC) | | | | | | | | |
| Metromedia Communications Corp. | 297 | | | | | | | |
| ITT Communication Services, Inc. | | | | | | | | |
| Comsystems Network Services | 116 | | | | | | | |
| Wiltel, Inc. | 664 | 917 | | | | | | |
| MFS Intelenet, Inc. | | | 118 | 122 | | | | |
| Sprint Companies 4/ 5/ | | | | | | | | |
| Sprint Communications Co. | 6,139 | 6,805 | 7,277 | 7,944 | 8,595 | 7,994 | 9,708 | 9,038 |
| GTE Sprint | | | | | | | | |
| US Telecom | | | | | | | | |
| Qwest Companies 6/ | | | | | | | | |
| LCI Int'l Telecom Corp. d/b/a Qwest Comm. Svcs. | 317 | 453 | 671 | 1,103 | 1,001 | 1,664 | 1,394 | 1,271 |
| Qwest Communications Corp. | | | | | | 320 | 517 | 1,773 |
| USLD Communications, Inc. | 100 | 136 | 155 | 188 | 241 | 279 | 216 | |
| Concert Global Networks USA, LLC 7/ | | | | | | | | 2,472 |
| Global Crossing Companies 8/ | | | | | | | | |
| Global Crossing Telecommunications Services, Inc | 436 | 568 | 827 | 1,119 | 775 | 874 | 874 | 801 |
| Lexitel | | | | | | | | |
| Global Crossing Bandwidth, Inc. | | 144 | 127 | | 324 | 539 | 692 | 1,555 |
| Global Crossing North American Networks, Inc. | 213 | 306 | 309 | 323 | 223 | | | 196 |
| Frontier Comm. - North Central Region, Inc. | | 123 | 133 | 121 | | | | |
| International Exchange Networks, Ltd, (IXnet, Inc.) | | | | | | | | 131 |
| BCE (Bell Canada Enterprise) Companies 9/ | | | | | | | | |
| Teleglobe USA, Inc. | | | | | | 275 | 557 | 282 |
| Excel Communications, Inc. | | | | | | | | |
| Excel Telecommunications, Inc. | | 156 | 363 | 1,091 | 1,179 | 1,219 | 942 | 703 |
| Telco Communications Group, Inc. | | | | | | | | |
| eMeritus Communications, Inc. | | | 215 | 429 | 379 | 264 | 260 | 169 |
| Long Distance Wholesale Club | | | | | 176 | 121 | 131 | |
| Verizon Companies | | | | | | | | |
| Bell Atlantic Comm, Inc. d/b/a Verizon Long Dist | | | | | | | | 130 |
| Verizon Select Services, Inc. | | | | | 340 | 607 | 834 | 1,004 |
| IDT Corporation | | | | | | 376 | 850 | 945 |
| VarTec Telecom, Inc. | | 107 | 125 | 470 | 820 | 836 | 819 | 923 |
| World Access, Inc. 10/ | | | | | | | | 914 |
| WorldxChange Communications | | | 115 | 196 | 345 | 308 | 374 | |
| FaciliCom International | | | | | | 164 | 202 | |
| Star Companies 11/ | | | | | | | | |
| Star Telecommunications, Inc. | | | | 140 | 253 | 401 | 443 | 296 |
| PT-1 Communications, Inc. | | | | 117 | 358 | 494 | 482 | 270 |
| PT-1 Long Distance, Inc. | | | | | | | | 241 |
| Broadwing Companies 12/ | | | | | | | | |
| Broadwing Communications Services, Inc | | | | | 258 | 724 | 453 | 574 |
| Broadwing Telecommunications, Inc | | | | | | | 150 | 202 |
| Cable & Wireless USA, Inc. | 557 | 654 | 700 | 919 | 1,066 | 953 | 913 | 770 |
| Viatel Companies 13/ | | | | | | | | |
| Viatel, Inc. | | | | | | | 333 | 247 |
| Viatel Services, Inc. | | | | | | | 324 | 335 |
| McLeodUSA Telecommunications, Inc. | | | | | | | 232 | 448 |
| Intermedia Communications, Inc | | | | | | 380 | 516 | 444 |
| Talk.com Holding Corp. | | | 180 | 232 | 305 | 426 | 398 | 428 |
| Williams Communications, LLC | | | | | 227 | 126 | 184 | 413 |
| RSL Companies 14/ | | | | | | | | |
| RSL Communications, Ltd. | | | | | 192 | | | |
| RSL COM USA, Inc. | | | | | | 171 | 270 | 362 |
| RSL COM Primecall, Inc. | | | | | | 130 | 160 | |
| Westinghouse Communications | | | | | | 127 | | |
| Primus Companies 15/ | | | | | | | | |
| Primus Telecommunications, Inc | | | | | | 176 | 240 | 338 |
| Telegroup, Inc. | | | 129 | 213 | 337 | 384 | | |
| Trescom International, Inc. | | | | 140 | 158 | | | |
| Pacific Gateway Exchange, Inc. 16/ | | | | 162 | 299 | 466 | 680 | 298 |
| Business Telecom, Inc. 17/ | | | 115 | 149 | 195 | 212 | 260 | 271 |
| ITC^DeltaCom Communications, Inc | | | | | | 122 | 172 | 270 |
| Global One Communications, LLC | | | | | | | | 265 |
| NOSVA Limited Partnership | | | | | | | 191 | 258 |
| Network Plus, Inc. | | | | | | | 153 | 236 |
| Startec Global Operating Company | | | | | | 160 | 261 | 215 |
| General Communication, Inc. | 92 | 106 | 120 | 143 | 158 | 175 | 184 | 211 |
| Evercom Systems, Inc. | | | | | | | 205 | 206 |
| SNET America, Inc. | | | | | 142 | 162 | 186 | 189 |
| Americatel Corporation | | | | | | | 129 | 188 |
| Lightyear Communications, Inc | | | | | | 180 | 189 | 176 |
| ALLTEL Communications, Inc | | | | | | | 120 | 175 |
| New Global Telecom, Inc. | | | | | | | 134 | 151 |
| Electric Lightwave | | | | | | | | 145 |
| Touch America Services, Inc. | | | | | | | | 140 |
| Covista Communications, Inc. | | | | | 123 | 137 | 140 | 134 |
| Working Assets Funding Service, Inc. | | | | | | 131 | 140 | 132 |
| Norlight Telecommunications, Inc | | | | | | | | 119 |
| Others 18/ | 4,459 | 5,445 | 5,813 | 6,553 | 8,920 | 9,453 | 8,781 | 8,431 |
| Total Non-LEC Carriers 18/ | 61,533 | 67,351 | 74,143 | 82,113 | 90,028 | 94,396 | 98,788 | 100,549 |
| Regional Bell Operating Companies | 9,849 | 9,527 | 8,189 | 7,950 | 7,138 | 6,857 | 6,182 | 6,073 |
| Other Incumbent Local Telephone Cos. 18/ | 3,908 | 3,848 | 3,143 | 3,298 | 3,077 | 2,572 | 1,864 | 543 |
| CAPs, CLECs, & Other Local Telephone Cos. 18/ | | | | | 550 | 1,230 | 1,412 | 2,450 |
| Total Local Exchange Carriers | 13,757 | 13,375 | 11,332 | 11,248 | 10,765 | 10,659 | 9,458 | 9,066 |
| Total Toll Service Revenues | $75,290 | $80,726 | $85,475 | $93,361 | $100,793 | $105,055 | $108,246 | $109,615 |

* Includes intrastate, interstate and international toll revenues

See notes following table.

## Notes for Table 10.1

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/ Concert Global Networks USA, LLC is a joint venture of AT&T Corp. and British Telecommunications plc.

8/ Global Crossing Ltd. acquired Frontier Corporation September 28, 1999. In 1994, RCI Long Distance, Inc., changed its name to Frontier Corporation. Global Crossing, Ltd., a Bermuda company, and certain of its affiliated filed for Chapter 11 bankruptcy protection for the southern district of New York on January 28, 2002.

9/ BCE, Inc. (Bell Canada Enterprises) acquired Teleglobe, Inc. on November 1, 2000. eMeritus Communications was formerly known as Teleglobe Business Solutions, Inc. (previously Telco Holdings, Inc.) Teleglobe USA, Inc., merged with Excel Telecommunications, Inc. and its affiliate in November of 1998. Excel Telecommunications acquired Telco Holdings in October of 1997.

10/ World Access, Inc. acquired WorldxChange Communications December 19, 2000. FaciliCom merged into World Access, Inc. on December 7, 1999. World Access and five of its subsidiaries, including WorldxChange and FaciliCom, filed for Chapter 11 bankruptcy protection in Illinois on April 24, 2001.

11/ Star Telecommunications' s revenues for 1996 - 1998 have been prorated to reflect the decrease in revised revenues reported for 1999. Star filed for Chapter 11 bankruptcy protection in California on March 13, 2001.

12/ Cincinnati Bell Inc., merged with IXC Communications, Inc., on November 9, 1999 and soon began doing business as Broadwing, Inc.

13/ Viatel, Inc. filed for Chapter 11 bankruptcy protection in Delaware on May 2, 2001 and discontinued offering service in the United States at that time. Revenues for year 2000 are from its Form 499-A, Telecommunications Reporting Worksheets.

14/ RSL COM USA bought Westinghouse Communications in August 1998. RSL COM USA filed for Chapter 11 bankruptcy protection in New York on March 16, 2001.

15/ Primus Telecommunications, Inc. acquired TresCom International, Inc., in 1998.

16/ Pacific Gateway Exchange filed for Chapter 11 bankruptcy protection in California on December 29, 2001. Revenues are for year ended December 31, 2000 and are from its Form 8-K filed May 31, 2001.

17/ Data for 1996 taken from the Annual Report to the Colorado Public Utilities Commission from telecommunications carriers regulated pursuant to §40-15-301 C.R.S.

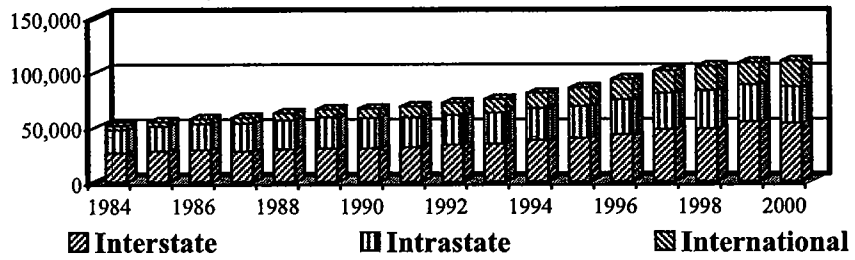
18/ Through 1996, toll revenues shown for other non-LEC carriers are staff estimates. Starting in 1997, total toll service revenues are based on FCC Form 431, Form 457, and Form 499-A filings. For those years, the amounts shown as other non-LEC toll revenues are calculated as total toll revenues less the total of the sum of the large long distance carriers and the total toll for local exchange carriers.

Source: Data filed in response to 47 CFR §43.21(c).

## Table 10.2
## Intrastate, Interstate, and International Toll Revenues
## (Dollar Amounts Shown in Millions)

| Year | Toll Revenues | | | Total Toll Revenues | As Percentage of Total Toll Revenues | | |
|---|---|---|---|---|---|---|---|
| | Intrastate | Domestic Interstate | International | | Intrastate | Domestic Interstate | International |
| 1984 | $20,872 | $26,490 | $3,794 | $51,156 | 40.8 % | 51.8 % | 7.4 % |
| 1985 | 22,310 | 28,387 | 4,119 | 54,815 | 40.7 | 51.8 | 7.5 |
| 1986 | 23,734 | 29,123 | 4,611 | 57,468 | 41.3 | 50.7 | 8.0 |
| 1987 | 25,339 | 27,844 | 5,336 | 58,519 | 43.3 | 47.6 | 9.1 |
| 1988 | 26,542 | 29,724 | 6,334 | 62,600 | 42.4 | 47.5 | 10.1 |
| 1989 | 28,060 | 30,585 | 7,379 | 66,024 | 42.5 | 46.3 | 11.2 |
| 1990 | 27,652 | 30,676 | 8,464 | 66,792 | 41.4 | 45.9 | 12.7 |
| 1991 | 27,149 | 31,331 | 10,078 | 68,558 | 39.6 | 45.7 | 14.7 |
| 1992 | 27,066 | 33,719 | 11,199 | 71,983 | 37.6 | 46.8 | 15.6 |
| 1993 | 28,158 | 34,661 | 12,470 | 75,290 | 37.4 | 46.0 | 16.6 |
| 1994 | 28,496 | 38,262 | 13,968 | 80,726 | 35.3 | 47.4 | 17.3 |
| 1995 | 29,147 | 39,903 | 16,425 | 85,475 | 34.1 | 46.7 | 19.2 |
| 1996 | 32,023 | 42,823 | 18,515 | 93,361 | 34.3 | 45.9 | 19.8 |
| 1997 | 32,859 | 47,716 | 20,218 | 100,793 | 32.6 | 47.3 | 20.1 |
| 1998 | 34,699 | 48,100 | 22,256 | 105,055 | 33.0 | 45.8 | 21.2 |
| 1999 | 33,600 | 54,483 | 20,163 | 108,246 | 31.0 | 50.4 | 18.6 |
| 2000 | 33,030 | 53,055 | 23,530 | 109,615 | 30.1 | 48.4 | 21.5 |

## Chart 10.1
## Toll Revenues by Market Segment
## (Dollar Amounts Shown in Billions)



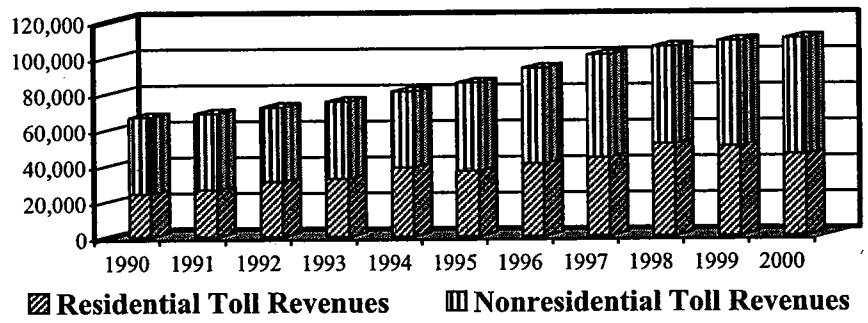
## Table 10.3
## Residential and Nonresidential Toll Revenues
## (Dollar Amounts Shown in Millions)

| Year | Toll Revenues | | Total Toll Revenues | As Percentage of Total Toll Revenues 1/ | |
|---|---|---|---|---|---|
| | 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 |
| 1997 | 43,754 | 57,039 | 100,793 | 43.4 | 56.6 |
| 1998 2/ | 51,057 | 53,998 | 105,055 | 48.6 | 51.4 |
| 1999 | 50,010 | 58,236 | 108,246 | 46.2 | 53.8 |
| 2000 | 45,271 | 64,344 | 109,615 | 41.3 | 58.7 |

1/ The percentage of residential and non-residential toll revenues to total toll revenues is based on data published by the U.S. Census Bureau in the *2000 Service Annual Survey, Information Sector Services, Table 3.3.10, Wired Telecommunications Carriers (NAICS 51331)--Estimated Local, Long-Distance, Network Access Revenue by Type of Service, and Destination for Employer Firms: 1998 Through 2000.* We have taken t percentages and applied them to our total revenue amount to obtain the residential and nonresidential revenues.

2/ In 1998, a break in the time series occurred when, for this particular survey, the U.S. Census Bureau converted f Standard Industrial Classification (SIC) system to the North American Industry Classification System (NA

## Chart 10.2
## Residential and Nonresidential Toll Revenues
## (Dollar Amounts Shown in Billions)



## Table 10.4
## Number of Toll Carriers

| | TRS Data | | | | TRS & USF Data | | Form 499-A Data | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | Preliminary 2001 |
| **Carriers That Provide Toll Service 1/** | | | | | | | | | |
| Toll Carriers | | | | | | | | | |
| Interexchange Carriers (IXCs) | 83 | 97 | 130 | 149 | 151 | 171 | 204 | 202 | 229 |
| Other Toll Carriers | | | | | | | | | |
| Operator Service Providers (OSPs) | 35 | 29 | 25 | 27 | 32 | 24 | 21 | 21 | 22 |
| Pre-paid Calling Card Providers | NA | NA | 8 | 16 | 18 | 20 | 21 | 24 | 32 |
| Satellite Service Carriers | NA | NA | NA | 22 | 13 | 13 | 21 | 24 | 31 |
| Toll Resellers | 171 | 206 | 260 | 345 | 340 | 388 | 457 | 482 | 576 |
| Other Toll Carriers | 32 | 34 | 30 | 28 | 15 | 31 | 17 | 29 | 38 |
| Total Toll Carriers | 321 | 366 | 453 | 587 | 569 | 647 | 741 | 782 | 928 |
| Fixed Local Service, Payphone, and Mobile Service Carriers Reporting Toll Service Revenues | NA | NA | NA | NA | 1,537 | 1,740 | 1,870 | 1,704 | NA |
| Total | NA | NA | NA | NA | 2,106 | 2,387 | 2,611 | 2,486 | NA |

NA - Not available.

1/ Counts through 2000 are based on the numbers of carriers actually reporting revenues. Counts for 2001 include all filers who reported revenues for 2000 as well as new carriers that filed through September 2001. The 2001 figures may double count some firms that have been bought, sold or merged during 2001.

Sources: Data filed in response to 47 CFR §43.21(c) and data filed on FCC Forms 431, 457, and 499-A worksheets. See also: Industry Analysis Division, Common Carrier Bureau, *Telecommunications Industry Revenues* (January 2002) and Industry Analysis Division, Common Carrier Bureau, *Telecommunications Providers Locator* (November 2001).

## Table 10.5
## Number of Carrier Identification Codes (CICs) Assigned by North American Numbering Plan Administrator

| Year | Quarter | Number of CICS Assigned | Year | Quarter | Number of CICS Assigned |
|---|---|---|---|---|---|
| 1982 | First Quarter | 11 | 1988 | First Quarter | 602 |
| | Second Quarter | 13 | | Second Quarter | 621 |
| | Third Quarter | 13 | | Third Quarter | 601 |
| | Fourth Quarter | 11 | | Fourth Quarter | 639 |
| 1983 | First Quarter | 15 | 1989 | First Quarter | 685 |
| | Second Quarter | 25 | | Second Quarter | 714 |
| | Third Quarter | 33 | | Third Quarter | 730 |
| | Fourth Quarter | 42 | | Fourth Quarter | 747 |
| 1984 | First Quarter | 54 | 1990 | First Quarter | 774 |
| | Second Quarter | 86 1/ | | Second Quarter | 794 |
| | Third Quarter | 121 | | Third Quarter | 817 |
| | Fourth Quarter | 155 | | Fourth Quarter | 791 |
| 1985 | First Quarter | 182 | 1991 | First Quarter | 745 |
| | Second Quarter | 212 | | Second Quarter | 766 |
| | Third Quarter | 236 | | Third Quarter | 783 |
| | Fourth Quarter | 256 | | Fourth Quarter | 807 |
| 1986 | First Quarter | 276 | 1992 | First Quarter | 786 |
| | Second Quarter | 331 | | Second Quarter | 831 |
| | Third Quarter | 361 | | Third Quarter | 840 |
| | Fourth Quarter | 413 | | Fourth Quarter | 886 |
| 1987 | First Quarter | 444 | | | |
| | Second Quarter | 495 | | | |
| | Third Quarter | 530 | | | |
| | Fourth Quarter | 573 | | | |

| Year | Quarter | FGB | FGD |
|---|---|---|---|
| 1993 | First Quarter | 694 2/ | 709 |
| | Second Quarter | 738 | 746 |
| | Third Quarter | 739 | 760 |
| | Fourth Quarter | 753 | 796 |
| 1994 | First Quarter | 781 | 815 |
| | Second Quarter | 795 | 845 |
| | Third Quarter | 805 | 899 3/ |
| | Fourth Quarter | 819 | 947 |
| 1995 | First Quarter | 829 | 1,016 |
| | Second Quarter | 832 | 1,082 |
| | Third Quarter | 843 | 1,146 |
| | Fourth Quarter | 852 | 1,209 |
| 1996 | First Quarter | 865 | 1,253 |
| | Second Quarter | 876 | 1,300 |
| | Third Quarter | 875 | 1,315 |
| | Fourth Quarter | 878 | 1,337 |
| 1997 | First Quarter | 882 | 1,395 |
| | Second Quarter | 896 | 1,427 |
| | Third Quarter | 908 | 1,481 |
| | Fourth Quarter | 909 | 1,538 |
| 1998 | First Quarter | 943 | 1,557 |
| | Second Quarter | 937 | 1,614 |
| | Third Quarter | 943 | 1,671 |
| | Fourth Quarter | 952 | 1,721 |
| 1999 | First Quarter | 949 | 1,842 |
| | Second Quarter | 953 | 1,909 |
| | Third Quarter | 954 | 1,980 |
| | Fourth Quarter | 956 | 2,032 |
| 2000 | First Quarter | 958 | 2,093 |
| | Second Quarter | 958 | 2,142 |
| | Third Quarter | 937 | 2,181 |
| | Fourth Quarter | 911 | 2,203 |
| 2001 | First Quarter | 897 | 2,232 |
| | Second Quarter | 885 | 2,225 |
| | Third Quarter | 876 | 2,259 |
| | Fourth Quarter | 853 | 2,237 |

1/ Conversion from 2-digit to 3-digit codes.
2/ Conversion from 3-digit to 4-digit codes.
3/ Includes both 3-digit and 4-digit codes.

Source: North American Numbering Plan Administrator.

## Table 10.6
## Alternative Measures of Long Distance Carrier Development

| Year | Month | Carriers with Presubscribed Lines 1/ | Carriers Purchasing Equal Access 2/ | Firms with Carrier Identification Codes | Firms Purchasing Access | Carriers Filing 499-A Worksheets 3/ |
|---|---|---|---|---|---|---|
| 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 | * | * | 321 |
| 1994 | March | * | 433 | * | * | * |
| | June | 454 | 444 | * | * | * |
| | September | * | 458 | * | * | * |
| | December | 511 | 465 | * | * | 366 |
| 1995 | March | * | * | * | * | * |
| | June | 549 | * | * | * | * |
| | September | * | * | * | * | * |
| | December | 583 | * | * | * | 453 |
| 1996 | March | * | * | * | * | * |
| | June | 582 | * | * | * | * |
| | September | * | * | * | * | * |
| | December | 621 | * | * | * | 587 |
| 1997 | December 4/ | * | * | * | * | 569 |
| 1998 | December | * | * | * | * | 647 |
| 1999 | December | * | * | * | * | 738 |
| 2000 | December | * | * | * | * | 782 |

* Data not available.

1/ The number of carriers with presubscribed lines is no longer available.

2/ Data for the periods prior to March 1990 include a small number of firms purchasing equal access that were not carriers.

3/ The number of companies first published represented those carriers filing Telecommunications Relay Service Worksheets with the Commission. They included interexchange carriers, operator service providers, other toll carriers, prepaid calling card providers, and toll resellers. In 1999, the source became the FCC Form 499-A, Telecommunications Reporting Worksheet.

4/ One company that had filed about fifty separate worksheets in 1996 filed only one consolidated worksheet for 1997.

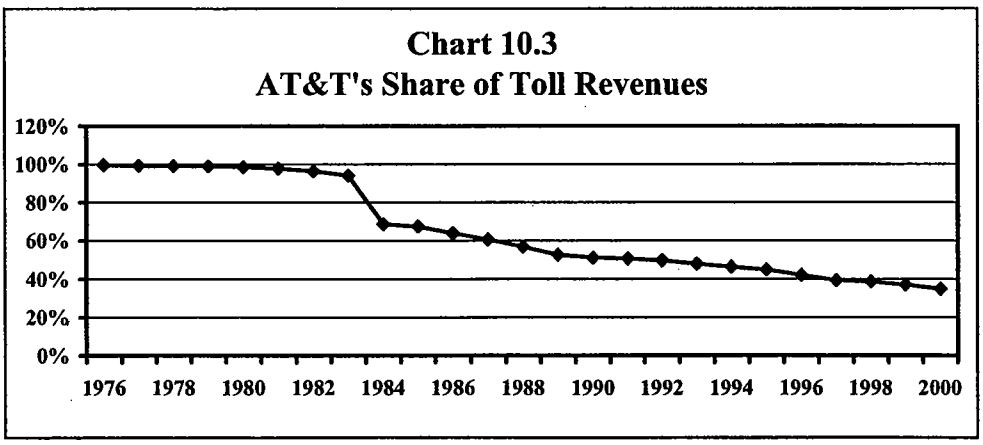
## Table 10.7
## Toll Revenues of AT&T, ILECs and Other Toll Service Providers
## (Dollar Amounts Shown in Millions)

| Year | Long Distance Carriers | | Local Exchange Carriers | | Total Industry Toll Revenues |
|---|---|---|---|---|---|
| | AT&T 1/ 2/ 3/ | 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 | 39,964 | 58,824 | 8,046 | 1,412 | 108,246 |
| 2000 | 38,110 | 62,439 | 6,616 | 2,450 | 109,615 |

1/ AT&T's revenues include the long distance revenues of Alascom (acquired in 1995) and Teleport Communications Group (including ACC Long Distance Corporation) which merged with AT&T ir in July of 1998.

2/ Prior to 1984, AT&T and Alascom toll revenues include local exchange carrier toll revenues, which were nc reported separately to the FCC.

3/ For year 2000, revenues for AT&T do not include their share of Concert Global Networks USA, Inc. (See Tabl 10.1, footnote 7.)



## Table 10.8
## Share of Total Toll Service Revenues
## Long Distance Carriers Only 1/

| Year | AT&T | WorldCom | Sprint | All Other Long Distance Carriers |
|---|---|---|---|---|
| 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 | 40.5 | 23.7 | 9.8 | 26.0 |
| 2000 | 37.9 2/ | 22.4 | 9.0 | 30.7 |

1/ Excludes independent local exchange carriers and competitive local exchange carriers.
2/ For year 2000, AT&T's market share does not reflect revenues from their share of Concert Global Networks USA, LLC. (See Table 10.1, footnote 7.)

## Table 10.9
## Share of Total Toll Service Revenues
## All Long Distance Toll Providers 1/

| Year | AT&T | WorldCom | Sprint | All Other Long Distance Carriers | Regional Bell Operating Companies | Other Local Telephone Companies |
|---|---|---|---|---|---|---|
| 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 | 36.9 | 21.7 | 9.0 | 23.7 | 5.7 | 3.0 |
| 2000 | 34.8 2/ | 20.6 | 8.3 | 28.1 | 5.5 | 2.7 |

1/ Includes independent local exchange carriers and competitive local exchange carriers.
2/ For year 2000, AT&T's market share does not reflect revenues from their share of Concert Global Networks USA, LLC. (See Table 10.1, footnote 7.)

## Table 10.10
## Residential Market Share
## (1995 - 2000)

| | AT&T | WorldCom 1/ | Sprint | Other |
|---|---|---|---|---|
| **Access Lines 2/** | | | | |
| 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 |
| 2000 | 53.3 | 18.1 | 6.9 | 21.8 |
| **Toll Revenues** | | | | |
| 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 |
| 2000 | 48.4 | 22.2 | 6.8 | 22.6 |
| **Direct-Dial Minutes** | | | | |
| 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 |
| 2000 | 44.7 | 21.3 | 7.3 | 26.6 |

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

1/ In 1995 for MCI only. In 1996, includes MCI and LDDS.

2/ In 1995, 1996, 1999 and 2000, TNS Telcoms defined 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.

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

## Table 10.11
## Market Shares of Residential Direct Dial-Minutes by State: 2000 1/

| | AT&T | WorldCom | Sprint | Other | Minutes 2/ |
|---|---|---|---|---|---|
| Alabama | 55.5 % | 22.6 % | 3.3 % | 18.5 % | 37,875 |
| Arizona | 45.3 | 28.3 | 6.6 | 19.8 | 63,686 |
| Arkansas | 41.7 | 18.8 | 5.6 | 33.9 | 26,107 |
| California | 42.6 | 21.4 | 6.7 | 29.4 | 245,219 |
| Colorado | 40.5 | 22.3 | 3.4 | 33.8 | 44,148 |
| Connecticut | 29.1 | 8.5 | 3.8 | 58.6 | 16,536 |
| Delaware | 26.1 | 27.1 | 8.2 | 38.6 | 5,076 |
| District of Columbia | 25.5 | 50.8 | 13.2 | 10.6 | 5,488 |
| Florida | 49.4 | 21.5 | 9.1 | 20.0 | 223,503 |
| Georgia | 48.7 | 29.3 | 3.3 | 18.8 | 62,360 |
| Idaho | 35.1 | 19.9 | 6.7 | 38.3 | 17,348 |
| Illinois | 46.3 | 22.0 | 6.4 | 25.3 | 102,295 |
| Indiana | 51.9 | 17.6 | 7.2 | 23.3 | 54,944 |
| Iowa | 40.7 | 25.0 | 4.5 | 29.8 | 34,979 |
| Kansas | 34.1 | 12.5 | 19.2 | 34.1 | 19,707 |
| Kentucky | 49.5 | 15.5 | 7.9 | 27.1 | 35,217 |
| Louisiana | 49.2 | 16.4 | 5.1 | 29.4 | 34,739 |
| Maine | 43.5 | 22.0 | 4.2 | 30.3 | 5,812 |
| Maryland | 39.6 | 32.3 | 5.8 | 22.3 | 62,912 |
| Massachusetts | 57.4 | 20.3 | 10.1 | 12.1 | 25,218 |
| Michigan | 51.8 | 15.4 | 9.3 | 23.6 | 89,987 |
| Minnesota | 46.1 | 23.7 | 7.8 | 22.4 | 56,207 |
| Mississippi | 59.0 | 25.3 | 2.7 | 13.0 | 22,046 |
| Missouri | 46.5 | 11.2 | 12.4 | 29.9 | 26,396 |
| Montana | 44.0 | 11.3 | 5.0 | 39.7 | 13,359 |
| Nebraska | 41.7 | 24.8 | 8.9 | 24.6 | 18,079 |
| Nevada | 37.2 | 20.4 | 11.9 | 30.4 | 25,971 |
| New Hampshire | 47.1 | 21.1 | 13.3 | 18.6 | 8,065 |
| New Jersey | 55.5 | 21.1 | 6.6 | 16.8 | 70,028 |
| New Mexico | 40.7 | 25.9 | 5.2 | 28.2 | 15,963 |
| New York | 38.2 | 23.8 | 5.8 | 32.1 | 153,660 |
| North Carolina | 53.1 | 16.6 | 11.3 | 19.0 | 74,305 |
| North Dakota | 19.7 | 30.4 | 6.8 | 43.1 | 11,491 |
| Ohio | 44.7 | 17.6 | 8.9 | 28.8 | 111,411 |
| Oklahoma | 42.2 | 17.1 | 5.2 | 35.5 | 26,516 |
| Oregon | 48.8 | 18.0 | 1.3 | 31.9 | 41,791 |
| Pennsylvania | 40.6 | 25.5 | 6.4 | 27.5 | 109,935 |
| Rhode Island | 38.8 | 16.8 | 21.6 | 22.9 | 5,474 |
| South Carolina | 39.7 | 18.5 | 9.9 | 32.0 | 43,129 |
| South Dakota | 40.9 | 17.0 | 3.0 | 39.1 | 6,914 |
| Tennessee | 49.1 | 20.5 | 7.4 | 23.0 | 55,678 |
| Texas | 33.7 | 18.5 | 10.0 | 37.7 | 126,653 |
| Utah | 58.3 | 17.4 | 4.1 | 20.2 | 14,197 |
| Vermont | 47.5 | 21.8 | 2.6 | 28.1 | 5,958 |
| Virginia | 41.1 | 24.1 | 9.7 | 25.0 | 82,380 |
| Washington | 43.1 | 20.9 | 7.3 | 28.6 | 54,701 |
| West Virginia | 57.5 | 23.9 | 0.4 | 18.1 | 16,295 |
| Wisconsin | 44.3 | 20.7 | 6.2 | 28.9 | 85,598 |
| Wyoming | 55.4 | 17.9 | 5.1 | 21.6 | 9,493 |
| Total | 44.7 % | 21.3 % | 7.3 % | 26.6 % | 2,504,849 |

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.

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

**Table 10.12**
**BOC Applications to Provide**
**In-Region InterLATA Service ***
**(Section 271 Applications)**

| State | Resolution | Date Application Filed | Date Application Resolved |
|---|---|---|---|
| **Arkansas** | **Approved** | **08/20/01** | **11/16/01** |
| **Connecticut** | **Approved** | **04/23/01** | **07/20/01** |
| **Georgia** | **Pending** | **02/14/02** | **05/15/02** |
| Georgia | Withdrawn | 10/02/01 | 12/20/01 |
| **Kansas** | **Approved** | **10/26/00** | **01/22/01** |
| **Louisiana** | **Pending** | **02/14/02** | **05/15/02** |
| Louisiana | Withdrawn | 10/02/01 | 12/20/01 |
| Louisiana | Denied | 11/06/97 | 02/04/98 |
| Louisiana | Denied | 07/09/98 | 10/13/98 |
| *Maine* | *Pending* | *03/21/02* | *1/* |
| Massachusetts | Withdrawn | 09/22/00 | 12/18/00 |
| **Massachusetts** | **Approved** | **01/16/01** | **04/16/01** |
| Michigan | Withdrawn | 01/02/97 | 02/11/97 |
| Michigan | Denied | 05/21/97 | 08/19/97 |
| **Missouri** | **Approved** | **08/20/01** | **11/16/01** |
| Missouri | Withdrawn | 04/04/01 | 06/07/01 |
| *New Jersey* | *Pending* | *03/26/02* | *2/* |
| New Jersey | Withdrawn | 12/20/01 | 03/19/02 |
| **New York** | **Approved** | **09/29/99** | **12/22/99** |
| Oklahoma | Denied | 04/11/97 | 06/26/97 |
| **Oklahoma** | **Approved** | **10/26/00** | **01/22/01** |
| **Pennsylvania** | **Approved** | **06/21/01** | **09/19/01** |
| **Rhode Island** | **Approved** | **11/26/01** | **03/22/02** |
| South Carolina | Denied | 09/30/97 | 12/24/97 |
| Texas | Withdrawn | 01/10/00 | 04/05/00 |
| **Texas** | **Approved** | **04/05/00** | **06/30/00** |
| **Vermont** | **Approved** | **01/17/02** | **04/12/02** |

* As of May 15, 2002.
1/ Statutory deadline for Commission action is June 19, 2002
2/ Statutory deadline for Commission action is June 24, 2002

# 11 Minutes

## 1. Dial Equipment Minutes

As in the case of telephone lines, there are several 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.

DEMs, which are shown in Table 11.1, are measured as calls enter and leave telephone switches; therefore, two DEMs are counted for every conversation minute. (Individual company and state data can be found in our *Monitoring Report* on the **FCC-State Link** web page.) Until recently, the volume of local calling grew slowly. In recent years, however, local usage has begun to surge due to the introduction of facsimile machines, computer modems, and other devices that use telephone lines. The volume of long distance calling surged as prices fell in the mid-1980s. Local minutes fell from 84% of all calls in 1980 to 74% in the 1990s and then climbed back to 78% in 2000. Intrastate toll minutes increased from 8% of all minutes in 1980 to 12% in 1990 and then fell back to 9% in 2000. Interstate calling minutes increased from 8% of the total in 1980 to 15% in the mid-1990s and fell back to 12% in 2000.

As shown in Table 11.2, the average telephone line is used primarily for local calling and is now used over an hour per day for all calls (local, intrastate toll, and interstate toll). Increases in both local and long distance calling have caused the total usage per line to increase from 46 minutes per day in 1980 to 72 minutes per day in 2000.

## 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 and 800-like calls. It excludes calls made on private telecommunications systems, on leased lines, and minutes on the "closed end" of WATS and 800-like calls. On ordinary long distance calls, minutes are counted both where the call originates and where the call terminates.

Table 11.3 shows the total number of interstate switched access minutes handled by all long distance carriers. The number of minutes grew steadily from mid-1984 to 2001 stemming from a combination of overall economic growth and price reductions.

Telephone industry traffic experts often 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, it is not clear why reported changes in access minutes are not entirely consistent with reported changes in dial equipment minutes.

## Table 11.1
## Dial Equipment Minutes
## (Minutes Shown in Billions)

| | 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 | 1,846 | 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 | 2,389 | 370 | 486 | 3,245 |
| 1997 | 2,694 | 407 | 528 | 3,629 |
| 1998 | 2,992 | 423 | 556 | 3,971 |
| 1999 | 3,378 | 452 | 585 | 4,414 |
| 2000 | 3,909 | 472 | 616 | 4,998 |
| **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 | 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 | 7 | 7 | 7 | 7 |
| 1997 | 13 | 10 | 9 | 12 |
| 1998 | 11 | 4 | 5 | 9 |
| 1999 | 13 | 7 | 5 | 11 |
| 2000 | 16 | 5 | 5 | 13 |
| **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 | 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 |
| 1999 | 77 | 10 | 13 | 100 |
| 2000 | 78 | 9 | 12 | 100 |

Source: National Exchange Carrier Association.

**Table 11.2**
**Line Usage Per Day**
**(Dial Equipment Minutes per Local Loop)**

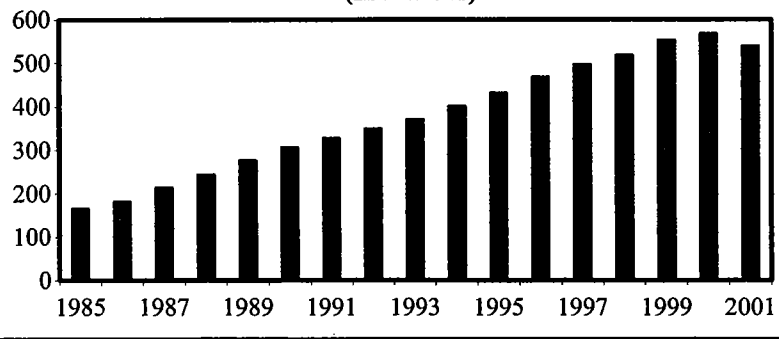
| | Local | Intrastate Toll | Interstate Toll | Total |
|---|---|---|---|---|
| 1980 | 39 | 4 | 4 | 46 |
| 1981 | 39 | 4 | 4 | 46 |
| 1982 | 39 | 4 | 4 | 47 |
| 1983 | 39 | 4 | 4 | 48 |
| 1984 | 40 | 5 | 5 | 50 |
| 1985 | 40 | 5 | 6 | 51 |
| 1986 | 39 | 5 | 6 | 51 |
| 1987 | 38 | 6 | 7 | 50 |
| 1988 | 39 | 6 | 7 | 51 |
| 1989 | 38 | 6 | 7 | 51 |
| 1990 | 37 | 6 | 7 | 50 |
| 1991 | 37 | 6 | 7 | 50 |
| 1992 | 37 | 6 | 7 | 50 |
| 1993 | 37 | 6 | 7 | 51 |
| 1994 | 38 | 6 | 8 | 51 |
| 1995 | 38 | 6 | 8 | 52 |
| 1996 | 39 | 6 | 8 | 53 |
| 1997 | 42 | 6 | 8 | 57 |
| 1998 | 46 | 6 | 8 | 60 |
| 1999 | 50 | 7 | 9 | 65 |
| 2000 | 57 | 7 | 9 | 72 |
| **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 | -1 | -2 |
| 1991 | -2 | -1 | 1 | -1 |
| 1992 | 0 | 0 | 1 | 0 |
| 1993 | 2 | -1 | 1 | 2 |
| 1994 | 1 | 0 | 3 | 1 |
| 1995 | 1 | 2 | 4 | 1 |
| 1996 | 3 | 2 | 2 | 3 |
| 1997 | 8 | 6 | 4 | 7 |
| 1998 | 7 | 0 | 2 | 6 |
| 1999 | 10 | 4 | 2 | 8 |
| 2000 | 13 | 2 | 3 | 11 |

## Table 11.3
## Interstate Switched Access Minutes
## (In Billions)

| Year | Period | Access Minutes | Year | Period | Access Minutes | Year | Period | Access Minutes |
|---|---|---|---|---|---|---|---|---|
| | | | 1990 | First Quarter | 74.7 | 1996 | First Quarter | 115.7 |
| | | | | Second Quarter | 75.8 | | Second Quarter | 114.7 |
| 1984 | Third Quarter | 37.5 | | Third Quarter | 77.9 | | Third Quarter | 117.5 |
| | Fourth Quarter | 39.6 | | Fourth Quarter | 79.1 | | Fourth Quarter | 120.2 |
| | | | | **Total 1990** | **307.4** | | **Total 1996** | **468.1** |
| 1985 | First Quarter | 39.6 | 1991 | First Quarter | 79.2 | 1997 | First Quarter | 122.1 |
| | Second Quarter | 41.5 | | Second Quarter | 81.9 | | Second Quarter | 124.4 |
| | Third Quarter | 42.8 | | Third Quarter | 82.6 | | Third Quarter | 124.9 |
| | Fourth Quarter | 43.3 | | Fourth Quarter | 84.4 | | Fourth Quarter | 125.8 |
| | **Total 1985** | **167.1** | | **Total 1991** | 328.0 | | **Total 1997** | **497.3** |
| 1986 | First Quarter | 43.0 | 1992 | First Quarter | 85.6 | 1998 | First Quarter | 124.0 |
| | Second Quarter | 44.8 | | Second Quarter | 86.5 | | Second Quarter | 131.3 |
| | Third Quarter | 46.7 | | Third Quarter | 87.9 | | Third Quarter | 130.7 |
| | Fourth Quarter | 48.5 | | Fourth Quarter | 89.8 | | Fourth Quarter | 132.8 |
| | **Total 1986** | **183.1** | | **Total 1992** | **349.7** | | **Total 1998** | **518.8** |
| 1987 | First Quarter | 51.2 | 1993 | First Quarter | 90.6 | 1999 | First Quarter | 136.0 |
| | Second Quarter | 52.5 | | Second Quarter | 91.2 | | Second Quarter | 138.2 |
| | Third Quarter | 55.0 | | Third Quarter | 93.6 | | Third Quarter | 138.2 |
| | Fourth Quarter | 57.0 | | Fourth Quarter | 95.9 | | Fourth Quarter | 140.2 |
| | **Total 1987** | **215.7** | | **Total 1993** | **371.2** | | **Total 1999** | **552.7** |
| 1988 | First Quarter | 59.0 | 1994 | First Quarter | 98.7 | 2000 | First Quarter | 142.9 |
| | Second Quarter | 59.6 | | Second Quarter | 97.9 | | Second Quarter | 142.9 |
| | Third Quarter | 62.1 | | Third Quarter | 101.9 | | Third Quarter | 141.3 |
| | Fourth Quarter | 64.0 | | Fourth Quarter | 102.9 | | Fourth Quarter | 141.0 |
| | **Total 1988** | **244.6** | | **Total 1994** | **401.4** | | **Total 2000** | **568.1** |
| 1989 | First Quarter | 66.2 | 1995 | First Quarter | 105.6 | 2001 | First Quarter | 138.1 |
| | Second Quarter | 68.5 | | Second Quarter | 106.8 | | Second Quarter | 137.1 |
| | Third Quarter | 69.7 | | Third Quarter | 109.0 | | Third Quarter | 133.3 |
| | Fourth Quarter | 72.6 | | Fourth Quarter | 110.6 | | Fourth Quarter | 131.3 |
| | **Total 1989** | **277.1** | | **Total 1995** | **431.9** | | **Total 2001** | **539.8** |

Source: Industry Analysis Division, Common Carrier Bureau, *October 2001 Monitoring Report* (November 2001) and NECA filings (fourth quarter and year 2001).

**Chart 11.1**
**Interstate Switched Access Minutes**
**(In Billions)**



# 12 Mobile Wireless Service

The Commission collects data on the number of wireless subscribers per state as part of the local competition and broadband data gathering program (FCC Form 477). This program requires providers of wireless service to file information twice each year for each state in which they have at least 10,000 subscribers. Table 12.1 shows the number of wireless subscribers per state as of June 30, 2001.

The Cellular Telecommunications & Internet Association (CTIA) periodically publishes summary information on the industry; a selection of which is shown in Tables 12.2 and 12.3. CTIA can be found on the Internet at www.wow-com.com.

The wireless industry has grown dramatically. Table 12.2 shows that there were 92,000 subscribers in 1984, as compared with over 118 million subscribers as of June 2001. As seen in Table 12.3, the industry's annual revenues rose from less than a half billion in 1984 to almost $60 billion between mid-2000 and mid-2001. The table also shows that the industry had over 186,000 employees as of June 2001, as compared to about 1,000 employees in 1984; and there was a significant drop in the average monthly bill from $96.83 at the end of 1987 to $45.56 as of June 2001.

# Table 12.1
## Mobile Wireless Telephone Subscribers
## (As Reported on FCC Form 477) 1/

| State | Jun 2001 Reporting Carriers 1/ | Jun 2001 Percent Resold 2/ | Subscribers Dec 1999 | Subscribers Jun 2000 | Subscribers Dec 2000 3/ | Subscribers Jun 2001 | Percent Change Jun 00 - Jun 01 |
|---|---|---|---|---|---|---|---|
| Alabama | 12 | 1 % | 1,080,410 | 1,253,084 | 1,386,294 | 1,930,631 | 54 % |
| Alaska | 5 | 10 | 165,221 | 169,892 | * | 218,424 | 29 |
| Arizona | 13 | 3 | 1,125,321 | 1,624,668 | 1,855,115 | 2,018,410 | 24 |
| Arkansas | 6 | 2 | 719,919 | 715,467 | 743,928 | 891,275 | 25 |
| California | 12 | 5 | 8,544,941 | 12,283,369 | 12,710,520 | 14,184,625 | 15 |
| Colorado | 9 | 3 | 1,552,718 | 1,654,989 | 1,856,075 | 1,983,405 | 20 |
| Connecticut | 6 | 9 | 1,077,089 | 1,136,618 | 1,277,123 | 1,418,367 | 25 |
| Delaware | 5 | 6 | 270,848 | 275,219 | 371,014 | 389,284 | 41 |
| District of Columbia | 6 | 9 | 910,116 | 4/ | 928,962 | 987,323 | NM |
| Florida | 9 | 7 | 5,158,079 | 4,983,478 | 6,369,985 | 7,536,670 | 51 |
| Georgia | 14 | 4 | 2,538,983 | 2,687,238 | 2,754,784 | 4,076,119 | 52 |
| Guam | * | * | * | * | 0 | * | * |
| Hawaii | 6 | 2 | 288,425 | 454,364 | 524,291 | 543,283 | 20 |
| Idaho | 7 | 3 | 271,436 | 296,066 | 344,564 | 398,781 | 35 |
| Illinois | 10 | 9 | 3,922,482 | 4,309,660 | 5,143,767 | 5,621,044 | 30 |
| Indiana | 9 | 5 | 1,318,975 | 1,717,378 | 1,715,074 | 1,781,247 | 4 |
| Iowa | 8 | 7 | 774,773 | 975,629 | 832,106 | 861,382 | (12) |
| Kansas | 10 | 3 | 669,472 | 724,024 | 801,293 | 901,225 | 24 |
| Kentucky | 9 | 1 | 911,700 | 999,544 | 1,026,334 | 1,176,756 | 18 |
| Louisiana | 12 | 3 | 1,227,106 | 1,294,693 | 1,306,457 | 1,677,292 | 30 |
| Maine | 5 | 3 | 187,003 | 283,640 | 359,786 | 399,616 | 41 |
| Maryland | 8 | 4 | 1,473,494 | 4/ | 1,982,477 | 2,134,125 | NM |
| Massachusetts | 6 | 4 | 1,892,014 | 2,228,169 | 2,649,130 | 2,753,685 | 24 |
| Michigan | 10 | 9 | 3,512,813 | 3,423,535 | 3,551,719 | 4,071,091 | 19 |
| Minnesota | 12 | 7 | 1,550,411 | 1,595,560 | 1,851,430 | 2,014,317 | 26 |
| Mississippi | 9 | 4 | 673,355 | 509,038 | 786,577 | 993,781 | 95 |
| Missouri | 9 | 4 | 1,855,452 | 1,848,775 | 1,767,411 | 1,937,684 | 5 |
| Montana | * | * | * | * | * | * | * |
| Nebraska | 5 | 2 | 576,296 | 600,885 | 659,380 | 712,685 | 19 |
| Nevada | 6 | 3 | 750,335 | 825,163 | 684,752 | 766,581 | (7) |
| New Hampshire | 7 | 13 | 280,508 | 309,263 | 387,264 | 445,181 | 44 |
| New Jersey | 6 | 1 | 2,289,181 | 2,750,024 | 3,575,130 | 3,896,778 | 42 |
| New Mexico | 8 | 8 | 363,827 | 395,111 | 443,343 | 619,582 | 57 |
| New York | 9 | 11 | 4,833,816 | 5,016,524 | 5,918,136 | 6,749,096 | 35 |
| North Carolina | 11 | 4 | 2,536,068 | 2,730,178 | 3,105,811 | 3,377,331 | 24 |
| North Dakota | * | * | * | * | * | * | * |
| Ohio | 12 | 6 | 3,237,786 | 3,278,960 | 4,150,498 | 4,255,934 | 30 |
| Oklahoma | 12 | 3 | 826,637 | 979,513 | 1,124,214 | 1,200,234 | 23 |
| Oregon | 8 | 3 | 914,848 | 1,082,425 | 1,201,207 | 1,268,909 | 17 |
| Pennsylvania | 12 | 5 | 2,767,474 | 3,850,372 | 4,129,186 | 4,378,216 | 14 |
| Puerto Rico | 5 | 21 | * | 1,090,005 | 757,613 | 1,374,747 | 26 |
| Rhode Island | 6 | 5 | 279,304 | 313,550 | 355,889 | 401,805 | 28 |
| South Carolina | 8 | 9 | 1,137,232 | 1,236,338 | 1,392,586 | 1,502,345 | 22 |
| South Dakota | * | * | * | * | * | * | * |
| Tennessee | 11 | 1 | 1,529,054 | 1,876,444 | 1,985,851 | 2,251,208 | 20 |
| Texas | 16 | 5 | 5,792,453 | 6,705,423 | 7,548,537 | 8,294,338 | 24 |
| Utah | 10 | 3 | 643,824 | 692,006 | 750,244 | 833,492 | 20 |
| Vermont | * | * | * | * | * | * | * |
| Virgin Islands | * | * | * | 0 | 0 | * | * |
| Virginia | 11 | 4 | 1,860,262 | 4/ | 2,450,289 | 2,767,247 | NM |
| Washington | 9 | 4 | 1,873,475 | 2,144,767 | 2,286,082 | 2,493,214 | 16 |
| West Virginia | 9 | 6 | 241,265 | 347,916 | 392,384 | 452,036 | 30 |
| Wisconsin | 10 | 7 | 1,525,818 | 1,342,908 | 1,698,520 | 2,008,679 | 50 |
| Wyoming | 4 | 3 | 127,634 | * | * | 173,939 | * |
| Nationwide | 72 | 5 % | 79,696,083 | 90,643,058 | 101,043,219 | 114,028,928 | 26 % |

NM - Not meaningful.

* Data withheld to maintain firm confidentiality.

1/ Carriers with under 10,000 subscribers in a state were not required to report.

2/ Percentage of mobile wireless subscribers receiving their service from a mobile wireless reseller.

3/ Data for December 2000 have been revised.

4/ At the end of June 2000, the District of Columbia, Maryland, and Virginia had a total of 4.8 million subscribers. The state-by-state totals for these individual states were inconsistently reported at the end of June 2000 compared to the other filing periods.

Source: Industry Analysis Division, Common Carrier Bureau, *Local Telephone Competition: Status as of June 30, 2001* (February 2002).

## Table 12.2
## Wireless Telephone Subscribers
## (As Reported by Cellular Telecommunications & Internet Assn.)

| | 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 | 19,283,506 |
| December | 1,581 | 24,134,421 |
| 1995 June | 1,581 | 28,154,415 |
| December | 1,627 | 33,785,661 |
| 1996 June | 1,629 | 38,195,466 |
| December | 1,740 | 44,042,992 |
| 1997 June | 2,005 | 48,705,553 |
| December | 2,228 | 55,312,293 |
| 1998 June | 2,300 | 60,831,431 |
| December | 3,073 | 69,209,321 |
| 1999 June | 3,447 | 76,284,753 |
| December | 3,518 | 86,047,003 |
| 2000 June | 2,306 1/ | 97,035,925 |
| December | 2,440 | 109,478,031 |
| 2001 June | 2,540 | 118,397,734 |

1/ The drop in the number of systems from December 1999 to June 2000 was due to the reclassification of Nextel's systems from city-by-city to consolidated MSAs and BTAs.

Source: Cellular Telecommunications & Internet Association (CTIA).

## Table 12.3

**Wireless Telephone Service: Industry Survey Results**
**(As Reported by Cellular Telecommunications & Internet Assn.)**

| | Survey Results | | Estimates for Total Industry | | |
|---|---|---|---|---|---|
| | 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 |
| December | 1,371 | 93.2 | 53,902 | 7,710,890 | 56.21 |
| 1995 June | 1,330 | 93.9 | 60,624 | 8,740,352 | 52.42 |
| December | 1,392 | 93.0 | 68,165 | 10,331,614 | 51.00 |
| 1996 June | 1,346 | 92.2 | 73,365 | 11,194,247 | 48.84 |
| December | 1,422 | 92.4 | 84,161 | 12,440,724 | 47.70 |
| 1997 June | 1,785 | 94.9 | 97,039 | 13,134,551 | 43.86 |
| December | 2,017 | 94.9 | 109,387 | 14,351,082 | 42.78 |
| 1998 June | 2,026 | 94.7 | 113,111 | 15,286,660 | 39.88 |
| December | 2,869 | 93.3 | 134,754 | 17,846,515 | 39.43 |
| 1999 June | 3,175 | 95.6 | 141,929 | 19,368,304 | 40.24 |
| December | 3,216 | 93.4 | 155,817 | 20,650,185 | 41.24 |
| 2000 June | 1,949 1/ | 91.8 | 159,645 | 24,645,365 | 45.15 |
| December | 2,111 | 94.7 | 184,449 | 27,820,655 | 45.27 |
| 2001 June | 2,132 | 92.6 | 186,317 | 30,905,721 | 45.56 |

1/ The drop in the number of systems from December 1999 to June 2000 was due to the reclassification of Nextel's systems from city-by-city to consolidated MSAs and BTAs.

Source: Cellular Telecommunications & Internet Association (CTIA).

# 13 Price Indices 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. They can be found on the Internet at www.bls.gov. The following material illustrates the range of information available from price indices.

## 1. Long-Term Trends in Price Indices

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 13.1 shows long-term changes in the consumer price indices 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 Indices

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 local, long distance, and cellular services. The annual rate of change is shown in Table 13.2 for the overall CPI (which measures the impact of inflation on consumers) and the CPI for telephone services. In addition, Table 13.2 shows the gross domestic product chain-type price index (which measures inflation throughout the economy) prepared by the Department of Commerce's Bureau of Economic Analysis.

## 3. Price Indices 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, and subscriber line 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 indices of local costs are presented in Table 13.3.

## 4. Price Indices for Long Distance Service

Price indices are available for intrastate toll and interstate toll services. These series are also presented in Table 13.3.

## 5. Price-Index Limitations

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. In 1995, BLS made major changes to the PPI telephone series, and there are no data after July 1995 comparable with prior data. Because of these sorts of difficulties, measures of average revenues are sometimes used as alternatives to price indices.

## Table 13.1
## Long-Term Changes for Various Price Indices
## (Annual Rates of Change)

| | 1935 - 2001 | 1989 - 2001 |
|---|---|---|
| CPI All Items | 3.8 % | 3.0 % |
| CPI All Services | 4.3 | 3.7 |
| CPI Telephone Services 1/ | 1.4 | 0.6 |
| CPI Major Categories: | | |
| - Food & Beverages | * | 2.8 |
| - Housing | * | 3.1 |
| - Apparel | 2.5 | 0.8 |
| - Transportation | 3.5 | 2.5 |
| - Medical Care | 5.0 | 5.2 |
| - Recreation 2/ | * | 1.8 |
| - Other Goods & Services | * | 5.6 |
| CPI Public Transportation | 4.8 | 4.1 |
| CPI Utility Natural Gas Service | 3.8 | 4.2 |
| CPI Electricity | 1.9 | 1.5 |
| CPI Sewer & Water Maintenance | * | 4.3 |
| CPI Postage | 3.9 | 2.7 |

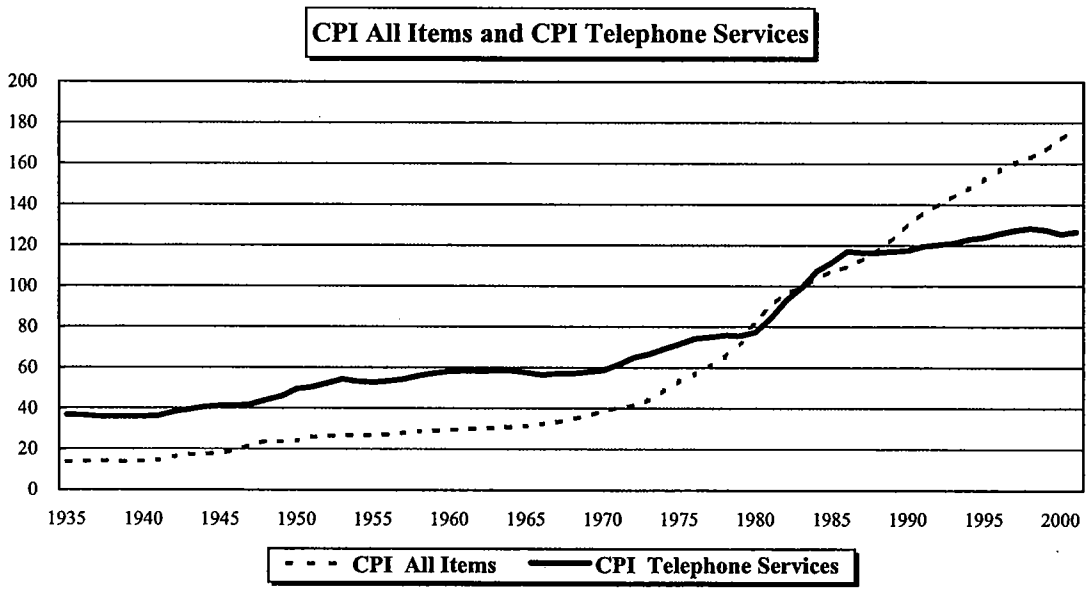
* Series not established until after 1935.

1/ The CPI telephone service index was revised in December of 1997.

2/ Series not established until 1993. Figure reflects annual change between 1993 and 2001.

Source: Bureau of Labor Statistics.

## Chart 13.1

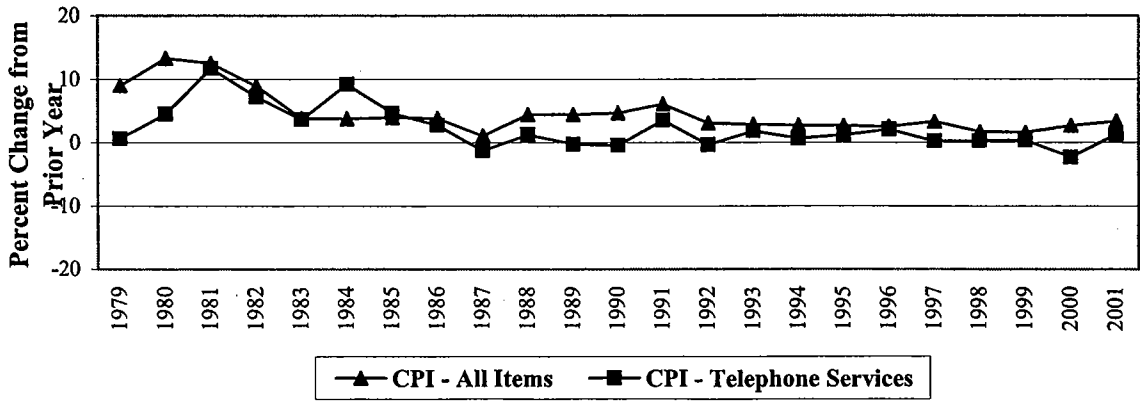


## Table 13.2
## Annual Changes in Major Price Indices

| | GDP Chain-Type Price Index | CPI - All Items | CPI - Telephone Services |
|---|---|---|---|
| 1978 | 7.4 % | 9.0 % | 0.9 % |
| 1979 | 8.3 | 13.3 | 0.7 |
| 1980 | 9.6 | 12.5 | 4.6 |
| 1981 | 8.3 | 8.9 | 11.7 |
| 1982 | 5.1 | 3.8 | 7.2 |
| 1983 | 3.6 | 3.8 | 3.6 |
| 1984 | 3.5 | 3.9 | 9.2 |
| 1985 | 3.0 | 3.8 | 4.7 |
| 1986 | 2.2 | 1.1 | 2.7 |
| 1987 | 3.1 | 4.4 | -1.3 |
| 1988 | 3.7 | 4.4 | 1.3 |
| 1989 | 3.6 | 4.6 | -0.3 |
| 1990 | 4.1 | 6.1 | -0.4 |
| 1991 | 2.8 | 3.1 | 3.5 |
| 1992 | 2.2 | 2.9 | -0.3 |
| 1993 | 2.7 | 2.7 | 1.8 |
| 1994 | 2.0 | 2.7 | 0.7 |
| 1995 | 2.1 | 2.5 | 1.2 |
| 1996 | 1.7 | 3.3 | 2.1 |
| 1997 | 1.6 | 1.7 | 0.2 |
| 1998 | 1.3 | 1.6 | 0.3 * |
| 1999 | 1.6 | 2.7 | 0.4 |
| 2000 | 2.5 | 3.4 | -2.3 |
| 2001 | 1.8 | 1.6 | 1.3 |

* The CPI telephone service index was revised in December of 1997.
Sources: Bureau of Labor Statistics and Bureau of Economic Analysis.

## Chart 13.2
## Percentage Change in CPI All Items and CPI Telephone Services



## Table 13.3
## Annual Changes in Price Indices
## for Local and Long Distance Telephone Services

| | Local Residential Service | | Toll Service 1/ | | | |
|---|---|---|---|---|---|---|
| | | | Interstate | | Intrastate | |
| | CPI | PPI | CPI | PPI | CPI | PPI |
| 1978 | 1.4 % | 3.1 % | -0.7 % | 0.0 % | 1.3 % | 0.1 % |
| 1979 | 1.7 | 1.6 | -0.8 | -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 | 2.7 | 3.9 | 4.2 | 1.7 |
| 1983 | 3.1 | 0.2 | 1.4 | 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 | -3.8 |
| 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 | 0.7 | 5.4 | 6.1 | -1.0 | -1.4 |
| 1995 | 2.6 | 2/ | 0.1 | 2/ | -3.8 | 2/ |
| 1996 | 0.9 | 0.2 | 3.7 | 0.7 | 6.1 | 0.9 |
| 1997 | 1.0 | 0.2 | -4.3 | 7.8 | 2.8 | -4.3 |
| 1998 | 1.3 | -0.1 | -0.8 | -0.4 | 1.5 | -3.7 |
| 1999 | 2.8 | 0.2 | -0.7 | 2.3 | -1.6 | -2.7 |
| 2000 | 5.5 | 1.6 | -11.2 | -4.3 | -6.0 | 0.1 |
| 2001 | 4.5 | 2.5 | -2.0 | -8.0 | -1.7 | 0.6 |

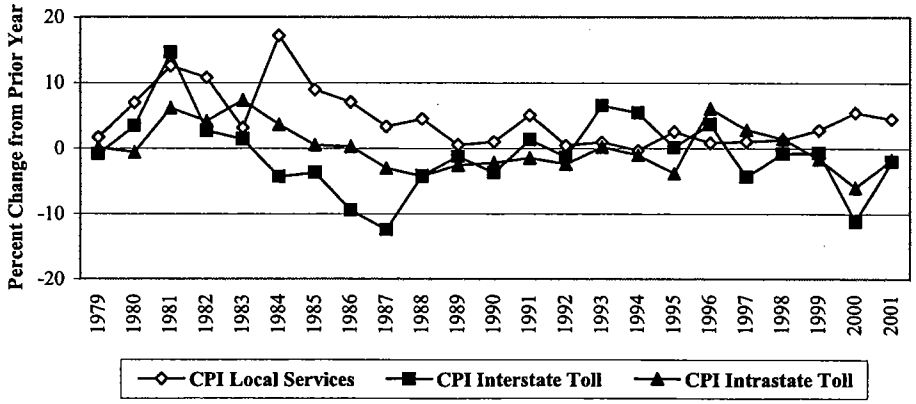
1/ The CPI toll indices represent rates for households. Through 1994, PPI toll indices represent rate changes for both business and residential consumers. Since 1995, PPI indices reflect rates for residential customers.

2/ The PPI telephone indices were revised in June of 1995. The series are not comparable. Due to substantial month-to-month variation in the new PPI indices, PPI price levels are determined using a five-month weighted average.

Source: Bureau of Labor Statistics.

### Chart 13.3

### CPI Telephone Service Price Indices



# 14 Price Levels

## 1. Local Rate Levels

The price indices maintained by the Bureau of Labor Statistics indicate percentage changes in the price of telephone services. 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 BLS in constructing the Consumer Price Index.

Table 14.1 presents average local rates for residential customers in urban areas. In October 2001, the monthly charge was $21.84, while the average charge for connecting phone service was $42.72.

Table 14.2 presents average local rates for a business with a single phone line in an urban area. In October 2001, the representative monthly charge was $42.18 while the charge for connecting phone service was $72.38.

## 2. Long Distance Rates

In the past, we published a table (Table 14.3) on AT&T's basic schedule prices for residential and business services comparing the rates at the time of divestiture with the rates at the time of publication of each *Trends*. The rates were taken from the tariffs filed by AT&T with the Commission. They were based on calling distance(s) calculated by mileage bands (1-10, 11-22, 23-55, 56-124, 125-292, 293-430, 431-925, 926-1910, 1911-3000, 3001-4250, and 4251-5750). The table showed the rate(s) for call(s) based for each of the mileage bands for a directly dialed five-minute long distance call made during the day, evening, and on night and weekends. As of July 31, 2001, AT&T is no longer required to file long distance tariffs with the Commission so we have discontinued the old Table 14.3.

Tables 14.3 and 14.4 contain measures of average revenue per minute (APRM) for long distance calls. Estimates of APRM are often used interchangeably with estimates of the average price. From 1984 to 2000, the cost of long distance calling dropped from 32 cents per minute to 12 cents per minute. The average price of 12 cents per minute represents a mix of international calling (47 cents per minute) and domestic interstate calling (9 cents per minute). The decline in prices since 1984 is more than 70% after adjusting for the impact of inflation.

## Table 14.1
## Average Residential Rates for Local Service in Urban Areas, 1986-2001
## (As of October 15)

| | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Representative Monthly Charge 1/ | $12.58 | $12.44 | $12.32 | $12.30 | $12.36 | $13.03 | $13.05 | $13.16 | $13.19 | $13.62 | $13.71 | $13.67 | $13.75 | $13.77 | $13.64 | $14.05 |
| Subscriber Line Charges | 2.04 | 2.66 | 2.67 | 3.53 | 3.55 | 3.56 | 3.55 | 3.55 | 3.55 | 3.54 | 3.54 | 3.53 | 3.52 | 3.58 | 4.50 | 5.03 |
| Additional Monthly Charge for Touch-Tone Service | 1.57 | 1.52 | 1.54 | 1.52 | 1.33 | 1.06 | 0.97 | 0.94 | 0.77 | 0.44 | 0.30 | 0.25 | 0.10 | 0.09 | 0.06 | 0.06 |
| Taxes, 911, and Other Charges | 1.51 | 1.56 | 1.58 | 1.70 | 2.00 | 2.12 | 2.15 | 2.29 | 2.31 | 2.41 | 2.40 | 2.42 | 2.39 | 2.48 | 2.57 | 2.70 |
| **Total Monthly Charge** | **$17.70** | **$18.18** | **$18.11** | **$19.05** | **$19.24** | **$19.77** | **$19.72** | **$19.95** | **$19.81** | **$20.01** | **$19.95** | **$19.88** | **$19.76** | **$19.93** | **$20.78** | **$21.84** |
| Basic Connection Charge | $45.63 | $44.04 | $42.94 | $43.06 | $43.06 | $42.00 | $41.50 | $41.38 | $41.28 | $40.91 | $41.11 | $41.04 | $41.24 | $41.26 | $41.45 | $40.16 |
| Additional Connection Charge for Touch-Tone Service | 1.34 | 1.31 | 1.55 | 1.76 | 1.77 | 1.27 | 1.22 | 1.23 | 0.85 | 0.23 | 0.23 | 0.17 | 0.12 | 0.12 | 0.12 | 0.12 |
| Taxes, 911, and Other Charges | 2.28 | 2.20 | 2.11 | 2.44 | 2.32 | 2.30 | 2.29 | 2.30 | 2.33 | 2.44 | 2.36 | 2.46 | 2.38 | 2.57 | 2.53 | 2.44 |
| **Total Connection Charge** | **$49.25** | **$47.55** | **$46.60** | **$47.26** | **$47.15** | **$45.57** | **$45.01** | **$44.92** | **$44.46** | **$43.58** | **$43.70** | **$43.67** | **$43.74** | **$43.95** | **$44.10** | **$42.72** |
| **Additional Charge if Drop Line and Connection Block Needed** | NA | NA | $6.04 | $6.07 | $6.89 | $6.89 | $6.50 | $7.29 | $6.74 | $5.90 | $5.74 | $5.65 | $5.64 | $5.86 | $5.84 | $5.84 |
| Lowest-Cost Inside Wiring Maintenance Plan | $0.58 | $0.85 | $0.89 | $1.07 | $1.07 | $1.20 | $1.25 | $1.31 | $1.45 | $1.52 | $1.78 | $1.68 | $2.22 | $2.66 | $3.03 | $3.49 |

NA - Not available.

1/ Rates are based on flat-rate service where available, and measured/message service with one hundred 5-minute, same-zone, business-day calls elsewhere. As of 2001, all 95 cities in the Urban Rates Survey offere flat-rate residential service, which made measuring the cost of such calls unnecessary

Source: Urban Rates Survey.

## Table 14.2
## Average Local Rates for Businesses with a Single Line in Urban Areas, 1989 - 2001
### (As of October 15)

| | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Monthly Representative Service Charge 1/ | $31.06 | $30.97 | $32.29 | $32.45 | $32.70 | $32.25 | $32.48 | $32.58 | $32.76 | $32.44 | $32.41 | $32.18 | $31.97 |
| Subscriber Line Charges | 3.55 | 3.57 | 3.57 | 3.56 | 3.57 | 3.57 | 3.57 | 3.54 | 3.54 | 3.54 | 3.52 | 4.39 | 4.99 |
| Extra for Touch-Tone Service | 2.43 | 2.35 | 1.84 | 1.71 | 1.67 | 1.21 | 0.97 | 0.82 | 0.38 | 0.32 | 0.25 | 0.19 | 0.18 |
| Taxes, 911, and Other Charges | 4.21 | 4.32 | 4.42 | 4.57 | 4.63 | 4.61 | 4.79 | 4.87 | 4.99 | 4.97 | 5.03 | 5.04 | 5.04 |
| **Total Monthly Charge** | **$41.25** | **$41.21** | **$42.12** | **$42.29** | **$42.57** | **$41.64** | **$41.80** | **$41.81** | **$41.67** | **$41.27** | **$41.21** | **$41.80** | **$42.18** |
| Monthly Charge for Flat-Rate Service | $33.04 | $33.29 | $34.12 | $34.06 | $34.85 | $34.39 | $34.45 | $34.42 | $34.68 | $34.39 | $33.73 | $33.45 | $33.43 |
| Subscriber Line Charges | 3.65 | 3.69 | 3.70 | 3.70 | 3.70 | 3.70 | 3.69 | 3.61 | 3.61 | 3.56 | 3.50 | 4.35 | 5.14 |
| Extra for Touch-Tone Service | 2.12 | 2.11 | 1.87 | 1.84 | 1.76 | 1.12 | 1.00 | 0.89 | 0.53 | 0.49 | 0.47 | 0.43 | 0.41 |
| Taxes, 911, and Other Charges | 4.90 | 4.98 | 5.22 | 5.34 | 5.50 | 5.36 | 5.58 | 5.55 | 5.58 | 5.63 | 5.49 | 5.68 | 5.82 |
| **Total Monthly Charge for Flat-Rate Service** | **$43.71** | **$44.07** | **$44.91** | **$44.94** | **$45.81** | **$44.57** | **$44.71** | **$44.47** | **$44.39** | **$44.07** | **$43.20** | **$43.90** | **$44.79** |
| Number of Sample Cities with Flat-Rate Service | 59 | 56 | 54 | 54 | 54 | 53 | 53 | 53 | 53 | 54 | 54 | 54 | 54 |
| Monthly Charge for Measured/Message Service | $16.18 | $16.17 | $16.76 | $16.55 | $16.60 | $16.74 | $17.06 | $17.26 | $17.28 | $17.16 | $17.06 | $16.92 | $17.10 |
| 200 Five-Minute Same-Zone Business-Day Calls | 16.11 | 16.19 | 16.70 | 17.23 | 17.57 | 17.38 | 17.15 | 17.10 | 17.18 | 17.15 | 17.24 | 17.63 | 17.33 |
| Subscriber Line Charges | 3.54 | 3.55 | 3.55 | 3.54 | 3.55 | 3.55 | 3.54 | 3.51 | 3.51 | 3.53 | 3.52 | 4.39 | 4.98 |
| Extra for Touch-Tone Service | 2.48 | 2.39 | 1.87 | 1.73 | 1.68 | 1.22 | 0.98 | 0.83 | 0.39 | 0.33 | 0.25 | 0.20 | 0.19 |
| Taxes, Including 911 Charges | 4.41 | 4.53 | 4.56 | 4.77 | 4.86 | 4.83 | 5.01 | 5.13 | 5.22 | 5.19 | 5.28 | 5.32 | 5.32 |
| **Total Monthly Charge for Measured/Message Service** | **$42.72** | **$42.83** | **$43.44** | **$43.82** | **$44.26** | **$43.72** | **$43.75** | **$43.84** | **$43.57** | **$43.35** | **$43.35** | **$44.45** | **$44.93** |
| Number of Sample Cities with Measured/Message Service | 83 | 83 | 84 | 84 | 84 | 87 | 87 | 86 | 85 | 85 | 85 | 85 | 85 |
| Cost of a Five-Minute Same-Zone Business-Day Call | $0.09 | $0.09 | $0.09 | $0.09 | $0.09 | $0.09 | $0.09 | $0.09 | $0.09 | $0.09 | $0.09 | $0.10 | $0.09 |
| Basic Connection Charge | $71.05 | $71.36 | $72.75 | $72.55 | $71.41 | $69.88 | $67.87 | $68.47 | $68.67 | $65.83 | $67.87 | $67.77 | $67.84 |
| Additional Connection Charge for Touch-Tone Service | 1.70 | 1.89 | 1.13 | 1.19 | 1.17 | 0.92 | 0.27 | 0.17 | 0.17 | 0.12 | 0.12 | 0.12 | 0.12 |
| Taxes, Including 911 Charges | 4.06 | 4.15 | 4.32 | 4.33 | 4.25 | 4.13 | 4.17 | 4.20 | 4.45 | 4.13 | 4.53 | 4.40 | 4.42 |
| **Total Connection Charge** | **$76.81** | **$77.40** | **$78.20** | **$78.07** | **$76.83** | **$74.93** | **$72.31** | **$72.85** | **$73.29** | **$70.09** | **$72.55** | **$72.29** | **$72.38** |
| Additional Charge if Drop Line and Connection Block Needed | $5.92 | $7.87 | $6.90 | $6.83 | $6.64 | $6.49 | $7.28 | $6.98 | $6.54 | $6.54 | $6.65 | $6.62 | $6.62 |
| Lowest-Cost Inside Wiring Maintenance Plan | $1.78 | $1.91 | $2.05 | $2.03 | $2.08 | $2.26 | $2.39 | $2.63 | $2.84 | $3.04 | $3.53 | $3.92 | $4.21 |

1/ Rates are based on flat-rate service where available, and measured/message service with 200 five-minute, same-zone, business-day calls elsewhere.

Source: Urban Rates Survey.

# Table 14.3
## Average Revenue per Minute

| | AT&T | All Carriers | | |
|---|---|---|---|---|
| | All Interstate and International Switched Services | All Interstate and International Switched Services | International Switched Services 1/ | All Interstate Switched Services |
| 1984 | $0.32 | | | |
| 1985 | 0.31 | | | |
| 1986 | 0.28 | | | |
| 1987 | 0.25 | | | |
| 1988 | 0.23 | | | |
| 1989 | 0.22 | | | |
| 1990 | 0.20 | | | |
| 1991 | 0.20 | | | |
| 1992 | 0.19 | $0.19 | $1.01 | $0.15 |
| 1993 | 0.19 | 0.19 | 1.02 | 0.15 |
| 1994 | 0.18 | 0.18 | 0.93 | 0.14 |
| 1995 | NA | 0.17 | 0.92 | 0.12 |
| 1996 | NA | 0.16 | 0.77 | 0.12 |
| 1997 | NA | 0.15 | 0.70 | 0.11 |
| 1998 | NA | 0.14 | 0.60 | 0.11 |
| 1999 | NA | 0.14 | 0.54 | 0.11 |
| 2000 | NA | 0.12 | 0.53 | 0.09 |

NA - Not available.

Note: Data for some prior years have been revised.

1/ Billed revenue per minute for international service differs in Table 6.1 and Table 14.3. Data in Table 6.1 are calculated using all U.S. billed minutes and revenues. Data for Table 14.3 represent charges for most U.S. billed calls that originate or terminate in the United States. International-to-international revenues and reorigination, country-beyond and country-direct minutes are not included in this table.

Sources: AT&T information provided by AT&T. Other estimates from Industry Analysis Division, Common Carrier Bureau, *Telecommunications Industry Revenues* (Febuary 2002). 2000 data were revised to reflect revised Section 43.61 international traffic data for some carriers.

## Table 14.4
## Indicators of Long Distance Prices

| | Average Revenue per Minute for Interstate and International Calls 1/ | AT&T Charge per Minute for a 10-Minute Day Rate 200-Mile Call (Basic Rates) | Consumer Price Index: All Goods and Services (1982-1984 = 100) | Restated in 2000 Dollars | |
|---|---|---|---|---|---|
| | | | | Revenue per Minute | Basic Rate 200-Mile Call Charge per Minute |
| 1930 | $0.27 | $0.35 | 16.7 | $2.83 | $3.61 |
| 1931 | 0.27 | 0.35 | 15.2 | 3.05 | 3.97 |
| 1932 | 0.26 | 0.35 | 13.7 | 3.30 | 4.40 |
| 1933 | 0.28 | 0.35 | 13.0 | 3.64 | 4.64 |
| 1934 | 0.27 | 0.35 | 13.4 | 3.50 | 4.50 |
| 1935 | 0.27 | 0.35 | 13.7 | 3.34 | 4.40 |
| 1936 | 0.25 | 0.35 | 13.9 | 3.11 | 4.34 |
| 1937 | 0.22 | 0.35 | 14.4 | 2.59 | 4.19 |
| 1938 | 0.21 | 0.26 | 14.1 | 2.62 | 3.11 |
| 1939 | 0.22 | 0.26 | 13.9 | 2.67 | 3.16 |
| 1940 | 0.21 | 0.26 | 14.0 | 2.59 | 3.14 |
| 1941 | 0.21 | 0.26 | 14.7 | 2.43 | 2.99 |
| 1942 | 0.22 | 0.26 | 16.3 | 2.28 | 2.69 |
| 1943 | 0.21 | 0.22 | 17.3 | 2.10 | 2.19 |
| 1944 | 0.22 | 0.22 | 17.6 | 2.11 | 2.15 |
| 1945 | 0.21 | 0.22 | 18.0 | 2.03 | 2.10 |
| 1946 | 0.20 | 0.22 | 19.5 | 1.74 | 1.94 |
| 1947 | 0.19 | 0.22 | 22.3 | 1.48 | 1.70 |
| 1948 | 0.19 | 0.22 | 24.1 | 1.33 | 1.57 |
| 1949 | 0.19 | 0.22 | 23.8 | 1.36 | 1.59 |
| 1950 | 0.19 | 0.22 | 24.1 | 1.38 | 1.57 |
| 1951 | 0.20 | 0.22 | 26.0 | 1.33 | 1.46 |
| 1952 | 0.20 | 0.22 | 26.5 | 1.32 | 1.43 |
| 1953 | 0.21 | 0.22 | 26.7 | 1.34 | 1.42 |
| 1954 | 0.22 | 0.22 | 26.9 | 1.43 | 1.41 |
| 1955 | 0.23 | 0.22 | 26.8 | 1.48 | 1.41 |
| 1956 | 0.23 | 0.22 | 27.2 | 1.48 | 1.39 |
| 1957 | 0.24 | 0.22 | 28.1 | 1.46 | 1.35 |
| 1958 | 0.24 | 0.22 | 28.9 | 1.42 | 1.31 |
| 1959 | 0.24 | 0.22 | 29.1 | 1.43 | 1.30 |
| 1960 | 0.24 | 0.22 | 29.6 | 1.40 | 1.28 |
| 1961 | 0.25 | 0.22 | 29.9 | 1.43 | 1.27 |
| 1962 | 0.25 | 0.22 | 30.2 | 1.44 | 1.25 |
| 1963 | 0.25 | 0.22 | 30.6 | 1.40 | 1.24 |
| 1964 | 0.25 | 0.22 | 31.0 | 1.38 | 1.22 |
| 1965 | 0.24 | 0.22 | 31.5 | 1.31 | 1.20 |
| 1966 | 0.24 | 0.22 | 32.4 | 1.29 | 1.17 |
| 1967 | 0.24 | 0.22 | 33.4 | 1.25 | 1.13 |
| 1968 | 0.24 | 0.22 | 34.8 | 1.17 | 1.09 |
| 1969 | 0.24 | 0.22 | 36.7 | 1.13 | 1.03 |

1/ Estimates for 1930 through 1981 are based on information in AT&T *Long Lines Statistics* 1930-1963, 1946-1970, and 1960-1981, and appear to represent data for the conterminous U.S. only. Data prior to 1946 may not be comparable. Data for 1982 and 1983 were estimated using BLS price index changes. Data for 1984 through 1991 were supplied by AT&T. Starting with 1992, data are from Industry Analysis Division, Common Carrier Bureau, *Telecommunications Industry Revenues* (January 2002).

## Table 14.4
## Indicators of Long Distance Prices - Continued

| | Average Revenue per Minute for Interstate and International Calls 1/ | AT&T Charge per Minute for a 10-Minute Day Rate 200-Mile Call (Basic Rates) | Consumer Price Index: All Goods and Services (1982-1984 = 100) | Restated in 2000 Dollars | |
|---|---|---|---|---|---|
| | | | | Revenue per Minute | Basic Rate 200-Mile Call Charge per Minute |
| 1970 | $0.23 | $0.22 | 38.8 | $1.02 | $0.95 |
| 1971 | 0.25 | 0.21 | 40.5 | 1.04 | 0.89 |
| 1972 | 0.24 | 0.23 | 41.8 | 1.00 | 0.96 |
| 1973 | 0.25 | 0.23 | 44.4 | 0.98 | 0.91 |
| 1974 | 0.26 | 0.25 | 49.3 | 0.90 | 0.87 |
| 1975 | 0.27 | 0.25 | 53.8 | 0.88 | 0.79 |
| 1976 | 0.29 | 0.32 | 56.9 | 0.86 | 0.95 |
| 1977 | 0.28 | 0.33 | 60.6 | 0.81 | 0.92 |
| 1978 | 0.29 | 0.33 | 65.2 | 0.76 | 0.88 |
| 1979 | 0.29 | 0.33 | 72.6 | 0.69 | 0.79 |
| 1980 | 0.30 | 0.33 | 82.4 | 0.63 | 0.70 |
| 1981 | 0.33 | 0.35 | 90.9 | 0.62 | 0.67 |
| 1982 | 0.34 | 0.41 | 96.5 | 0.61 | 0.73 |
| 1983 | 0.35 | 0.41 | 99.6 | 0.60 | 0.71 |
| 1984 | 0.32 | 0.41 | 103.9 | 0.54 | 0.68 |
| 1985 | 0.31 | 0.39 | 107.6 | 0.49 | 0.62 |
| 1986 | 0.28 | 0.31 | 109.6 | 0.44 | 0.49 |
| 1987 | 0.25 | 0.27 | 113.6 | 0.37 | 0.40 |
| 1988 | 0.23 | 0.25 | 118.3 | 0.34 | 0.36 |
| 1989 | 0.22 | 0.23 | 124.0 | 0.30 | 0.32 |
| 1990 | 0.20 | 0.22 | 130.7 | 0.26 | 0.28 |
| 1991 | 0.20 | 0.21 | 136.2 | 0.25 | 0.27 |
| 1992 | 0.19 | 0.21 | 140.3 | 0.24 | 0.26 |
| 1993 | 0.19 | 0.22 | 144.5 | 0.23 | 0.26 |
| 1994 | 0.18 | 0.24 | 148.2 | 0.21 | 0.28 |
| 1995 | 0.17 | 0.27 | 152.4 | 0.19 | 0.31 |
| 1996 | 0.16 | 0.28 | 156.9 | 0.18 | 0.31 |
| 1997 | 0.15 | 0.29 | 160.5 | 0.16 | 0.31 |
| 1998 | 0.14 | 0.28 | 163.0 | 0.15 | 0.30 |
| 1999 | 0.14 | 0.26 | 166.6 | 0.15 | 0.27 |
| 2000 | 0.12 | 0.30 | 172.2 | 0.12 | 0.30 |

1/ Estimates for 1930 through 1981 are based on information in AT&T *Long Lines Statistics* 1930-1963, 1946-1970, and 1960-1981, and appear to represent data for the conterminous U.S. only. Data prior to 1946 may not be comparable. Data for 1982 and 1983 were estimated using BLS price index changes. Data for 1984 through 1991 were supplied by AT&T. Starting with 1992, data are from Industry Analysis Division, Common Carrier Bureau, *Telecommunications Industry Revenues* (January 2002).

# 15 Residential Telephone Usage

Bill Harvesting® data collected by TNS Telecoms provides information on actual usage in the residential telecom market as collected from the actual telecommunications bills of households. TNS Telecoms (TNS), a telecommunications market information firm, conducts nationwide surveys and Bill Harvesting® on a quarterly basis from over 120,000 households each year. These surveys, in which households are asked to mail copies of their phone bills for one month to TNS, are called Bill Harvesting studies. The company has donated databases containing information on residential phone usage to the Commission.

The Bill Harvesting data reflect calls itemized on residential telephone bills. Thus, 800 and 800-like calls made from the residence are not included, nor are collect calls made from the residence. In contrast, 800 and 800-like calls received, and shown on the household monthly bill, are included, as are collect calls received.

Table 15.1 shows the percentage of residential long distance telephone usage that is intrastate, interstate and international. In 2000, 37% of residential toll phone calls were interstate as opposed to 48% of minutes. Table 15.2 shows the average number of minutes on household telephone bills from 1995-2000.

Table 15.3 shows the distribution of residential long distance calls by call duration. The average interstate residential call lasts ten minutes, although about one-third of interstate toll calls last one minute or less. Tables 15.4 and 15.5 show the duration and the average distance (sometimes called length of haul) of residential long distance calls. The average distance of an interstate call is 708 miles, as opposed to 54 miles for an intrastate call.

Table 15.6 shows the percentage of residential long distance minutes by day of week. In the 2000 survey, 34% of residential minutes were on weekdays between 7:00 a.m. and 7:00 p.m., and 36% of residential minutes were on weekends.

## Table 15.1
## Distribution of Residential Toll Calls and Minutes

| Type | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|---|---|---|---|---|---|---|
| ***Calls*** | | | | | | |
| IntraLATA-Intrastate | 41 % | 40 % | 38 % | 38 % | 39 % | 39 % |
| InterLATA-Intrastate | 19 | 18 | 19 | 19 | 18 | 17 |
| IntraLATA-Interstate | 1 | 1 | 1 | 1 | 1 | 1 |
| InterLATA-Interstate | 37 | 35 | 37 | 36 | 37 | 36 |
| International | 1 | 1 | 1 | 1 | 1 | 1 |
| Others 1/ | 2 | 5 | 5 | 4 | 4 | 5 |
| Total Calls in Sample | 197,787 | 165,465 | 483,685 | 578,850 | 474,408 | 538,337 |
| ***Minutes*** | | | | | | |
| IntraLATA-Intrastate | 28 % | 29 % | 27 % | 27 % | 28 % | 29 % |
| InterLATA-Intrastate | 18 | 18 | 18 | 18 | 17 | 17 |
| IntraLATA-Interstate | 1 | 1 | 1 | 1 | 1 | 1 |
| InterLATA-Interstate | 50 | 47 | 49 | 49 | 49 | 47 |
| International | 2 | 1 | 1 | 1 | 2 | 2 |
| Others 1/ | 1 | 4 | 4 | 3 | 3 | 5 |
| Total Minutes in Sample | 1,493,674 | 1,210,675 | 3,673,315 | 4,330,888 | 3,544,905 | 4,030,602 |

Note: Figures may not add to 100% due to rounding.

1/ Toll-free calls billed to residential customers, 900 calls and calls that cannot be classified.
Source: Calculated by IATD staff with data provided by TNS Telecoms (formerly PNR and Associates), *Telecoms Market MonitorTM.*

## Table 15.2
## Average Residential Monthly Toll Calling

| Type | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|---|---|---|---|---|---|---|
| IntraLATA-Intrastate | 40 | 41 | 41 | 40 | 36 | 33 |
| InterLATA-Intrastate | 26 | 26 | 27 | 26 | 23 | 19 |
| IntraLATA-Interstate | 1 | 1 | 1 | 1 | 1 | 1 |
| InterLATA-Interstate | 71 | 67 | 73 | 71 | 65 | 55 |
| International | 3 | 1 | 2 | 2 | 2 | 2 |
| Others 1/ | 1 | 6 | 6 | 5 | 4 | 5 |
| All Types | 143 | 143 | 149 | 144 | 131 | 116 |

Note: Figures may not add to totals due to rounding.

1/ Toll-free calls billed to residential customers, 900 calls and calls that cannot be classified.
Source: Calculated by IATD staff with data provided by TNS Telecoms (formerly PNR and Associates), *Telecoms Market MonitorTM.*

## Table 15.3
## Duration of Residential Long Distance Calls: 2000 1/

| Duration of Call (In Minutes) | Intrastate | Interstate | All Calls |
|---|---|---|---|
| 1 | 41.6 % | 32.8 % | 38.0 % |
| 2 | 13.8 | 9.6 | 12.1 |
| 3 | 8.2 | 7.1 | 7.8 |
| 4 | 5.1 | 4.1 | 4.7 |
| 5 | 3.8 | 3.4 | 3.6 |
| 6 | 3.0 | 3.0 | 3.0 |
| 7 | 2.4 | 2.6 | 2.5 |
| 8 | 2.1 | 2.4 | 2.2 |
| 9 | 1.7 | 2.1 | 1.9 |
| 10 | 3.1 | 4.0 | 3.5 |
| 11-15 | 5.3 | 8.2 | 6.5 |
| 16-20 | 3.2 | 5.7 | 4.2 |
| 21-25 | 2.0 | 4.1 | 2.8 |
| 26-30 | 1.3 | 2.9 | 1.9 |
| 31-45 | 2.0 | 4.6 | 3.1 |
| 46-60 | 0.7 | 1.8 | 1.2 |
| Greater Than 60 | 0.6 | 1.6 | 1.0 |
| Average Duration | 6.1 | 10.0 | 7.7 |
| Median Duration | 2.0 | 4.0 | 2.0 |

1/ Direct-dial calls carried by long distance carriers and local exchange carriers. Includes only domestic calls.

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

## Table 15.4
## Duration and Distance of Intrastate Toll Calls 1/

| | Duration (In Minutes) | | Distance (In Miles) | |
|---|---|---|---|---|
| | Average | Median | Average | Median |
| 1995 | 6.0 | 2.0 | 53 | 26 |
| 1996 | 6.0 | 2.0 | 55 | 28 |
| 1997 | 6.2 | 2.0 | 56 | 28 |
| 1998 | 6.0 | 2.0 | 55 | 29 |
| 1999 | 6.0 | 2.0 | 54 | 29 |
| 2000 | 6.1 | 2.0 | 54 | 28 |

1/ Direct-dial calls carried by long distance carriers and local exchange carriers. Includes only domestic calls.

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

## Table 15.5
## Duration and Distance of Interstate Toll Calls 1/

| | Duration (In Minutes) | | Distance (In Miles) | |
|---|---|---|---|---|
| | Average | Median | Average | Median |
| 1995 | 10.6 | 4.0 | 689 | 507 |
| 1996 | 10.0 | 4.0 | 670 | 473 |
| 1997 | 10.3 | 4.0 | 695 | 480 |
| 1998 | 10.3 | 4.0 | 691 | 493 |
| 1999 | 10.0 | 3.9 | 702 | 507 |
| 2000 | 10.0 | 4.0 | 708 | 525 |

1/ Direct-dial calls carried by long distance carriers and local exchange carriers. Includes only domestic calls.

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

## Table 15.6
## Distribution of Residential Long Distance Minutes
## By Day of Week in 2000 1/

| Day | 7:00 AM-6:59 PM | 7:00 PM-6:59 AM | Total |
|---|---|---|---|
| Monday | 7.2 % | 6.2 % | 13.4 % |
| Tuesday | 6.8 | 6.2 | 13.0 |
| Wednesday | 6.5 | 6.1 | 12.6 |
| Thursday | 6.9 | 6.2 | 13.2 |
| Friday | 6.9 | 4.8 | 11.7 |
| Saturday | 10.4 | 4.5 | 14.9 |
| Sunday | 13.5 | 7.7 | 21.2 |
| Total | 58.2 % | 41.8 % | 100.0 % |

1/ Direct-dial calls carried by long distance carriers and local exchange carriers. Includes only interLATA calls.

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

# 16 Revenues

In 1993, the Commission required all carriers with interstate revenues to begin filing an annual Telecommunications Relay Service (TRS) Fund Worksheet. Because revenues derived from providing access to the interstate network are considered to be interstate, virtually all carriers were required to file information. Starting in 1997, larger carriers were required to file Universal Service Fund (USF) worksheets, which contain similar information but with breakouts for revenues from service provided for resale and for service provided to end users. End-user revenues include revenues associated with services to end users and do not include resale (carrier's carrier) revenues. Carrier's carrier revenues are sales of telecommunications to universal service contributors for resale in the form of telecommunications. Filers report all other revenues as end-user revenues.[1] On April 1, 2000, carriers first filed an FCC Form 499-A Telecommunications Reporting Worksheet to report prior year revenue data for TRS, USF, North American Numbering Planning Administration, and local number portability contribution purposes. The FCC Form 499-A superseded the older reporting requirements and is now filed to satisfy carrier registration requirements at the Commission as well. Beginning in 2001, many telecommunications providers also had to file the quarterly FCC Form 499-Q. Some estimates for 2001 have been made based on data filed on the FCC Form 499-Q filings.

Table 16.1 shows the major components of telecommunications revenues for 2000: carrier's carrier revenues and end-user revenues for local, wireless, and toll service. Table 16.2 shows how local, wireless, and toll revenues have changed over time. The table highlights how some significant changes in the revenue levels from 1996 to 1997 are due to major reporting changes. Table 16.3 shows the number of telecom service providers by principal type of business. Table 16.4 contains revenues for 1992 through the third quarter of 2001 by type of carrier. Additional revenue detail can be found in the latest *Telecommunications Industry Revenues* report (January 2002 edition).

The publication *Telecommunications Provider Locator* (November 2001 edition) lists 5,679 carriers that filed a FCC Form 499-A worksheet in 2001. It also contains an address and contact telephone number for each carrier.

State-level telephone revenues are estimated using data from various editions of *Telecommunications Industry Revenues, Statistics of Communications Common Carriers, Local Telephone Competition,* access filings to the FCC, and the *Statistical Abstract to the United*

[1] Carrier's carrier revenues and end-user revenues are defined in the FCC Form 499 instructions. Carrier's carrier revenues includes, for example, most access services that local exchange carriers provide to toll carriers. Sales to *de minimis* carriers and to others that are exempt from universal service contribution requirements, however, must be classified as end-user revenues. Note that filers contribute to universal service funding mechanism based on certain types of end-user revenues.

States.[2] Table 16.5 provides estimates of telecommunications revenues by state for 1995 to 2000. Table 16.6 provides estimates of end-user and carrier's carrier revenues by state for 2000. Table 16.7 provides estimates of telecommunications revenues for incumbent local exchange carriers, competitive local exchange carriers, and mobile wireless carriers by state; also for subscriber line charges, access, and toll services. Table 16.8 provides estimates of monthly end-user telecommunications revenues per USF loop for the year 2000.

[2] See Industry Analysis Division, Common Carrier Bureau, *State-by-State Telephone Revenues and Universal Service Data* (April 2001), and previous editions for discussion of the methodology. Estimates for 2000 use a similar methodology as those used in 1999.

# Table 16.1
## Telecommunications Industry Revenues: 2000 1/
## (Dollar Amounts Shown in Millions)

| | Carrier's Carrier Revenues 2/ | End-User Revenues 2/ | Total Revenues |
|---|---|---|---|
| Local Service 3/ | $36,621 | $84,526 | $121,147 |
| Wireless Service | 5,144 | 56,857 | 62,000 |
| Toll Service | 21,849 | 87,767 | 109,615 |
| Total | 63,613 | 229,149 | 292,762 |
| Service Reported as: | | | |
| Intrastate | 25,553 | 147,465 | 173,018 |
| Interstate and International 4/ | 38,060 | 81,685 | 119,745 |
| Total | $63,613 | $229,149 | $292,762 |

Note: Detail may not add to totals due to rounding.

1/ Data include revenues for *de minimis* filers as well as for other carriers that are exempt from universal service contribution requirements.

2/ Carrier's carrier revenues are reported on the Form 499-A as sales to other universal service contributors for resale. This includes, for example, access services that local exchange carriers provide to toll carriers. Sales to *de minimis* resellers, end-user customers, governments, non-profits, and any other non-contributors are treated as end-user revenues. Filers contribute to the universal service funding mechanisms based on their end-user revenues.

3/ Payphone revenues are included with local service revenues in this table.

4/ Revenues from calls that both originate and terminate in foreign points are reported as end-user revenues, but are not included in the universal service contribution base.

Source: Industry Analysis Division, Common Carrier Bureau, *Telecommunications Industry Revenues* (January 2002).

## Table 16.2
## Telecommunications Revenues Reported by Type of Service
## (Dollar Amounts Shown in Millions)

| | TRS Data | | | | | Universal Service & TRS Data | | Form 499-A Data | |
|---|---|---|---|---|---|---|---|---|---|
| **Telecommunications Revenues** | **1992** | **1993** | **1994** | **1995** | **1996** | **1997** | **1998** | **1999** | **2000** |
| Local Exchange | $39,235 | $40,176 | $42,245 | $45,194 | $48,717 | $53,771 | $59,245 | $62,840 | $67,747 |
| Pay Telephone 1/ | | | | | | 2,182 | 2,536 | 2,218 | 1,932 |
| Local Private Line 2/ | 1,049 | 1,088 | 1,138 | 1,226 | 1,616 | 8,282 | 10,403 | 12,914 | 16,864 |
| Other Local 3/ | 7,687 | 8,002 | 8,302 | 10,428 | 10,543 | 2,847 | 2,179 | 4,601 | 5,449 |
| Subscriber Line Charges 2/ | | | | | | 8,327 | 11,052 | 10,826 | 11,563 |
| Access 2/ | 29,353 | 30,832 | 32,759 | 33,911 | 35,641 | 21,423 | 18,449 | 18,105 | 17,017 |
| Universal Service Surcharges on Local Service Bills 4/ | | | | | | | 103 | 260 | 575 |
| Additional Revenues from TRS Worksheets | | | | | | 595 | 595 | | |
| Total Local Service Revenues | 77,324 | 80,098 | 84,443 | 90,759 | 96,516 | 97,426 | 104,563 | 111,764 | 121,147 |
| Wireless Service | 7,285 | 10,237 | 14,293 | 18,759 | 26,049 | 32,760 | 36,240 | 48,117 | 61,505 |
| Universal Service Surcharges on Local Service Bills 4/ | | | | | | | 345 | 379 | 495 |
| Additional Revenues from TRS Worksheets | | | | | | 189 | 189 | | |
| Total Wireless Service Revenues | 7,285 | 10,237 | 14,293 | 18,759 | 26,049 | 32,950 | 36,775 | 48,495 | 62,000 |
| Operator 1/ | 9,465 | 10,772 | 10,539 | 11,170 | 10,975 | 12,002 | 12,205 | 10,049 | 11,406 |
| Non-Operator Switched Toll | 54,448 | 60,591 | 61,468 | 65,217 | 73,751 | 72,059 | 74,168 | 78,389 | 75,183 |
| Long Distance Private Line | 7,783 | 8,067 | 9,043 | 9,719 | 10,665 | 10,504 | 11,952 | 13,169 | 16,189 |
| Other Long Distance | 4,048 | 3,095 | 3,428 | 3,523 | 4,299 | 4,695 | 3,386 | 3,656 | 3,372 |
| Universal Service Surcharges on Local Service Bills 4/ | | | | | | | 1,810 | 2,983 | 3,467 |
| Additional Revenues from TRS Worksheets | | | | | | 1,532 | 1,532 | | |
| Total Toll Service Revenues | 75,744 | 82,525 | 84,478 | 89,629 | 99,691 | 100,793 | 105,055 | 108,246 | 109,615 |
| Non-Telecommunications Revenues Formerly Reported as Other Local and Wireless Revenues 3/ | (6,944) | (7,518) | (8,324) | (9,071) | (10,474) | | | | |
| Total Telecommunications Revenues 3/ | 153,409 | 165,342 | 174,890 | 190,076 | 211,782 | 231,168 | 246,392 | 268,505 | 292,762 |
| Non-Telecommunications Revenues 3/ | 6,944 | 7,518 | 8,324 | 9,071 | 10,474 | 25,633 | 27,944 | 33,144 | 42,261 |
| Total Reported Revenues | 160,353 | 172,860 | 183,214 | 199,147 | 222,256 | 256,801 | 272,019 | 301,648 | 335,023 |
| Service Reported as: | | | | | | | | | |
| Intrastate 3/ | 82,379 | 89,409 | 94,278 | 103,852 | 117,375 | 133,654 | 142,108 | 157,212 | 173,018 |
| Interstate and International | 71,030 | 75,933 | 80,611 | 86,224 | 94,407 | 97,514 | 104,284 | 111,293 | 119,745 |
| Total Telecommunications Revenues 3/ | $153,409 | $165,342 | $174,890 | $190,076 | $211,782 | $231,168 | $246,392 | $268,505 | $292,762 |

Note: Detail may not add to totals due to rounding.

1/ TRS filers generally reported pay telephone revenues as local service revenues, access revenues or operator toll revenues. The Universal Service and FCC Form 499-A worksheets contain a separate category for payphone coin revenues. Starting in 1997, payphone revenues include payphone compensation received from toll . carriers.

2/ TRS Worksheet filers generally reported special access revenues as access revenues. Reporting changes implemented with the Universal Service Worksheet explain the increase in local private line revenues and the fall in access revenues shown for 1997. TRS Worksheet filers included subscriber line charges with other access charges. Universal Service Worksheet filers report subscriber line charges in a separate category. The increase from 1997 to 1998 represents PICC charges levied by ILECs as well as $1.2 billion of PICC pass-through charges levied by toll carriers.

3/ Significant amounts of enhanced services, billing and collection, CPE and other non-telecommunications revenues were 'reported in the TRS mobile and other local service categories through 1996. Universal Service Worksheet filers report these revenues in the non-telecommunications category. For prior years, the amounts of non-telecommunications revenues reported as mobile and other local revenues were estimated as 70% of the amounts that Tier 1 ILECs reported in ARMIS as miscellaneous and nonregulated revenues (currently account 5200 + account 5280) and 10% of amounts reported as mobile service revenue.

4/ Charges on end-user bills identified as recovering state or federal universal service contributions are reported separately from local, wireless and toll revenues. Reported amounts are apportioned between local, wireless and toll service based on the proportions of local, wireless and toll intrastate and interstate revenues by type of carrier.

Source: Industry Analysis Division, Common Carrier Bureau, *Telecommunications Industry Revenues* (January 2002).

# Table 16.3
## Number of Interstate Telecommunications Providers
### By Principal Type of Business

| Service Provider Category 1/ | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 2/ | Prel. 2001 2/ |
|---|---|---|---|---|---|---|---|---|---|---|
| Incumbent Local Exchange Carriers (ILECs) 3/ | | 1,281 | 1,347 | 1,347 | 1,376 | 1,410 | 1,348 | 1,335 | 1,327 | 1,329 |
| Competitive Access Providers (CAPs) and Competitive Local Exchange Carriers (CLECs) | | 20 | 30 | 57 | 94 | 129 | 212 | 349 | 485 | 532 |
| Local Resellers | | | | | 8 | 11 | 54 | 87 | 82 | 134 |
| Other Local Exchange Carriers | | | | | 17 | 7 | 10 | 60 | 40 | 59 |
| Total: Competitors of ILECs | | 20 | 30 | 57 | 119 | 147 | 276 | 496 | 607 | 725 |
| Total: Fixed Local Service Providers | | 1,301 | 1,377 | 1,404 | 1,495 | 1,557 | 1,624 | 1,831 | 1,934 | 2,054 |
| Payphone Providers | | 163 | 197 | 271 | 533 | 509 | 615 | 758 | 683 | 936 |
| Wireless Telephony Including Cellular, Personal Communications Service (PCS) and SMR Telephony Carriers | | 798 | 790 | 792 | 853 | 732 | 808 | 806 | 810 | 858 |
| Paging & Messaging Service | | 126 | 117 | 138 | 200 | 137 | 303 | 427 | 418 | 576 |
| Specialized Mobile Radio (SMR) Dispatch | | | | | 163 | 99 | 119 | 212 | 195 | 289 |
| Wireless Data Service Providers | | | | | 1 | 1 | 5 | 6 | 6 | 6 |
| Other Mobile Service Providers | | | | | | | 23 | 44 | 22 | 32 |
| Total: Wireless Service Providers | | 924 | 907 | 930 | 1,217 | 969 | 1,235 | 1,495 | 1,451 | 1,761 |
| Interexchange Carriers (IXCs) | | 83 | 97 | 130 | 149 | 151 | 171 | 204 | 202 | 229 |
| Operator Service Providers (OSPs) | | 35 | 29 | 25 | 27 | 32 | 24 | 21 | 21 | 22 |
| Prepaid Calling Card Providers | | | | 8 | 16 | 18 | 20 | 21 | 24 | 32 |
| Satellite Service Carriers | | | | | 22 | 13 | 13 | 21 | 24 | 31 |
| Toll Resellers | | 171 | 206 | 260 | 345 | 340 | 388 | 454 | 482 | 576 |
| Other Toll Carriers | | 32 | 34 | 30 | 28 | 15 | 31 | 17 | 29 | 38 |
| Total: Toll Service Providers | | 321 | 366 | 453 | 587 | 569 | 647 | 738 | 782 | 928 |
| All Filers | 2,558 | 2,709 | 2,847 | 3,058 | 3,832 | 3,604 | 4,121 | 4,822 | 4,850 | 5,679 |

1/ Starting in 1993, filers have been asked to select for themselves a service provider category that best describes their operations. The choices have changed over the years; for example, most satellite service providers identified themselves as other toll carriers in their 1997 TRS worksheets because there was no separate category for satellite service providers.

2/ Counts through 2000 are based on the numbers of carriers actually reporting revenues. Counts for 2001 include all filers who reported revenues for 2000 as well as new carriers that filed through September 2001. The 2001 figures may double count some firms that have been bought, sold or merged during 2001.

3/ Fewer incumbent local exchange carriers filed in 1998 than in 1997 because of consolidation of study areas.

Source: Industry Analysis Division, Common Carrier Bureau, *Telecommunications Provider Locator* (Novermber 2001 and earlier editions) and FCC Form 499-A filings for new carriers.

## Table 16.4
## Gross Revenues Reported by Type of Carrier
### (Dollars Shown in Millions)

| | TRS Worksheet Data | | | | | Universal Service & TRS Data | | Form 499 Data | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Service Provider Category 1/ | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | Preliminary 2001 |
| Incumbent Local Exchange Carriers 2/ | $91,584 | $95,228 | $98,431 | $102,820 | $107,905 | $105,154 | $108,234 | $112,216 | $116,158 | $118,791 |
| Competitive Access Providers (CAPs) and Competitive Local Exchange Carriers (CLECs) | 69 | 191 | 281 | 623 | 1,011 | 1,919 | 3,348 | 5,652 | 9,814 | 11,123 |
| Local Resellers | | | | | | 206 | 410 | 511 | 879 | 1,242 |
| Other Local Exchange Carriers | | | | | | 157 | 36 | 171 | 11 | 291 |
| Private Carriers | | | | | | 112 | 147 | 87 | 39 | 211 |
| Shared-Tenant Service Providers | | | | | | 87 | 93 | 87 | 202 | 36 |
| Total: Competitors of ILECs | 69 | 191 | 281 | 623 | 1,011 | 2,481 | 4,034 | 6,508 | 10,945 | 12,903 |
| Total: Fixed Local Service Providers | 91,835 | 95,595 | 99,011 | 103,792 | 109,273 | 107,634 | 112,268 | 118,725 | 127,103 | 131,694 |
| Total: Payphone Providers | 183 | 175 | 300 | 349 | 357 | 933 | 1,101 | 1,213 | 972 | 926 |
| Wireless Telephony Including Cellular, Personal Communications Service (PCS) and SMR Telephony Carriers 2/ | 6,718 | 9,215 | 13,259 | 17,208 | 23,778 | 29,944 | 33,139 | 46,513 | 59,823 | 72,802 |
| Paging & Messaging Service 2/ | | | | | | 2,861 | 3,161 | 3,232 | 3,102 | 3,254 |
| Specialized Mobile Radio (SMR) Dispatch | | | | | | | | 186 | 191 | 221 |
| Wireless Data Service Providers | | | | | | | | 63 | 36 | 57 |
| Other Mobile Service Providers | 670 | 964 | 938 | 1,419 | 2,121 | 225 | 731 | 159 | 128 | 140 |
| Total: Wireless Service Providers | 7,387 | 10,179 | 14,197 | 18,627 | 25,900 | 33,030 | 37,032 | 50,152 | 63,280 | 76,474 |
| Interexchange Carriers (IXCs) | 57,341 | 61,118 | 66,381 | 70,938 | 79,057 | 79,080 | 83,443 | 87,570 | 87,311 | 79,564 |
| Operator Service Providers (OSPs) | 558 | 695 | 536 | 500 | 461 | 603 | 590 | 337 | 635 | 407 |
| Prepaid Calling Card Providers | | | | 16 | 238 | 519 | 888 | 866 | 727 | 154 |
| Satellite Service Carriers | | | | | | 1,011 | 475 | 280 | 336 | 404 |
| Toll Resellers | 1,293 | 1,869 | 2,840 | 4,220 | 6,564 | 8,010 | 9,885 | 9,211 | 10,641 | 11,081 |
| Other Toll Carriers | 2,186 | 711 | 709 | 773 | 577 | 348 | 710 | 150 | 1,758 | 2,084 |
| Total: Toll Service Providers | 61,378 | 64,393 | 70,466 | 76,447 | 86,896 | 89,570 | 95,992 | 98,414 | 101,407 | 93,695 |
| Non-Telecommunications Revenues in Prior-Year Data 2/ | (6,944) | (7,518) | (8,324) | (9,071) | (10,474) | | | | | |
| Other Adjustments 3/ | (248) | 2,693 | (461) | 280 | 187 | 0 | 0 | 0 | 0 | 0 |
| Total Telecommunications Revenues | $153,409 | $165,342 | $174,890 | $190,076 | $211,782 | $231,168 | $246,392 | $268,505 | $292,762 | $302,789 |

1/ Filers are asked to select for themselves a service provider category that best describes their operations. The choices have changed over the years. For example, most satellite service providers identified themselves as other toll carriers in their 1997 Form 431 TRS worksheets because there were no separate category for satellite service providers.

2/ Significant amounts of enhanced service, billing and collection, CPE and other non-telecommunications revenues were reported on TRS worksheets by incumbent local exchange carriers (ILECs) and wireless carriers through 1996. Universal Service Worksheet filers report these revenues in the non-telecommunications category. For prior years, the amounts of non-telecommunications revenues reported as mobile and other local revenues were estimated as 70% of the amounts that Tier 1 ILECs reported in ARMIS as miscellaneous and nonregulated revenues (currently account 5200 + account 5280) and 10% of amounts reported as mobile service revenues.

3/ Other adjustments include some amounts withheld to preserve confidentiality and revisions made after the initial publication of the data.

Source: Industry Analysis Division, Common Carrier Bureau, *Telecommunications Industry Revenues* (January 2002). 2001 figures are preliminary and are based on FCC Form 499-Q filings.

## Table 16.5
## Total Telecommunications Revenues by State
## (Dollar Amounts Shown in Millions)

| | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | Percent Change 1995-2000 |
|---|---|---|---|---|---|---|---|
| Alabama | $2,668 | $2,946 | $3,205 | $3,394 | $3,712 | $4,008 | 50.2 % |
| Alaska | 464 | 518 | 561 | 590 | 664 | 717 | 54.5 |
| Arizona | 2,842 | 3,249 | 3,667 | 3,958 | 4,359 | 4,972 | 74.9 |
| Arkansas | 1,534 | 1,719 | 1,885 | 2,005 | 2,303 | 2,315 | 51.0 |
| California | 22,379 | 25,100 | 27,236 | 28,692 | 29,384 | 33,577 | 50.0 |
| Colorado | 3,128 | 3,526 | 4,006 | 4,260 | 4,826 | 5,290 | 69.1 |
| Connecticut | 2,765 | 2,943 | 3,266 | 3,173 | 3,405 | 3,924 | 41.9 |
| Delaware | 492 | 567 | 627 | 685 | 788 | 875 | 77.8 |
| District of Columbia | 886 | 955 | 1,049 | 1,085 | 1,581 | 1,648 | 85.9 |
| Florida | 11,582 | 12,972 | 14,161 | 15,042 | 17,223 | 18,308 | 58.1 |
| Georgia | 5,335 | 6,004 | 6,849 | 7,469 | 8,479 | 8,919 | 67.2 |
| Guam | NA | 85 | 97 | 103 | 99 | 108 | NA |
| Hawaii | 775 | 841 | 930 | 969 | 1,009 | 1,177 | 51.9 |
| Idaho | 791 | 908 | 967 | 1,010 | 1,092 | 1,210 | 52.9 |
| Illinois | 7,916 | 8,920 | 10,069 | 10,948 | 11,983 | 13,516 | 70.7 |
| Indiana | 3,804 | 4,192 | 4,536 | 4,810 | 5,099 | 5,552 | 45.9 |
| Iowa | 1,888 | 2,039 | 2,163 | 2,268 | 2,441 | 2,340 | 23.9 |
| Kansas | 1,829 | 2,017 | 2,165 | 2,304 | 2,588 | 2,571 | 40.5 |
| Kentucky | 2,353 | 2,629 | 2,861 | 3,060 | 3,426 | 3,573 | 51.9 |
| Louisiana | 2,703 | 2,946 | 3,192 | 3,432 | 3,913 | 3,964 | 46.6 |
| Maine | 869 | 976 | 996 | 1,105 | 1,195 | 1,328 | 52.9 |
| Maryland | 3,767 | 4,234 | 4,625 | 4,911 | 5,176 | 5,783 | 53.5 |
| Massachusetts | 4,988 | 5,455 | 6,010 | 6,338 | 6,561 | 7,428 | 48.9 |
| Michigan | 6,444 | 7,246 | 7,983 | 8,523 | 9,530 | 9,937 | 54.2 |
| Minnesota | 3,064 | 3,461 | 3,864 | 4,115 | 4,617 | 4,877 | 59.1 |
| Mississippi | 1,584 | 1,734 | 1,877 | 2,017 | 2,283 | 2,486 | 56.9 |
| Missouri | 3,623 | 4,017 | 4,389 | 4,613 | 5,442 | 5,688 | 57.0 |
| Montana | 640 | 709 | 756 | 780 | 897 | 937 | 46.3 |
| Nebraska | 1,296 | 1,428 | 1,540 | 1,587 | 1,737 | 1,760 | 35.8 |
| Nevada | 1,099 | 1,324 | 1,489 | 1,592 | 1,884 | 1,954 | 77.8 |
| New Hampshire | 989 | 1,118 | 1,208 | 1,246 | 1,313 | 1,429 | 44.4 |
| New Jersey | 7,091 | 7,927 | 8,707 | 9,366 | 9,558 | 10,670 | 50.5 |
| New Mexico | 1,121 | 1,262 | 1,370 | 1,433 | 1,518 | 1,515 | 35.2 |
| New York | 14,983 | 16,026 | 17,120 | 17,935 | 19,700 | 20,903 | 39.5 |
| North Carolina | 5,394 | 6,104 | 6,613 | 7,297 | 8,006 | 8,619 | 59.8 |
| North Dakota | 481 | 587 | 596 | 599 | 660 | 731 | 51.8 |
| Northern Mariana Ils. | 15 | 18 | 21 | 30 | 34 | 32 | 116.6 |
| Ohio | 7,457 | 8,219 | 8,823 | 9,396 | 9,952 | 10,902 | 46.2 |
| Oklahoma | 1,996 | 2,179 | 2,410 | 2,552 | 2,727 | 2,915 | 46.0 |
| Oregon | 2,238 | 2,502 | 2,720 | 2,905 | 3,123 | 3,159 | 41.1 |
| Pennsylvania | 7,961 | 8,867 | 9,588 | 10,309 | 10,770 | 12,200 | 53.3 |
| Puerto Rico | 1,244 | 1,405 | 1,606 | 1,467 | 2,051 | 1,971 | 58.4 |
| Rhode Island | 686 | 761 | 839 | 859 | 946 | 1,012 | 47.6 |
| South Carolina | 2,653 | 2,849 | 3,053 | 3,393 | 3,790 | 4,047 | 52.6 |
| South Dakota | 488 | 584 | 602 | 635 | 716 | 763 | 56.3 |
| Tennessee | 3,467 | 3,880 | 4,302 | 4,553 | 4,928 | 5,256 | 51.6 |
| Texas | 12,871 | 14,563 | 15,943 | 17,576 | 19,032 | 21,405 | 66.3 |
| Utah | 1,112 | 1,284 | 1,443 | 1,557 | 1,790 | 1,998 | 79.7 |
| Vermont | 424 | 547 | 575 | 602 | 684 | 717 | 69.0 |
| Virgin Islands | 74 | 93 | 101 | 109 | 122 | 129 | 75.5 |
| Virginia | 5,061 | 5,646 | 6,179 | 6,576 | 7,020 | 8,013 | 58.3 |
| Washington | 3,995 | 4,438 | 4,613 | 5,080 | 5,703 | 6,253 | 56.5 |
| West Virginia | 1,143 | 1,240 | 1,337 | 1,383 | 1,437 | 1,625 | 42.2 |
| Wisconsin | 3,258 | 3,621 | 3,927 | 4,234 | 4,719 | 5,195 | 59.5 |
| Wyoming | 366 | 402 | 449 | 462 | 513 | 563 | 53.7 |
| Total | $190,076 | $211,782 | $231,168 | $246,392 | $268,505 | $292,762 | 54.0 % |

NA - Not available.

Note: Figures may not add to totals due to rounding.

Source: Industry Analysis Division, Common Carrier Bureau, *State-by-State Telephone Revenues and Universal Service Data* (April 2001 and previous editions). Estimates for 2000 use a methodology that is similar to that used in 1999.

## Table 16.6
## Telecommunications Revenues by State: 2000
## (Dollar Amounts Shown in Millions)

| | End User | | | Carrier's Carrier | | | Total: End User + Carrier's Carrier | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Interstate | Intrastate | Total | Interstate | Intrastate | Total | Interstate | Intrastate | Total | Percent of Total |
| Alabama | $1,083 | $2,125 | $3,208 | $510 | $290 | $800 | $1,593 | $2,415 | $4,008 | 1.37 % |
| Alaska | 203 | 357 | 560 | 95 | 62 | 157 | 298 | 419 | 717 | 0.24 |
| Arizona | 1,665 | 2,231 | 3,896 | 699 | 377 | 1,075 | 2,364 | 2,608 | 4,972 | 1.70 |
| Arkansas | 648 | 1,165 | 1,812 | 312 | 191 | 503 | 960 | 1,356 | 2,315 | 0.79 |
| California | 7,932 | 18,337 | 26,269 | 3,724 | 3,584 | 7,308 | 11,656 | 21,921 | 33,577 | 11.47 |
| Colorado | 1,634 | 2,529 | 4,163 | 744 | 383 | 1,127 | 2,378 | 2,912 | 5,290 | 1.81 |
| Connecticut | 1,280 | 1,827 | 3,107 | 596 | 221 | 818 | 1,876 | 2,048 | 3,924 | 1.34 |
| Delaware | 318 | 389 | 708 | 120 | 47 | 167 | 439 | 436 | 875 | 0.30 |
| District of Columbia | 460 | 847 | 1,307 | 250 | 91 | 340 | 710 | 938 | 1,648 | 0.56 |
| Florida | 5,450 | 8,809 | 14,259 | 2,384 | 1,665 | 4,049 | 7,834 | 10,474 | 18,308 | 6.25 |
| Georgia | 2,650 | 4,393 | 7,043 | 1,269 | 607 | 1,876 | 3,919 | 5,000 | 8,919 | 3.05 |
| Guam | 27 | 58 | 85 | 13 | 10 | 23 | 40 | 68 | 108 | 0.04 |
| Hawaii | 327 | 603 | 930 | 149 | 98 | 247 | 476 | 701 | 1,177 | 0.40 |
| Idaho | 422 | 498 | 920 | 206 | 84 | 290 | 627 | 582 | 1,210 | 0.41 |
| Illinois | 3,614 | 7,223 | 10,837 | 1,607 | 1,071 | 2,679 | 5,221 | 8,294 | 13,516 | 4.62 |
| Indiana | 1,513 | 2,806 | 4,318 | 704 | 530 | 1,233 | 2,216 | 3,336 | 5,552 | 1.90 |
| Iowa | 726 | 1,094 | 1,820 | 321 | 199 | 520 | 1,046 | 1,293 | 2,340 | 0.80 |
| Kansas | 771 | 1,229 | 2,001 | 370 | 200 | 570 | 1,142 | 1,429 | 2,571 | 0.88 |
| Kentucky | 1,009 | 1,766 | 2,775 | 484 | 315 | 798 | 1,493 | 2,081 | 3,573 | 1.22 |
| Louisiana | 1,077 | 2,118 | 3,196 | 467 | 301 | 768 | 1,545 | 2,419 | 3,964 | 1.35 |
| Maine | 383 | 650 | 1,033 | 195 | 99 | 295 | 579 | 749 | 1,328 | 0.45 |
| Maryland | 1,846 | 2,763 | 4,609 | 764 | 410 | 1,173 | 2,610 | 3,173 | 5,783 | 1.98 |
| Massachusetts | 2,240 | 3,646 | 5,887 | 1,035 | 507 | 1,542 | 3,275 | 4,153 | 7,428 | 2.54 |
| Michigan | 2,319 | 5,609 | 7,928 | 1,079 | 930 | 2,009 | 3,398 | 6,539 | 9,937 | 3.39 |
| Minnesota | 1,432 | 2,354 | 3,786 | 680 | 412 | 1,091 | 2,112 | 2,765 | 4,877 | 1.67 |
| Mississippi | 680 | 1,347 | 2,028 | 305 | 153 | 458 | 986 | 1,500 | 2,486 | 0.85 |
| Missouri | 1,554 | 2,758 | 4,312 | 773 | 603 | 1,376 | 2,327 | 3,361 | 5,688 | 1.94 |
| Montana | 300 | 418 | 718 | 137 | 82 | 219 | 437 | 500 | 937 | 0.32 |
| Nebraska | 484 | 890 | 1,374 | 237 | 149 | 386 | 721 | 1,039 | 1,760 | 0.60 |
| Nevada | 762 | 786 | 1,548 | 305 | 102 | 407 | 1,066 | 888 | 1,954 | 0.67 |
| New Hampshire | 511 | 596 | 1,107 | 236 | 86 | 322 | 747 | 682 | 1,429 | 0.49 |
| New Jersey | 3,422 | 4,965 | 8,387 | 1,455 | 828 | 2,283 | 4,877 | 5,793 | 10,670 | 3.64 |
| New Mexico | 514 | 651 | 1,165 | 223 | 126 | 350 | 737 | 778 | 1,515 | 0.52 |
| New York | 5,618 | 10,615 | 16,234 | 2,870 | 1,799 | 4,669 | 8,489 | 12,414 | 20,903 | 7.14 |
| North Carolina | 2,372 | 4,339 | 6,712 | 1,050 | 858 | 1,908 | 3,422 | 5,197 | 8,619 | 2.94 |
| North Dakota | 227 | 321 | 548 | 117 | 65 | 182 | 344 | 387 | 731 | 0.25 |
| Northern Mariana Islands | 9 | 16 | 25 | 4 | 3 | 7 | 13 | 19 | 32 | 0.01 |
| Ohio | 2,776 | 5,778 | 8,554 | 1,319 | 1,029 | 2,348 | 4,095 | 6,807 | 10,902 | 3.72 |
| Oklahoma | 859 | 1,462 | 2,321 | 399 | 195 | 594 | 1,259 | 1,657 | 2,915 | 1.00 |
| Oregon | 1,060 | 1,352 | 2,412 | 483 | 264 | 747 | 1,543 | 1,616 | 3,159 | 1.08 |
| Pennsylvania | 3,411 | 6,065 | 9,476 | 1,499 | 1,225 | 2,724 | 4,909 | 7,291 | 12,200 | 4.17 |
| Puerto Rico | 414 | 1,069 | 1,483 | 303 | 184 | 488 | 717 | 1,254 | 1,971 | 0.67 |
| Rhode Island | 351 | 461 | 811 | 146 | 54 | 200 | 497 | 515 | 1,012 | 0.35 |
| South Carolina | 1,141 | 2,054 | 3,195 | 517 | 335 | 852 | 1,658 | 2,389 | 4,047 | 1.38 |
| South Dakota | 239 | 341 | 580 | 115 | 68 | 183 | 354 | 409 | 763 | 0.26 |
| Tennessee | 1,521 | 2,719 | 4,240 | 677 | 339 | 1,016 | 2,199 | 3,058 | 5,256 | 1.80 |
| Texas | 5,265 | 11,245 | 16,510 | 2,742 | 2,153 | 4,895 | 8,007 | 13,398 | 21,405 | 7.31 |
| Utah | 626 | 939 | 1,566 | 288 | 144 | 432 | 914 | 1,084 | 1,998 | 0.68 |
| Vermont | 229 | 330 | 559 | 108 | 50 | 158 | 337 | 379 | 717 | 0.24 |
| Virgin Islands | 45 | 53 | 99 | 21 | 9 | 30 | 67 | 63 | 129 | 0.04 |
| Virginia | 2,468 | 3,667 | 6,135 | 1,118 | 760 | 1,878 | 3,586 | 4,427 | 8,013 | 2.74 |
| Washington | 1,813 | 2,989 | 4,802 | 862 | 589 | 1,452 | 2,675 | 3,578 | 6,253 | 2.14 |
| West Virginia | 475 | 767 | 1,242 | 244 | 139 | 383 | 718 | 907 | 1,625 | 0.56 |
| Wisconsin | 1,321 | 2,791 | 4,112 | 634 | 449 | 1,084 | 1,955 | 3,240 | 5,195 | 1.77 |
| Wyoming | 189 | 246 | 435 | 93 | 34 | 127 | 282 | 280 | 563 | 0.19 |
| Total | $81,684 | $147,463 | $229,147 | $38,062 | $25,555 | $63,616 | $119,745 | $173,018 | $292,762 | 100.00 % |

Note: Figures may not add to totals due to rounding.

Source: Estimates for 2000 use a methodology that is similar to that used in 1999. See also: Industry Analysis Division, Common Carrier Bureau *State-by-State Telephone Revenues and Universal Service Data* (April 2001).

## Table 16.7
## Telecommunications Revenues by Type of Service
## (Dollar Amounts Shown in Millions)

| | ILECs 1/ | CLECs | Mobile Wireless | SLCs | Access | Toll | Total |
|---|---|---|---|---|---|---|---|
| Alabama | $1,344 | $77 | $848 | $163 | $291 | $1,285 | $4,008 |
| Alaska | NA | NA | NA | NA | NA | NA | 717 |
| Arizona | 1,221 | 121 | 1,134 | 224 | 419 | 1,852 | 4,972 |
| Arkansas | 649 | 49 | 455 | 85 | 217 | 861 | 2,315 |
| California | 7,399 | 1,099 | 7,772 | 1,200 | 3,149 | 12,958 | 33,577 |
| Colorado | 1,510 | 210 | 1,135 | 228 | 425 | 1,781 | 5,290 |
| Connecticut | 956 | 113 | 781 | 151 | 317 | 1,606 | 3,924 |
| Delaware | 197 | 20 | 227 | 37 | 46 | 349 | 875 |
| District of Columbia | 419 | 70 | 568 | 42 | 140 | 409 | 1,648 |
| Florida | 4,585 | 527 | 3,895 | 785 | 1,659 | 6,857 | 18,308 |
| Georgia | 2,802 | 339 | 1,684 | 341 | 684 | 3,068 | 8,919 |
| Guam | NA | NA | NA | NA | NA | NA | 108 |
| Hawaii | 316 | 28 | 321 | 52 | 103 | 356 | 1,177 |
| Idaho | 301 | 25 | 211 | 56 | 136 | 481 | 1,210 |
| Illinois | 3,630 | 589 | 3,145 | 457 | 866 | 4,829 | 13,516 |
| Indiana | 1,437 | 141 | 1,049 | 225 | 527 | 2,174 | 5,552 |
| Iowa | 518 | 120 | 509 | 105 | 205 | 882 | 2,340 |
| Kansas | 697 | 78 | 490 | 100 | 238 | 967 | 2,571 |
| Kentucky | 1,095 | 41 | 628 | 149 | 352 | 1,308 | 3,573 |
| Louisiana | 1,385 | 51 | 799 | 174 | 258 | 1,297 | 3,964 |
| Maine | 315 | 27 | 220 | 50 | 138 | 577 | 1,328 |
| Maryland | 1,560 | 117 | 1,212 | 247 | 395 | 2,251 | 5,783 |
| Massachusetts | 1,657 | 374 | 1,620 | 300 | 567 | 2,910 | 7,428 |
| Michigan | 2,343 | 269 | 2,172 | 365 | 818 | 3,971 | 9,937 |
| Minnesota | 1,236 | 211 | 1,132 | 209 | 462 | 1,627 | 4,877 |
| Mississippi | 925 | 47 | 481 | 96 | 135 | 803 | 2,486 |
| Missouri | 1,517 | 149 | 1,081 | 216 | 678 | 2,047 | 5,688 |
| Montana | 228 | 17 | 173 | 38 | 99 | 381 | 937 |
| Nebraska | 511 | 39 | 403 | 63 | 168 | 576 | 1,760 |
| Nevada | 444 | 47 | 419 | 85 | 131 | 829 | 1,954 |
| New Hampshire | 302 | 38 | 237 | 54 | 132 | 666 | 1,429 |
| New Jersey | 1,988 | 237 | 2,186 | 442 | 910 | 4,906 | 10,670 |
| New Mexico | 380 | 33 | 271 | 69 | 151 | 611 | 1,515 |
| New York | 6,219 | 2,032 | 3,619 | 766 | 1,634 | 6,633 | 20,903 |
| North Carolina | 2,295 | 169 | 1,899 | 340 | 817 | 3,099 | 8,619 |
| North Dakota | 176 | 13 | 131 | 26 | 92 | 294 | 731 |
| Northern Mariana Islands | NA | NA | NA | NA | NA | NA | 32 |
| Ohio | 2,813 | 226 | 2,538 | 402 | 996 | 3,928 | 10,902 |
| Oklahoma | 793 | 75 | 687 | 117 | 226 | 1,017 | 2,915 |
| Oregon | 560 | 73 | 735 | 155 | 358 | 1,278 | 3,159 |
| Pennsylvania | 2,712 | 639 | 2,525 | 518 | 1,104 | 4,703 | 12,200 |
| Puerto Rico | 562 | 32 | 463 | 63 | 306 | 545 | 1,971 |
| Rhode Island | 236 | 25 | 218 | 41 | 64 | 428 | 1,012 |
| South Carolina | 1,209 | 65 | 852 | 153 | 338 | 1,430 | 4,047 |
| South Dakota | 165 | 16 | 162 | 29 | 90 | 301 | 763 |
| Tennessee | 1,654 | 164 | 1,214 | 221 | 327 | 1,677 | 5,256 |
| Texas | 5,965 | 1,294 | 4,616 | 735 | 2,104 | 6,691 | 21,405 |
| Utah | 492 | 95 | 459 | 89 | 170 | 692 | 1,998 |
| Vermont | 186 | 13 | 136 | 26 | 66 | 290 | 717 |
| Virgin Islands | NA | NA | NA | NA | NA | NA | 129 |
| Virginia | 1,917 | 247 | 1,498 | 315 | 812 | 3,224 | 8,013 |
| Washington | 1,407 | 176 | 1,398 | 264 | 684 | 2,324 | 6,253 |
| West Virginia | 506 | 33 | 240 | 66 | 180 | 601 | 1,625 |
| Wisconsin | 1,403 | 204 | 1,039 | 188 | 410 | 1,952 | 5,195 |
| Wyoming | 155 | 11 | 101 | 24 | 55 | 216 | 563 |
| Total | $75,540 | $10,945 | $61,991 | $11,384 | $25,736 | $107,165 | $292,763 |

NA - Not applicable.

Note: Figures may not add to totals due to rounding.

1/ Excludes subscriber line charges.

2/ Totals in the first six columns include revenues for locations not estimated.

Source: Estimates for 2000 use a methodology that is similar to that used in 1999. See also: Industry Analysis Division, Common Carrier Bureau, *State-by-State Telephone Revenues and Universal Service Data* (April 2001).

## Table 16.8
## Monthly End-User Telecommunications Revenues per USF Loop: 2000

| | ILECs | SLCs | Intrastate Toll | Interstate Toll | CLECs | Other Wireline | Total Wireline | Mobile Wireless | All Revenues |
|---|---|---|---|---|---|---|---|---|---|
| Alabama | $38.27 | $5.35 | $8.26 | $25.31 | $1.62 | $1.01 | $79.82 | $25.53 | $105.35 |
| Alaska | NA | NA | NA | NA | NA | NA | NA | NA | 102.37 |
| Arizona | 28.10 | 5.96 | 5.72 | 32.95 | 2.07 | 1.03 | 75.83 | 27.62 | 103.45 |
| Arkansas | 30.29 | 4.58 | 11.79 | 25.71 | 1.68 | 1.08 | 75.12 | 22.46 | 97.59 |
| California | 22.48 | 4.21 | 18.39 | 18.69 | 2.47 | 0.85 | 67.09 | 24.98 | 92.06 |
| Colorado | 36.31 | 6.33 | 6.24 | 32.75 | 3.75 | 1.22 | 86.59 | 28.86 | 115.45 |
| Connecticut | 27.04 | 4.94 | 10.68 | 31.79 | 2.37 | 1.22 | 78.05 | 23.38 | 101.43 |
| Delaware | 23.71 | 5.13 | 4.05 | 34.10 | 1.78 | 0.75 | 69.51 | 28.95 | 98.46 |
| District of Columbia | 32.72 | 3.80 | 0.03 | 28.63 | 4.03 | 1.67 | 70.89 | 46.95 | 117.84 |
| Florida | 28.84 | 5.70 | 10.89 | 28.65 | 2.46 | 1.00 | 77.54 | 25.92 | 103.46 |
| Georgia | 38.30 | 5.38 | 7.52 | 30.85 | 3.44 | 1.21 | 86.70 | 24.35 | 111.05 |
| Guam | NA | NA | NA | NA | NA | NA | NA | NA | 95.40 |
| Hawaii | 31.58 | 6.00 | 7.01 | 25.47 | 2.11 | 1.10 | 73.26 | 33.86 | 107.13 |
| Idaho | 28.26 | 6.03 | 6.33 | 34.74 | 1.76 | 1.54 | 78.65 | 20.91 | 99.56 |
| Illinois | 31.93 | 4.64 | 13.34 | 26.08 | 3.84 | 0.88 | 80.71 | 29.27 | 109.98 |
| Indiana | 27.97 | 5.04 | 14.91 | 24.44 | 2.03 | 0.99 | 75.38 | 21.60 | 96.98 |
| Iowa | 21.66 | 5.05 | 9.02 | 24.86 | 3.73 | 0.91 | 65.22 | 22.49 | 87.71 |
| Kansas | 29.05 | 4.81 | 9.67 | 27.50 | 2.42 | 1.14 | 74.60 | 21.61 | 96.21 |
| Kentucky | 35.54 | 5.59 | 11.21 | 27.84 | 1.00 | 1.17 | 82.34 | 21.55 | 103.89 |
| Louisiana | 38.28 | 5.55 | 8.31 | 24.58 | 1.04 | 0.79 | 78.56 | 23.37 | 101.93 |
| Maine | 26.06 | 4.81 | 18.10 | 27.34 | 1.65 | 1.33 | 79.29 | 19.24 | 98.53 |
| Maryland | 28.66 | 5.23 | 8.34 | 29.45 | 1.60 | 0.84 | 74.12 | 23.56 | 97.68 |
| Massachusetts | 26.42 | 5.51 | 13.90 | 29.50 | 4.42 | 1.18 | 80.94 | 27.32 | 108.25 |
| Michigan | 26.12 | 4.70 | 22.25 | 20.19 | 2.22 | 0.89 | 76.36 | 25.62 | 101.98 |
| Minnesota | 27.87 | 5.43 | 7.50 | 26.00 | 3.53 | 1.15 | 71.49 | 27.01 | 98.50 |
| Mississippi | 45.98 | 5.48 | 8.19 | 28.68 | 1.72 | 0.91 | 90.96 | 25.29 | 116.25 |
| Missouri | 29.66 | 4.86 | 11.67 | 25.34 | 2.16 | 1.18 | 74.88 | 22.34 | 97.22 |
| Montana | 29.41 | 5.72 | 11.19 | 34.00 | 1.63 | 1.29 | 83.23 | 23.69 | 106.92 |
| Nebraska | 36.35 | 5.16 | 8.95 | 28.65 | 2.08 | 1.28 | 82.46 | 30.35 | 112.81 |
| Nevada | 24.01 | 5.27 | 2.90 | 37.51 | 1.90 | 0.94 | 72.55 | 23.93 | 96.48 |
| New Hampshire | 25.38 | 5.20 | 12.47 | 39.30 | 2.38 | 1.43 | 86.16 | 21.03 | 107.19 |
| New Jersey | 20.73 | 5.31 | 16.77 | 31.09 | 1.83 | 1.03 | 76.77 | 24.12 | 100.89 |
| New Mexico | 27.22 | 5.68 | 7.56 | 32.41 | 1.76 | 1.07 | 75.68 | 20.53 | 96.20 |
| New York | 33.96 | 4.83 | 9.24 | 24.03 | 8.22 | 1.07 | 81.35 | 20.90 | 102.25 |
| North Carolina | 31.80 | 5.44 | 12.19 | 27.29 | 1.74 | 0.98 | 79.45 | 27.84 | 107.28 |
| North Dakota | 31.92 | 5.40 | 12.41 | 36.52 | 1.73 | 1.78 | 89.75 | 25.22 | 114.97 |
| N. Mariana Islands | NA | NA | NA | NA | NA | NA | NA | NA | 99.71 |
| Ohio | 29.02 | 4.78 | 14.50 | 23.05 | 1.73 | 1.03 | 74.11 | 27.70 | 4.00 |
| Oklahoma | 27.15 | 4.60 | 7.66 | 24.47 | 1.91 | 0.99 | 66.78 | 24.89 | 91.67 |
| Oregon | 18.34 | 5.86 | 9.38 | 29.05 | 1.77 | 1.25 | 65.65 | 25.44 | 91.09 |
| Pennsylvania | 23.36 | 5.14 | 14.16 | 23.57 | 4.08 | 0.85 | 71.16 | 23.01 | 94.17 |
| Puerto Rico | 30.46 | 3.91 | 12.48 | 16.23 | 1.29 | 1.84 | 66.22 | 26.58 | 92.80 |
| Rhode Island | 25.83 | 5.17 | 9.01 | 34.11 | 2.05 | 0.99 | 77.16 | 25.17 | 102.33 |
| South Carolina | 36.57 | 5.36 | 10.47 | 29.34 | 1.47 | 1.06 | 84.26 | 27.25 | 111.51 |
| South Dakota | 27.88 | 5.63 | 11.99 | 34.87 | 1.98 | 1.54 | 83.90 | 28.88 | 112.78 |
| Tennessee | 34.39 | 5.30 | 5.94 | 25.96 | 2.52 | 0.91 | 75.02 | 26.72 | 101.74 |
| Texas | 32.10 | 4.56 | 11.40 | 21.86 | 5.16 | 1.13 | 76.21 | 26.28 | 102.49 |
| Utah | 29.30 | 6.11 | 7.27 | 30.55 | 4.19 | 1.22 | 78.65 | 28.89 | 107.54 |
| Vermont | 31.61 | 5.01 | 10.66 | 34.72 | 1.67 | 1.35 | 85.02 | 24.33 | 109.35 |
| Virgin Islands | NA | NA | NA | NA | NA | NA | NA | NA | 120.68 |
| Virginia | 28.60 | 5.42 | 12.12 | 31.91 | 2.73 | 1.16 | 81.93 | 23.64 | 105.58 |
| Washington | 26.55 | 5.75 | 12.58 | 27.99 | 2.47 | 1.28 | 76.60 | 27.90 | 104.50 |
| West Virginia | 35.14 | 5.31 | 9.95 | 28.47 | 1.67 | 1.34 | 81.88 | 17.63 | 99.51 |
| Wisconsin | 28.88 | 4.46 | 15.66 | 22.00 | 3.11 | 0.94 | 75.05 | 22.63 | 97.68 |
| Wyoming | 36.05 | 6.49 | 7.12 | 38.67 | 1.86 | 1.71 | 91.90 | 24.86 | 116.76 |
| Total | $28.95 | $5.03 | $12.31 | $25.74 | $3.11 | $1.04 | $76.17 | $25.13 | $101.30 |

NA - Not applicable.

Note: Figures may not add to totals due to rounding. Average revenues include both residential and business users. USF loops are a measure of access lines for incumbent local exchange carriers. See subcategory 1.3 of 47 CFR 36.154(a).

Source: Estimates for 2000 use a methodology that is similar to that used in 1999. See also: Industry Analysis Division, Common Carrier Bureau, *State-by-State Telephone Revenues and Universal Service Data* (April 2001).

# 17 Subscribership

Under contract with the FCC, the Bureau of the Census includes questions on telephones as part of its Current Population Survey (CPS). 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.[1]

More than twenty-three 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.

Because of smaller sample sizes, state-by-state data are subject to greater sampling errors than the national data shown in Table 17.1. Additional information can be found in the *Telephone Penetration* and *Telephone Subscribership* reports available on the **FCC-State Link** web page.

Prior to 1980, historical estimates of telephone penetration were based on a comparison of the number of residential main stations to the number of households. These estimates became less reliable at that point because of the emergence of an increasing number of households with multiple phone lines. In the 1980 decennial census, the question "Do you have a telephone?" was added to the long-form questionnaire. The 1980 and 1990 percentages in Table 17.3 are based on those responses. With the telephone companies no longer owning the telephone instruments, however, it is possible for someone to have a telephone but not have service. This may account for some of the discrepancy between the 1990 percentages in Tables 17.1 and 17.3.

For other countries of the world, telephone development is often measured as the number of access lines per 100 people. This measure includes both residential and business lines. Historical estimates for the United States, using the decennial census population counts, are shown in Table 17.3.

The Bureau of the Census also includes questions on computers and Internet use as part of its Current Population Survey. Using this information, the National Telecommunications and Information Administration (NTIA) has released its fourth report examining which American households have access to telephones, computers, and the Internet, and which do not. Chart 17.1 shows the percent of households with a telephone, computer, and Internet use for 1994, 1997,

[1] As of November 2001, CPS revised its survey to inquire as to whether households subscribing to telephone service received wireline service, wireless service or both types. At this time, we do not publish subscribership data on wireless service. Prior to November 2001, the question was intended to be neutral as to whether the household has wireline or wireless phones.

1998, August 2000 and September 2001. The percent of households may differ from Table 17.1 because a different monthly survey was used. The NTIA report, *A Nation Online: How Americans Are Expanding Their Use of the Internet*, finds that the number of Americans connected to the nation's information infrastructure is soaring. According to the latest report by NTIA, the rapid swing to new technologies is happening with most groups of Americans, "regardless of income, education, race or ethnicity location, age or gender." Their conclusion is that "digital inclusion is a reasonable goal." NTIA's web site can be accessed at www.ntia.doc.gov.

## Table 17.1
## Household Telephone Subscribership in the United States

| | 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 |
| November | 99.8 | 93.7 | 93.8 | 6.2 | 6.2 |
| 1995 March | 99.9 | 93.8 | 93.9 | 6.1 | 6.1 |
| July | 100.0 | 94.0 | 94.0 | 6.0 | 6.0 |
| November | 100.4 | 94.2 | 93.9 | 6.2 | 6.1 |
| 1996 March | 100.6 | 94.4 | 93.8 | 6.2 | 6.2 |
| July | 101.2 | 95.0 | 93.9 | 6.1 | 6.1 |
| November | 101.3 | 95.1 | 93.9 | 6.2 | 6.1 |
| 1997 March | 102.0 | 95.8 | 93.9 | 6.2 | 6.1 |
| July | 102.3 | 96.1 | 93.9 | 6.2 | 6.1 |
| November | 102.8 | 96.5 | 93.8 | 6.3 | 6.2 |
| 1998 March | 103.4 | 97.4 | 94.1 | 6.1 | 5.9 |
| July | 103.4 | 97.3 | 94.1 | 6.1 | 5.9 |
| November | 104.1 | 98.0 | 94.2 | 6.1 | 5.8 |
| 1999 March | 104.8 | 98.5 | 94.0 | 6.3 | 6.0 |
| July | 105.1 | 99.2 | 94.4 | 5.9 | 5.6 |
| November | 105.4 | 99.1 | 94.1 | 6.3 | 5.9 |
| 2000 March | 105.3 | 99.6 | 94.6 | 5.7 | 5.4 |
| July | 105.8 | 99.8 | 94.4 | 5.9 | 5.6 |
| November | 106.5 | 100.2 | 94.1 | 6.3 | 5.9 |
| 2001 March | 107.0 | 101.1 | 94.6 | 5.8 | 5.4 |
| July | 106.9 | 101.7 | 95.1 | 5.2 | 4.9 |
| November | 107.7 | 102.2 | 94.9 | 5.5 | 5.1 |

Source: Industry Analysis and Technology Division, Wireline Competition Bureau, *Telephone Subscribership in the United States* (May 2002).

## Table 17.2
## Telephone Penetration by State
## (Percentage of Households with Telephone Service)

| State | November 1983 | July 2001 | Change | |
|---|---|---|---|---|
| Alabama | 87.9 % | 93.0 % | 5.1 % | * |
| Alaska | 83.8 | 94.7 | 10.9 | * |
| Arizona | 88.8 | 93.5 | 4.8 | * |
| Arkansas | 88.2 | 91.4 | 3.3 | |
| California | 91.7 | 97.0 | 5.3 | * |
| Colorado | 94.4 | 97.4 | 3.0 | * |
| Connecticut | 95.5 | 96.8 | 1.3 | |
| Delaware | 95.0 | 94.4 | -0.6 | |
| District of Columbia | 94.7 | 93.8 | -0.9 | |
| Florida | 85.5 | 93.2 | 7.7 | * |
| Georgia | 88.9 | 93.2 | 4.3 | * |
| Hawaii | 94.6 | 96.9 | 2.3 | |
| Idaho | 89.5 | 94.1 | 4.6 | * |
| Illinois | 95.0 | 93.7 | -1.3 | |
| Indiana | 90.3 | 95.0 | 4.7 | * |
| Iowa | 95.4 | 97.2 | 1.8 | |
| Kansas | 94.9 | 95.4 | 0.5 | |
| Kentucky | 86.9 | 93.7 | 6.8 | * |
| Louisiana | 88.9 | 94.5 | 5.6 | * |
| Maine | 90.7 | 97.7 | 7.0 | * |
| Maryland | 96.3 | 95.5 | -0.8 | |
| Massachusetts | 94.3 | 95.7 | 1.4 | |
| Michigan | 93.8 | 94.7 | 0.9 | |
| Minnesota | 96.4 | 97.7 | 1.4 | |
| Mississippi | 82.4 | 88.1 | 5.7 | * |
| Missouri | 92.1 | 96.6 | 4.5 | * |
| Montana | 92.8 | 94.8 | 2.0 | |
| Nebraska | 94.0 | 96.5 | 2.5 | * |
| Nevada | 89.4 | 95.2 | 5.8 | * |
| New Hampshire | 95.0 | 97.8 | 2.8 | * |
| New Jersey | 94.1 | 95.9 | 1.8 | |
| New Mexico | 85.3 | 93.6 | 8.3 | * |
| New York | 90.8 | 94.9 | 4.1 | * |
| North Carolina | 89.3 | 93.9 | 4.6 | * |
| North Dakota | 95.1 | 94.6 | -0.5 | |
| Ohio | 92.2 | 96.7 | 4.5 | * |
| Oklahoma | 91.5 | 93.0 | 1.5 | |
| Oregon | 91.2 | 96.2 | 5.0 | * |
| Pennsylvania | 95.1 | 97.0 | 1.9 | * |
| Rhode Island | 93.3 | 95.7 | 2.4 | |
| South Carolina | 81.8 | 94.9 | 13.1 | * |
| South Dakota | 92.7 | 94.9 | 2.2 | |
| Tennessee | 87.6 | 93.2 | 5.6 | * |
| Texas | 89.0 | 94.3 | 5.3 | * |
| Utah | 90.3 | 96.5 | 6.2 | * |
| Vermont | 92.7 | 97.2 | 4.5 | * |
| Virginia | 93.1 | 95.8 | 2.7 | |
| Washington | 92.5 | 96.9 | 4.5 | * |
| West Virginia | 88.1 | 94.5 | 6.4 | * |
| Wisconsin | 94.8 | 95.6 | 0.8 | |
| Wyoming | 89.7 | 93.7 | 4.0 | * |
| Total United States | 91.4 % | 95.1 % | 3.7 % | * |

Note: Differences may not appear to equal changes due to rounding

* Increase is statistically significant at the 95% confidence level

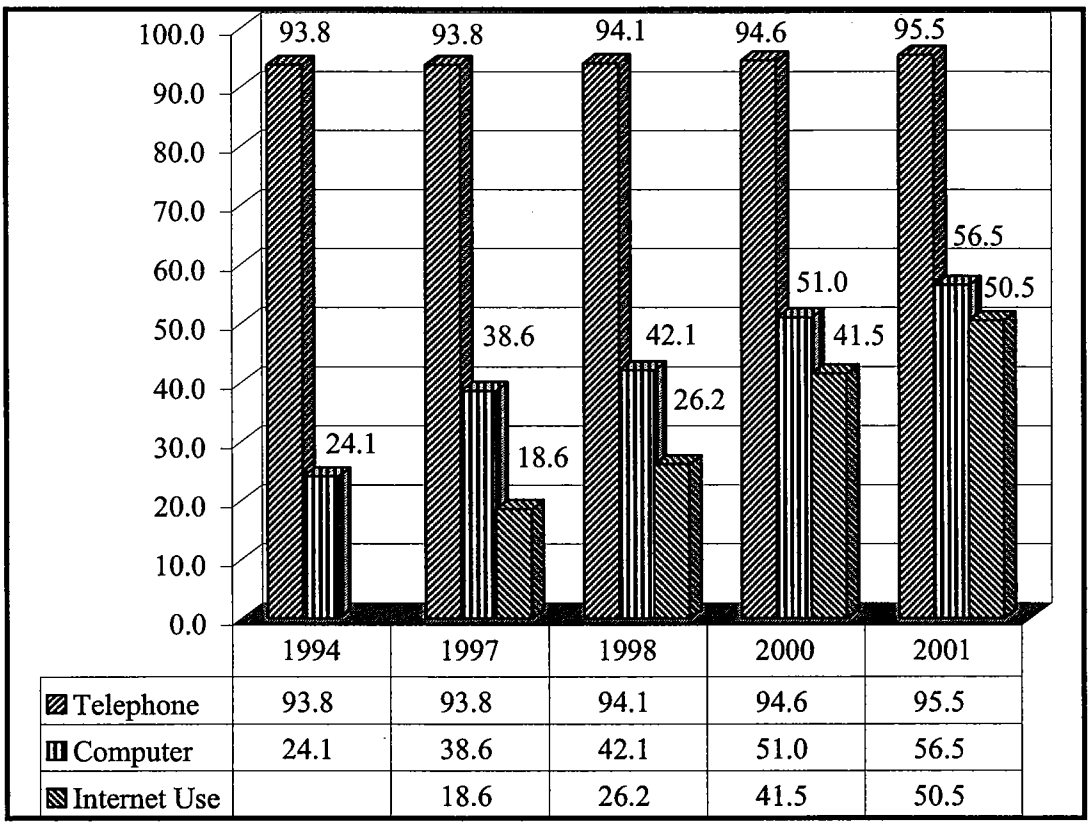
Source: Industry Analysis Division, Common Carrier Bureau, *Telephone Subscribership in the United States* (February 2002).

## Table 17.3
## Historical Telephone Penetration Estimates

| Year | Percentage of Households with Telephones | Access Lines per 100 Population |
|---|---|---|
| 1920 | 35.0 % | 9.6 |
| 1930 | 40.9 | 12.5 |
| 1940 | 36.9 | 12.7 |
| 1950 | 61.8 | 21.7 |
| 1960 | 78.3 | 27.6 |
| 1970 | 90.5 | 35.0 |
| 1980 | 92.9 | 46.2 |
| 1990 | 94.8 | 54.8 |

Sources: FCC staff estimates based on data from the Bureau of the Census, *Historical Statistics of the United States, Colonial Times to 1970* , Part 2, page 783, for all percentage data except 1980 and 1990, which are from the decennial censuses. Access line data for 1920 through 1970 are estimated by multiplying the number of telephones by the proportion of main plus equivalent main stations to total telephones for the Bell System. Prior to 1950, the 1950 proportion is used. For 1980 and 1990, access lines reported by USTA are used.

## Chart 17.1
## Percent of U.S. Households
## With a Telephone, Computer, and Internet Use




| | 1994 | 1997 | 1998 | 2000 | 2001 |
|---|---|---|---|---|---|
| Telephone | 93.8 | 93.8 | 94.1 | 94.6 | 95.5 |
| Computer | 24.1 | 38.6 | 42.1 | 51.0 | 56.5 |
| Internet Use | | 18.6 | 26.2 | 41.5 | 50.5 |

Source: National Telecommunications and Information Administration (NTIA) and U.S. Census Bureau, *Current Population Survey.*

# 18 Technology Development

The Bell operating companies (BOCs) file data on technology as part of their Automated Reporting Management Information System (ARMIS) reports. The data contained in Tables 18.1 - 18.3 are from the BOCs' ARMIS 43-07 reports. The individual carrier's data can be obtained from the ARMIS web page at www.fcc.gov/wcb/armis/db. Selected holding company statistics from the ARMIS 43-07 can be found in our *Infrastructure* report on the **FCC-State Link** web page.

## 1. Central Office Technology

Telephone companies replaced most of their older electromechanical switches with computerized equipment during the 1980s. In the telephone industry, these computers are referred to as stored program control switches. Switches with the most current technologies are fully digital. Some small rural central offices have their switching function done by computer but the calls still are processed in their analog form. The spread of these technologies throughout the BOCs is shown in Table 18.1

Newer signaling systems have been developed which permit calls to be set up more quickly and efficiently. In the late 1980s, telephone company switching offices began to be converted to the newest signaling system, Signaling System 7. As shown in Table 18.2, Signaling System 7 has been deployed almost everywhere. This was followed by an integrated systems digital network (ISDN). One of the attractions of ISDN was that ordinary local telephone lines (copper loops) could transport high-speed data between computers and handle more than one telephone conversation at a time. The number of BOCs switching offices and the lines served by offices with ISDN are shown in Table 18.2. Information about broadband deployment is contained in Chapter 2, Advanced Telecommunications.

## 2. Transmission Technology

Each telephone company has a network of transmission paths or carrier links tying together their switching offices. As indicated in Table 18.3, fiber optic cables have rapidly replaced copper to provide these links. From 1990 to 2001, the proportion of fiber has grown from 60% to 97%.

Although fiber technology was first used for interoffice transmission facilities, the technology is now being deployed closer to customers. The number of working channels provides an approximation of the number of transmission paths between customers and the telephone company offices serving those customers. Although the number of fiber channels nearly tripled during the first half of the 1990s, in 2001 copper wire still linked about 80% of customers to the first point of switching.

### 3. Equal Access

Equal access refers to a class of service whereby all long distance service providers receive equivalent connections to the local exchange carrier's network. Where a local exchange carrier serves customers using equal-access switches, those customers can utilize their preferred long distance provider by dialing "1" plus the ten-digit telephone number they want to reach.

For equal access to take place, the local exchange carrier had to convert its lines to equal access. The conversion of lines by local exchange carriers to equal access started in 1984; by the end of 1996, over 99% of the nation's lines had been converted. A table tracing this process through time can be found in the equal-access section of the *Trends* report released in July 1998.

Despite the fact that more than 99% of the nation's customers are now provided with equal access, there still are many central offices where equal access is not yet available. Because the non-equal-access offices tend to be smaller offices, the percentage of converted offices is significantly smaller than the percentage of converted lines. Table 18.4 shows the number of central office wire centers in each state that had been converted to equal access as of May 1, 2001. The table is derived from NECA's Tariff 4 database, 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 database. Thus, in some cases, the data continue to show some offices not yet converted to equal access even in states where equal access is reported to be available to all customers.

### 4. Telecommunications Patents

Another measure of developing technology is the number of U.S. patents. The U.S. Patent and Trademark Office maintains a file of over six million distinct U.S. patents granted. These patents are categorized by technology. Chart 18.1 shows the number of patents granted for telecommunications from 1990 to 2000. The information presented profiles U.S. patent activity in the general field of telecommunications. It includes all U.S. patent documents, excepting reissued patents, granted between January 1990 and December 31, 2000, which have been classified as follows:

> Class 370, *Multiplex Communications*, is the generic class for multiplexing or duplexing systems, methods, or apparatus.
>
> Class 375, *Pulse or Digital Communications*, is the generic class for pulse or digital communication systems using electrical or electromagnetic signals. Such communication includes transmitting an intelligence-bearing signal from one point to another in the form of discrete variations in some parameter of the electrical or electromagnetic signal.
>
> Class 379, *Telephonic Communications*, includes systems, processes and instruments for the two-way electrical transmission of intelligible audio

information having arbitrary content over a link (including an electrical conductor) between spaced apart locations, so as to enable conversation there between, and intended for the private use of a listener or a group of listeners. Also included are switching, signaling or signal transmission systems, processes and instruments peculiar to, or specified as for a telephone or a telephone system.

Class 455, *Telecommunications*, is the generic class for modulated carrier wave communications.

Data for prior years differ from the March 2000 *Trends* report. Revisions to prior-year data reflect annual reclassification of patent categories. For example, if a patent type was reclassified in 1998, the data for prior years have been recalculated based on this reclassification.

## Table 18.1
## Central Offices and Access Lines by Technology
## (Bell Operating Companies)

| Year End | Total Offices | Electromechanical Offices | | Analog Stored Program Controlled Offices | | Digital Stored Program Controlled Offices | |
|---|---|---|---|---|---|---|---|
| 1980 | 9,195 | 6,842 | 74.41 % | 2,353 | 25.59 % | 0 | 0.00 % |
| 1981 | 9,198 | 6,647 | 72.27 | 2,527 | 27.47 | 24 | 0.26 |
| 1982 | 9,173 | 6,357 | 69.30 | 2,736 | 29.83 | 80 | 0.87 |
| 1983 | 9,156 | 6,075 | 66.35 | 2,910 | 31.78 | 171 | 1.87 |
| 1984 | 9,102 | 5,714 | 62.78 | 3,041 | 33.41 | 347 | 3.81 |
| 1985 | 9,124 | 5,244 | 57.47 | 3,020 | 33.10 | 860 | 9.43 |
| 1986 | 9,167 | 4,604 | 50.22 | 2,943 | 32.10 | 1,620 | 17.67 |
| 1987 | 9,190 | 3,819 | 41.56 | 2,833 | 30.83 | 2,538 | 27.62 |
| 1988 | 9,300 | 3,031 | 32.59 | 2,692 | 28.95 | 3,577 | 38.46 |
| 1989 | 9,338 | 2,416 | 25.87 | 2,519 | 26.98 | 4,403 | 47.15 |
| 1990 | 9,872 | 1,646 | 16.67 | 2,410 | 24.41 | 5,816 | 58.91 |
| 1991 | 9,951 | 1,148 | 11.54 | 2,167 | 21.78 | 6,636 | 66.69 |
| 1992 | 10,069 | 615 | 6.11 | 1,924 | 19.11 | 7,530 | 74.78 |
| 1993 | 10,089 | 296 | 2.93 | 1,554 | 15.40 | 8,239 | 81.66 |
| 1994 | 10,023 | 95 | 0.95 | 1,133 | 11.30 | 8,795 | 87.75 |
| 1995 | 10,051 | 60 | 0.60 | 976 | 9.71 | 9,015 | 89.69 |
| 1996 | 9,966 | 1 | 0.01 | 718 | 7.20 | 9,247 | 92.79 |
| 1997 | 9,965 | 0 | 0.00 | 548 | 5.50 | 9,417 | 94.50 |
| 1998 | 9,788 | 0 | 0.00 | 431 | 4.40 | 9,357 | 95.60 |
| 1999 1/ | 9,968 | 0 | 0.00 | 320 | 3.21 | 9,648 | 96.79 |
| 2000 2/ | 15,092 | 0 | 0.00 | 203 | 1.35 | 14,889 | 98.65 |
| 2001 3/ | 15,109 | 0 | 0.00 | 139 | 0.92 | 14,970 | 99.08 |

### Access Lines Served by Type of Office (Thousands)

| Year End | All Offices | Electromechanical Offices | | Analog Stored Program Controlled Offices | | Digital Stored Program Controlled Offices | |
|---|---|---|---|---|---|---|---|
| 1980 | 81,032 | 44,930 | 55.45 % | 36,092 | 44.54 % | 10 | 0.01 % |
| 1981 | 82,581 | 40,425 | 48.95 | 42,099 | 50.98 | 57 | 0.07 |
| 1982 | 83,819 | 36,813 | 43.92 | 46,803 | 55.84 | 203 | 0.24 |
| 1983 | 86,186 | 32,652 | 37.89 | 52,919 | 61.40 | 615 | 0.71 |
| 1984 | 88,630 | 30,074 | 33.93 | 56,404 | 63.64 | 2,151 | 2.43 |
| 1985 | 91,455 | 24,778 | 27.09 | 58,532 | 64.00 | 8,145 | 8.91 |
| 1986 | 93,630 | 19,491 | 20.82 | 59,252 | 63.28 | 14,886 | 15.90 |
| 1987 | 96,593 | 14,205 | 14.71 | 59,442 | 61.54 | 22,946 | 23.76 |
| 1988 | 99,564 | 8,707 | 8.74 | 60,364 | 60.63 | 30,493 | 30.63 |
| 1989 | 102,684 | 5,646 | 5.50 | 58,846 | 57.31 | 38,192 | 37.19 |
| 1990 | 105,641 | 3,216 | 3.04 | 56,973 | 53.93 | 45,452 | 43.02 |
| 1991 | 107,388 | 1,876 | 1.75 | 53,450 | 49.77 | 52,061 | 48.48 |
| 1992 | 109,997 | 717 | 0.65 | 48,952 | 44.50 | 60,324 | 54.84 |
| 1993 | 113,368 | 264 | 0.23 | 41,912 | 36.97 | 71,192 | 62.80 |
| 1994 | 117,345 | 115 | 0.10 | 33,191 | 28.28 | 84,040 | 71.62 |
| 1995 | 122,266 | 63 | 0.05 | 29,031 | 23.74 | 93,172 | 76.20 |
| 1996 | 125,844 | 1 | 0.00 | 24,559 | 19.52 | 101,283 | 80.48 |
| 1997 | 131,722 | 0 | 0.00 | 21,219 | 16.11 | 110,503 | 83.89 |
| 1998 | 136,426 | 0 | 0.00 | 16,688 | 12.23 | 119,738 | 87.77 |
| 1999 1/ | 141,763 | 0 | 0.00 | 11,925 | 8.41 | 129,838 | 91.59 |
| 2000 2/ | 160,557 | 0 | 0.00 | 7,317 | 4.56 | 153,240 | 95.44 |
| 2001 3/ | 155,948 | 0 | 0.00 | 4,810 | 3.08 | 151,138 | 96.92 |

Note: Because of different sources, the data for 1989 and earlier years may not be consistent with the data fo 1990 and later years.

1/ Southern New England Telephone Company merged with SBC Communications October 26, 1998. Thei data are included in this table starting with 1999.

2/ Large increase in 2000 is due to the merger of Bell Atlantic and GTE

3/ Data for 2001 are preliminary and are underdoing a review by Commission staff

Sources: 1980-1989 reported in CC Docket 89-624.
1990-2001 reported in ARMIS 43-07.

## Table 18.2
## Features Available in Central Offices
### (Bell Operating Companies)

| Year End | Total Offices | Equal Access Offices | | Signaling System 7 Offices 1/ | | ISDN Offices 2/ | |
|---|---|---|---|---|---|---|---|
| 1980 | 9,195 | 0 | 0.00 % | 0 | 0.00 % | 0 | 0.0 % |
| 1981 | 9,198 | 0 | 0.00 | 0 | 0.00 | 0 | 0.0 |
| 1982 | 9,173 | 0 | 0.00 | 0 | 0.00 | 0 | 0.0 |
| 1983 | 9,156 | 0 | 0.00 | 0 | 0.00 | 0 | 0.0 |
| 1984 | 9,102 | 124 | 1.36 | 0 | 0.00 | 0 | 0.0 |
| 1985 | 9,124 | 1,891 | 20.73 | 0 | 0.00 | 0 | 0.0 |
| 1986 | 9,167 | 3,623 | 39.52 | 0 | 0.00 | 0 | 0.0 |
| 1987 | 9,190 | 4,823 | 52.48 | 29 | 0.32 | 4 | 0.0 |
| 1988 | 9,300 | 6,071 | 65.28 | 435 | 4.68 | 82 | 0.9 |
| 1989 | 9,338 | 6,788 | 72.69 | 931 | 9.97 | 179 | 1.9 |
| 1990 | 9,872 | 7,950 | 80.53 | 2,428 | 24.59 | 600 | 6.1 |
| 1991 | 9,951 | 8,601 | 86.43 | 3,670 | 36.88 | 920 | 9.2 |
| 1992 | 10,069 | 9,281 | 92.17 | 5,392 | 53.55 | 1,219 | 12.1 |
| 1993 | 10,089 | 9,697 | 96.11 | 6,688 | 66.29 | 1,874 | 18.6 |
| 1994 | 10,023 | 9,934 | 99.11 | 8,334 | 83.15 | 2,400 | 23.9 |
| 1995 | 10,051 | 9,978 | 99.27 | 8,977 | 89.31 | 2,868 | 28.5 |
| 1996 | 9,966 | 9,845 | 98.79 | 9,286 | 93.18 | 3,329 | 33.4 |
| 1997 | 9,965 | 9,936 | 99.71 | 9,688 | 97.22 | 3,902 | 39.2 |
| 1998 | 9,788 | 9,765 | 99.77 | 9,643 | 98.52 | 4,146 | 42.4 |
| 1999 3/ | 9,968 | 9,925 | 99.57 | 9,844 | 98.76 | 4,424 | 44.4 |
| 2000 4/ | 15,092 | 15,053 | 99.74 | 14,837 | 98.31 | 5,413 | 35.9 |
| 2001 5/ | 15,109 | 15,106 | 99.98 | 14,969 | 99.07 | 5,465 | 36.2 |

### Equipped Access Lines by Type of Office (Thousands)

| Year End | All Offices | Equal Access Offices | | Signaling System 7 Offices 1/ | | ISDN Offices 2/ | |
|---|---|---|---|---|---|---|---|
| 1980 | 81,032 | 0 | 0.00 % | 0 | 0.00 % | 0 | 0.00 % |
| 1981 | 82,581 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| 1982 | 83,819 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| 1983 | 86,186 | 146 | 0.17 | 0 | 0.00 | 0 | 0.00 |
| 1984 | 88,630 | 9,350 | 10.55 | 0 | 0.00 | 0 | 0.00 |
| 1985 | 91,455 | 49,241 | 53.84 | 0 | 0.00 | 0 | 0.00 |
| 1986 | 93,630 | 70,543 | 75.34 | 0 | 0.00 | 0 | 0.00 |
| 1987 | 96,593 | 81,743 | 84.63 | 1,035 | 1.07 | 12 | 0.01 |
| 1988 | 99,564 | 91,809 | 92.21 | 10,325 | 10.37 | 47 | 0.05 |
| 1989 | 102,684 | 97,410 | 94.86 | 21,917 | 21.34 | 111 | 0.11 |
| 1990 | 105,641 | 102,429 | 96.96 | 40,026 | 37.89 | 13,970 | 13.22 |
| 1991 | 107,388 | 105,413 | 98.16 | 57,321 | 53.38 | 20,567 | 19.15 |
| 1992 | 109,997 | 109,006 | 99.10 | 76,480 | 69.53 | 28,375 | 25.80 |
| 1993 | 113,368 | 112,993 | 99.67 | 92,493 | 81.59 | 39,875 | 35.17 |
| 1994 | 117,345 | 117,266 | 99.93 | 109,465 | 93.28 | 56,546 | 48.19 |
| 1995 | 122,266 | 122,210 | 99.95 | 116,568 | 95.34 | 71,274 | 58.29 |
| 1996 | 125,844 | 125,843 | 100.00 | 122,343 | 97.22 | 85,434 | 67.89 |
| 1997 | 131,722 | 131,722 | 100.00 | 130,778 | 99.28 | 95,956 | 72.85 |
| 1998 | 136,426 | 136,426 | 100.00 | 136,246 | 99.87 | 106,834 | 78.31 |
| 1999 3/ | 141,763 | 141,763 | 100.00 | 141,685 | 99.94 | 113,999 | 80.42 |
| 2000 4/ | 160,557 | 160,557 | 100.00 | 160,303 | 99.84 | 132,844 | 82.74 |
| 2001 5/ | 155,948 | 155,948 | 100.00 | 155,774 | 99.89 | 129,413 | 82.98 |

Note: Because of different sources, the data for 1989 and earlier years may not be entirely consistent with the data fo 1990 and later years.

1/ Signaling System 7 Switch (SS7-317).

2/ ISDN basic access line capacity reported for 1990-2001. Note that not all lines served by ISDN-compatibl switching offices actually receive ISDN service.

3/ Southern New England Telephone Company merged with SBC Communications October 26, 1998. Their data ar included in this table starting with 1999.

4/ Large increase in 2000 is due to the merger of Bell Atlantic and GTE.

5/ Data for 2001 are preliminary and are underdoing a review by Commission staff

Sources: 1980-1989 reported in CC Docket 89-624.
1990-2001 reported in ARMIS 43-07.

## Table 18.3
## Local Transmission Technology
## (Bell Operating Companies)

### Digital Transmission Links

| Year End | Total | Copper | | Fiber | | Radio | |
|---|---|---|---|---|---|---|---|
| 1990 1/ | 2,895,117 | 1,092,041 | 37.7 % | 1,737,984 | 60.0 % | 65,092 | 2.2 % |
| 1991 | 3,271,023 | 1,039,316 | 31.8 | 2,154,043 | 65.9 | 77,664 | 2.4 |
| 1992 | 3,564,847 | 864,931 | 24.3 | 2,610,185 | 73.2 | 89,731 | 2.5 |
| 1993 | 4,159,574 | 805,290 | 19.4 | 3,264,106 | 78.5 | 90,175 | 2.2 |
| 1994 | 4,495,728 | 568,197 | 12.6 | 3,846,394 | 85.6 | 81,137 | 1.8 |
| 1995 | 5,828,645 | 485,909 | 8.3 | 5,274,173 | 90.5 | 68,563 | 1.2 |
| 1996 | 7,955,574 | 433,758 | 5.5 | 7,477,395 | 94.0 | 44,421 | 0.6 |
| 1997 | 10,067,498 | 413,204 | 4.1 | 9,610,601 | 95.5 | 43,693 | 0.4 |
| 1998 | 13,558,832 | 420,488 | 3.1 | 13,099,829 | 96.6 | 38,515 | 0.3 |
| 1999 | 17,662,105 | 518,331 | 2.9 | 17,104,970 | 96.8 | 38,804 | 0.2 |
| 2000 2/ | 24,334,009 | 771,385 | 3.2 | 23,523,610 | 96.7 | 39,014 | 0.2 |
| 2001 3/ | 31,174,910 | 860,180 | 2.8 | 30,282,540 | 97.1 | 32,190 | 0.1 |

1/ 1990 contains some analog links.
2/ Large increase in 2000 is due to the merger of Bell Atlantic and GTE.
3/ Data for 2001 are preliminary and are underdoing a review by Commission staff.

### Working Telecommunications Channels
### (Thousands)

| Year End | Total | Copper | | Fiber | | Radio | |
|---|---|---|---|---|---|---|---|
| 1990 | 122,564 1/ | 106,373 | 86.8 % | 3,546 | 2.9 % | 0 | 0.0 % |
| 1991 | 118,654 | 114,047 | 96.1 | 4,605 | 3.9 | 2 | 0.0 |
| 1992 | 120,848 | 114,609 | 94.8 | 6,238 | 5.2 | 1 | 0.0 |
| 1993 | 124,191 | 115,496 | 93.0 | 8,694 | 7.0 | 1 | 0.0 |
| 1994 | 130,192 | 118,437 | 91.0 | 11,755 | 9.0 | 0 | 0.0 |
| 1995 | 136,231 | 122,975 | 90.3 | 13,255 | 9.7 | 0 | 0.0 |
| 1996 | 142,824 | 125,595 | 87.9 | 17,228 | 12.1 | 1 | 0.0 |
| 1997 | 149,429 | 128,436 | 86.0 | 20,992 | 14.0 | 0 | 0.0 |
| 1998 | 160,621 | 131,867 | 82.1 | 28,753 | 17.9 | 0 | 0.0 |
| 1999 2/ | 169,555 | 135,546 | 79.9 | 34,009 | 20.1 | 0 | 0.0 |
| 2000 3/ | 196,414 | 153,624 | 78.2 | 42,575 | 21.7 | 215 | 0.1 |
| 2001 4/ | 228,357 | 154,117 | 67.5 | 74,238 | 32.5 | 1 | 0.0 |

1/ Includes some other channels.
2/ Southern New England Telephone Company merged with SBC Communications October 26, 1998. Their data are included in this table starting with 1999.
3/ Large increase in 2000 is due to the merger of Bell Atlantic and GTE.
4/ Data for 2001 are preliminary and are underdoing a review by Commission staff.

Source: ARMIS 43-07 report.

# Table 18.4
## Central Offices Converted to Equal Access 1/
## (As of May 1, 2002)

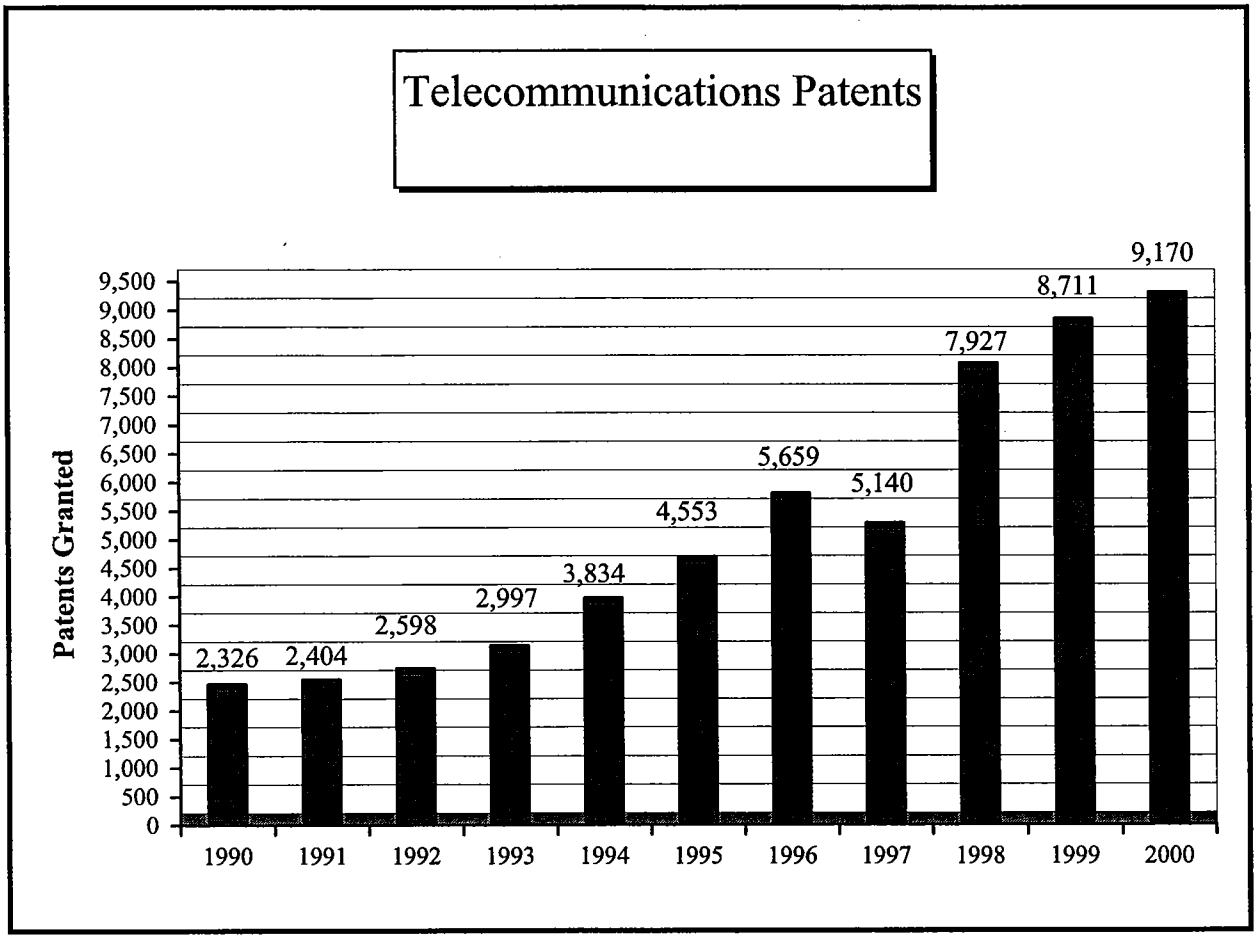
| | Bell Company Central Offices | | | Other ILEC Central Offices | | | CLEC Central Offices | | | All Central Offices | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Equal Access | Non-Equal Access | % Equal Access | Equal Access | Non-Equal Access | % Equal Access | Equal Access | Non-Equal Access | % Equal Access | Total Offices | % Equal Access |
| Alabama | 237 | 0 | 100.0 % | 123 | 1 | 99.2 % | 34 | 6 | 85.0 % | 401 | 98.3 % |
| Alaska | 0 | 0 | NA | 58 | 197 | 22.7 | 0 | 0 | NA | 255 | 22.7 |
| Arizona | 145 | 0 | 100.0 | 97 | 8 | 92.4 | 29 | 1 | 96.7 | 280 | 96.8 |
| Arkansas | 135 | 0 | 100.0 | 259 | 2 | 99.2 | 22 | 2 | 91.7 | 420 | 99.0 |
| California | 899 | 9 | 99.0 | 95 | 6 | 94.1 | 383 | 38 | 91.0 | 1,430 | 96.3 |
| Colorado | 166 | 1 | 99.4 | 102 | 8 | 92.7 | 35 | 1 | 97.2 | 313 | 96.8 |
| Connecticut | 127 | 0 | 100.0 | 3 | 0 | 100.0 | 25 | 3 | 89.3 | 158 | 98.1 |
| Delaware | 33 | 0 | 100.0 | 0 | 0 | NA | 0 | 1 | 0.0 | 34 | 97.1 |
| District of Columbia | 19 | 0 | 100.0 | 0 | 0 | NA | 25 | 3 | 89.3 | 47 | 93.6 |
| Florida | 287 | 0 | 100.0 | 176 | 2 | 98.9 | 287 | 19 | 93.8 | 771 | 97.3 |
| Georgia | 181 | 0 | 100.0 | 241 | 5 | 98.0 | 111 | 13 | 89.5 | 551 | 96.7 |
| Guam | 0 | 0 | NA | 18 | 0 | 100.0 | 0 | 0 | NA | 18 | 100.0 |
| Hawaii | 86 | 0 | 100.0 | 7 | 0 | 100.0 | 2 | 1 | 66.7 | 96 | 99.0 |
| Idaho | 97 | 0 | 100.0 | 75 | 14 | 84.3 | 8 | 2 | 80.0 | 196 | 91.8 |
| Illinois | 687 | 15 | 97.9 | 322 | 9 | 97.3 | 95 | 16 | 85.6 | 1,144 | 96.5 |
| Indiana | 387 | 2 | 99.5 | 187 | 0 | 100.0 | 40 | 10 | 80.0 | 626 | 98.1 |
| Iowa | 135 | 0 | 100.0 | 673 | 2 | 99.7 | 40 | 0 | 100.0 | 850 | 99.8 |
| Kansas | 171 | 2 | 98.8 | 364 | 5 | 98.6 | 19 | 6 | 76.0 | 567 | 97.7 |
| Kentucky | 279 | 0 | 100.0 | 96 | 3 | 97.0 | 18 | 9 | 66.7 | 405 | 97.0 |
| Louisiana | 228 | 0 | 100.0 | 95 | 0 | 100.0 | 35 | 4 | 89.7 | 362 | 98.9 |
| Maine | 143 | 1 | 99.3 | 105 | 9 | 92.1 | 12 | 1 | 92.3 | 271 | 95.9 |
| Maryland | 212 | 0 | 100.0 | 1 | 0 | 100.0 | 41 | 5 | 89.1 | 259 | 98.1 |
| Massachusetts | 274 | 2 | 99.3 | 3 | 0 | 100.0 | 77 | 8 | 90.6 | 364 | 97.3 |
| Michigan | 540 | 10 | 98.2 | 156 | 6 | 96.3 | 84 | 7 | 92.3 | 803 | 97.1 |
| Minnesota | 158 | 0 | 100.0 | 548 | 4 | 99.3 | 110 | 1 | 99.1 | 821 | 99.4 |
| Mississippi | 206 | 0 | 100.0 | 56 | 6 | 90.3 | 14 | 4 | 77.8 | 286 | 96.5 |
| Missouri | 306 | 4 | 98.7 | 346 | 44 | 88.7 | 58 | 8 | 87.9 | 766 | 92.7 |
| Montana | 76 | 0 | 100.0 | 199 | 1 | 99.5 | 20 | 2 | 90.9 | 298 | 99.0 |
| Nebraska | 69 | 0 | 100.0 | 395 | 0 | 100.0 | 14 | 0 | 100.0 | 478 | 100.0 |
| Nevada | 55 | 0 | 100.0 | 49 | 15 | 76.6 | 28 | 2 | 93.3 | 149 | 88.6 |
| New Hampshire | 125 | 1 | 99.2 | 27 | 1 | 96.4 | 19 | 1 | 95.0 | 174 | 98.3 |
| New Jersey | 206 | 0 | 100.0 | 28 | 0 | 100.0 | 46 | 8 | 85.2 | 288 | 97.2 |
| New Mexico | 65 | 0 | 100.0 | 88 | 34 | 72.1 | 5 | 0 | 100.0 | 192 | 82.3 |
| New York | 526 | 1 | 99.8 | 298 | 15 | 95.2 | 113 | 18 | 86.3 | 971 | 96.5 |
| North Carolina | 182 | 0 | 100.0 | 318 | 5 | 98.5 | 85 | 15 | 85.0 | 605 | 96.7 |
| North Dakota | 27 | 0 | 100.0 | 242 | 20 | 92.4 | 15 | 0 | 100.0 | 304 | 93.4 |
| Ohio | 474 | 34 | 93.3 | 340 | 5 | 98.6 | 125 | 9 | 93.3 | 987 | 95.1 |
| Oklahoma | 208 | 2 | 99.0 | 293 | 22 | 93.0 | 23 | 2 | 92.0 | 550 | 95.3 |
| Oregon | 136 | 0 | 100.0 | 146 | 5 | 96.7 | 33 | 2 | 94.3 | 322 | 97.8 |
| Pennsylvania | 505 | 0 | 100.0 | 301 | 32 | 90.4 | 119 | 15 | 88.8 | 972 | 95.2 |
| Puerto Rico | 0 | 0 | NA | 86 | 0 | 100.0 | 1 | 0 | 100.0 | 87 | 100.0 |
| Rhode Island | 30 | 0 | 100.0 | 0 | 0 | NA | 6 | 1 | 85.7 | 37 | 97.3 |
| South Carolina | 156 | 0 | 100.0 | 122 | 0 | 100.0 | 29 | 5 | 85.3 | 312 | 98.4 |
| South Dakota | 42 | 0 | 100.0 | 204 | 8 | 96.2 | 7 | 0 | 100.0 | 261 | 96.9 |
| Tennessee | 195 | 0 | 100.0 | 162 | 3 | 98.2 | 48 | 4 | 92.3 | 412 | 98.3 |
| Texas | 793 | 12 | 98.5 | 690 | 13 | 98.2 | 659 | 28 | 95.9 | 2,195 | 97.6 |
| Utah | 63 | 0 | 100.0 | 84 | 18 | 82.4 | 14 | 1 | 93.3 | 180 | 89.4 |
| Vermont | 90 | 2 | 97.8 | 42 | 0 | 100.0 | 3 | 1 | 75.0 | 138 | 97.8 |
| Virgin Islands | 0 | 0 | NA | 5 | 0 | 100.0 | 0 | 0 | NA | 5 | 100.0 |
| Virginia | 327 | 0 | 100.0 | 134 | 7 | 95.0 | 52 | 11 | 82.5 | 531 | 96.6 |
| Washington | 219 | 0 | 100.0 | 147 | 2 | 98.7 | 62 | 1 | 98.4 | 431 | 99.3 |
| West Virginia | 145 | 0 | 100.0 | 83 | 6 | 93.3 | 7 | 2 | 77.8 | 243 | 96.7 |
| Wisconsin | 225 | 5 | 97.8 | 410 | 0 | 100.0 | 64 | 6 | 91.4 | 710 | 98.5 |
| Wyoming | 26 | 0 | 100.0 | 35 | 23 | 60.3 | 4 | 1 | 80.0 | 89 | 73.0 |
| Total United States | 11,103 | 103 | 99.1 % | 9,134 | 566 | 94.2 % | 3,205 | 304 | 91.3 % | 24,415 | 96.0 % |

NA - Not applicable.

1/ 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.

Source: NECA FCC Tariff No. 4 database.

## Chart 18.1




Note: 1996 total reflects one-time change in law affecting patents.

Source: U.S. Patent and Trademark Office, *Technology Profile Report - Telecommunications, Classes 370, 375, 379 and 455.*

# 19 Telephone Numbers

In 1994, many area codes were nearing exhaustion as demand for telephone numbers continued to rise. Adding new area codes was difficult because some older telephone equipment was designed to recognize only area codes with a middle digit of 0 or 1, and the supply of those area codes was dwindling. On January 1, 1995, the restriction on the middle digit was removed, and 640 new area codes were made available. During 1995, fourteen new area codes were assigned -- the largest single-year expansion of area codes in decades. Nineteen area codes were added in 1996, forty-three in 1997, twenty in 1998, twenty-four in 1999, thirteen in 2000, twenty-six in 2001, and seven codes have been added in 2002. The above counts of area code activation are for the contiguous United States, offshore points, Canada, and the Caribbean. The changes in area codes from 1984 to 2002 are shown in Table 19.1. Area codes are assigned by the North American Numbering Plan Administration (NANPA), which is part of Neustar, Inc.

Toll-free service was first introduced in 1967 by AT&T. On May 1, 1993, procedures for routing toll-free (800) calls were changed and 800 numbers were made "portable." The new system enables customers to change service providers while still retaining the same 800 number. There has been tremendous growth in the toll-free market. The growth of toll-free telephone numbers is shown in Table 19.2. In March 1996, a second toll-free calling code (888) was placed in service; the third toll-free calling code (877) went into effect April 4, 1998; and the fourth toll-free calling code (866) went into effect July 29, 2000. The next toll-free code scheduled for service is 855, which was scheduled for November 18, 2000, but has been delayed. Database Service Management, Inc., a subsidiary of Telcordia Technologies, Inc., maintains the database on toll-free numbers.

Dialing patterns differ from state to state. For instance, in some states, callers making local calls within an area code are required to only dial the 7-digit phone number. In other states, callers making local calls must dial the ten-digit phone number (area code plus the phone number). Finally, in some states, local callers must dial a "1" before dialing the area code plus the phone number. Each state's public utilities commission (or public service commission) determines the calling pattern for each area code in their state. The dialing pattern for area codes are listed in area code planning letters, which are available on the North American Numbering Plan Administrator's web site at www.nanpa.com.

For both local and domestic toll calls, there are two basic types of calls: those within an area code and those between area codes. Table 19.3 shows the dialing patterns for all four types of calls. The last column of Table 19.3 indicates whether all toll calls in that state require callers to dial a "1" before the telephone number.

## Table 19.1
### Area Code Assignments
### (1984-2002)

| Location | Date | Previous Code | Added Code |
|---|---|---|---|
| California | 1/84 | 213 | 818 |
| New York | 9/84 | 212 | 718 |
| Colorado | 3/88 | 303 | 719 |
| Florida | 4/88 | 305 | 407 |
| Massachusetts | 7/88 | 617 | 508 |
| Illinois | 11/89 | 312 | 708 |
| New Jersey | 11/90 | 201 | 908 |
| Texas | 11/90 | 214 | 903 |
| California | 9/91 | 415 | 510 |
| Maryland | 10/91 | 301 | 410 |
| California | 11/91 | 213 | 310 |
| New York | 1/92 | 212 | 917 |
| New York | 1/92 | 718 | 917 |
| Georgia | 5/92 | 404 | 706 |
| New York | 7/92 | 212 | 718 |
| Texas | 11/92 | 512 | 210 |
| California | 11/92 | 714 | 909 |
| Ontario | 10/93 | 416 | 905 |
| North Carolina | 11/93 | 919 | 910 |
| Michigan | 12/93 | 313 | 810 |
| Pennsylvania | 1/94 | 215 | 610 |
| Alabama | 1/95 | 205 | 334 |
| Washington | 1/95 | 206 | 360 |
| Arizona | 3/95 | 602 | 520 |
| Colorado | 4/95 | 303 | 970 |
| Florida (Tampa) | 5/95 | 813 | 941 |
| Virginia | 7/95 | 703 | 540 |
| Georgia (Atlanta) | 8/95 | 404 | 770 |
| Connecticut | 8/95 | 203 | 860 |
| Florida (Miami) | 9/95 | 305 | 954 |
| Tennessee | 9/95 | 615 | 423 |
| Bermuda | 10/95 | 809 | 441 |
| Oregon | 11/95 | 503 | 541 |
| South Carolina | 12/95 | 803 | 864 |
| Florida (North) | 12/95 | 904 | 352 |
| Missouri | 1/96 | 314 | 573 |
| Illinois (Chicago) | 1/96 | 708 | 847 |
| Puerto Rico | 3/96 | 809 | 787 |
| Ohio | 3/96 | 216 | 330 |
| Minnesota | 3/96 | 612 | 320 |
| Antigua | 4/96 | 809 | 268 |
| Florida (Southeast) | 5/96 | 407 | 561 |
| Barbados | 7/96 | 809 | 246 |
| St. Lucia | 7/96 | 809 | 758 |
| Virginia | 7/96 | 804 | 757 |

## Table 19.1
### Area Code Assignments -- Continued
### (1984-2002)

| Location | Date | Previous Code | Added Code |
|---|---|---|---|
| Montserrat | 7/96 | 809 | 664 |
| Illinois (Chicago) | 8/96 | 708 | 630 |
| Cayman Islands | 9/96 | 809 | 345 |
| Texas (Dallas) | 9/96 | 214 | 972 |
| Ohio | 9/96 | 513 | 937 |
| Bahamas | 10/96 | 809 | 242 |
| St. Kitts & Nevis | 10/96 | 809 | 869 |
| Illinois | 10/96 | 312 | 773 |
| British Columbia | 10/96 | 604 | 250 |
| Texas (Houston) | 11/96 | 713 | 281 |
| California (Southern) | 1/97 | 310 | 562 |
| Indiana | 2/97 | 317 | 765 |
| California | 3/97 | 619 | 760 |
| Anguilla | 3/97 | 809 | 264 |
| Arkansas | 4/97 | 501 | 870 |
| Washington State | 4/97 | 206 | 253 |
| Washington State | 4/97 | 206 | 425 |
| Jamaica | 5/97 | 809 | 876 |
| Michigan | 5/97 | 810 | 248 |
| Texas | 5/97 | 817 | 254 |
| Texas | 5/97 | 817 | 940 |
| Turks & Caicos | 6/97 | 809 | 649 |
| Trinidad/Tobago | 6/97 | 809 | 868 |
| Maryland | 6/97 | 301 | 240 |
| Maryland | 6/97 | 410 | 443 |
| New Jersey | 6/97 | 201 | 973 |
| New Jersey | 6/97 | 908 | 732 |
| U.S. Virgin Islands | 6/97 | 809 | 340 |
| California | 6/97 | 818 | 626 |
| Florida | 6/97 | 904 | 850 |
| Guam | 7/97 | NA | 671 |
| Commonwealth of the Northern Mariana Islands | 7/97 | NA | 670 |
| Texas | 7/97 | 210 | 830 |
| Texas | 7/97 | 210 | 956 |
| Kansas | 7/97 | 913 | 785 |
| Wisconsin | 7/97 | 414 | 920 |
| California | 8/97 | 415 | 650 |
| Ohio | 8/97 | 216 | 440 |
| Massachusetts | 9/97 | 617 | 781 |
| Massachusetts | 9/97 | 508 | 978 |
| Tennessee | 9/97 | 615 | 931 |
| Mississippi | 9/97 | 601 | 228 |
| Utah | 9/97 | 801 | 435 |
| Dominica | 10/97 | 809 | 767 |

## Table 19.1
### Area Code Assignments -- Continued
### (1984-2002)

| Location | Date | Previous Code | Added Code |
|---|---|---|---|
| British Virgin Islands | 10/97 | 809 | 284 |
| Missouri | 10/97 | 816 | 660 |
| Yukon & Northwest Territories | 10/97 | 403 | 867 |
| Yukon & Northwest Territories | 10/97 | 819 | 867 |
| Grenada | 10/97 | 809 | 473 |
| California | 11/97 | 916 | 530 |
| Oklahoma | 11/97 | 405 | 580 |
| Ohio | 12/97 | 614 | 740 |
| Michigan | 12/97 | 313 | 734 |
| North Carolina | 12/97 | 910 | 336 |
| Georgia (Atlanta) | 1/98 | 770 | 678 |
| Pennsylvania | 2/98 | 412 | 724 |
| Florida | 3/98 | 305 | 786 |
| California | 3/98 | 510 | 925 |
| South Carolina | 3/98 | 803 | 843 |
| North Carolina | 3/98 | 704 | 828 |
| North Carolina | 3/98 | 919 | 252 |
| Alabama | 3/98 | 205 | 256 |
| California | 4/98 | 714 | 949 |
| Colorado | 2/98 | 303 | 720 |
| St. Vincent & the Grenadines | 6/98 | 809 | 784 |
| California (Los Angeles) | 6/98 | 213 | 323 |
| Quebec | 6/98 | 514 | 450 |
| Florida | 7/98 | 813 | 727 |
| California | 7/98 | 408 | 831 |
| Minnesota | 7/98 | 612 | 651 |
| Louisiana | 8/98 | 504 | 225 |
| California | 11/98 | 209 | 559 |
| Pennsylvania | 12/98 | 717 | 570 |
| Nevada | 12/98 | 702 | 775 |
| Texas (Houston) | 1/99 | 281 | 832 |
| Texas (Houston) | 1/99 | 713 | 832 |
| Alberta | 1/99 | 403 | 780 |
| California | 2/99 | 805 | 661 |
| Texas | 2/99 | 512 | 361 |
| Arizona | 3/99 | 602 | 480 |
| Arizona | 3/99 | 602 | 623 |
| Kentucky | 4/99 | 502 | 270 |
| Mississippi | 4/99 | 601 | 662 |
| Missouri | 5/99 | 314 | 636 |
| Michigan | 6/99 | 616 | 231 |
| Pennsylvania | 6/99 | 215 | 267 |
| Pennsylvania | 6/99 | 610 | 484 |
| California | 6/99 | 619 | 858 |
| New Jersey | 6/99 | 609 | 856 |

## Table 19.1
### Area Code Assignments -- Continued
### (1984-2002)

| Location | Date | Previous Code | Added Code |
|---|---|---|---|
| New York (Manhattan) | 7/99 | 212 | 646 |
| Texas (Dallas) | 7/99 | 214 | 469 |
| Texas (Dallas) | 7/99 | 972 | 469 |
| Florida | 9/99 | 941 | 863 |
| Wisconsin | 9/99 | 414 | 262 |
| Louisiana | 10/99 | 318 | 337 |
| Florida | 11/99 | 407 | 321 |
| New York | 11/99 | 516 | 631 |
| Tennessee | 11/99 | 423 | 865 |
| Texas | 2/00 | 409 | 936 |
| Texas | 2/00 | 409 | 979 |
| Minnesota | 2/00 | 612 | 763 |
| Minnesota | 2/00 | 612 | 952 |
| Virginia | 3/00 | 703 | 571 |
| Kentucky | 4/00 | 606 | 859 |
| New York | 6/00 | 914 | 845 |
| California | 7/00 | 515 | 641 |
| Georgia | 8/00 | 912 | 478 |
| Georgia | 8/00 | 912 | 229 |
| Oregon | 10/00 | 503 | 971 |
| Texas | 10/00 | 817 | 682 |
| Ohio | 10/00 | 234 | 330 |
| Kansas | 2/01 | 316 | 620 |
| Tennessee | 2/01 | 901 | 731 |
| Louisiana | 2/01 | 504 | 985 |
| Florida | 2/01 | 904 | 386 |
| Ontario | 3/01 | 416 | 647 |
| Iowa | 3/01 | 319 | 563 |
| North Carolina | 4/01 | 704 | 980 |
| Michigan | 4/01 | 517 | 989 |
| Massachusetts | 5/01 | 781 | 339 |
| Massachusetts | 5/01 | 978 | 351 |
| Massachusetts | 5/01 | 508 | 774 |
| Massachusetts | 5/01 | 617 | 857 |
| Virginia | 6/01 | 804 | 434 |
| Ontario | 6/01 | 905 | 289 |
| Alabama | 6/01 | 334 | 251 |
| Arizona | 6/01 | 520 | 928 |
| Florida | 8/01 | 954 | 754 |
| Pennsylvania | 8/01 | 412 | 878 |
| Virginia | 9/01 | 540 | 276 |
| Puerto Rico | 9/01 | 787 | 939 |
| Michigan | 9/01 | 810 | 586 |
| British Columbia | 11/01 | 604 | 778 |
| New York | 11/01 | 716 | 585 |

## Table 19.1
### Area Code Assignments -- Continued
### (1984-2002)

| Location | Date | Previous Code | Added Code |
|---|---|---|---|
| New Jersey | 12/01 | 201 | 551 |
| New Jersey | 12/01 | 732 | 848 |
| New Jersey | 12/01 | 973 | 862 |
| Ohio | 1/02 | 419 | 567 |
| Illinois | 1/02 | 847 | 224 |
| Indiana | 1/02 | 219 | 260 |
| Indiana | 1/02 | 219 | 574 |
| Arkansas | 1/02 | 501 | 479 |
| Florida | 2/02 | 561 | 772 |
| Florida | 3/02 | 941 | 239 |

NA - Not applicable.

Source: North American Numbering Plan Administration (NANPA).

**Table 19.2**
**Telephone Numbers Assigned for Toll-Free Service ***
**(Summary December 1993 - 2001 and March 2002)**

| Year | Month | Working Toll-Free Numbers | Miscellaneous Toll-Free Numbers 1/ | Total Toll-Free Numbers Assigned | Spare Toll-Free Numbers Still Available |
|---|---|---|---|---|---|
| 1993 | December | 3,155,955 | 731,438 | 3,887,393 | 3,822,607 |
| 1994 | December | 4,948,605 | 763,235 | 5,711,840 | 1,998,160 |
| 1995 | December | 6,700,576 | 286,487 | 6,987,063 | 722,937 |
| 1996 | December | 9,527,982 | 945,671 | 10,473,653 | 5,216,347 |
| 1997 | December | 12,980,714 | 996,449 | 13,977,163 | 1,712,837 |
| 1998 | December | 16,200,883 | 965,466 | 17,166,349 | 6,503,651 |
| 1999 | December | 19,677,001 | 1,101,964 | 20,778,965 | 2,891,035 |
| 2000 | December | 23,022,015 | 1,178,096 | 24,200,111 | 7,449,889 |
| 2001 | December | 23,453,029 | 1,027,973 | 24,481,002 | 7,168,998 |
| 2002 | April | 22,585,348 | 1,841,945 | 24,427,293 | 7,222,707 |

**Table 19.2**
**Telephone Numbers Assigned for Toll-Free Service ***
**800 Toll-Free Service**

| Year | Month | Working 800 Numbers | Miscellaneous 800 Numbers 1/ | Total 800 Numbers Assigned | Spare 800 Numbers Still Available |
|---|---|---|---|---|---|
| 1993 | April | 2,448,985 | 642,725 | 3,091,710 | 4,618,290 |
| | May | 2,511,933 | 708,192 | 3,220,125 | 4,489,875 |
| | June | 2,589,123 | 722,006 | 3,311,129 | 4,398,871 |
| | July | 2,675,483 | 705,416 | 3,380,899 | 4,329,101 |
| | August | 2,738,259 | 701,009 | 3,439,268 | 4,270,732 |
| | September | 2,818,262 | 639,547 | 3,457,809 | 4,252,191 |
| | October | 2,891,994 | 660,544 | 3,552,538 | 4,157,462 |
| | November | 3,083,250 | 728,514 | 3,811,764 | 3,898,236 |
| | December | 3,155,955 | 731,438 | 3,887,393 | 3,822,607 |
| 1994 | January | 3,257,540 | 580,216 | 3,837,756 | 3,872,244 |
| | February | 3,381,646 | 731,005 | 4,112,651 | 3,597,349 |
| | March | 3,516,620 | 743,813 | 4,260,433 | 3,449,567 |
| | April | 3,659,129 | 699,212 | 4,358,341 | 3,351,659 |
| | May | 3,793,865 | 738,767 | 4,532,632 | 3,177,368 |
| | June | 3,933,037 | 792,698 | 4,725,735 | 2,984,265 |
| | July | 4,099,174 | 699,803 | 4,798,977 | 2,911,023 |
| | August | 4,312,486 | 807,881 | 5,120,367 | 2,589,633 |
| | September | 4,506,014 | 841,381 | 5,347,395 | 2,362,605 |
| | October | 4,611,014 | 871,684 | 5,482,698 | 2,227,302 |
| | November | 4,817,854 | 875,416 | 5,693,270 | 2,016,730 |
| | December | 4,948,605 | 763,235 | 5,711,840 | 1,998,160 |
| 1995 | January | 5,096,646 | 807,294 | 5,903,940 | 1,806,060 |
| | February | 5,278,800 | 811,221 | 6,090,021 | 1,619,979 |
| | March | 5,528,723 | 793,771 | 6,322,494 | 1,387,506 |
| | April | 5,741,780 | 797,902 | 6,539,682 | 1,170,318 |
| | May | 5,980,848 | 843,093 | 6,823,941 | 886,059 |
| | June | 6,340,534 | 481,633 | 6,822,167 | 887,833 |
| | July | 6,402,785 | 443,717 | 6,846,502 | 863,498 |
| | August | 6,428,120 | 442,270 | 6,870,390 | 839,610 |
| | September | 6,503,018 | 437,215 | 6,940,233 | 769,767 |
| | October | 6,583,344 | 396,605 | 6,979,949 | 730,051 |
| | November | 6,647,880 | 310,043 | 6,957,923 | 752,077 |
| | December | 6,700,576 | 286,487 | 6,987,063 | 722,937 |
| 1996 | January | 6,766,607 | 297,001 | 7,063,608 | 646,392 |
| | February | 6,861,093 | 335,557 | 7,196,650 | 513,350 |
| | March | 6,907,098 | 293,244 | 7,200,342 | 509,658 |
| | April | 6,934,085 | 280,927 | 7,215,012 | 494,988 |
| | May | 6,943,620 | 333,140 | 7,276,760 | 433,240 |
| | June | 6,986,821 | 324,899 | 7,311,720 | 398,280 |
| | July | 7,022,309 | 339,900 | 7,362,209 | 347,791 |
| | August | 7,074,772 | 311,273 | 7,386,045 | 323,955 |
| | September | 7,119,167 | 310,562 | 7,429,729 | 280,271 |
| | October | 7,185,135 | 325,088 | 7,510,223 | 199,777 |
| | November | 7,242,377 | 337,502 | 7,579,879 | 130,121 |
| | December | 7,272,819 | 343,905 | 7,616,724 | 93,276 |

**Table 19.2**
**Telephone Numbers Assigned for Toll-Free Service * -- Continued**
**800 Toll-Free Service**

| Year | Month | Working Toll-Free Numbers | Miscellaneous Toll-Free Numbers 1/ | Total Toll-Free Numbers Assigned | Spare Toll-Free Numbers Still Available |
|---|---|---|---|---|---|
| 1997 | January | 7,333,632 | 323,804 | 7,657,436 | 52,564 |
| | February | 7,388,696 | 318,571 | 7,707,267 | 2,733 |
| | March | 7,402,769 | 305,362 | 7,708,131 | 1,869 |
| | April | 7,411,118 | 296,925 | 7,708,043 | 1,957 |
| | May | 7,411,291 | 294,320 | 7,705,611 | 4,389 |
| | June | 7,415,591 | 293,802 | 7,709,393 | 607 |
| | July | 7,421,288 | 283,794 | 7,705,082 | 4,918 |
| | August | 7,430,733 | 276,024 | 7,706,757 | 3,243 |
| | September | 7,427,717 | 280,668 | 7,708,385 | 1,615 |
| | October | 7,433,483 | 276,490 | 7,709,973 | 27 |
| | November | 7,423,662 | 276,576 | 7,700,238 | 9,762 |
| | December | 7,429,160 | 267,429 | 7,696,589 | 13,411 |
| 1998 | January | 7,431,789 | 264,143 | 7,695,932 | 14,068 |
| | February | 7,445,338 | 257,493 | 7,702,831 | 7,169 |
| | March | 7,455,240 | 249,964 | 7,705,204 | 4,796 |
| | April | 7,464,692 | 232,462 | 7,697,154 | 12,846 |
| | May | 7,476,270 | 228,409 | 7,704,679 | 5,321 |
| | June | 7,480,468 | 227,041 | 7,707,509 | 2,491 |
| | July | 7,485,866 | 221,078 | 7,706,944 | 3,056 |
| | August | 7,483,417 | 224,242 | 7,707,659 | 2,341 |
| | September | 7,489,271 | 219,080 | 7,708,351 | 1,649 |
| | October | 7,479,005 | 229,889 | 7,708,894 | 1,106 |
| | November | 7,478,913 | 228,892 | 7,707,805 | 2,195 |
| | December | 7,487,529 | 215,267 | 7,702,796 | 7,204 |
| 1999 | January | 7,498,435 | 194,520 | 7,692,955 | 17,045 |
| | February | 7,504,256 | 192,068 | 7,696,324 | 13,676 |
| | March | 7,498,527 | 204,515 | 7,703,042 | 6,958 |
| | April | 7,506,452 | 202,241 | 7,708,693 | 1,307 |
| | May | 7,504,523 | 204,751 | 7,709,274 | 726 |
| | June | 7,502,118 | 207,061 | 7,709,179 | 821 |
| | July | 7,512,928 | 196,345 | 7,709,273 | 727 |
| | August | 7,514,686 | 194,434 | 7,709,120 | 880 |
| | September | 7,523,302 | 185,363 | 7,708,665 | 1,335 |
| | October | 7,493,898 | 215,756 | 7,709,654 | 346 |
| | November | 7,499,343 | 210,266 | 7,709,609 | 391 |
| | December | 7,505,737 | 202,416 | 7,708,153 | 1,847 |

**Table 19.2**
**Telephone Numbers Assigned for Toll-Free Service * -- Continued**
**800 Toll-Free Service**

| Year | Month | Working 800 Numbers | Miscellaneous 800 Numbers 1/ | Total 800 Numbers Assigned | Spare 800 Numbers Still Available |
|---|---|---|---|---|---|
| 2000 | January | 7,486,650 | 223,367 | 7,710,017 | N.A. |
| | February | 7,490,980 | 198,506 | 7,689,486 | 20,514 |
| | March | 7,516,391 | 193,246 | 7,709,637 | 363 |
| | April | 7,531,395 | 177,779 | 7,709,174 | 826 |
| | May | 7,547,157 | 158,776 | 7,705,933 | 4,067 |
| | June | 7,570,082 | 139,444 | 7,709,526 | 474 |
| | July | 7,576,696 | 132,065 | 7,708,761 | 1,239 |
| | August | 7,558,277 | 151,720 | 7,709,997 | 3 |
| | September | 7,752,091 | -42,295 | 7,709,796 | 204 |
| | October | 7,578,617 | 131,366 | 7,709,983 | 17 |
| | November | 7,563,824 | 135,636 | 7,699,460 | 10,540 |
| | December | 7,566,810 | 132,887 | 7,699,697 | 10,303 |
| 2001 | January | 7,483,975 | 215,316 | 7,699,291 | 10,709 |
| | February | 7,450,121 | 248,257 | 7,698,378 | 11,622 |
| | March | 7,434,621 | 264,967 | 7,699,588 | 10,412 |
| | April | 7,407,530 | 292,123 | 7,699,653 | 10,347 |
| | May | 7,410,426 | 261,585 | 7,672,011 | 37,989 |
| | June | 7,357,279 | 242,106 | 7,599,385 | 110,615 |
| | July | 7,336,672 | 222,085 | 7,558,757 | 151,243 |
| | August | 7,343,034 | 178,105 | 7,521,139 | 188,861 |
| | September | 7,383,111 | 164,881 | 7,547,992 | 162,008 |
| | October | 7,348,545 | 174,507 | 7,523,052 | 186,948 |
| | November | 7,361,135 | 186,143 | 7,547,278 | 162,722 |
| | December | 7,370,055 | 184,689 | 7,554,744 | 155,256 |
| 2002 | January | 7,372,220 | 208,787 | 7,581,007 | 128,993 |
| | February | 7,319,840 | 250,589 | 7,570,429 | 139,571 |
| | April | 7,217,397 | 370,919 | 7,588,316 | 121,684 |

**Table 19.2**
**TelephoneNumbers Assigned for Toll-Free Service * -- Continuec**
**888 Toll-Free Service**

| Year | Month | Working 888 Numbers | Miscellaneous 888 Numbers 1/ | Total 888 Numbers Assigned | Spare 888 Numbers Still Available |
|---|---|---|---|---|---|
| 1996 | February | 67,399 | 560,598 | 627,997 | 7,352,003 |
| | March | 267,874 | 568,574 | 836,448 | 7,143,552 |
| | April | 442,005 | 565,402 | 1,007,407 | 6,972,593 |
| | May | 707,374 | 542,428 | 1,249,802 | 6,730,198 |
| | June | 922,849 | 544,079 | 1,466,928 | 6,513,072 |
| | July | 1,157,770 | 549,845 | 1,707,615 | 6,272,385 |
| | August | 1,437,660 | 576,399 | 2,014,059 | 5,965,941 |
| | September | 1,641,519 | 590,345 | 2,231,864 | 5,748,136 |
| | October | 1,886,663 | 629,365 | 2,516,028 | 5,463,972 |
| | November | 2,074,600 | 622,375 | 2,696,975 | 5,283,025 |
| | December | 2,255,163 | 601,766 | 2,856,929 | 5,123,071 |
| 1997 | January | 2,457,250 | 591,533 | 3,048,783 | 4,931,217 |
| | February | 2,654,984 | 629,997 | 3,284,981 | 4,695,019 |
| | March | 2,857,608 | 661,164 | 3,518,772 | 4,461,228 |
| | April | 3,097,015 | 646,709 | 3,743,724 | 4,236,276 |
| | May | 3,399,856 | 657,615 | 4,057,471 | 3,922,529 |
| | June | 3,660,984 | 681,981 | 4,342,965 | 3,637,035 |
| | July | 3,990,769 | 696,331 | 4,687,100 | 3,292,900 |
| | August | 4,345,910 | 742,755 | 5,088,665 | 2,891,335 |
| | September | 4,776,688 | 774,431 | 5,551,119 | 2,428,881 |
| | October | 5,139,455 | 726,515 | 5,865,970 | 2,114,030 |
| | November | 5,353,989 | 699,223 | 6,053,212 | 1,926,788 |
| | December | 5,551,554 | 729,020 | 6,280,574 | 1,699,426 |
| 1998 | January | 5,760,023 | 719,289 | 6,479,312 | 1,500,688 |
| | February | 5,968,391 | 723,679 | 6,692,070 | 1,287,930 |
| | March | 6,167,479 | 728,415 | 6,895,894 | 1,084,106 |
| | April | 6,373,603 | 690,041 | 7,063,644 | 916,356 |
| | May | 6,493,156 | 672,776 | 7,165,932 | 814,068 |
| | June | 6,591,764 | 665,496 | 7,257,260 | 722,740 |
| | July | 6,705,902 | 661,085 | 7,366,987 | 613,013 |
| | August | 6,790,315 | 669,486 | 7,459,801 | 520,199 |
| | September | 6,898,718 | 612,254 | 7,510,972 | 469,028 |
| | October | 7,012,860 | 573,695 | 7,586,555 | 393,445 |
| | November | 7,054,472 | 572,759 | 7,627,231 | 352,769 |
| | December | 7,146,159 | 515,009 | 7,661,168 | 318,832 |

**Table 19.2**
**Telephone Numbers Assigned for Toll-Free Service * -- Continued**
**888 Toll-Free Service**

| Year | Month | Working 888 Numbers | Miscellaneous 888 Numbers 1/ | Total 888 Numbers Assigned | Spare 888 Numbers Still Available |
|---|---|---|---|---|---|
| 1999 | January | 7,196,336 | 510,057 | 7,706,393 | 273,607 |
| | February | 7,249,001 | 493,132 | 7,742,133 | 237,867 |
| | March | 7,278,531 | 495,904 | 7,774,435 | 205,565 |
| | April | 7,324,847 | 234,588 | 7,559,435 | 420,565 |
| | May | 7,385,748 | 216,196 | 7,601,944 | 378,056 |
| | June | 7,428,424 | 231,697 | 7,660,121 | 319,879 |
| | July | 7,487,759 | 231,884 | 7,719,643 | 260,357 |
| | August | 7,546,299 | 233,286 | 7,779,585 | 200,415 |
| | September | 7,601,867 | 211,318 | 7,813,185 | 166,815 |
| | October | 7,542,131 | 341,720 | 7,883,851 | 96,149 |
| | November | 7,592,293 | 342,918 | 7,935,211 | 44,789 |
| | December | 7,643,158 | 324,405 | 7,967,563 | 12,437 |
| 2000 | January | 7,615,927 | 363,960 | 7,979,887 | 113 |
| | February | 7,627,138 | 247,788 | 7,874,926 | 105,074 |
| | March | 7,685,423 | 230,035 | 7,915,458 | 64,542 |
| | April | 7,717,002 | 229,345 | 7,946,347 | 33,653 |
| | May | 7,758,684 | 157,984 | 7,916,668 | 63,332 |
| | June | 7,789,986 | 140,658 | 7,930,644 | 49,356 |
| | July | 7,820,147 | 141,713 | 7,961,860 | 18,140 |
| | August | 7,806,064 | 167,935 | 7,973,999 | 6,001 |
| | September | 7,806,252 | 173,588 | 7,979,840 | 160 |
| | October | 7,804,668 | 175,332 | 7,980,000 | 0 |
| | November | 7,795,241 | 172,827 | 7,968,068 | 11,932 |
| | December | 7,789,188 | 177,328 | 7,966,516 | 13,484 |
| 2001 | January | 7,647,783 | 324,097 | 7,971,880 | 8,120 |
| | February | 7,628,543 | 345,775 | 7,974,318 | 5,682 |
| | March | 7,616,189 | 355,451 | 7,971,640 | 8,360 |
| | April | 7,601,821 | 344,060 | 7,945,881 | 34,119 |
| | May | 7,573,372 | 264,492 | 7,837,864 | 142,136 |
| | June | 7,548,761 | 270,198 | 7,818,959 | 161,041 |
| | July | 7,540,276 | 254,940 | 7,795,216 | 184,784 |
| | August | 7,529,912 | 220,202 | 7,750,114 | 229,886 |
| | September | 7,508,100 | 203,518 | 7,711,618 | 268,382 |
| | October | 7,472,910 | 201,782 | 7,674,692 | 305,308 |
| | November | 7,464,369 | 197,092 | 7,661,461 | 318,539 |
| | December | 7,452,071 | 190,727 | 7,642,798 | 337,202 |
| 2002 | January | 7,415,181 | 197,673 | 7,612,854 | 367,146 |
| | February | 7,387,865 | 190,345 | 7,578,210 | 401,790 |
| | April | 6,637,447 | 840,389 | 7,477,836 | 502,164 |

**Table 19.2**
**Telephone Numbers Assigned for Toll-Free Service * -- Continued**
**877 Toll-Free Service**

| Year | Month | Working 877 Numbers | Miscellaneous 877 Numbers 1/ | Total 877 Numbers Assigned | Spare 877 Numbers Still Available |
|---|---|---|---|---|---|
| 1998 | April | 168,300 | 276,169 | 444,469 | 7,535,531 |
| | May | 354,303 | 256,712 | 611,015 | 7,368,985 |
| | June | 552,037 | 209,967 | 762,004 | 7,217,996 |
| | July | 759,971 | 179,830 | 939,801 | 7,040,199 |
| | August | 918,956 | 201,087 | 1,120,043 | 6,859,957 |
| | September | 1,072,046 | 206,714 | 1,278,760 | 6,701,240 |
| | October | 1,259,620 | 277,038 | 1,536,658 | 6,443,342 |
| | November | 1,386,726 | 292,264 | 1,678,990 | 6,301,010 |
| | December | 1,567,195 | 235,190 | 1,802,385 | 6,177,615 |
| 1999 | January | 1,712,675 | 233,863 | 1,946,538 | 6,033,462 |
| | February | 1,920,715 | 299,430 | 2,220,145 | 5,759,855 |
| | March | 2,141,228 | 329,044 | 2,470,272 | 5,509,728 |
| | April | 2,410,517 | 403,711 | 2,814,228 | 5,165,772 |
| | May | 2,678,075 | 407,450 | 3,085,525 | 4,894,475 |
| | June | 2,899,466 | 410,026 | 3,309,492 | 4,670,508 |
| | July | 3,140,981 | 491,644 | 3,632,625 | 4,347,375 |
| | August | 3,472,534 | 456,372 | 3,928,906 | 4,051,094 |
| | September | 3,755,361 | 436,433 | 4,191,794 | 3,788,206 |
| | October | 4,008,681 | 486,968 | 4,495,649 | 3,484,351 |
| | November | 4,304,159 | 505,179 | 4,809,338 | 3,170,662 |
| | December | 4,528,106 | 575,143 | 5,103,249 | 2,876,751 |
| 2000 | January | 4,882,111 | 573,482 | 5,455,593 | 2,524,407 |
| | February | 5,118,387 | 659,479 | 5,777,866 | 2,202,134 |
| | March | 5,436,297 | 598,702 | 6,034,999 | 1,945,001 |
| | April | 5,764,078 | 520,951 | 6,285,029 | 1,694,971 |
| | May | 6,098,025 | 469,486 | 6,567,511 | 1,412,489 |
| | June | 6,317,507 | 402,858 | 6,720,365 | 1,259,635 |
| | July | 6,608,186 | 391,545 | 6,999,731 | 980,269 |
| | August | 6,636,282 | 385,065 | 7,021,347 | 958,653 |
| | September | 6,539,180 | 496,015 | 7,035,195 | 944,805 |
| | October | 6,475,202 | 622,384 | 7,097,586 | 882,414 |
| | November | 6,436,613 | 657,271 | 7,093,884 | 886,116 |
| | December | 6,391,285 | 719,333 | 7,110,618 | 869,382 |
| 2001 | January | 6,425,413 | 612,539 | 7,037,952 | 942,048 |
| | February | 6,369,360 | 559,994 | 6,929,354 | 1,050,646 |
| | March | 6,289,079 | 469,980 | 6,759,059 | 1,220,941 |
| | April | 6,249,330 | 537,570 | 6,786,900 | 1,193,100 |
| | May | 6,191,049 | 611,661 | 6,802,710 | 1,177,290 |
| | June | 6,094,898 | 715,097 | 6,809,995 | 1,170,005 |
| | July | 6,147,253 | 602,984 | 6,750,237 | 1,229,763 |
| | August | 6,169,624 | 518,953 | 6,688,577 | 1,291,423 |
| | September | 6,163,297 | 489,084 | 6,652,381 | 1,327,619 |
| | October | 6,170,689 | 370,974 | 6,541,663 | 1,438,337 |
| | November | 6,162,433 | 401,766 | 6,564,199 | 1,415,801 |
| | December | 6,214,863 | 345,468 | 6,560,331 | 1,419,669 |
| 2002 | January | 6,188,017 | 327,365 | 6,515,382 | 1,464,618 |
| | February | 6,191,784 | 323,701 | 6,515,485 | 1,464,515 |
| | April | 6,062,715 | 324,445 | 6,387,160 | 1,592,840 |

## Table 19.2
## Telephone Numbers Assigned for Toll-Free Service * -- Continued
## 866 Toll-Free Service

| Year | Month | Working 866 Numbers | Miscellaneous 866 Numbers 1/ | Total 866 Numbers Assigned | Spare 866 Numbers Still Available |
|---|---|---|---|---|---|
| 2000 | July | 8,714 | 135,238 | 143,952 | 7,836,048 |
| | August | 384,164 | 213,442 | 597,606 | 7,382,394 |
| | September | 672,250 | 155,646 | 827,896 | 7,152,104 |
| | October | 931,620 | 161,091 | 1,092,711 | 6,887,289 |
| | November | 1,200,025 | 139,026 | 1,339,051 | 6,640,949 |
| | December | 1,274,732 | 148,548 | 1,423,280 | 6,556,720 |
| 2001 | January | 1,485,551 | 190,096 | 1,675,647 | 6,304,353 |
| | February | 1,597,785 | 224,368 | 1,822,153 | 6,157,847 |
| | March | 1,652,602 | 361,888 | 2,014,490 | 5,965,510 |
| | April | 1,726,291 | 356,526 | 2,082,817 | 5,897,183 |
| | May | 1,868,490 | 345,639 | 2,214,129 | 5,765,871 |
| | June | 1,944,520 | 362,880 | 2,307,400 | 5,672,600 |
| | July | 2,011,779 | 342,485 | 2,354,264 | 5,625,736 |
| | August | 2,171,463 | 320,800 | 2,492,263 | 5,487,737 |
| | September | 2,256,792 | 308,801 | 2,565,593 | 5,414,407 |
| | October | 2,333,977 | 289,824 | 2,623,801 | 5,356,199 |
| | November | 2,406,337 | 272,400 | 2,678,737 | 5,301,263 |
| | December | 2,416,040 | 307,089 | 2,723,129 | 5,256,871 |
| 2002 | January | 2,490,156 | 327,104 | 2,817,260 | 5,162,740 |
| | February | 2,563,573 | 323,783 | 2,887,356 | 5,092,644 |
| | April | 2,667,789 | 306,192 | 2,973,981 | 5,006,019 |

NA - Not applicable.

* Toll-free (800) service was initially offered by AT&T in 1967. On May 3, 1993, procedures for routing toll-free calls were changed and 800 numbers were made "portable" so customers who switched service providers could retain their numbers. Due to the growth in toll-free numbers, a new toll-free calling code, 888, was added in March 1996, which made it possible to assign about 8 million new toll-free numbers. A third toll-free calling code, 877, was added in April 1998; and a fourth toll-free code, 866, was added in November 2000.

1/ Miscellaneous numbers include those in the 800, 888, 877, and 866 service management systems maintained by Database Service Management, Inc., and categorized as reserved, assigned but not yet activated, recently disconnected, or suspended.

# 20 Universal Service

The high-cost support mechanisms enable areas with very high costs to recover some of these costs from the support mechanisms, leaving a smaller remainder of the costs to be recovered through end-user rates or state universal support mechanisms. In this manner, the high-cost support mechanisms are intended to hold down rates and thereby further one of the most important goals of federal and state regulation -- the preservation and advancement of universal telephone service.

There currently are six high-cost support mechanisms. These include embedded high-cost loop (HCL) support[1], long-term support (LTS), local switching support (LSS), the forward-looking, high-cost model support, the interstate access universal service support, for price-cap carriers, and interstate common line support (ICLS) for rate-of-return carriers.

The Universal Service Fund (USF) high-cost loop support provides assistance to companies with above average non-traffic-sensitive local loop costs -- a term that refers to the costs of providing the loop connection between the customers and the central office. The second high-cost support mechanism, LTS, is also related to non-traffic-sensitive costs. LTS provides support to members of the NECA common line pool, to allow them to charge a below-cost carrier common line rate. The third high-cost support mechanism, LSS, is related to traffic-sensitive local switching costs. LSS provides support to LECs with study areas of 50,000 or fewer access lines to help defray the higher switching cost of small LECs.

In October 1999, the Commission adopted the fourth mechanism, a new high-cost support mechanism for non-rural carriers. The new mechanism is based on the forward-looking costs of providing supported services as determined by the Commission's cost model. For each state, the cost model calculates the wire center average forward-looking cost per line incurred by non-rural carriers to provide supported services. These wire center average costs are then averaged at the statewide level to determine the statewide average forward-looking cost per line. The forward-looking support mechanism provides support to non-rural carriers in those states that have a statewide average forward-looking cost per line greater than the national benchmark, which is set at 135 percent of the national average forward-looking cost per line.[2]

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[1] This was formerly referred to as the Universal Service Fund, and still bears that name in the Commission rules. It is now referred to as high-cost loop support to avoid confusion with the new, more comprehensive universal service support mechanisms that the Commission developed to implement the 1996 Act. *See* 47 CFR § 36.601.

[2] But cf. *Qwest Corp. v. FCC*, 2001 WL 864222 (10th Cir. July 31, 2001) (reversing and remanding the Ninth Order of the FCC "because it does not provide sufficient reasoning or record evidence to support [the] reasonableness [of its decision]"). *See Federal-State Joint Board on Universal Service,* Notice of Proposed Rulemaking, CC Docket No. 96-45, 17 FCC Rcd 2999 (2002) (seeking comment on court's remand of the Ninth Order).

On May 31, 2000, the Commission established the fifth mechanism, an explicit interstate access universal service support mechanism for price-cap carriers to replace the implicit support previously collected through interstate access charges. Like LTS, the purpose of this new mechanism is to provide explicit support to ensure reasonably affordable interstate rates. This is in contrast to the Commission's other high-cost support mechanisms, which provide support to enable states to ensure reasonably affordable and comparable intrastate rates.

In the *MAG Order* (FCC 01-304), which was released by the Commission on November 8, 2001, the Commission created the ICLS mechanism to convert implicit support in the access rate structure to explicit, portable support. ICLS will recover any shortfall between the allowed common line revenues of rate-of-return carriers and their subscriber line charge revenues and gradually replace the carrier common line charge. Under the MAG Order, the ICLS mechanism will be implemented beginning on July 1, 2002.

Table 20.1 shows USF, LTS, LSS, high-cost model support, and interstate access universal service support payments from 1986 to 2000. ICLS payments will begin July 1, 2002, and therefore are not provided in these charts. Table 20.2 shows projected payments by state for 2000. It should be noted that these projections do not include subsequent quarterly true-ups.

Eligible schools and libraries receive telecommunications services, Internet access, and internal connections at discounts that range from 20 percent to 90 percent. The level of the discount is generally based on the percentage of students eligible for the national school lunch program, or in the case of libraries, the percentage of students eligible for the national school lunch program in the school district the library is located in. In addition, schools and libraries located in rural areas receive an additional discount.

The portion of universal service support designated for health care providers is designed to allow rural health care providers to purchase telecommunications services at the same rates that health care providers located in urban areas pay for these services. The Commission's universal service rules permit eligible rural health care providers to receive discounts on telecommunications service so that they pay a rate no greater than the rate available in the nearest large city. The Commission defined "nearest large city" as the closest city in the state with a population of at least 50,000. In addition, any rural health care provider that cannot obtain toll-free Internet access is entitled to receive the lesser of $180 of toll charges per month, or the toll charges incurred for 30 hours per month, for telecommunications access to an Internet service provider.

Table 20.3 shows, on a state-by-state basis, funding commitments to schools and libraries for the July 1, 2000 - June 30, 2001 funding year. The commitments are broken down by type of service that was funded. Table 20.4 shows, on a state-by-state basis, Rural Health Care funding disbursements by speed of service.

Carriers contribute to universal service based on their end-user revenues. Since November 1999, all contributions to USF are based on interstate end-user revenues. Table 20.5 shows interstate and intrastate contribution rates since the first quarter of 1998.

## Table 20.1
## Universal Service Fund Payment History
### (In Millions of Dollars)

| Year | High-Cost Loop Support | Long-Term Support | Switching Support | New High-Cost Model Support | Interstate Access Support | Total Support | Cumulative Payments |
|---|---|---|---|---|---|---|---|
| 1986 | $56 | $0 | NA | $0 | $0 | $56 | $56 |
| 1987 | 126 | 0 | NA | 0 | 0 | 126 | 181 |
| 1988 | 183 | 0 | NA | 0 | 0 | 183 | 365 |
| 1989 | 265 | 236 | NA | 0 | 0 | 500 | 865 |
| 1990 | 339 | 263 | NA | 0 | 0 | 602 | 1,467 |
| 1991 | 485 | 272 | NA | 0 | 0 | 757 | 2,223 |
| 1992 | 609 | 306 | NA | 0 | 0 | 915 | 3,138 |
| 1993 | 705 | 323 | $311 | 0 | 0 | 1,339 | 4,477 |
| 1994 | 725 | 347 | 304 | 0 | 0 | 1,376 | 5,853 |
| 1995 | 750 | 382 | 325 | 0 | 0 | 1,457 | 7,310 |
| 1996 | 763 | 426 | 348 | 0 | 0 | 1,536 | 8,846 |
| 1997 | 794 | 470 | 351 | 0 | 0 | 1,614 | 10,460 |
| 1998 | 827 | 476 | 387 | 0 | 0 | 1,691 | 12,151 |
| 1999 | 864 | 473 | 383 | 0 | 0 | 1,720 | 13,871 |
| 2000 | 894 | 479 | 390 | 199 | 276 | 2,238 | 16,109 |
| 2001 | 999 | 487 | 399 | 202 | 574 | 2,661 | 18,770 |

NA - Not available.

Note: Universal service payments for 2001 are projected.

Sources: Industry Analysis Division, Common Carrier Bureau, *October 2001 Monitoring Report* (November 2001), and USAC filings.

**Table 20.2**
**High-Cost Support Payments by State: 2001**
**(In Thousands of Dollars)**

| | High-Cost Loop Support | Long-Term Loop Support | Local Switching Support | New High-Cost Model Support | Interstate Access Support | Total Support |
|---|---|---|---|---|---|---|
| Alabama | $25,629 | $7,444 | $6,692 | $42,371 | $17,706 | $99,842 |
| Alaska | 43,859 | 17,207 | 16,714 | 0 | 0 | 77,780 |
| American Samoa | 59 | 258 | 212 | 0 | 0 | 530 |
| Arizona | 24,443 | 3,172 | 11,307 | 0 | 12,649 | 51,570 |
| Arkansas | 50,196 | 15,623 | 8,113 | 0 | 6,792 | 80,725 |
| California | 31,668 | 13,469 | 6,693 | 0 | 32,233 | 84,062 |
| Colorado | 30,243 | 12,293 | 4,202 | 0 | 16,227 | 62,964 |
| Connecticut | 0 | 165 | 598 | 0 | 340 | 1,104 |
| Delaware | 0 | 0 | 0 | 0 | 380 | 380 |
| District of Columbia | 0 | 0 | 0 | 0 | 0 | 0 |
| Florida | 12,971 | 5,401 | 3,742 | 0 | 62,276 | 84,390 |
| Georgia | 48,044 | 18,129 | 13,011 | 0 | 11,899 | 91,083 |
| Guam | 384 | 1,975 | 0 | 0 | 0 | 2,359 |
| Hawaii | 1,277 | 0 | 1,580 | 0 | 2,682 | 5,539 |
| Idaho | 18,772 | 3,511 | 6,829 | 0 | 14,456 | 43,568 |
| Illinois | 8,157 | 6,305 | 11,788 | 0 | 12,815 | 39,065 |
| Indiana | 4,366 | 5,211 | 9,090 | 0 | 23,768 | 42,434 |
| Iowa | 5,684 | 7,359 | 14,323 | 0 | 7,088 | 34,454 |
| Kansas | 48,929 | 11,622 | 14,227 | 0 | 6,688 | 81,466 |
| Kentucky | 9,052 | 4,972 | 4,907 | 0 | 16,112 | 35,044 |
| Louisiana | 44,796 | 16,978 | 7,302 | 0 | 10,765 | 79,842 |
| Maine | 7,748 | 6,098 | 7,530 | 8,873 | 726 | 30,977 |
| Maryland | 0 | 93 | 475 | 0 | 3,706 | 4,274 |
| Massachusetts | 50 | 104 | 486 | 0 | 785 | 1,424 |
| Michigan | 22,805 | 9,967 | 7,906 | 0 | 145 | 40,824 |
| Minnesota | 17,720 | 12,335 | 17,761 | 0 | 3,393 | 51,209 |
| Mississippi | 20,274 | 5,151 | 3,709 | 103,997 | 11,751 | 144,883 |
| Missouri | 54,016 | 10,877 | 8,733 | 0 | 15,789 | 89,415 |
| Montana | 27,729 | 10,158 | 9,495 | 4,383 | 569 | 52,334 |
| Nebraska | 10,053 | 3,919 | 10,788 | 0 | 1,321 | 26,080 |
| Nevada | 6,662 | 930 | 6,770 | 0 | 8,384 | 22,746 |
| New Hampshire | 1,029 | 1,535 | 4,946 | 0 | 1,968 | 9,478 |
| New Jersey | 0 | 0 | 1,082 | 0 | 4,948 | 6,030 |
| New Mexico | 18,232 | 6,263 | 10,334 | 0 | 7,673 | 42,501 |
| New York | 12,687 | 6,908 | 18,375 | 0 | 23,740 | 61,710 |
| North Carolina | 11,410 | 12,233 | 5,538 | 0 | 11,953 | 41,134 |
| North Dakota | 11,076 | 6,071 | 9,444 | 0 | 868 | 27,460 |
| Northern Mariana Islands | 1,721 | 0 | 843 | 0 | 247 | 2,811 |
| Ohio | 6,876 | 5,291 | 4,692 | 0 | 11,546 | 28,405 |
| Oklahoma | 38,404 | 16,657 | 14,734 | 0 | 6,889 | 76,684 |
| Oregon | 23,809 | 9,391 | 7,606 | 0 | 19,563 | 60,369 |
| Pennsylvania | 1,065 | 14,347 | 6,680 | 0 | 13,267 | 35,360 |
| Puerto Rico | 37,473 | 91,087 | 0 | 0 | 0 | 128,559 |
| Rhode Island | 0 | 0 | 0 | 0 | 97 | 97 |
| South Carolina | 19,851 | 11,264 | 7,444 | 0 | 16,761 | 55,321 |
| South Dakota | 8,712 | 5,115 | 9,912 | 0 | 76 | 23,814 |
| Tennessee | 13,889 | 10,548 | 7,755 | 0 | 8,570 | 40,762 |
| Texas | 96,390 | 30,092 | 17,921 | 0 | 38,261 | 182,664 |
| Utah | 4,860 | 1,510 | 5,195 | 0 | 2,731 | 14,297 |
| Vermont | 3,802 | 2,424 | 5,301 | 10,008 | 1,193 | 22,729 |
| Virgin Islands | 17,980 | 7,314 | 0 | 0 | 0 | 25,294 |
| Virginia | 4,106 | 3,392 | 4,875 | 0 | 51,425 | 63,798 |
| Washington | 30,601 | 15,577 | 7,987 | 0 | 22,760 | 76,925 |
| West Virginia | 22,015 | 1,077 | 3,759 | 25,875 | 19,703 | 72,430 |
| Wisconsin | 22,368 | 13,630 | 22,988 | 0 | 2,616 | 61,601 |
| Wyoming | 15,454 | 4,568 | 6,202 | 6,151 | 6,090 | 38,464 |
| Total | $999,398 | $487,019 | $398,599 | $201,658 | $574,391 | $2,661,065 |

Note: Universal service payments for 2001 are projected.

Sources: Industry Analysis Division, Common Carrier Bureau, *October 2001 Monitoring Report* (November 2001), and USAC filings.

## Table 20.3
## Schools and Libraries Funding by State and by Type of Service
## (Funding Period: July 1, 2000 Through June 30, 2001
## Funds Committed Through February 26, 2002)[1]

| State/Territory | Internal Connections | | Internet Access | | Telecom. & Dedicated | | Totals | |
|---|---|---|---|---|---|---|---|---|
| | Funds Committed | Funds Disbursed | Funds Committed | Funds Disbursed | Funds Committed | Funds Disbursed | Funds Committed | Funds Disbursed |
| Alabama | $6,866,772 | $5,488,774 | $4,993,268 | $4,150,321 | $9,347,685 | $6,316,181 | $21,207,725 | $15,955,276 |
| Alaska | 1,605,232 | 1,032,972 | 6,583,971 | 5,222,509 | 4,249,003 | 2,320,656 | 12,438,207 | 8,576,138 |
| American Samoa | 554,452 | 554,452 | 1,073,639 | 1,058,519 | 442,886 | 430,174 | 2,070,977 | 2,043,145 |
| Arizona | 34,557,476 | 28,107,590 | 2,448,588 | 1,431,075 | 10,230,601 | 5,125,622 | 47,236,665 | 34,664,287 |
| Arkansas | 7,950,946 | 7,072,979 | 4,214,521 | 2,282,294 | 4,894,008 | 2,587,421 | 17,059,475 | 11,942,693 |
| California | 356,622,445 | 238,786,358 | 7,561,873 | 3,522,494 | 64,767,615 | 24,820,977 | 428,951,933 | 267,129,828 |
| Colorado | 2,117,962 | 1,637,995 | 989,949 | 484,690 | 11,358,750 | 6,681,357 | 14,466,660 | 8,804,042 |
| Connecticut | 15,163,599 | 14,019,490 | 2,529,915 | 1,915,903 | 6,506,924 | 5,022,633 | 24,200,438 | 20,958,026 |
| Delaware | 9,285 | 0 | 69,838 | 51,548 | 1,544,833 | 1,089,809 | 1,623,956 | 1,141,357 |
| District of Columbia | 2,421,006 | 2,271,897 | 2,164,955 | 1,694,519 | 2,284,297 | 2,102,415 | 6,870,258 | 6,068,830 |
| Florida | 13,541,787 | 6,524,854 | 8,978,101 | 4,167,385 | 35,884,617 | 24,713,802 | 58,404,506 | 35,406,041 |
| Georgia | 16,310,332 | 15,130,606 | 9,922,580 | 7,638,271 | 24,651,413 | 16,249,652 | 50,884,326 | 39,018,529 |
| Guam | 112,774 | 0 | 396,376 | 88,465 | 480,198 | 812 | 989,348 | 89,276 |
| Hawaii | 340,168 | 135,209 | 325,064 | 250,515 | 1,914,249 | 438,093 | 2,579,482 | 823,818 |
| Idaho | 137,548 | 121,509 | 599,203 | 423,754 | 2,169,382 | 1,458,102 | 2,906,133 | 2,003,364 |
| Illinois | 87,357,743 | 72,461,132 | 3,001,961 | 1,681,855 | 24,788,205 | 16,485,874 | 115,147,909 | 90,628,861 |
| Indiana | 1,675,182 | 1,459,894 | 10,564,246 | 4,809,473 | 8,526,844 | 4,534,121 | 20,766,272 | 10,803,488 |
| Iowa | 215,970 | 35,094 | 1,514,639 | 1,036,541 | 3,613,523 | 2,298,317 | 5,344,132 | 3,369,952 |
| Kansas | 406,105 | 301,292 | 1,987,379 | 1,214,441 | 6,493,468 | 3,778,118 | 8,886,952 | 5,293,851 |
| Kentucky | 10,305,274 | 6,899,559 | 1,459,360 | 1,000,009 | 14,774,311 | 8,887,582 | 26,538,946 | 16,787,150 |
| Louisiana | 8,751,656 | 7,728,741 | 3,961,992 | 3,307,968 | 10,647,716 | 7,660,470 | 23,361,365 | 18,697,179 |
| Maine | 274,386 | 274,386 | 211,056 | 181,410 | 2,976,072 | 1,548,989 | 3,461,514 | 2,004,785 |
| Maryland | 7,760,539 | 6,388,343 | 1,479,036 | 886,786 | 9,922,363 | 8,418,725 | 19,161,937 | 15,693,854 |
| Massachusetts | 20,788,838 | 18,693,994 | 12,464,503 | 925,440 | 13,368,779 | 8,778,707 | 46,622,121 | 28,398,141 |
| Michigan | 20,499,664 | 19,810,890 | 5,419,133 | 3,477,968 | 27,617,373 | 15,449,625 | 53,536,170 | 38,738,483 |
| Minnesota | 737,942 | 604,517 | 2,169,797 | 1,311,501 | 14,165,691 | 9,490,621 | 17,073,430 | 11,406,639 |
| Mississippi | 10,440,614 | 8,411,028 | 2,062,776 | 1,241,735 | 17,575,194 | 10,385,191 | 30,078,584 | 20,037,955 |
| Missouri | 49,687,073 | 40,620,342 | 5,259,337 | 3,122,095 | 17,409,623 | 7,083,339 | 72,356,033 | 50,825,775 |
| Montana | 437,363 | 362,856 | 789,286 | 529,030 | 1,943,713 | 1,533,610 | 3,170,362 | 2,425,496 |
| Nebraska | 99,744 | 12,680 | 842,998 | 543,159 | 5,444,911 | 3,693,701 | 6,387,653 | 4,249,540 |
| Nevada | 595,860 | 269,440 | 27,099 | 25,592 | 3,289,524 | 2,126,340 | 3,912,483 | 2,421,372 |
| New Hampshire | 28,135 | 28,022 | 352,414 | 138,166 | 866,902 | 364,649 | 1,247,451 | 530,838 |
| New Jersey | 19,779,568 | 14,040,297 | 2,938,846 | 1,555,593 | 19,722,531 | 11,767,856 | 42,440,945 | 27,363,746 |
| New Mexico | 10,958,867 | 7,897,874 | 1,646,370 | 523,454 | 6,204,817 | 3,154,227 | 18,810,054 | 11,575,555 |
| New York | 170,631,613 | 149,587,289 | 13,817,134 | 5,846,161 | 92,019,021 | 52,243,995 | 276,467,768 | 207,677,445 |
| North Carolina | 8,115,425 | 7,673,540 | 6,074,211 | 4,329,339 | 13,731,994 | 9,980,755 | 27,921,630 | 21,983,634 |
| North Dakota | 98,403 | 86,131 | 372,936 | 293,072 | 1,279,850 | 923,260 | 1,751,190 | 1,302,463 |
| Northern Mariana Ils. | 0 | 0 | 328,659 | 76,608 | 170,213 | 0 | 498,872 | 76,608 |
| Ohio | 33,358,994 | 32,667,867 | 8,507,353 | 5,399,043 | 18,416,413 | 8,959,900 | 60,282,759 | 47,026,810 |
| Oklahoma | 8,805,876 | 7,875,025 | 4,549,642 | 2,194,677 | 11,450,301 | 5,725,062 | 24,805,819 | 15,794,765 |
| Oregon | 888,800 | 795,055 | 1,422,657 | 789,512 | 8,385,550 | 3,691,797 | 10,697,007 | 5,276,364 |
| Pennsylvania | 22,992,679 | 17,293,973 | 6,940,363 | 4,524,315 | 24,187,691 | 14,832,706 | 54,120,734 | 36,650,995 |
| Puerto Rico | 48,083,879 | 35,774,992 | 28,206,579 | 12,750,559 | 465,908 | 167,577 | 76,756,365 | 48,693,129 |
| Rhode Island | 882,136 | 698,945 | 702,500 | 464,687 | 3,104,491 | 1,947,161 | 4,689,127 | 3,110,793 |
| South Carolina | 32,682,036 | 28,817,297 | 1,302,912 | 187,226 | 18,140,186 | 8,728,843 | 52,125,134 | 37,733,366 |
| South Dakota | 165,960 | 39,115 | 343,644 | 93,813 | 1,366,500 | 992,920 | 1,876,104 | 1,125,849 |
| Tennessee | 18,152,471 | 5,196,382 | 14,154,569 | 12,799,818 | 14,120,713 | 8,662,730 | 46,427,754 | 26,658,931 |
| Texas | 89,683,773 | 76,240,630 | 10,230,580 | 4,169,869 | 51,815,051 | 20,568,341 | 151,729,403 | 100,978,840 |
| Utah | 342,829 | 238,787 | 1,440,918 | 1,057,682 | 3,313,245 | 2,513,883 | 5,096,993 | 3,810,352 |
| Vermont | 3,889 | 0 | 556,489 | 312,255 | 1,125,984 | 675,203 | 1,686,362 | 987,458 |
| Virgin Islands | 675,658 | 646,246 | 87,524 | 3,600 | 71,767 | 20,562 | 834,949 | 670,408 |
| Virginia | 1,371,510 | 969,615 | 2,756,541 | 1,860,931 | 15,293,243 | 11,351,188 | 19,421,294 | 14,181,734 |
| Washington | 3,763,777 | 1,657,160 | 1,038,807 | 653,116 | 13,706,429 | 9,595,006 | 18,509,014 | 11,905,282 |
| West Virginia | 1,482,354 | 856,047 | 378,976 | 254,909 | 3,774,881 | 2,015,198 | 5,636,211 | 3,126,154 |
| Wisconsin | 7,672,616 | 6,478,346 | 3,291,786 | 2,176,971 | 14,639,090 | 7,980,853 | 25,603,492 | 16,636,171 |
| Wyoming | 564,894 | 533,125 | 133,142 | 33,042 | 428,320 | 320,563 | 1,126,356 | 886,730 |
| Totals | $1,159,531,881 | $901,310,636 | $217,641,994 | $122,165,683 | $701,084,864 | $398,695,270 | $2,078,258,739 | $1,422,171,589 |

[1] Because of the appeals process, funding commitments have been made after the program year ended on June 30, 2001.

Source: USAC data. Rollups performed by the Industry Analysis and Technology Division, Wireline Competition Bureau, FCC.

## Table 20.4
## Rural Health Care Fund Disbursements by Service Speed and by State
## (Funding Period: July 1, 2000 Through June 30, 2001
## Activity Through February 26, 2002)

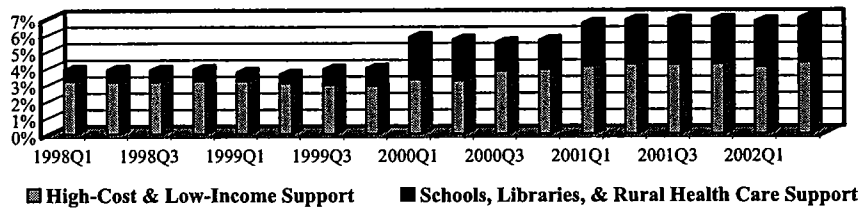
| State | Voice Grade | Broadband | | Other Service or Speed Unknown | Total |
|---|---|---|---|---|---|
| | 56K to 199K | 200K to 1.49Mb | 1.5Mb and faster | | |
| Alabama | $0 | $0 | $0 | $0 | $0 |
| Alaska | 0 | 35,776 | 2,957,695 | 473,204 | 3,466,675 |
| Arizona | 0 | 0 | 178,027 | 0 | 178,027 |
| Arkansas | 0 | 0 | 63,112 | 0 | 63,112 |
| California | 123,716 | 0 | 7,891 | 0 | 131,607 |
| Colorado | 0 | 0 | 19,245 | 0 | 19,245 |
| Connecticut | 0 | 0 | 0 | 0 | 0 |
| Delaware | 0 | 0 | 0 | 0 | 0 |
| District of Columbia | 0 | 0 | 0 | 0 | 0 |
| Florida | 0 | 0 | 0 | 0 | 0 |
| Georgia | 0 | 0 | 0 | 0 | 0 |
| Hawaii | 0 | 0 | 218,920 | 0 | 218,920 |
| Idaho | 1,632 | 0 | 0 | 0 | 1,632 |
| Illinois | 0 | 0 | 56,454 | 0 | 56,454 |
| Indiana | 0 | 0 | 0 | 0 | 0 |
| Iowa | 0 | 0 | 75,359 | 2,543 | 77,902 |
| Kansas | 19,460 | 0 | 32,063 | 18,694 | 70,217 |
| Kentucky | 0 | 0 | 14,488 | 0 | 14,488 |
| Louisiana | 0 | 0 | 8,478 | 0 | 8,478 |
| Maine | 0 | 0 | 0 | 0 | 0 |
| Maryland | 0 | 0 | 0 | 0 | 0 |
| Massachusetts | 0 | 0 | 0 | 0 | 0 |
| Michigan | 342 | 0 | 73,667 | 930 | 74,938 |
| Minnesota | 0 | 0 | 194,233 | 9,685 | 203,918 |
| Mississippi | 1,514 | 0 | 0 | 7,084 | 8,598 |
| Missouri | 0 | 0 | 8,892 | 0 | 8,892 |
| Montana | 0 | 0 | 197,676 | 3,028 | 200,704 |
| Nebraska | 0 | 0 | 236,406 | 2,585 | 238,991 |
| Nevada | 0 | 0 | 0 | 0 | 0 |
| New Hampshire | 0 | 0 | 0 | 0 | 0 |
| New Jersey | 0 | 0 | 0 | 0 | 0 |
| New Mexico | 0 | 0 | 14,220 | 21,757 | 35,977 |
| New York | 0 | 0 | 0 | 0 | 0 |
| North Carolina | 0 | 0 | 63,713 | 865 | 64,577 |
| North Dakota | 9,270 | 0 | 169,040 | 10,066 | 188,376 |
| Ohio | 546 | 0 | 1,736 | 1,753 | 4,035 |
| Oklahoma | 0 | 0 | 7,541 | 787 | 8,328 |
| Oregon | 0 | 0 | 28,406 | 0 | 28,406 |
| Pennsylvania | 0 | 0 | 0 | 0 | 0 |
| Rhode Island | 0 | 0 | 0 | 0 | 0 |
| South Carolina | 0 | 0 | 17,909 | 0 | 17,909 |
| South Dakota | 180 | 0 | 115,933 | 16,574 | 132,687 |
| Tennessee | 0 | 0 | 1,148 | 0 | 1,148 |
| Texas | 0 | 0 | 0 | 0 | 0 |
| Utah | 0 | 0 | 0 | 0 | 0 |
| Vermont | 0 | 0 | 0 | 0 | 0 |
| Virgin Islands | 0 | 0 | 45,135 | 42,538 | 87,673 |
| Virginia | 0 | 0 | 0 | 0 | 0 |
| Washington | 0 | 0 | 30,176 | 0 | 30,176 |
| West Virginia | 856 | 0 | 4,587 | 0 | 5,443 |
| Wisconsin | 0 | 0 | 4,149 | 0 | 4,149 |
| Wyoming | 0 | 0 | 0 | 14,921 | 14,921 |
| Totals | $157,517 | $35,776 | $4,846,299 | $627,013 | $5,666,604 |

Source: USAC data. Rollups performed by the Industry Analysis and Technology Division, Wireline Competition Bureau, FCC.

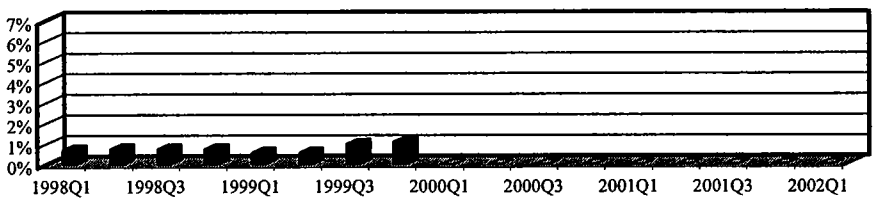
## Table 20.5
## Universal Service Fund Factors

| Year | Quarter | Factors for Interstate End-User Revenues: High-Cost & Low-Income Support | Interstate End-User Revenues: Schools, Libraries, & Rural Health Care | Interstate End-User Revenues: All Support | Factors for Intrastate End-User Revenues: High-Cost & Low-Income Support | Intrastate End-User Revenues: Schools, Libraries, & Rural Health Care | Intrastate End-User Revenues: 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 |
| | Second Quarter | 4.18 | 2.70 | 6.88 | 0.00 | 0.00 | 0.00 |
| | Third Quarter | 4.15 | 2.74 | 6.89 | 0.00 | 0.00 | 0.00 |
| | Fourth Quarter | 4.21 | 2.71 | 6.92 | 0.00 | 0.00 | 0.00 |
| 2002 | First Quarter | 4.02 | 2.79 | 6.81 | 0.00 | 0.00 | 0.00 |
| | Second Quarter | 4.28 | 3.00 | 7.28 | 0.00 | 0.00 | 0.00 |

## Chart 20.1
## Interstate Universal Service Fund Factors




## Chart 20.2
## Intrastate Universal Service Fund Factors




Source: Quarterly public notices on universal service contribution factors in CC Docket 96-45.

# 21 Appendix A – List of Publications by Industry Analysis and Technology Division

Most recent release dates are shown in parentheses:

*High-Speed Services for Internet Access: Subscribership as of June 30, 2001* (February 2002).

*Infrastructure of the Local Operating Operating Companies* (October 2000).

*2000 International Telecommunications Data* (December 2001).

*Local Telephone Competition: Status as of June 30, 2001* (February 2002).

*Numbering Resource Untilization in the United States* (November 2001).

*October 2001 Monitoring Report* (November 2001).

*Quality of Service of Service Report of the Local Operating Companies* (December 2001).

*State-by-State Telephone Revenues and Universal Service Data* (April 2001).

*Statistics of Communications Common Carriers 2001/2000 Edition* (September 2001).

*Statistics of the Long Distance Telecommunications Industry* (January 2001).

*Telecommunications Industry Revenues* (January 2002).

*Telecommunications Provider Locator* (November 2001).

*Telephone Penetration by Income by State* (April 2002).

*Telephone Subscribership in the United States* (February 2002).

*Trends in the International Telecommunications Industry* (April 2001).

*Trends in Telephone Service* (August 2001).

# 22 Appendix B – Sources of Telecommunications Information

The information in this report and, in many cases, more detailed information can be downloaded from the **FCC-State Link** Internet site at www.fcc.gov/wcb/stats.

Printed copies of various statistical reports are available for reference in the FCC's Reference Information Center, Courtyard Level, 445 12th Street, S.W., and from the Commission's duplicating contractor, Qualex International, 202-863-2893.

Additional information on regulated carriers, including investments, revenues, expenses, and earnings, is contained in the annual *Statistics of Communications Common Carriers*. The 2000/2001 edition can be purchased from the U.S. Government Printing Office (202-512-1800) and can be found on the **FCC-State Link**.

Filings with the Securities and Exchange Commission, such as the annual reports on Form 10-K, can be downloaded from the Edgar Internet site at www.sec.gov.

The names, addresses and telephone numbers for companies in the telephone industry are published in the Industry Analysis and Technology Division's *Telecommunications Provider Locator*, which can also be downloaded from the **FCC-State Link**.

In April 2001, the Commission began requiring all new and existing telecommunications carriers providing interstate telecommunications services to register with the FCC using the FCC Form 499-A. Carriers file the form with the Commission's data collection agent, the National Exchange Carrier Association. Copies of the form can be downloaded from the Internet at www.fcc.gov/formpage.html. Information on registered companies can be found on the Internet at http://gullfoss2.fcc.gov/cib/form499/499a.cfm.

The information on consumer expenditures (Table 3.1), employment (Tables 5.1 and 5.2), and price indices (Tables 13.1 - 13.3) comes from the Bureau of Labor Statistics and can be found on the Internet at www.bls.gov.

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. Tables 6.1 - 6.5 contain summary information on international telephone service. More detailed international data are available from *International Telecommunications Data* and *Trends in the International Telecommunications Industry*, both of which are published by the Industry Analysis and Technology Division and can also be found on the **FCC-State Link**.

Table 10.5, on carrier identification codes, and Table 19.1, on area codes, come from the North American Numbering Plan Administration (NANPA), which is part of Neustar, Inc. Additional information on NANPA can be found on the Internet at www.nanpa.com.

The information on wireless telephone service shown in Tables 12.2 and 12.3 was prepared from data received from the Cellular Telecommunications & Internet Association (CTIA), 1133 21st Street N.W., Washington, D.C. 20036, 202-785-0081. CTIA can be found on the Internet at www.wow-com.com.

TNS Telecoms (TNS) has donated databases containing information on residential phone usage collected from actual consumer telecommunications bills to the Commission. TNS Telecoms has granted the Commission permission to use these databases for research purposes and to publish the industry level results. TNS Telecoms has been monitoring the telecommunications market since 1995 through both the ReQuest® consumer survey and Bill Harvesting® in the residential market and the BusinessWave® business survey in the business market. Tables 10.9, 10.10, and 15.1 - 15.6 come from these databases. For additional information, visit www.tnstelecoms.com or contact them at 1-866-811-TNST or by e-mail at contact@tnstelecoms.com. Their address is 101 Greenwood Avenue, Suite 502, Jenkintown, PA 19046.

Copies of NTIA's report *A Nation Online: How Americans Are Expanding Their Use of the Internet* can be obtained through NTIA's web site at www.ntia.doc.gov or by contacting NTIA's Office of Public Affairs at (202) 482-7002.

Tables 18.1 - 18.3 contain information from the ARMIS 43-07 reports for the BOCs. Individual carrier information can be obtained from the ARMIS web page at www.fcc.gov/wcb/armis/db.

Chart 18.1 shows the number of patents granted for telecommunications. Additional information on U.S. patents can be found on the Internet at www.uspto.gov.

The United States Telecom Association (USTA) (1401 H Street N.W., Washington, D.C. 20005, 202-326-7300) represents most incumbent local telephone companies. Like many trade associations, it collects information from each of its members. Annually, it publishes and sells statistical publications such as *Statistics of the Local Exchange Carriers*. USTA can be found on the Internet at www.usta.org.

The Association for Local Telecommunications Services (ALTS) (888 17th Street N.W., Suite 900, Washington, D.C. 20006, 202-969-2587) represents many of the competitive local exchange carriers. They can be found on the Internet at www.alts.org. Their annual report, *The State of Local Competition 2001,* is also available on their web site.

# 23 Appendix C – Contacting the Report Authors

*Trends in Telephone Service* was prepared by the Industry Analysis and Technology Division, Wireline Competition Bureau, Federal Communications Commission. Principal authors of the report can be contacted at their electronic mail addresses or by calling the Industry Analysis and Technology Division at 202-418-0940. Users of TTY equipment should call 202-418-0484.

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