

# *Trends in Telephone Service*



*Industry Analysis and Technology Division  
Wireline Competition Bureau*

*September 2010*

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# Introduction

*Trends in Telephone Service* is published by the Industry Analysis and Technology Division of the Federal Communication Commission's Wireline Competition Bureau.<sup>1</sup> This report is designed 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, telephone rates and price changes, toll service providers, 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.<sup>2</sup> In most cases, these other reports provide more detailed information than that provided here. These reports can be accessed from the Wireline Competition Bureau Statistical Reports Internet site, at [www.fcc.gov/wcb/stats](http://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.

## 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

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<sup>1</sup> *Trends in Telephone Service* was last published in August 2008.

<sup>2</sup> See Appendix A for a list of these publications.



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. 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.

As part of access charge reform in May of 2000, the FCC started to eliminate PICCs and consolidate them with SLCs. 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. Current per-line charges and per-minute charges are reported for each of the carriers in Tables 1.3 and 1.4, respectively.

**Table 1.1**  
**Interstate Per-Line Access Charges <sup>1</sup>**

| Rates in Effect |                       | Charged to End Users <sup>2</sup><br>(Subscriber Line Charges) |                            |                                      | Charged to Long Distance Carriers <sup>3</sup><br>(Presubscribed Interexchange Carrier Charges) |                            |                       |         |
|-----------------|-----------------------|--|----------------------------|--------------------------------------|---|----------------------------|-----------------------|---------|
| From            | To                    | Residential and<br>Single-Line<br>Business                     | Non-Primary<br>Residential | Multiline<br>Business<br>and Centrex | Residential and<br>Single-Line<br>Business  | Non-Primary<br>Residential | Multiline<br>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 <sup>4</sup> | 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    |
| 07/01/02        | 06/30/03              | 5.62   | 5.88                       | 6.45                                 | 0.00  | 0.00                       | 0.48                  | 0.08    |
| 07/01/03        | 06/30/04              | 5.96   | 5.94                       | 6.37                                 | 0.00  | 0.00                       | 0.20                  | 0.04    |
| 07/01/04        | 06/30/05              | 5.92   | 5.85                       | 6.24                                 | 0.00  | 0.00                       | 0.19                  | 0.05    |
| 07/01/05        | 06/30/06              | 5.92   | 5.83                       | 6.26                                 | 0.00  | 0.00                       | 0.21                  | 0.04    |
| 07/01/06        | 06/30/07              | 5.91   | 5.81                       | 6.27                                 | 0.00  | 0.00                       | 0.23                  | 0.04    |
| 07/01/07        | 06/30/08              | 5.93   | 5.81                       | 6.30                                 | 0.00  | 0.00                       | 0.23                  | 0.05    |
| 07/01/08        | 06/30/09              | 5.90   | 5.78                       | 6.27                                 | 0.00  | 0.00                       | 0.22                  | 0.05    |
| 07/01/09        | 06/30/10              | 5.88   | 5.75                       | 6.21                                 | 0.00  | 0.00                       | 0.18                  | 0.04    |

<sup>1</sup> 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.

<sup>2</sup> Prior to 1/01/1998, 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 1/01/1998 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 7/1/2003, the caps on SLCs for primary residential and single-line business, non-primary residential, and multiline business and Centrex lines equal \$6.50, \$7.00, and \$9.20, respectively. For NECA pool companies, the residential SLC cap is \$6.50, while the multiline business and Centrex SLC cap equals \$9.20.

<sup>3</sup> 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 7/01/2000, residential and single-line business PICCs was eliminated. Since then the PICCs cap for multiline business lines equal \$4.31 for price cap carriers. Centrex groups of 9 or fewer lines are capped at the multiline business PICC rate of \$4.31 per group. Centrex groups with more than 9 lines are capped at \$0.48 per line (1/9th the multiline business rate).

<sup>4</sup> Although the charges took effect on 7/1/2000, some companies made adjustments to the tariffs which did not take effect until 8/11/2000.

Source: Access tariff filings.

**Table 1.2**  
**Interstate Per-Minute Access Charges**  
**(National Average in Cents per Minute) <sup>1</sup>**

| Rates in Effect |                       | Interstate Charges for Switched Access Service                             |  |  |   |  |
|-----------------|-----------------------|--|--|--|---|--|
| From            | To                    | Carrier<br>Common Line<br>per Originating<br>Access<br>Minute <sup>1</sup> | Carrier<br>Common Line<br>per Terminating<br>Access<br>Minute <sup>1</sup> | Traffic<br>Sensitive<br>per Switched<br>Minute | Non-Traffic<br>Sensitive<br>per Switched<br>Minute <sup>2</sup> | Total<br>Charge per<br>Conversation<br>Minute <sup>3</sup> |
| 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        | 06/31/00 <sup>4</sup> | 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   |
| 07/01/02        | 06/30/03              | 0.02   | 0.01   | 0.48   | 0.22  | 1.46   |
| 07/01/03        | 06/30/04              | 0.00   | 0.00   | 0.48   | 0.22  | 1.44   |
| 07/01/04        | 06/30/05              | 0.00   | 0.00   | 0.50   | 0.25  | 1.53   |
| 07/01/05        | 06/30/06              | 0.00   | 0.00   | 0.52   | 0.25  | 1.59   |
| 07/01/06        | 06/30/07              | 0.01   | 0.00   | 0.54   | 0.25  | 1.63   |
| 07/01/07        | 06/30/08              | 0.01   | 0.00   | 0.56   | 0.26  | 1.71   |
| 07/01/08        | 06/30/09              | 0.01   | 0.00   | 0.63   | 0.24  | 1.80   |
| 07/01/09        | 06/30/10              | 0.00   | 0.00   | 0.64   | 0.26  | 1.85   |

<sup>1</sup> 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 revenues from subscriber line charges (SLCs) or primary interexchange carrier charges (PICCs), both of which are reported in Table 1.1. Effective 07/01/03, the carrier common line (CCL) rates for NECA carriers were eliminated.

<sup>2</sup> 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.

<sup>3</sup> 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.

<sup>4</sup> Although the charges took effect on 7/1/2000, some companies made adjustments to the tariffs which did not take effect until 8/11/2000.

Source: Access tariff filings.

**Table 1.3**  
**Interstate Per-Line Access Charges by Carrier**  
(In Dollars per Month per Line) <sup>1</sup>

| Company                | Rates Effective from 07/01/09 to 06/30/10     |                            |   |                       |         | 2008 Average Monthly Access Lines <sup>3</sup><br>(Thousands) |                            |   |
|------------------------|---|----------------------------|---|-----------------------|---------|---|----------------------------|---|
|                        | Subscriber Line Charges                       |                            |   | PICC <sup>2</sup>     |         |   |                            |   |
|                        | Residential<br>and<br>Single-Line<br>Business | Non-Primary<br>Residential | Multiline<br>Business<br>and<br>Centrex | Multiline<br>Business | Centrex | Residential<br>and<br>Single-Line<br>Business                 | Non-Primary<br>Residential | Multiline<br>Business<br>and<br>Centrex |
| ACS                    | \$6.50  | NA                         | \$9.20                                  | \$0.00                | \$0.00  | 49  | 0                          | 24                                      |
| América Móvil          | 6.50  | 6.50                       | 9.20                                    | 0.00                  | 0.00    | 687   | 1                          | 172                                     |
| AT&T                   | 5.47  | 5.26                       | 5.41                                    | 0.00                  | 0.00    | 31,552  | 3,570                      | 17,938                                  |
| CenturyTel             | 5.67  | 5.47                       | 7.17                                    | 0.05                  | 0.06    | 4,934   | 348                        | 1,694                                   |
| Cincinnati Bell        | 5.28  | 5.28                       | 5.28                                    | 0.00                  | 0.00    | 466   | 31                         | 259                                     |
| Consolidated           | 6.50  | 6.50                       | 9.20                                    | 0.00                  | 0.00    | 136   | 6                          | 55                                      |
| FairPoint              | 6.23  | 6.23                       | 6.23                                    | 0.00                  | 0.00    | 835   | 54                         | 320                                     |
| Frontier               | 6.17  | 6.53                       | 9.20                                    | 3.87                  | 0.74    | 1,288   | 58                         | 436                                     |
| Hawaiin Telecom        | 6.50  | 7.00                       | 8.15                                    | 0.00                  | 0.00    | 365   | 35                         | 90                                      |
| Iowa Telecom           | 5.89  | 5.89                       | 8.09                                    | 0.00                  | 0.00    | 155   | 5                          | 43                                      |
| Pacific Telecom Inc.   | 6.50  | 7.00                       | 9.20                                    | 0.71                  | 0.11    | 11  | 0                          | 4                                       |
| Qwest                  | 5.99  | 6.20                       | 6.38                                    | 0.00                  | 0.00    | 6,619   | 636                        | 2,731                                   |
| Verizon                | 6.27  | 6.29                       | 6.76                                    | 0.45                  | 0.06    | 20,585  | 2,388                      | 10,959                                  |
| Windstream             | 6.29  | 6.46                       | 7.50                                    | 0.12                  | 1.32    | 1,523   | 224                        | 534                                     |
| Price Caps             | 5.83  | 5.75                       | 6.11                                    | 0.19                  | 0.04    | 69,205  | 7,358                      | 35,260                                  |
| NECA                   | 6.50  | NA                         | 9.20                                    | 0.00                  | NA      | 4,788   | NA                         | 1,213                                   |
| Price Caps<br>and NECA | \$5.88  | \$5.75                     | \$6.21                                  | \$0.18                | \$0.04  | 73,993  | 7,358                      | 36,472                                  |

NA - Not Applicable.

<sup>1</sup> 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. For example, non-primary residential SLCs can be less than primary residential SLCs due to weighting by access lines. Note that at the disaggregated level, non-primary rates are always greater than or equal to primary rates. The primary line rate is weighted by the number of primary residential lines and the non-primary residential rate is similarly weighted by the number of non-primary access lines. Because the weight on primary lines versus non-primary lines is not constant, the primary rate is not necessarily lower than the non-primary rate at the holding company level. No information is available for those carriers that are not in the NECA pool, but are subject to rate-of-return regulation.

<sup>2</sup> PICC is an abbreviation for Presubscribed Interexchange Carrier Charge.

<sup>3</sup> 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 1.3**  
**Interstate Per-Line Access Charges by Carrier -- Continued**  
(In Dollars per Month per Line) <sup>1</sup>

| Company                 | Rates Effective from 07/01/08 to 06/30/09     |                            |   |                       |         | 2007 Average Monthly Access Lines <sup>3</sup><br>(Thousands) |                            |   |
|-------------------------|---|----------------------------|---|-----------------------|---------|---|----------------------------|---|
|                         | Subscriber Line Charges                       |                            |   | PICC <sup>2</sup>     |         |   |                            |   |
|                         | Residential<br>and<br>Single-Line<br>Business | Non-Primary<br>Residential | Multiline<br>Business<br>and<br>Centrex | Multiline<br>Business | Centrex | Residential<br>and<br>Single-Line<br>Business                 | Non-Primary<br>Residential | Multiline<br>Business<br>and<br>Centrex |
| América Móvil           | \$6.50  | \$6.50                     | \$9.20                                  | \$0.00                | \$0.00  | 777   | 2                          | 193                                     |
| AT&T                    | 5.48  | 5.30                       | 5.45                                    | 0.00                  | 0.00    | 34,451  | 4,099                      | 18,699                                  |
| CenturyTel <sup>4</sup> | 6.37  | 6.58                       | 7.55                                    | 0.82                  | 1.19    | 407   | 17                         | 116                                     |
| Cincinnati Bell         | 5.27  | 5.27                       | 5.27                                    | 0.00                  | 0.00    | 522   | 36                         | 260                                     |
| Consolidated            | 6.50  | 6.50                       | 9.20                                    | 0.00                  | 0.00    | 148   | 8                          | 57                                      |
| Embarq                  | 5.66  | 5.55                       | 6.95                                    | 0.00                  | 0.00    | 4,349   | 375                        | 1,502                                   |
| FairPoint               | 6.25  | 6.25                       | 6.25                                    | 0.00                  | 0.00    | 930   | 72                         | 333                                     |
| Frontier                | 6.47  | 6.95                       | 9.20                                    | 4.27                  | 0.79    | 1,171   | 57                         | 365                                     |
| Hawaiian Telecom        | 6.50  | 7.00                       | 8.15                                    | 0.00                  | 0.00    | 405   | 39                         | 94                                      |
| Iowa Telecom            | 6.16  | 6.16                       | 8.41                                    | 0.00                  | 0.00    | 168   | 6                          | 46                                      |
| Pacific Telecom Inc.    | 6.50  | 7.00                       | 9.20                                    | 1.33                  | 0.20    | 15  | 1                          | 3                                       |
| Qwest                   | 6.02  | 6.26                       | 6.53                                    | 0.00                  | 0.00    | 7,322   | 755                        | 2,863                                   |
| Verizon                 | 6.29  | 6.31                       | 6.80                                    | 0.55                  | 0.07    | 22,306  | 2,804                      | 11,703                                  |
| Windstream              | 6.36  | 6.48                       | 7.69                                    | 0.50                  | 0.73    | 1,566   | 93                         | 583                                     |
| Price Caps              | 5.85  | 5.78                       | 6.15                                    | 0.23                  | 0.05    | 74,538  | 8,364                      | 36,817                                  |
| NECA                    | 6.50  | NA                         | 9.14                                    | 0.00                  | NA      | 6,388   | NA                         | 1,621                                   |
| Price Caps<br>and NECA  | \$5.90  | \$5.78                     | \$6.27                                  | \$0.22                | \$0.05  | 80,926  | 8,364                      | 38,437                                  |

NA - Not Applicable.

<sup>1</sup> 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. For example, non-primary residential SLCs can be less than primary residential SLCs due to weighting by access lines. Note that at the disaggregated level, non-primary rates are always greater than or equal to primary rates. The primary line rate is weighted by the number of primary residential lines and the non-primary residential rate is similarly weighted by the number of non-primary access lines. Because the weight on primary lines versus non-primary lines is not constant, the primary rate is not necessarily lower than the non-primary rate at the holding company level. No information is available for those carriers that are not in the NECA pool, but are subject to rate-of-return regulation.

<sup>2</sup> PICC is an abbreviation for Presubscribed Interexchange Carrier Charge.

<sup>3</sup> 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.

<sup>4</sup> Data reflect only those company study areas subject to price-cap regulation.

Source: Access tariff filings.

**Table 1.4**  
**Interstate Per-Minute Access Charges by Carrier**  
(In Cents per Minute) <sup>1</sup>

| Company                    | Rates Effective from July 1, 2009 to June 30, 2010               |  |   |  |  | Year 2008<br>Local<br>Switching<br>Minutes of<br>Use<br>(Millions) |
|----------------------------|--|--|---|--|--|--|
|                            | Carrier<br>Common<br>Line per<br>Originating<br>Access<br>Minute | Carrier<br>Common<br>Line per<br>Terminating<br>Access<br>Minute | Switched<br>Traffic<br>Sensitive<br>per<br>Access<br>Minute | Switched<br>Non-Traffic<br>Sensitive<br>per<br>Access<br>Minute <sup>2</sup> | Total<br>Charge per<br>Conversation<br>Minute <sup>3</sup> |  |
| ACS                        | 0.00 ¢   | 0.00 ¢   | 0.56 ¢  | 0.12 ¢   | 1.39 ¢   | 236  |
| América Móvil              | 0.00   | 0.00   | 0.90  | 0.22   | 2.29   | 2,029  |
| AT&T                       | 0.00   | 0.00   | 0.49  | 0.24   | 1.50   | 135,647  |
| CenturyTel                 | 0.01   | 0.00   | 0.85  | 0.21   | 2.18   | 20,102   |
| Cincinnati Bell            | 0.00   | 0.00   | 0.66  | 0.55   | 2.47   | 2,170  |
| Consolidated               | 0.00   | 0.00   | 1.33  | 0.35   | 3.46   | 456  |
| FairPoint                  | 0.00   | 0.00   | 0.51  | 0.28   | 1.62   | 3,421  |
| Frontier                   | 0.19   | 0.00   | 0.50  | 0.58   | 2.40   | 4,567  |
| Hawaiian Telecom           | 0.00   | 0.00   | 0.63  | 0.38   | 2.06   | 996  |
| Iowa Telecom               | 0.00   | 0.00   | 1.48  | 0.78   | 4.62   | 445  |
| Pacific Telecom Inc.       | 0.00   | 0.00   | 0.49  | 0.17   | 1.35   | 48   |
| Qwest                      | 0.00   | 0.00   | 0.79  | 0.20   | 2.03   | 30,733   |
| Verizon                    | 0.00   | 0.00   | 0.55  | 0.26   | 1.64   | 86,668   |
| Windstream                 | 0.00   | 0.00   | 0.62  | 0.25   | 1.78   | 6,084  |
| Price Caps                 | 0.00   | 0.00   | 0.57  | 0.25   | 1.69   | 293,601  |
| NECA                       | 0.00   | 0.00   | 2.30  | 0.47   | 5.71   | 12,355   |
| All Price Caps<br>and NECA | 0.00   | 0.00   | 0.64  | 0.26   | 1.85   | 305,956  |

<sup>1</sup> 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.

<sup>2</sup> Non-traffic sensitive charges include charges assessed on a per-month, per-unit basis.

<sup>3</sup> 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.

**Table 1.4**  
**Interstate Per-Minute Access Charges by Carrier -- Continued**  
(In Cents per Minute) <sup>1</sup>

| Company                    | Rates Effective from July 1, 2008 to June 30, 2009               |  |   |  |  | Year 2007<br>Local<br>Switching<br>Minutes of<br>Use<br>(Millions) |
|----------------------------|--|--|---|--|--|--|
|                            | Carrier<br>Common<br>Line per<br>Originating<br>Access<br>Minute | Carrier<br>Common<br>Line per<br>Terminating<br>Access<br>Minute | Switched<br>Traffic<br>Sensitive<br>per<br>Access<br>Minute | Switched<br>Non-Traffic<br>Sensitive<br>per<br>Access<br>Minute <sup>2</sup> | Total<br>Charge per<br>Conversation<br>Minute <sup>3</sup> |  |
| América Móvil              | 0.00 ¢   | 0.00 ¢   | 0.97 ¢  | 0.28 ¢   | 2.56 ¢   | 2,210  |
| AT&T                       | 0.00   | 0.00   | 0.49  | 0.24   | 1.50   | 147,141  |
| CenturyTel <sup>4</sup>    | 0.10   | 0.00   | 0.49  | 0.28   | 1.69   | 1,638  |
| Cincinnati Bell            | 0.00   | 0.00   | 0.63  | 0.46   | 2.24   | 2,553  |
| Consolidated               | 0.00   | 0.00   | 1.29  | 0.40   | 3.47   | 470  |
| Embarq                     | 0.00   | 0.00   | 0.89  | 0.18   | 2.20   | 18,574   |
| FairPoint                  | 0.00   | 0.00   | 0.48  | 0.27   | 1.53   | 3,989  |
| Frontier                   | 0.28   | 0.01   | 0.49  | 0.53   | 2.39   | 4,212  |
| Hawaiian Telecom           | 0.00   | 0.00   | 0.60  | 0.48   | 2.20   | 1,221  |
| Iowa Telecom               | 0.00   | 0.00   | 1.63  | 0.82   | 5.00   | 485  |
| Pacific Telecom Inc.       | 0.00   | 0.00   | 0.54  | 0.14   | 1.40   | 51   |
| Qwest                      | 0.00   | 0.00   | 0.77  | 0.18   | 1.95   | 33,755   |
| Verizon                    | 0.02   | 0.00   | 0.52  | 0.23   | 1.57   | 100,522  |
| Windstream                 | 0.00   | 0.00   | 0.56  | 0.25   | 1.66   | 6,101  |
| Price Caps                 | 0.01   | 0.00   | 0.56  | 0.23   | 1.64   | 322,923  |
| NECA                       | 0.00   | 0.00   | 2.06  | 0.39   | 5.04   | 15,125   |
| All Price Caps<br>and NECA | 0.01   | 0.00   | 0.63  | 0.24   | 1.80   | 338,049  |

<sup>1</sup> 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.

<sup>2</sup> Non-traffic sensitive charges include charges assessed on a per-month, per-unit basis.

<sup>3</sup> 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.

<sup>4</sup> Data reflect only those company study areas subject to price-cap regulation.

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, in 2000 the Commission instituted a formal data collection program (FCC Form 477), which gathers standardized information about subscribership to high-speed Internet access services from telephone companies, cable system operators, terrestrial wireless service providers, satellite service providers, and any other facilities-based providers of advanced telecommunications capability. For reporting purposes, “high-speed” Internet access connections are faster than 200 kilobits per second (kbps) in at least one direction.

From June 2005 onward, all facilities-based providers of high-speed connections have been required to report to the Commission basic information about their service offerings and types of customers. (Data for semiannual reporting dates from December 1999 through December 2004 were required from facilities-based providers with at least 250 high-speed connections in service in a particular state. Small providers, many of whom serve rural areas with relatively small populations, were therefore underrepresented in the earlier data. However, as of June 2005, filers with fewer than 250 connections in a state, including entities that previously filed on a voluntary basis, represented only about 0.2% of total reported high-speed connections.)

Also starting with the June 2005 data, incumbent local exchange carriers (LECs) and cable system operators must report the extent to which their digital subscriber line (DSL) or cable modem high-speed connections are available to the households to whom they offer local telephone service or cable TV service – that is, available whether or not the household actually subscribes to a high-speed Internet access service.

From December 2008 onward, all facilities-based providers report connections in accordance with 72 upload and download transmission speed categories.<sup>1</sup>

Table 2.1 shows high-speed connections in service at semiannual reporting dates between June 2005 and December 2008 for the following types of technology: asymmetric digital subscriber line (aDSL), symmetric digital subscriber line (sDSL), other wireline, cable modem, fiber to the premises, satellite, fixed wireless, power line and other, and mobile wireless. Chart 2.1 shows the growth of high-speed connections from June 2005 through December 2008. (The drop in the reported number of mobile wireless connections between June 2008 and December 2008 is explained in the notes that follow Table 2.8.) Chart 2.2 shows the proportion of high-speed connections by technology as of December 31, 2008.

Table 2.2 shows residential high-speed connections by the above technologies. Chart 2.3 shows the growth of residential high-speed connections from June 2005 through December 2008,

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<sup>1</sup> From December 2008 onward, facilities-based providers of fixed-location high-speed Internet access connections also report the number of connections in service at the census tract level of detail as well as at the state level. For additional information, see Industry Analysis and Technology Division, Wireline Competition Bureau, *High-Speed Services for Internet Access: Status as of December 31, 2008* (February 2010).



and Chart 2.4 shows the proportion of residential high-speed connections by technology as of December 31, 2008.

Table 2.3 shows high-speed connections by speed tier and Table 2.4 shows residential high-speed connections by speed tier as of December 31, 2008.

Table 2.5 shows high-speed connections, by state and by technology, as of December 31, 2008. Table 2.6 shows the percentage of high-speed connections above 200 kbps in both directions, by state and by download speed, as of December 31, 2008.

Table 2.7 provides nationwide and state-specific estimates of the extent to which DSL high-speed connections provided by incumbent LECs, and cable modem high-speed service provided by cable system operators, are available to the households to whom these companies offer local telephone service or cable TV service.

Table 2.8 shows residential fixed-location high-speed connections and households by state as of December 31, 2008, and the ratio of the two.

The U.S. Department of Commerce periodically has asked the U.S. Census Bureau to include questions on whether households have telephones, computers, and Internet access as part of the *Current Population Survey*. Chart 2.5 shows the percent of U.S. households with computers, Internet access, and high-speed access as reported in those surveys.

Table 2.9 and Chart 2.6 show the percent of U.S. households with Internet access for rural and urban areas, and the proportion that have Internet access over a high-speed connection.

Table 17.5, appearing in section 17 of this report, presents broadband capabilities of small, mostly rural telephone companies based upon a periodic survey conducted by the National Exchange Carrier Association (NECA).

**Table 2.1**  
**High-Speed Connections 2005-2008**  
 (Connections over 200 kbps in at least one direction, in thousands)

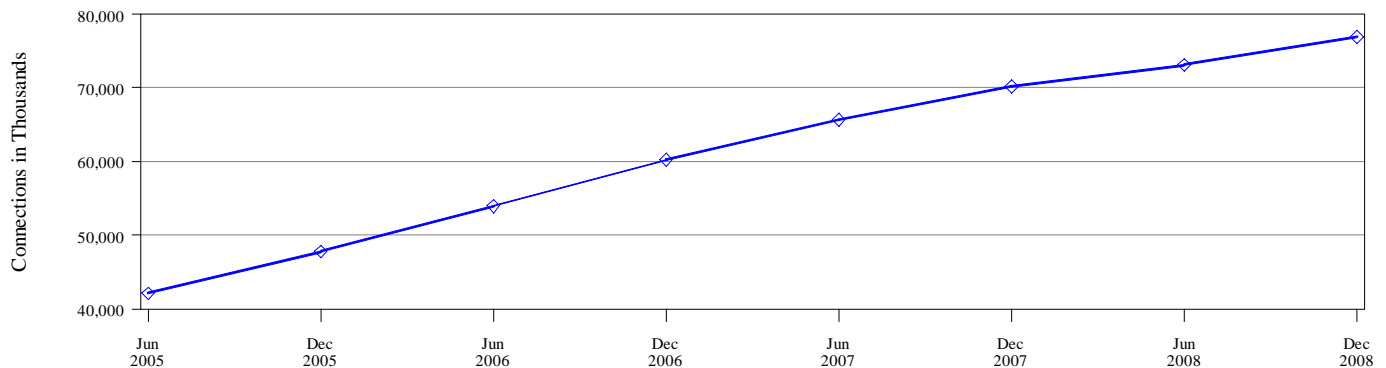
| Technology                   | 2005   |        | 2006   |        | 2007    |         | 2008    |                |
|------------------------------|--------|--------|--------|--------|---------|---------|---------|----------------|
|                              | Jun    | Dec    | Jun    | Dec    | Jun     | Dec     | Jun     | Dec            |
| Total                        | 42,518 | 50,930 | 64,992 | 82,525 | 100,986 | 121,222 | 132,814 | <b>102,043</b> |
| Total Fixed                  | 42,138 | 47,803 | 53,975 | 60,238 | 65,681  | 70,206  | 73,123  | <b>76,926</b>  |
| aDSL                         | 16,316 | 19,515 | 22,584 | 25,413 | 27,793  | 29,449  | 29,964  | <b>30,190</b>  |
| sDSL                         | 412    | 369    | 337    | 345    | 320     | 293     | 275     | <b>245</b>     |
| Other Wireline               | 487    | 373    | 472    | 545    | 622     | 605     | 665     | <b>711</b>     |
| Cable Modem                  | 24,017 | 26,558 | 29,173 | 31,982 | 34,404  | 36,507  | 38,190  | <b>41,468</b>  |
| FTTP <sup>1</sup>            | 316    | 298    | 547    | 894    | 1,281   | 1,849   | 2,346   | <b>2,881</b>   |
| Satellite                    | 377    | 427    | 495    | 572    | 669     | 791     | 869     | <b>938</b>     |
| Fixed Wireless               | 209    | 257    | 361    | 483    | 587     | 707     | 808     | <b>488</b>     |
| Power Line and Other         | 5      | 5      | 5      | 5      | 5       | 5       | 5       | <b>5</b>       |
| Mobile Wireless <sup>2</sup> | 380    | 3,128  | 11,017 | 22,288 | 35,305  | 51,016  | 59,691  | <b>25,117</b>  |

<sup>1</sup> Fiber to the premises.

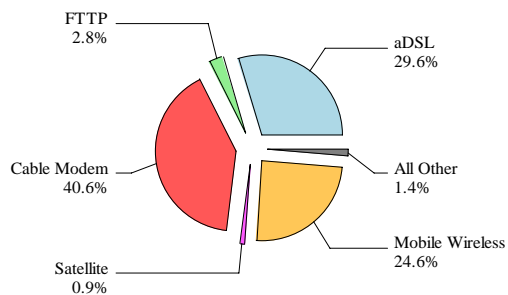
<sup>2</sup> Reporting instructions for mobile wireless changed between the June 2008 and December 2008 data. See additional notes following Table 2.8.

Source: Industry Analysis and Technology Division, Wireline Competition Bureau, *High-Speed Services for Internet Access: Status as of December 31, 2008* (February 2010).

**Chart 2.1**  
**Fixed High-Speed Connections 2005-2008**



**Chart 2.2**  
**High-Speed Connections by Technology as of December 31, 2008**



**Table 2.2**  
**Residential High-Speed Connections 2005-2008**  
 (Connections over 200 kbps in at least one direction, in thousands)

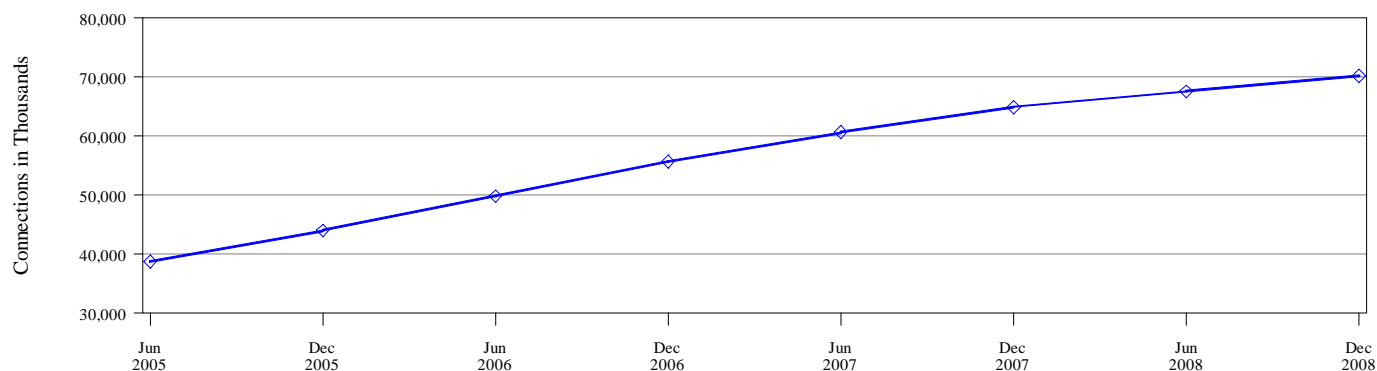
| Technology                   | 2005   |        | 2006   |        | 2007   |        | 2008   |               |
|------------------------------|--------|--------|--------|--------|--------|--------|--------|---------------|
|                              | Jun    | Dec    | Jun    | Dec    | Jun    | Dec    | Jun    | Dec           |
| Total                        | 38,696 | 43,965 | 50,941 | 58,344 | 66,173 | 73,984 | 79,090 | <b>85,966</b> |
| Total Fixed                  | 38,694 | 43,956 | 49,784 | 55,652 | 60,628 | 64,875 | 67,554 | <b>70,148</b> |
| aDSL                         | 14,443 | 17,371 | 20,152 | 22,768 | 24,962 | 26,475 | 26,950 | <b>26,481</b> |
| sDSL                         | 154    | 122    | 103    | 105    | 105    | 82     | 81     | <b>74</b>     |
| Other Wireline               | 6      | 7      | 9      | 13     | 12     | 17     | 32     | <b>42</b>     |
| Cable Modem                  | 23,578 | 25,714 | 28,388 | 31,118 | 33,336 | 35,341 | 36,901 | <b>39,788</b> |
| FTTP <sup>1</sup>            | 83     | 213    | 444    | 764    | 1,153  | 1,683  | 2,139  | <b>2,715</b>  |
| Satellite                    | 265    | 320    | 382    | 456    | 530    | 626    | 705    | <b>630</b>    |
| Fixed Wireless               | 161    | 203    | 301    | 424    | 523    | 644    | 741    | <b>413</b>    |
| Power Line and Other         | 4      | 5      | 5      | 5      | 5      | 5      | 5      | <b>5</b>      |
| Mobile Wireless <sup>2</sup> | 3      | 9      | 1,157  | 2,692  | 5,545  | 9,109  | 11,536 | <b>15,818</b> |

<sup>1</sup> Fiber to the premises.

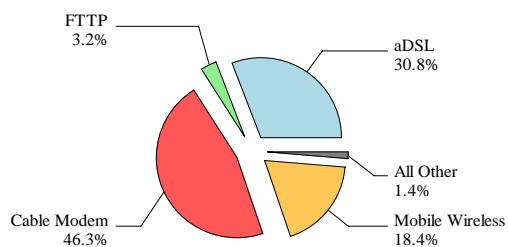
<sup>2</sup> Reporting instructions for mobile wireless changed between the June 2008 and December 2008 data. See additional notes following Table 2.8.

Source: Industry Analysis and Technology Division, Wireline Competition Bureau, *High-Speed Services for Internet Access: Status as of December 31, 2008* (February 2010).

**Chart 2.3**  
**Residential Fixed High-Speed Connections 2005-2008**



**Chart 2.4**  
**Residential High-Speed Connections by Technology as of December 31, 2008**



**Table 2.3**  
**Total High-Speed Connections by Speed Tier as of December 31, 2008**  
(Connections in thousands)

| Technology           | 200 kbps or less Upstream                     |                            |          | Over 200 kbps Upstream                        |   |   |   |  |   |                           |          | Total   |
|----------------------|---|----------------------------|----------|---|---|---|---|--|---|---------------------------|----------|---------|
|                      | Download over 200 kbps and less than 768 kbps | Download at least 768 kbps | Subtotal | Download over 200 kbps and less than 768 kbps | Download at least 768 kbps and less than 1.5 mbps | Download at least 1.5 mbps and less than 3 mbps | Download at least 3 mbps and less than 6 mbps | Download at least 6 mbps and less than 10 mbps | Download at least 10 mbps and less than 25 mbps | Download at least 25 mbps | Subtotal |         |
| aDSL                 | 1,174   | 2,455                      | 3,628    | 2,080   | 5,969   | 9,252   | 8,357   | 769  | 135   | #                         | 26,562   | 30,190  |
| sDSL                 | 0   | 0                          | 0        | 110   | 80  | *   | 4   | #  | *   | #                         | 245      | 245     |
| Other Wireline       | 0   | 0                          | 0        | 110   | 88  | 392   | 62  | 22   | 16  | 22                        | 711      | 711     |
| Cable Modem          | 446   | 607                        | 1,053    | 331   | 1,171   | 1,696   | 5,756   | 21,967   | 9,373   | 121                       | 40,415   | 41,468  |
| FTTP                 | 5   | 1                          | 6        | 19  | 40  | 79  | 697   | 37   | 1,970   | 34                        | 2,876    | 2,881   |
| Satellite            | 499   | 329                        | 828      | *   | *   | *   | *   | 0  | 0   | 0                         | 110      | 938     |
| Fixed Wireless       | 70  | 22                         | 92       | 101   | 109   | 123   | 45  | 9  | 9   | 1                         | 397      | 488     |
| Mobile Wireless      | 7,576   | 2,996                      | 10,572   | 4,296   | 8,364   | 1,747   | 138   | 0  | 0   | 0                         | 14,545   | 25,117  |
| Power Line and Other | 0   | 0                          | 0        | *   | *   | *   | *   | 0  | *   | 0                         | 5        | 5       |
| Total                | 9,769   | 6,409                      | 16,178   | 7,052   | 15,839  | 13,428  | 15,060  | 22,804   | 11,503  | 178                       | 85,865   | 102,043 |

Percentages

|                      |      |      |      |      |      |      |      |      |      |     |       |       |
|----------------------|------|------|------|------|------|------|------|------|------|-----|-------|-------|
| aDSL                 | 3.9  | 8.1  | 12.0 | 6.9  | 19.8 | 30.6 | 27.7 | 2.5  | 0.4  | 0.0 | 88.0  | 100.0 |
| sDSL                 | 0.0  | 0.0  | 0.0  | 44.9 | 32.5 | *    | 1.6  | 0.0  | *    | 0.0 | 100.0 | 100.0 |
| Other Wireline       | 0.0  | 0.0  | 0.0  | 15.5 | 12.3 | 55.1 | 8.7  | 3.1  | 2.2  | 3.1 | 100.0 | 100.0 |
| Cable Modem          | 1.1  | 1.5  | 2.5  | 0.8  | 2.8  | 4.1  | 13.9 | 53.0 | 22.6 | 0.3 | 97.5  | 100.0 |
| FTTP                 | 0.2  | 0.0  | 0.2  | 0.7  | 1.4  | 2.7  | 24.2 | 1.3  | 68.4 | 1.2 | 99.8  | 100.0 |
| Satellite            | 53.2 | 35.0 | 88.3 | *    | *    | *    | *    | 0.0  | 0.0  | 0.0 | 11.7  | 100.0 |
| Fixed Wireless       | 14.2 | 4.5  | 18.7 | 20.8 | 22.3 | 25.2 | 9.2  | 1.9  | 1.8  | 0.2 | 81.3  | 100.0 |
| Mobile Wireless      | 30.2 | 11.9 | 42.1 | 17.1 | 33.3 | 7.0  | 0.5  | 0.0  | 0.0  | 0.0 | 57.9  | 100.0 |
| Power Line and Other | 0.0  | 0.0  | 0.0  | *    | *    | *    | *    | 0.0  | *    | 0.0 | 100.0 | 100.0 |
| Total                | 9.6  | 6.3  | 15.9 | 6.9  | 15.5 | 13.2 | 14.8 | 22.3 | 11.3 | 0.2 | 84.1  | 100.0 |

# = Rounds to Zero.

\* = Data withheld to maintain firm confidentiality.

Source: Industry Analysis and Technology Division, Wireline Competition Bureau, *High-Speed Services for Internet Access: Status as of December 31, 2008* (February 2010).

**Table 2.4**  
**Residential High-Speed Connections by Speed Tier as of December 31, 2008**  
(Connections in thousands)

| Technology           | 200 kbps or less Upstream                     |                            |          | Over 200 kbps Upstream                        |   |   |   |  |   |                           |          | Total  |
|----------------------|---|----------------------------|----------|---|---|---|---|--|---|---------------------------|----------|--------|
|                      | Download over 200 kbps and less than 768 kbps | Download at least 768 kbps | Subtotal | Download over 200 kbps and less than 768 kbps | Download at least 768 kbps and less than 1.5 mbps | Download at least 1.5 mbps and less than 3 mbps | Download at least 3 mbps and less than 6 mbps | Download at least 6 mbps and less than 10 mbps | Download at least 10 mbps and less than 25 mbps | Download at least 25 mbps | Subtotal |        |
| aDSL                 | 1,094   | 2,348                      | 3,442    | 1,876   | 5,466   | 7,912   | 7,045   | 627  | 113   | #                         | 23,039   | 26,481 |
| sDSL                 | 0   | 0                          | 0        | 37  | 22  | *   | 1   | #  | *   | 0                         | 74       | 74     |
| Other Wireline       | 0   | 0                          | 0        | 4   | 20  | 8   | 1   | 8  | #   | #                         | 42       | 42     |
| Cable Modem          | 415   | 595                        | 1,010    | 317   | 1,111   | 1,553   | 5,353   | 21,355   | 9,020   | 70                        | 38,779   | 39,788 |
| FTTP                 | 4   | 1                          | 5        | 14  | 31  | 54  | 678   | 31   | 1,885   | 16                        | 2,710    | 2,715  |
| Satellite            | 354   | 203                        | 557      | *   | *   | *   | *   | 0  | 0   | 0                         | 73       | 630    |
| Fixed Wireless       | 63  | 20                         | 84       | 86  | 90  | 104   | 35  | 7  | 7   | #                         | 330      | 413    |
| Mobile Wireless      | 4,709   | 1,828                      | 6,537    | 2,928   | 5,079   | 1,156   | 119   | 0  | 0   | 0                         | 9,281    | 15,818 |
| Power Line and Other | 0   | 0                          | 0        | *   | *   | *   | *   | 0  | *   | 0                         | 5        | 5      |
| Total                | 6,639   | 4,995                      | 11,634   | 5,267   | 11,835  | 10,857  | 13,232  | 22,027   | 11,028  | 86                        | 74,333   | 85,966 |

Percentages

|                      |      |      |      |      |      |      |      |      |      |     |       |       |
|----------------------|------|------|------|------|------|------|------|------|------|-----|-------|-------|
| aDSL                 | 4.1  | 8.9  | 13.0 | 7.1  | 20.6 | 29.9 | 26.6 | 2.4  | 0.4  | 0.0 | 87.0  | 100.0 |
| sDSL                 | 0.0  | 0.0  | 0.0  | 49.6 | 29.6 | *    | 1.2  | 0.0  | *    | 0.0 | 100.0 | 100.0 |
| Other Wireline       | 0.0  | 0.0  | 0.0  | 9.0  | 48.4 | 19.8 | 3.4  | 18.9 | 0.6  | 0.0 | 100.0 | 100.0 |
| Cable Modem          | 1.0  | 1.5  | 2.5  | 0.8  | 2.8  | 3.9  | 13.5 | 53.7 | 22.7 | 0.2 | 97.5  | 100.0 |
| FTTP                 | 0.2  | 0.0  | 0.2  | 0.5  | 1.2  | 2.0  | 25.0 | 1.2  | 69.5 | 0.6 | 99.8  | 100.0 |
| Satellite            | 56.1 | 32.2 | 88.3 | *    | *    | *    | *    | 0.0  | 0.0  | 0.0 | 11.7  | 100.0 |
| Fixed Wireless       | 15.3 | 4.9  | 20.2 | 20.8 | 21.7 | 25.3 | 8.5  | 1.7  | 1.8  | 0.1 | 79.8  | 100.0 |
| Mobile Wireless      | 29.8 | 11.6 | 41.3 | 18.5 | 32.1 | 7.3  | 0.8  | 0.0  | 0.0  | 0.0 | 58.7  | 100.0 |
| Power Line and Other | 0.0  | 0.0  | 0.0  | *    | *    | *    | *    | 0.0  | *    | 0.0 | 100.0 | 100.0 |
| Total                | 7.7  | 5.8  | 13.5 | 6.1  | 13.8 | 12.6 | 15.4 | 25.6 | 12.8 | 0.1 | 86.5  | 100.0 |

# = Rounds to Zero.

\* = Data withheld to maintain firm confidentiality.

Source: Industry Analysis and Technology Division, Wireline Competition Bureau, *High-Speed Services for Internet Access: Status as of December 31, 2008* (February 2010).

**Table 2.5**  
**High-Speed Connections by Technology by State as of December 31, 2008**  
(Connections over 200 kbps in at least one direction, in thousands)

| State                | ADSL  | SDSL | Other Wireline | Cable Modem | Fiber | Satellite | Fixed Wireless | Mobile Wireless | Power Line and Other | Total  |
|----------------------|-------|------|----------------|-------------|-------|-----------|----------------|-----------------|----------------------|--------|
| Alabama              | 457   | 4    | 9              | 460         | 3     | *         | 1              | 281             | *                    | 1,235  |
| Alaska               | 75    | 4    | #              | *           | #     | *         | 4              | 43              | 0                    | 224    |
| American Samoa       | *     | *    | 0              | 0           | 0     | 0         | *              | 0               | 0                    | *      |
| Arizona              | 466   | 2    | *              | 987         | 2     | *         | 20             | 522             | 0                    | 2,033  |
| Arkansas             | 273   | #    | *              | 248         | 1     | *         | 1              | 178             | 0                    | 723    |
| California           | 4,617 | 22   | *              | 3,994       | 315   | *         | 23             | 3,494           | 0                    | 12,649 |
| Colorado             | 624   | 2    | *              | 659         | 3     | *         | 28             | 461             | 0                    | 1,816  |
| Connecticut          | *     | 2    | 5              | 615         | 2     | *         | *              | 338             | 0                    | 1,402  |
| Delaware             | *     | #    | 4              | *           | *     | *         | 0              | 77              | 0                    | 330    |
| District of Columbia | *     | 2    | 4              | *           | 1     | *         | *              | 181             | 0                    | 375    |
| Florida              | 2,005 | 5    | *              | 2,825       | 247   | *         | 5              | 1,542           | 0                    | 6,729  |
| Georgia              | 1,242 | 2    | *              | 973         | 16    | *         | #              | 773             | 0                    | 3,065  |
| Guam                 | *     | *    | *              | *           | 0     | 0         | 0              | *               | 0                    | 25     |
| Hawaii               | *     | *    | 1              | *           | 1     | *         | *              | 146             | 0                    | 498    |
| Idaho                | 160   | 1    | *              | 121         | 1     | *         | 21             | 133             | 0                    | 448    |
| Illinois             | 1,503 | 9    | *              | 1,591       | 5     | *         | 37             | 1,057           | 0                    | 4,265  |
| Indiana              | 672   | 4    | 9              | 626         | 55    | *         | 24             | 384             | *                    | 1,796  |
| Iowa                 | 336   | 3    | *              | 330         | 9     | *         | 25             | 115             | 0                    | 837    |
| Kansas               | 243   | 1    | *              | 425         | 13    | *         | 16             | 207             | 0                    | 924    |
| Kentucky             | 421   | 7    | *              | 452         | 4     | *         | 3              | 246             | 0                    | 1,154  |
| Louisiana            | 385   | 1    | *              | 518         | 19    | *         | 2              | 395             | 0                    | 1,346  |
| Maine                | 114   | 4    | 1              | 288         | 1     | *         | *              | 40              | 0                    | 454    |
| Maryland             | 471   | 7    | 24             | 799         | *     | *         | #              | 595             | 0                    | 2,193  |
| Massachusetts        | *     | 3    | 17             | 1,307       | *     | *         | 1              | 566             | 0                    | 2,600  |
| Michigan             | 779   | 8    | 16             | 1,411       | 4     | *         | 17             | 606             | *                    | 2,881  |
| Minnesota            | 544   | 30   | *              | 666         | 14    | *         | 20             | 357             | 0                    | 1,662  |
| Mississippi          | 229   | #    | *              | 216         | 1     | *         | #              | 142             | 0                    | 614    |
| Missouri             | 727   | 1    | 13             | 553         | 4     | *         | 12             | 364             | *                    | 1,711  |
| Montana              | 108   | 3    | 1              | 92          | 1     | *         | 13             | *               | 0                    | 320    |
| Nebraska             | 151   | 1    | *              | 278         | 2     | *         | 16             | 152             | 0                    | 607    |

**Table 2.5 - Continued**  
**High-Speed Connections by Technology by State as of December 31, 2008**  
 (Connections over 200 kbps in at least one direction, in thousands)

| State                | ADSL   | SDSL | Other Wireline | Cable Modem | Fiber | Satellite | Fixed Wireless | Mobile Wireless | Power Line and Other | Total   |
|----------------------|--------|------|----------------|-------------|-------|-----------|----------------|-----------------|----------------------|---------|
| Nevada               | 222    | 1    | 8              | *           | 1     | *         | 7              | 257             | 0                    | 918     |
| New Hampshire        | 91     | 2    | 3              | 298         | *     | *         | #              | 85              | 0                    | 499     |
| New Jersey           | 666    | 4    | 26             | 1,637       | *     | *         | *              | 903             | 0                    | 3,517   |
| New Mexico           | 231    | #    | *              | 146         | 1     | *         | 15             | 141             | 0                    | 546     |
| New York             | 1,122  | 17   | 38             | 4,139       | *     | *         | 3              | 1,708           | 0                    | 7,405   |
| North Carolina       | 891    | 1    | *              | 1,551       | 5     | *         | 1              | 701             | 0                    | 3,203   |
| North Dakota         | 62     | 1    | *              | 85          | 10    | *         | 5              | 41              | 0                    | 206     |
| Northern Mariana Isl | *      | 0    | *              | *           | *     | 0         | *              | *               | 0                    | *       |
| Ohio                 | 1,069  | 9    | 15             | 1,943       | 6     | *         | 20             | 816             | *                    | 3,910   |
| Oklahoma             | 337    | 1    | *              | 408         | 4     | *         | 8              | 239             | 0                    | 1,022   |
| Oregon               | 371    | 11   | *              | 516         | 54    | *         | 7              | 267             | 0                    | 1,252   |
| Pennsylvania         | 1,232  | 12   | 23             | 1,807       | *     | *         | 1              | 871             | 0                    | 4,225   |
| Puerto Rico          | *      | *    | 3              | *           | #     | *         | *              | 126             | 0                    | 464     |
| Rhode Island         | *      | 1    | 2              | *           | *     | *         | *              | 81              | 0                    | 378     |
| South Carolina       | 400    | #    | 10             | 752         | 14    | *         | *              | 313             | 0                    | 1,501   |
| South Dakota         | 54     | 3    | #              | 122         | 9     | *         | 7              | *               | 0                    | 246     |
| Tennessee            | 542    | 1    | *              | 717         | 28    | *         | 2              | 452             | 0                    | 1,784   |
| Texas                | 2,607  | 9    | *              | 2,081       | 258   | *         | 37             | 2,349           | 0                    | 7,484   |
| Utah                 | 299    | 4    | 6              | *           | 5     | *         | 30             | 189             | 0                    | 762     |
| Vermont              | 61     | *    | 1              | 71          | *     | *         | *              | *               | 0                    | 168     |
| Virgin Islands       | *      | *    | *              | 0           | 0     | *         | *              | *               | 0                    | 21      |
| Virginia             | 553    | 3    | 30             | 1,096       | 252   | *         | 9              | 901             | *                    | 2,887   |
| Washington           | 599    | 7    | 16             | 980         | 37    | *         | 11             | 682             | *                    | 2,357   |
| West Virginia        | 152    | *    | 3              | 205         | #     | *         | 1              | 80              | 0                    | 452     |
| Wisconsin            | 556    | 16   | 5              | 810         | 5     | *         | 15             | 306             | *                    | 1,739   |
| Wyoming              | 57     | 2    | *              | 64          | #     | *         | 3              | 43              | 0                    | 175     |
| Total                | 30,190 | 245  | 711            | 41,468      | 2,881 | 938       | 488            | 25,117          | 5                    | 102,043 |

# = Rounds to Zero.

\* = Data withheld to maintain firm confidentiality.

Source: Industry Analysis and Technology Division, Wireline Competition Bureau, *High-Speed Services for Internet Access: Status as of December 31, 2008* (February 2010).

**Table 2.6**  
**Percentage of High-Speed Connections by Download Speed by State as of December 31, 2008**  
 (Connections over 200 kbps in at least one direction)

| State                | Over 200 kbps Upstream and |                                |                              |                              |                               |
|----------------------|----------------------------|--------------------------------|------------------------------|------------------------------|-------------------------------|
|                      | % Over 200 kbps Downstream | % at least 768 kbps Downstream | % at least 3 mbps Downstream | % at least 6 mbps Downstream | % at least 10 mbps Downstream |
| Alabama              | 82.3                       | 76.1                           | 44.3                         | 17.9                         | 4.3                           |
| Alaska               | 76.0                       | 58.9                           | *                            | *                            | *                             |
| American Samoa       | *                          | *                              | *                            | *                            | *                             |
| Arizona              | 85.3                       | 76.3                           | 43.2                         | 37.6                         | 13.5                          |
| Arkansas             | 82.7                       | 76.6                           | *                            | *                            | *                             |
| California           | 86.2                       | 78.3                           | 40.5                         | 19.7                         | 3.9                           |
| Colorado             | 87.8                       | 77.5                           | 44.5                         | 39.0                         | 1.5                           |
| Connecticut          | 87.9                       | 80.8                           | 46.5                         | 37.5                         | *                             |
| Delaware             | 82.5                       | 75.6                           | *                            | *                            | *                             |
| District of Columbia | 62.6                       | 55.7                           | 39.6                         | 22.6                         | 5.0                           |
| Florida              | 86.0                       | 82.2                           | 51.8                         | 40.3                         | 8.6                           |
| Georgia              | 81.8                       | 76.7                           | 43.8                         | 23.7                         | 1.8                           |
| Guam                 | *                          | *                              | *                            | *                            | *                             |
| Hawaii               | 92.5                       | 88.3                           | 60.5                         | *                            | *                             |
| Idaho                | 81.6                       | 72.4                           | 35.1                         | *                            | *                             |
| Illinois             | 87.9                       | 79.6                           | 43.0                         | 31.9                         | 7.5                           |
| Indiana              | 84.3                       | 76.2                           | 45.8                         | 32.6                         | 13.9                          |
| Iowa                 | 87.0                       | 74.6                           | 46.5                         | *                            | *                             |
| Kansas               | 83.3                       | 77.0                           | 42.8                         | 33.7                         | 3.8                           |
| Kentucky             | 88.5                       | 76.7                           | 49.3                         | 31.2                         | 26.2                          |
| Louisiana            | 85.3                       | 81.7                           | 39.0                         | *                            | *                             |
| Maine                | 86.0                       | 82.9                           | 69.4                         | 57.6                         | 4.0                           |
| Maryland             | 78.3                       | 72.1                           | 59.0                         | 40.2                         | 11.7                          |
| Massachusetts        | 81.5                       | 76.4                           | 65.2                         | 46.9                         | 11.0                          |
| Michigan             | 85.6                       | 78.8                           | 48.3                         | 32.6                         | *                             |
| Minnesota            | 85.9                       | 77.3                           | 45.1                         | 31.1                         | 3.9                           |
| Mississippi          | 85.4                       | 76.2                           | *                            | *                            | *                             |
| Missouri             | 85.4                       | 77.4                           | 36.6                         | 16.8                         | 5.2                           |
| Montana              | 72.9                       | 57.9                           | 31.7                         | *                            | *                             |
| Nebraska             | 81.5                       | 71.1                           | 45.2                         | *                            | *                             |



**Table 2.6 - Continued**  
**Percentage of High-Speed Connections by Download Speed by State as of December 31, 2008**  
 (Connections over 200 kbps in at least one direction)

| State                | Over 200 kbps Upstream and |                                |                              |                              |                               |
|----------------------|----------------------------|--------------------------------|------------------------------|------------------------------|-------------------------------|
|                      | % Over 200 kbps Downstream | % at least 768 kbps Downstream | % at least 3 mbps Downstream | % at least 6 mbps Downstream | % at least 10 mbps Downstream |
| Nevada               | 88.8                       | 83.0                           | 44.3                         | 30.4                         | 6.6                           |
| New Hampshire        | 81.1                       | 75.7                           | 66.8                         | 54.6                         | 3.7                           |
| New Jersey           | 80.9                       | 75.6                           | 64.0                         | 53.4                         | 35.1                          |
| New Mexico           | 81.1                       | 70.3                           | *                            | *                            | *                             |
| New York             | 83.1                       | 79.1                           | 65.5                         | 56.4                         | 55.6                          |
| North Carolina       | 81.0                       | 76.6                           | 53.1                         | 38.0                         | 4.1                           |
| North Dakota         | 85.0                       | 75.3                           | *                            | *                            | *                             |
| Northern Mariana Isl | *                          | *                              | *                            | *                            | *                             |
| Ohio                 | 80.7                       | 74.0                           | 48.8                         | 37.2                         | 4.5                           |
| Oklahoma             | 90.2                       | 84.8                           | 40.2                         | 28.0                         | 3.0                           |
| Oregon               | 87.3                       | 79.4                           | 51.1                         | 39.2                         | 5.3                           |
| Pennsylvania         | 79.9                       | 73.5                           | 57.1                         | 37.5                         | 8.9                           |
| Puerto Rico          | 94.5                       | 69.6                           | *                            | *                            | *                             |
| Rhode Island         | 85.5                       | 80.9                           | *                            | *                            | *                             |
| South Carolina       | 80.2                       | 75.9                           | 54.9                         | 33.1                         | 3.5                           |
| South Dakota         | 81.0                       | 72.6                           | *                            | *                            | *                             |
| Tennessee            | 81.2                       | 73.5                           | 46.6                         | 29.0                         | 2.9                           |
| Texas                | 86.3                       | 78.1                           | 37.6                         | 24.3                         | 5.2                           |
| Utah                 | 88.6                       | 78.5                           | 39.5                         | 33.2                         | 2.9                           |
| Vermont              | 74.0                       | 68.9                           | *                            | *                            | *                             |
| Virgin Islands       | 55.9                       | 13.6                           | 0.1                          | 0.1                          | 0.0                           |
| Virginia             | 78.8                       | 69.5                           | 52.6                         | 38.0                         | 21.5                          |
| Washington           | 85.7                       | 78.5                           | 48.0                         | 40.6                         | 4.8                           |
| West Virginia        | 83.5                       | 75.8                           | *                            | *                            | *                             |
| Wisconsin            | 87.8                       | 81.2                           | 50.3                         | 27.8                         | 6.4                           |
| Wyoming              | 82.9                       | 68.2                           | *                            | *                            | *                             |
| Total                | 84.1                       | 77.2                           | 48.6                         | 33.8                         | 11.4                          |

\* = Data withheld to maintain firm confidentiality.

Source: Industry Analysis and Technology Division, Wireline Competition Bureau, *High-Speed Services for Internet Access: Status as of December 31, 2008* (February 2010).

**Table 2.7**  
**Percentage of Residential End-User Premises with Access to High-Speed Services by State as of December 31, 2008**  
(Connections over 200 kbps in at least one direction)

| State                | xDSL Availability Where ILECs Offer Local Telephone Service | Cable Modem Availability Where Cable Systems Offer Cable TV Service |
|----------------------|---|---|
| Alabama              | 80  | 92  |
| Alaska               | 79  | *   |
| American Samoa       | *   | 0   |
| Arizona              | 86  | 93  |
| Arkansas             | 78  | 72  |
| California           | 89  | 98  |
| Colorado             | 89  | 96  |
| Connecticut          | *   | 100   |
| Delaware             | *   | *   |
| District of Columbia | *   | *   |
| Florida              | 92  | 97  |
| Georgia              | 96  | 90  |
| Guam                 | *   | *   |
| Hawaii               | *   | *   |
| Idaho                | 80  | 99  |
| Illinois             | 86  | 97  |
| Indiana              | 81  | 94  |
| Iowa                 | 87  | 91  |
| Kansas               | 84  | 95  |
| Kentucky             | 86  | 93  |
| Louisiana            | 84  | 97  |
| Maine                | 73  | 96  |
| Maryland             | 76  | 95  |
| Massachusetts        | *   | 100   |
| Michigan             | 74  | 91  |
| Minnesota            | 88  | 97  |
| Mississippi          | 76  | 91  |
| Missouri             | 81  | 95  |
| Montana              | 80  | 80  |
| Nebraska             | 87  | 94  |
| Nevada               | 90  | *   |
| New Hampshire        | 63  | 98  |
| New Jersey           | 88  | 100   |
| New Mexico           | 87  | 80  |
| New York             | 79  | 99  |
| North Carolina       | 89  | 96  |
| North Dakota         | 87  | 92  |
| Northern Mariana Isl | *   | *   |
| Ohio                 | 85  | 98  |
| Oklahoma             | 80  | 89  |
| Oregon               | 83  | 96  |
| Pennsylvania         | 85  | 98  |
| Puerto Rico          | *   | *   |
| Rhode Island         | *   | *   |
| South Carolina       | 85  | 93  |
| South Dakota         | 83  | 87  |
| Tennessee            | 84  | 98  |
| Texas                | 81  | 96  |
| Utah                 | 90  | *   |
| Vermont              | 72  | 91  |
| Virgin Islands       | *   | 0   |
| Virginia             | 69  | 96  |
| Washington           | 84  | 95  |
| West Virginia        | 66  | 88  |
| Wisconsin            | 83  | 96  |
| Wyoming              | 78  | 85  |
| Total                | 84  | 96  |

\* = Data withheld to maintain firm confidentiality. Figures are presented to the nearest percent.

Note: This table summarizes responses to Form 477 questions about service availability based on filers' best estimates, as opposed to subscribership. xDSL includes both asymmetric and symmetric DSL. Each state-specific estimate is a weighted average of the availability percentages that ILECs or cable system operators report for the areas they serve. Reported xDSL availability is weighted by ILEC end-user switched access lines and VoIP lines. Reported cable modem availability is weighted by cable TV subscribers. The weighted averages include ILECs or cable system operators that report no availability.

Source: Industry Analysis and Technology Division, Wireline Competition Bureau, *High-Speed Services for Internet Access: Status as of December 31, 2008* (February 2010).

**Table 2.8**  
**Residential Fixed High-Speed Connections and Households by State as of December 31, 2008**  
(Connections over 200 kbps in at least one direction and Households, in thousands)

| State                | Connections | Households | Subscribership Ratio |
|----------------------|-------------|------------|----------------------|
| Alabama              | 861         | 1,821      | 0.47                 |
| Alaska               | 155         | 248        | 0.62                 |
| American Samoa       | *           | 9          | *                    |
| Arizona              | 1,403       | 2,436      | 0.58                 |
| Arkansas             | 487         | 1,119      | 0.44                 |
| California           | 8,311       | 12,646     | 0.66                 |
| Colorado             | 1,230       | 1,886      | 0.65                 |
| Connecticut          | 973         | 1,362      | 0.71                 |
| Delaware             | 236         | 337        | 0.70                 |
| District of Columbia | 170         | 263        | 0.65                 |
| Florida              | 4,697       | 7,436      | 0.63                 |
| Georgia              | 2,062       | 3,628      | 0.57                 |
| Guam                 | *           | 39         | *                    |
| Hawaii               | *           | 450        | *                    |
| Idaho                | 283         | 562        | 0.50                 |
| Illinois             | 2,943       | 4,775      | 0.62                 |
| Indiana              | 1,299       | 2,457      | 0.53                 |
| Iowa                 | 654         | 1,180      | 0.55                 |
| Kansas               | 648         | 1,077      | 0.60                 |
| Kentucky             | 829         | 1,687      | 0.49                 |
| Louisiana            | 851         | 1,609      | 0.53                 |
| Maine                | 392         | 540        | 0.73                 |
| Maryland             | 1,461       | 2,140      | 0.68                 |
| Massachusetts        | 1,892       | 2,493      | 0.76                 |
| Michigan             | 2,081       | 3,869      | 0.54                 |
| Minnesota            | 1,188       | 2,011      | 0.59                 |
| Mississippi          | 418         | 1,076      | 0.39                 |
| Missouri             | 1,220       | 2,323      | 0.53                 |
| Montana              | 192         | 385        | 0.50                 |
| Nebraska             | 411         | 698        | 0.59                 |
| Nevada               | 603         | 1,015      | 0.59                 |
| New Hampshire        | 389         | 514        | 0.76                 |
| New Jersey           | 2,408       | 3,202      | 0.75                 |
| New Mexico           | 365         | 748        | 0.49                 |
| New York             | 5,260       | 7,297      | 0.72                 |
| North Carolina       | 2,277       | 3,617      | 0.63                 |
| North Dakota         | 146         | 255        | 0.57                 |
| Northern Mariana Isl | *           | 14         | *                    |
| Ohio                 | 2,844       | 4,495      | 0.63                 |
| Oklahoma             | 701         | 1,423      | 0.49                 |
| Oregon               | 890         | 1,489      | 0.60                 |
| Pennsylvania         | 3,113       | 4,831      | 0.64                 |
| Puerto Rico          | 301         | 1,262      | 0.24                 |
| Rhode Island         | 274         | 418        | 0.66                 |
| South Carolina       | 1,084       | 1,721      | 0.63                 |
| South Dakota         | 176         | 310        | 0.57                 |
| Tennessee            | 1,197       | 2,455      | 0.49                 |
| Texas                | 4,655       | 8,730      | 0.53                 |
| Utah                 | 518         | 858        | 0.60                 |
| Vermont              | 135         | 247        | 0.55                 |
| Virgin Islands       | 14          | 41         | 0.34                 |
| Virginia             | 1,824       | 3,003      | 0.61                 |
| Washington           | 1,533       | 2,533      | 0.61                 |
| West Virginia        | 343         | 737        | 0.47                 |
| Wisconsin            | 1,310       | 2,200      | 0.60                 |
| Wyoming              | 112         | 206        | 0.54                 |
| Total                | 70,148      | 116,181    | 0.60                 |

# = Rounds to Zero; \* = Data withheld to maintain firm confidentiality.

Source: Industry Analysis and Technology Division, Wireline Competition Bureau, *High-Speed Services for Internet Access: Status as of December 31, 2008* (February 2010).

## **Notes for Tables 2.1 – 2.8 and Charts 2.1 – 2.4**

### **General**

Figures may not sum to totals due to rounding. Summary statistics are for FCC Form 477 data. Form 477 collects information about Internet access connections in service to end-user locations that are advertised to deliver information to and/or from the end user – that is, in at least one direction – at transfer rates (“speeds”) above 200 kilobits per second (kbps). End users are residential, business, institutional, or government entities who use services for their own purposes and who do not resell such services to other entities. Numbers of connections are not adjusted for the number of persons at a single end-user location who have access to, or who use, the Internet access services delivered over the connection to that location. Numbers of residential connections are estimated based on the total connections and percentage-residential connections information reported on Form 477.

Information is collected about connections in 72 speed tiers (nine upstream tiers and eight downstream) defined by ranges of upstream speeds and downstream speeds and by the technology employed by the part of the connection that terminates at the end-user location. The mutually exclusive Form 477 technology categories are: asymmetric Digital Subscriber Line (“aDSL”), symmetric Digital Subscriber Line (“sDSL”), other wireline, cable modem, optical fiber to the end-user premises, satellite, fixed wireless (using licensed or unlicensed spectrum), mobile wireless (using licensed or unlicensed spectrum), electric power line, and all other (which is included to capture deployment of additional technologies over time).

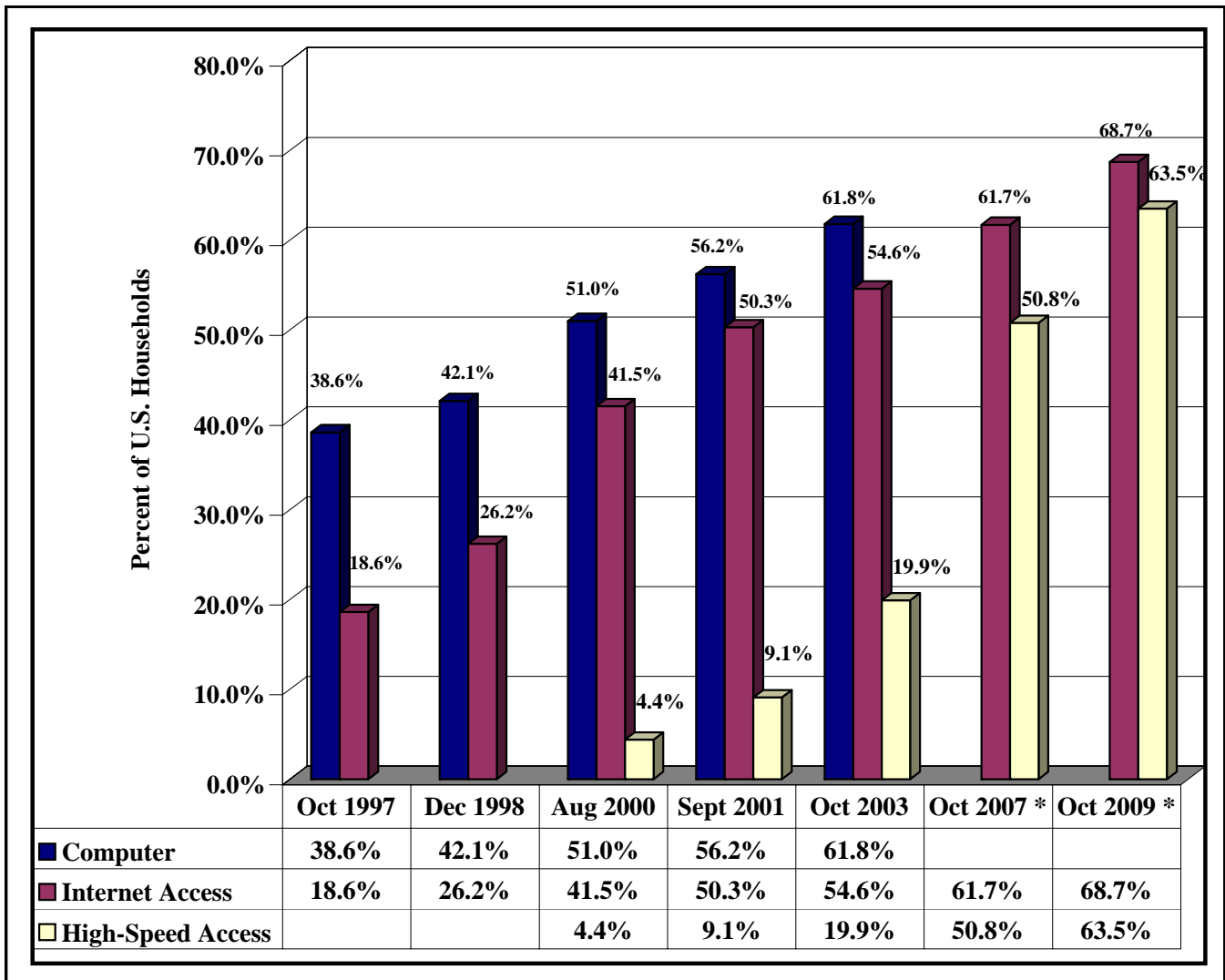
### **Mobile wireless**

Changed reporting instructions starting in December 2008 caused a one-time decrease in the reported number of high-speed mobile wireless Internet access service connections. For reporting periods through June 2008, Form 477 instructed mobile wireless providers to report the number of subscribers whose mobile device (such as a wireless modem laptop card, smartphone, or handset) was capable of sending or receiving data at speeds above 200 kbps. The Commission found these instructions insufficiently precise to enable it to determine, from the reported data, the number of subscribers making regular use of Internet access service above 200 kbps as part of their mobile service package.

Starting with the December 2008 data, Form 477 requires mobile wireless providers to report the number of subscribers that have a capable device (as just defined) for which the subscription includes a data plan for transferring, on a monthly basis, either a specified or an unlimited amount of data to and from Internet sites of the subscriber’s choice, and excluding subscribers whose choice of content is restricted to only customized-for-mobile content (for example, text and multimedia messaging, or the capacity to download ringtones and games).

Also, changed instructions about distinguishing residential subscribers from other subscribers in the December 2008, and later, data caused some mobile wireless providers to report a larger share of residential subscribers than they had reported for earlier dates.

**Chart 2.5**  
**Percent of U.S. Households**  
**With Computers, Internet Access, and High-Speed Access at Home**  
**Selected Years (1997 - 2009)**



\* Data on computer penetration are not available for 2007 and 2009.

Source: U.S. Department of Commerce, National Telecommunications and Information Administration (NTIA), *Digital Nation: 21st Century America's Progress Toward Universal Broadband Internet Access* (February 2010), available through NTIA's website at [www.ntia.doc.gov](http://www.ntia.doc.gov).

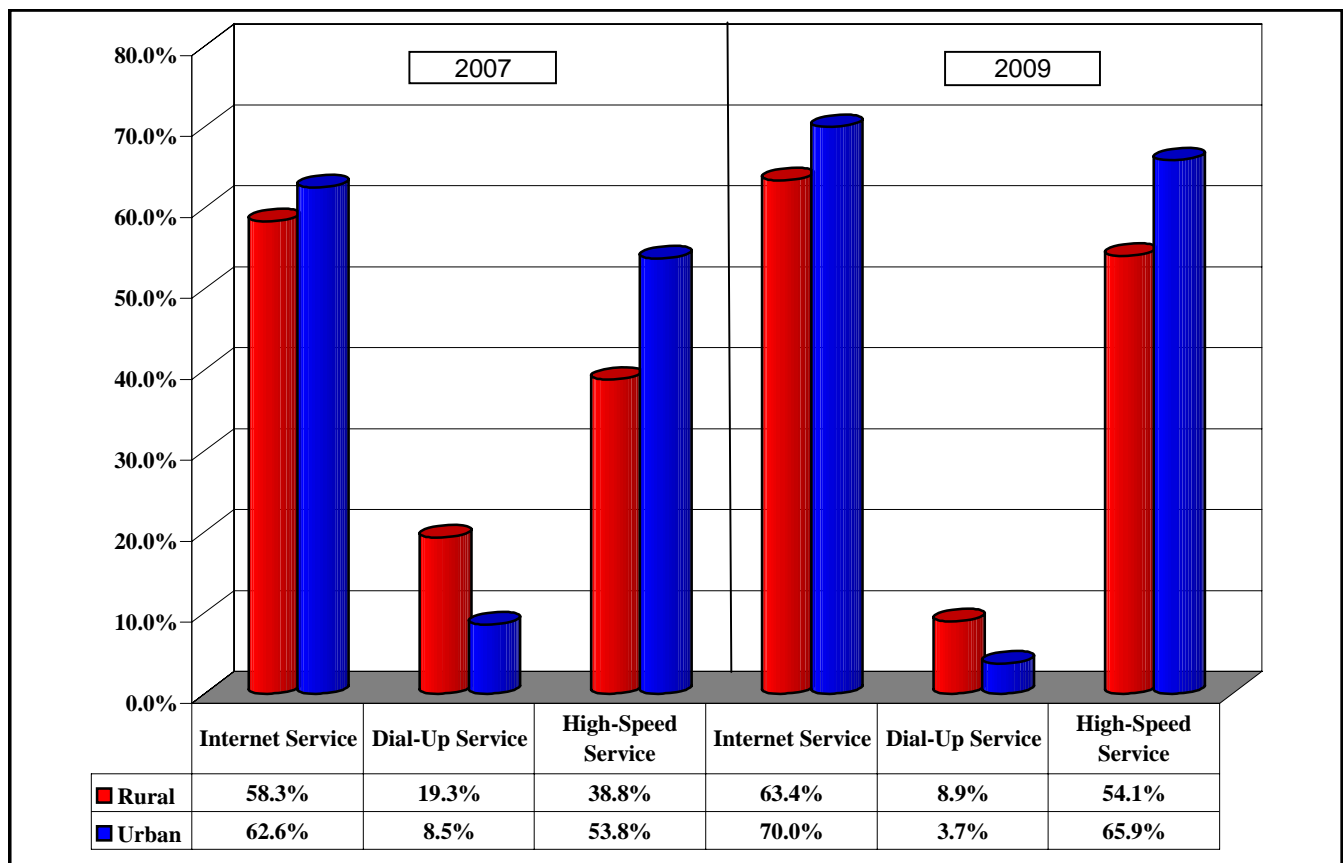
**Table 2.9**  
**Percent of U.S. Households with Internet Connections at Home**  
**Rural versus Urban**  
**(As of October 2007 and October 2009)**

|                         | Rural |       | Urban |       | Total |       |
|-------------------------|-------|-------|-------|-------|-------|-------|
|                         | 2007  | 2009  | 2007  | 2009  | 2007  | 2009  |
| <b>Internet Service</b> | 58.3% | 63.4% | 62.6% | 70.0% | 61.7% | 68.7% |
| Dial-Up Service         | 19.3% | 8.9%  | 8.5%  | 3.7%  | 10.7% | 4.7%  |
| High-Speed Service      | 38.8% | 54.1% | 53.8% | 65.9% | 50.8% | 63.5% |
| Other                   | 0.3%  | 0.4%  | 0.2%  | 0.4%  | 0.2%  | 0.4%  |

Note: Figures may not add up due to rounding.

Source: U.S. Department of Commerce, National Telecommunications and Information Administration (NTIA), *Broadband in America, 2007* (January 2008); U.S. Department of Commerce, NTIA, *Digital Nation: 21st Century America's Progress Toward Universal Broadband Internet Access* (February 2010); and Supplemental Current Population Survey (CPS) Internet Tables at [http://www.ntia.doc.gov/data/CPSTables/t11\\_2lst.txt](http://www.ntia.doc.gov/data/CPSTables/t11_2lst.txt).

**Chart 2.6**  
**Percent of U.S. Households with Internet Connections at Home**  
**Rural versus Urban**  
**(As of October 2007 and October 2009)**



### 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 total annual 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 twenty 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 \$1,100 in 2008.

Bill Harvesting® data collected by TNS Telecoms provide information on the telecommunications expenditures of households. (Additional information on TNS Telecoms can be found in Section 14 and Appendix B.)

Expenditures can be classified by the type of service provider. Table 3.2 presents average monthly household bills from wireline and wireless providers for 1995 through 2008.<sup>1</sup> The upper portion of the table shows average monthly expenditures for the entire sample of households while the lower shows average monthly expenditures among those households billed by each type of service provider. The average monthly household expenditures are greater in the latter portion of the table since those households not billed for particular services are removed from the average.

Another measure of consumer expenditures for telephone service is provided by the Bureau of Economic Analysis. Table 3.3 and Table 3.4 show estimates of personal consumption expenditures by households for landline, cellular and internet services by households. Charts 3.1 and 3.2 illustrate the increasing importance of the wireless and Internet share of household telecommunications service expenditures.

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<sup>1</sup> In this Trends Report, expenditures for local exchange providers and long distance providers have been combined. The breakout between local exchange and long distance expenditures has become more difficult to identify over time as LECs have increased the amount of bundled services that they provide to consumers.

**Table 3.1**  
**Household Expenditures for Telephone Service**

| Year | Annual Expenditures<br>for All Households |                           | Telephone<br>Expenditures as a<br>Percent of All<br>Expenditures |
|------|---|---------------------------|--|
|      | All Expenditures                          | Telephone<br>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  |
| 2001 | 39,518                                    | 914                       | 2.3  |
| 2002 | 40,677                                    | 957                       | 2.4  |
| 2003 | 40,817                                    | 956                       | 2.3  |
| 2004 | 43,395                                    | 990                       | 2.3  |
| 2005 | 46,409                                    | 1,048                     | 2.3  |
| 2006 | 48,398                                    | 1,087                     | 2.2  |
| 2007 | 49,638                                    | 1,100                     | 2.2  |
| 2008 | 50,486                                    | 1,127                     | 2.2  |

Source: Bureau of Labor Statistics, *Consumer Expenditure Survey*.



**Table 3.2**  
**Average Monthly Household Telecommunications Expenditures**  
**By Type of Provider**

(Averages for all Households)

| Year | Wireline Providers | Wireless Providers | Total |
|------|--------------------|--------------------|-------|
| 1995 | \$51               | \$7                | \$58  |
| 1996 | 51                 | 9                  | 60    |
| 1997 | 57                 | 11                 | 68    |
| 1998 | 56                 | 14                 | 70    |
| 1999 | 55                 | 17                 | 72    |
| 2000 | 53                 | 23                 | 76    |
| 2001 | 51                 | 29                 | 80    |
| 2002 | 48                 | 35                 | 83    |
| 2003 | 47                 | 41                 | 88    |
| 2004 | 45                 | 47                 | 92    |
| 2005 | 44                 | 53                 | 97    |
| 2006 | 44                 | 58                 | 102   |
| 2007 | 45                 | 68                 | 113   |
| 2008 | 48                 | 78                 | 125   |

(Averages for only those Households Billed for Service)

| Year | Wireline Providers | Wireless Providers | Total |
|------|--------------------|--------------------|-------|
| 1995 | \$54               | \$46               | \$100 |
| 1996 | 56                 | 45                 | 101   |
| 1997 | 60                 | 40                 | 100   |
| 1998 | 61                 | 41                 | 102   |
| 1999 | 59                 | 42                 | 101   |
| 2000 | 59                 | 46                 | 105   |
| 2001 | 57                 | 51                 | 108   |
| 2002 | 55                 | 56                 | 111   |
| 2003 | 53                 | 62                 | 115   |
| 2004 | 49                 | 67                 | 116   |
| 2005 | 49                 | 74                 | 122   |
| 2006 | 48                 | 78                 | 126   |
| 2007 | 48                 | 85                 | 133   |
| 2008 | 50                 | 92                 | 142   |

Note: **Average monthly household expenditures are estimates based on sample data.** All households in the sample have wireline telephone service. Households in Alaska and Hawaii are excluded from the analysis. No effort was made to distinguish bundled prices from a la carte prices. For households taking bundled local and long distance from the same provider, the entire bill is generally considered local.

Source: Calculated by Industry Analysis and Technology Division staff using survey data from TNS Telecoms *ReQuest Market Monitor*™, *Bill Harvesting*®.

**Table 3.3**  
**Personal Consumption Expenditures (PCE)**  
**(Expenditure Amounts Shown in Millions)**

|      | Personal<br>Consumption<br>Expenditures<br>1/ | Landline<br>Telephone<br>Services<br>2/ | Cellular<br>Telephone<br>Services<br>3/ | Internet<br>Access<br>Services<br>4/ | Total<br>Telephone<br>and<br>Internet<br>Access | Telephone<br>& Internet<br>Access<br>as a<br>Percentage<br>of PCE | As a Percentage of Total<br>Telephone and internet Access |          |          |
|------|---|---|---|--------------------------------------|---|---|---|----------|----------|
|      |   |   |   |                                      |   |   | Landline  | Cellular | Internet |
| 1980 | \$1,755,826                                   | \$27,574                                | \$0                                     | \$0                                  | \$27,574  | 1.6 %   | 100 %   | 0 %      | 0 %      |
| 1981 | 1,939,506                                     | 30,889                                  | 0                                       | 0                                    | 30,889  | 1.6   | 100   | 0        | 0        |
| 1982 | 2,075,495                                     | 35,140                                  | 0                                       | 0                                    | 35,140  | 1.7   | 100   | 0        | 0        |
| 1983 | 2,288,576                                     | 38,639                                  | 0                                       | 0                                    | 38,639  | 1.7   | 100   | 0        | 0        |
| 1984 | 2,501,083                                     | 41,786                                  | 0                                       | 0                                    | 41,786  | 1.7   | 100   | 0        | 0        |
| 1985 | 2,717,608                                     | 45,877                                  | 101                                     | 0                                    | 45,978  | 1.7   | 100   | 0        | 0        |
| 1986 | 2,896,746                                     | 49,088                                  | 173                                     | 0                                    | 49,261  | 1.7   | 100   | 0        | 0        |
| 1987 | 3,096,960                                     | 51,637                                  | 242                                     | 0                                    | 51,879  | 1.7   | 100   | 0        | 0        |
| 1988 | 3,350,056                                     | 53,799                                  | 591                                     | 25                                   | 54,415  | 1.6   | 99  | 1        | 0        |
| 1989 | 3,594,490                                     | 56,783                                  | 1,352                                   | 50                                   | 58,185  | 1.6   | 98  | 2        | 0        |
| 1990 | 3,835,453                                     | 58,456                                  | 2,246                                   | 100                                  | 60,802  | 1.6   | 96  | 4        | 0        |
| 1991 | 3,980,073                                     | 60,915                                  | 3,088                                   | 200                                  | 64,203  | 1.6   | 95  | 5        | 0        |
| 1992 | 4,236,891                                     | 66,133                                  | 4,866                                   | 305                                  | 71,304  | 1.7   | 93  | 7        | 0        |
| 1993 | 4,483,594                                     | 68,585                                  | 6,423                                   | 412                                  | 75,420  | 1.7   | 91  | 9        | 1        |
| 1994 | 4,750,806                                     | 72,770                                  | 8,522                                   | 805                                  | 82,097  | 1.7   | 89  | 10       | 1        |
| 1995 | 4,987,280                                     | 73,893                                  | 11,274                                  | 1,611                                | 86,778  | 1.7   | 85  | 13       | 2        |
| 1996 | 5,273,608                                     | 79,036                                  | 13,735                                  | 2,675                                | 95,446  | 1.8   | 83  | 14       | 3        |
| 1997 | 5,570,626                                     | 87,443                                  | 15,706                                  | 3,575                                | 106,724   | 1.9   | 82  | 15       | 3        |
| 1998 | 5,918,488                                     | 91,625                                  | 19,455                                  | 5,549                                | 116,629   | 2.0   | 79  | 17       | 5        |
| 1999 | 6,342,784                                     | 95,796                                  | 24,204                                  | 10,055                               | 130,055   | 2.1   | 74  | 19       | 8        |
| 2000 | 6,830,371                                     | 97,636                                  | 32,590                                  | 16,437                               | 146,663   | 2.1   | 67  | 22       | 11       |
| 2001 | 7,148,807                                     | 96,817                                  | 40,763                                  | 18,243                               | 155,823   | 2.2   | 62  | 26       | 12       |
| 2002 | 7,439,191                                     | 90,907                                  | 48,933                                  | 21,929                               | 161,769   | 2.2   | 56  | 30       | 14       |
| 2003 | 7,804,013                                     | 85,499                                  | 54,667                                  | 26,128                               | 166,294   | 2.1   | 51  | 33       | 16       |
| 2004 | 8,285,080                                     | 81,662                                  | 61,458                                  | 28,451                               | 171,571   | 2.1   | 48  | 36       | 17       |
| 2005 | 8,819,002                                     | 76,677                                  | 69,390                                  | 29,888                               | 175,955   | 2.0   | 44  | 39       | 17       |
| 2006 | 9,322,662                                     | 79,566                                  | 78,224                                  | 32,301                               | 190,091   | 2.0   | 42  | 41       | 17       |
| 2007 | 9,826,438                                     | 76,053                                  | 85,940                                  | 38,606                               | 200,599   | 2.0   | 38  | 43       | 19       |
| 2008 | 10,129,919                                    | 76,454                                  | 91,517                                  | 42,470                               | 210,441   | 2.1   | 36  | 43       | 20       |
| 2009 | 10,089,069                                    | 76,600                                  | 94,543                                  | 44,144                               | 215,287   | 2.1   | 36  | 44       | 21       |

Note: All series revised for all years

1/ Personal Consumption Expenditures (Series DPCERC).

2/ Represents the sum of two series: Landline Local Telephone Service (Series DLOCRC) and Landline Long Distance Telephone Services (Series DLDTRC).

3/ Cellular Telephone Service (Series DCELRC).

4/ Internet Access (Series DINTRC).

Source: Bureau Of Economic Analysis, National Economic Accounts, Table 2.4.5U. Personal Consumption Expenditures by Type of Product. See [http://www.bea.gov/national/nipaweb/nipa\\_underlying/SelectTable.asp](http://www.bea.gov/national/nipaweb/nipa_underlying/SelectTable.asp), last visited June 8, 2010.

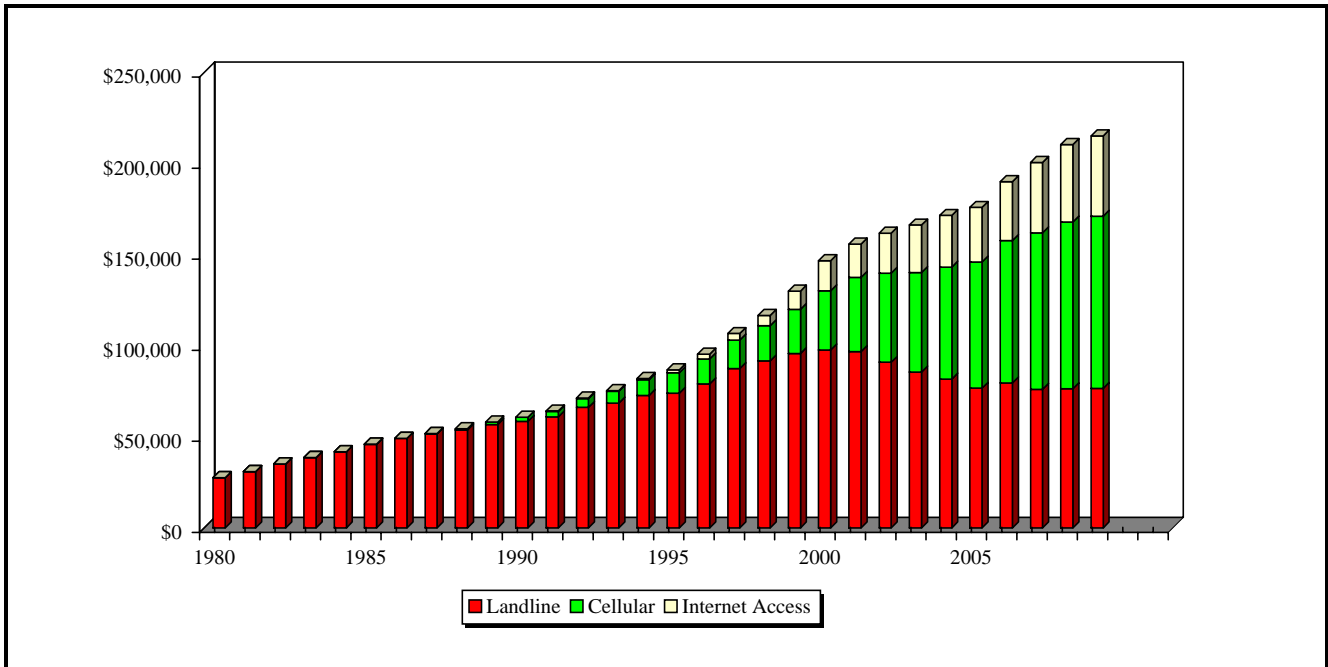
**Table 3.4**  
**Personal Consumption Expenditures**  
**Per Household Per Month 1/**

|      | Households in<br>July<br>(Millions) | All<br>Consumption<br>Expenditures | Landline<br>Telephone<br>Services | Cellular<br>Telephone<br>Services | Internet<br>Access<br>Services | Total Telephone<br>and Internet<br>Access |
|------|-------------------------------------|------------------------------------|-----------------------------------|-----------------------------------|--------------------------------|---|
| 1980 | 81.9                                | \$1,786                            | \$28                              | \$0                               | \$0                            | \$28                                      |
| 1981 | 83.5                                | 1,935                              | 31                                | 0                                 | 0                              | 31  |
| 1982 | 84.7                                | 2,042                              | 35                                | 0                                 | 0                              | 35  |
| 1983 | 85.1                                | 2,241                              | 38                                | 0                                 | 0                              | 38  |
| 1984 | 86.6                                | 2,407                              | 40                                | 0                                 | 0                              | 40  |
| 1985 | 88.2                                | 2,568                              | 43                                | 0                                 | 0                              | 43  |
| 1986 | 89.5                                | 2,697                              | 46                                | 0                                 | 0                              | 46  |
| 1987 | 90.7                                | 2,845                              | 47                                | 0                                 | 0                              | 48  |
| 1988 | 92.4                                | 3,021                              | 49                                | 1                                 | 0                              | 49  |
| 1989 | 93.8                                | 3,193                              | 50                                | 1                                 | 0                              | 52  |
| 1990 | 94.8                                | 3,372                              | 51                                | 2                                 | 0                              | 53  |
| 1991 | 95.5                                | 3,473                              | 53                                | 3                                 | 0                              | 56  |
| 1992 | 96.6                                | 3,655                              | 57                                | 4                                 | 0                              | 62  |
| 1993 | 97.9                                | 3,816                              | 58                                | 5                                 | 0                              | 64  |
| 1994 | 98.6                                | 4,015                              | 62                                | 7                                 | 1                              | 69  |
| 1995 | 100.0                               | 4,156                              | 62                                | 9                                 | 1                              | 72  |
| 1996 | 101.2                               | 4,343                              | 65                                | 11                                | 2                              | 79  |
| 1997 | 102.3                               | 4,538                              | 71                                | 13                                | 3                              | 87  |
| 1998 | 103.4                               | 4,770                              | 74                                | 16                                | 4                              | 94  |
| 1999 | 105.1                               | 5,029                              | 76                                | 19                                | 8                              | 103                                       |
| 2000 | 105.8                               | 5,380                              | 77                                | 26                                | 13                             | 116                                       |
| 2001 | 106.9                               | 5,573                              | 75                                | 32                                | 14                             | 121                                       |
| 2002 | 108.5                               | 5,714                              | 70                                | 38                                | 17                             | 124                                       |
| 2003 | 112.1                               | 5,801                              | 64                                | 41                                | 19                             | 124                                       |
| 2004 | 113.5                               | 6,083                              | 60                                | 45                                | 21                             | 126                                       |
| 2005 | 114.4                               | 6,424                              | 56                                | 51                                | 22                             | 128                                       |
| 2006 | 116.2                               | 6,686                              | 57                                | 56                                | 23                             | 136                                       |
| 2007 | 117.7                               | 6,957                              | 54                                | 61                                | 27                             | 142                                       |
| 2008 | 118.0                               | 7,154                              | 54                                | 65                                | 30                             | 149                                       |
| 2009 | 118.0                               | 7,125                              | 54                                | 67                                | 31                             | 152                                       |

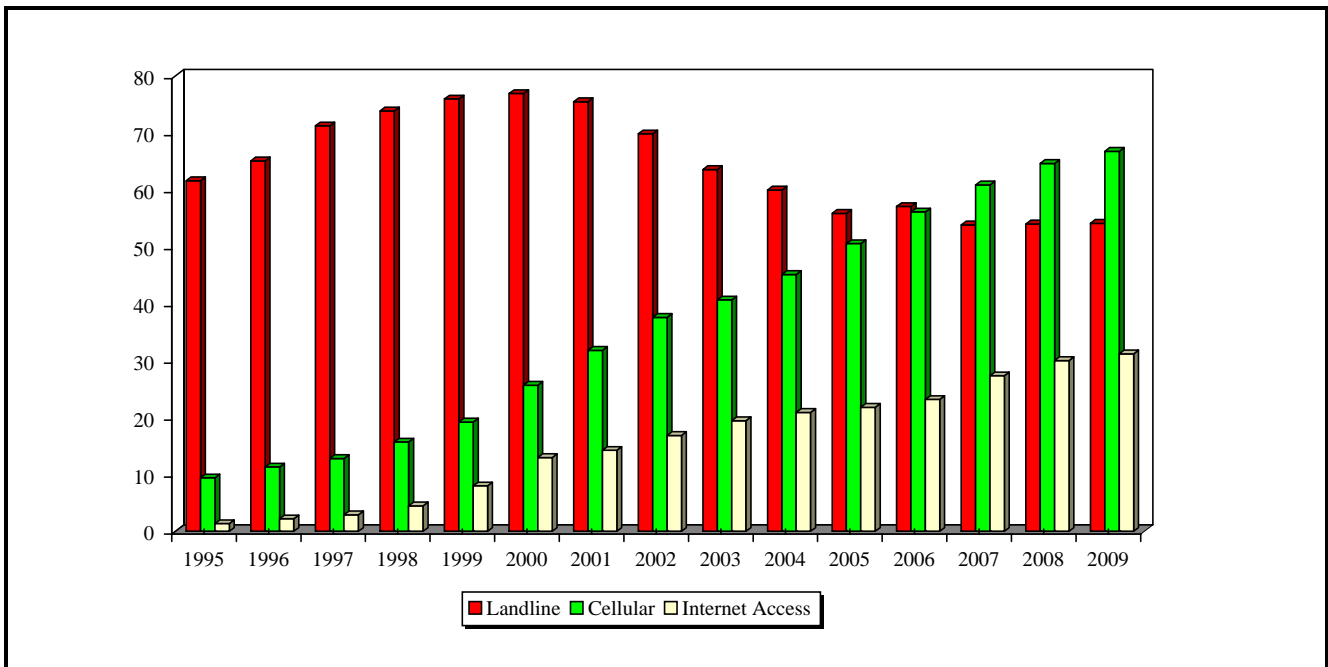
1/ Expenditure amounts per month were calculated as the amounts shown in Table 3.3 divided by the number of households as of July.

Source: Number of households from the Census Bureau's Current Population Survey. Expenditure data from the Bureau Of Economic Analysis, National Economic Accounts, Table 2.4.5U. Personal Consumption Expenditures by Type of Product.  
See [http://www.bea.gov/national/nipaweb/nipa\\_underlying/SelectTable.asp](http://www.bea.gov/national/nipaweb/nipa_underlying/SelectTable.asp) last visited June 8, 2010.

**Chart 3.1**  
**Personal Consumption Expenditures for Telephone Service and Internet Access**  
 (\$ Millions)



**Chart 3.2**  
**Monthly Personal Consumption Expenditures for Telephone Service per Household**



## 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 filed annual reports for each monitoring period. Table 4.1 is a summary of interstate rates of return for 2000-2008 filed by price-cap carriers. Beginning in 2008, AT&T, Qwest, and Verizon no longer file FCC Form 492A.<sup>1</sup> Rates of return for 1991-1999 can be found in the August 2001 *Trends* report which can be accessed at [www.fcc.gov/wcb/stats](http://www.fcc.gov/wcb/stats).

The rates of return shown in Table 4.1 were those 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 Wireline Competition Bureau Statistical Reports web site at [www.fcc.gov/wcb/stats](http://www.fcc.gov/wcb/stats). Copies of the FCC Form 492A reports are on file in the FCC's Reference Information Center, Courtyard Level, 445 12th Street S.W., Washington, D.C. 20554.

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<sup>1</sup> The Commission's *MO&O in Petition of AT&T For Forbearance*, WC Docket No. 07-21, *et al*, 23 FCC Rcd 7302 (2008), granted AT&T conditional forbearance from filing FCC 492A, the Rate of Return Monitoring Report, subject to approval of a compliance plan. On December 12, 2008, the Commission extended the same relief, subject to the same conditions, to Verizon and Qwest. On December 31, 2008, in a Public Notice, the Wireline Competition Bureau approved the three plans effective immediately. Therefore, the 2007 preliminary reported data will also be their final data. AT&T, Verizon, and Qwest entities will no longer file Report Form 492A for year 2008 and subsequent years.

**Table 4.1**  
**Interstate Rate of Return Summary \***  
**Years 2000 through 2008**  
**Price-Cap Companies Reporting FCC Form 492A**  
**(Final Reports for 2000 Through 2007 and Initial Report for 2008) <sup>1</sup>**

| Reporting Entity                   |   | 2008          | 2007    | 2006    | 2005                 | 2004                 | 2003    | 2002                 | 2001    | 2000    |
|------------------------------------|---|---------------|---------|---------|----------------------|----------------------|---------|----------------------|---------|---------|
| <b>AT&amp;T, Inc.</b>              |   | <sup>11</sup> |         |         |                      |                      |         |                      |         |         |
| 1                                  | BellSouth Telecommunications Inc                                |               | 24.54 % | 15.88 % | 25.00 %              | 22.68 %              | 21.93 % | 19.35 %              | 21.25 % | 22.83 % |
| 2                                  | Ameritech Operating Companies                                   |               | 40.11   | 33.26   | 27.92                | 22.51                | 20.55   | 20.24                | 25.72   | 30.24   |
| 3                                  | Nevada Bell Telephone Company                                   |               | 33.51   | 33.54   | 31.29                | 24.76                | 20.16   | 14.86                | 20.86   | 21.55   |
| 4                                  | Pacific Bell Telephone Company                                  |               | 62.43   | 48.67   | 36.81                | 28.77                | 26.23   | 21.00                | 23.79   | 19.20   |
| 5                                  | Southern New England Telephone Company, The                     |               | 31.55   | 28.62   | 27.47                | 21.82 <sup>6</sup>   | 23.93   | 18.47                | 23.57   | 18.21   |
| 6                                  | Southwestern Bell Telephone Company L.P.                        |               | 31.66   | 26.73   | 20.27                | 16.38 <sup>6</sup>   | 15.60   | 14.88                | 18.81   | 15.17   |
| 7                                  | <b>Qwest Corporation, Including Malheur and El Paso</b>         | <sup>11</sup> | 52.56   | 41.97   | 28.60 <sup>10</sup>  | 25.07                | 22.74   | 20.08                | 19.14   | 19.93   |
| <b>Verizon Telephone Companies</b> |   | <sup>11</sup> |         |         |                      |                      |         |                      |         |         |
| 8                                  | Verizon Telephone Companies (Verizon FCC Tariff No. 1 & No. 11) |               | 19.89   | 16.55   | 18.37                | 11.24                | 8.00    | 11.95                | 12.93   | 13.36   |
| 9                                  | Verizon California Inc. (California - GTCA)                     |               | 39.60   | 32.18   | 27.89                | 34.99                | 29.17   | 28.50                | 28.48   | 25.87   |
| 10                                 | Verizon California Inc. (Arizona - COAZ)                        |               | 81.40   | 19.58   | 26.11                | 6.17                 | 2.05    | 6.99                 | 13.25   | 10.90   |
| 11                                 | Verizon California Inc. (California - COCA)                     |               | 85.67   | 54.32   | 40.93                | 36.93                | 30.64   | 28.22                | 29.80   | 28.74   |
| 12                                 | Verizon California Inc. (Nevada - CONV)                         |               | 47.81   | 39.12   | 27.98                | 28.79                | 28.51   | 24.08                | 26.66   | 28.82   |
| 13                                 | Verizon Florida Inc. (Florida - GTFL)                           |               | 30.16   | 31.59   | 32.25                | 28.96                | 24.46   | 22.03                | 29.23   | 21.90   |
| 14                                 | Verizon North Inc. (COPA + COQS = COPT)                         |               | 36.03   | 32.55   | 38.92                | 32.88 <sup>6</sup>   | 40.74   | 43.61                | 39.71   | 41.05   |
| 15                                 | Verizon North Inc. (Illinois - COIL)                            |               | 48.90   | 42.82   | 41.27                | 41.72                | 60.34   | 54.09                | 53.67   | 44.51   |
| 16                                 | Verizon North Inc. (Indiana - COIN)                             |               | 70.42   | 54.82   | 51.36                | 40.36                | 47.34   | 46.06                | 46.55   | 47.67   |
| 17                                 | Verizon North Inc. (Ohio - GTOH)                                |               | 29.59   | 19.66   | 20.96                | 18.58                | 19.39   | 19.53                | 20.45   | 21.88   |
| 18                                 | Verizon North Inc. (Pennsylvania - GTPA)                        |               | 29.13   | 9.28    | 52.26                | 20.50                | 13.76   | 22.50                | 23.17   | 21.95   |
| 19                                 | Verizon North Inc. (Wisconsin - GTWI)                           |               | 21.76   | 17.16   | 13.86                | 11.53 <sup>6</sup>   | 10.85   | 9.90                 | 14.16   | 16.99   |
| 20                                 | Verizon North/Verizon South (GTIN + GLIN = GAIN)                |               | 26.98   | 19.97   | 22.78                | 22.34                | 22.64   | 24.75                | 32.82   | 33.00   |
| 21                                 | Verizon North/Contel South (GTMI + GLMI = GAMI)                 |               | 23.38   | 20.00   | 17.88                | 14.83 <sup>6</sup>   | 15.10   | 16.64                | 17.49   | 16.45   |
| 22                                 | Verizon North/Verizon South (GTIL + GLIL = GAIL)                |               | 34.90   | 25.48   | 23.11                | 23.29                | 21.99   | 21.54                | 23.67   | 23.90   |
| 23                                 | Verizon Northwest Inc. (Idaho - GTID)                           |               | 68.31   | 47.61   | 43.93                | 34.53                | 28.20   | 33.01                | 38.74   | 34.17   |
| 24                                 | Verizon Northwest Inc. (Oregon - GTOR)                          |               | 29.30   | 29.05   | 32.43                | 25.44                | 26.28   | 26.10                | 31.69   | 30.95   |
| 25                                 | Verizon Northwest Inc. (Washington - COWA)                      |               | 47.16   | 39.13   | 33.53                | 30.44                | 36.20   | 31.57                | 40.06   | 39.49   |
| 26                                 | Verizon Northwest Inc. (Washington - GTWA)                      |               | 40.45   | 40.04   | 33.22                | 33.91                | 29.82   | 28.97                | 34.03   | 33.26   |
| 27                                 | Verizon Northwest Inc. (West Coast CA - GNCA)                   |               | (7.20)  | (1.59)  | (33.59)              | (9.44)               | (13.80) | (5.17)               | 1.91    | (8.35)  |
| 28                                 | Verizon South Inc. (North Carolina - GTNC)                      |               | 32.74   | 29.37   | (27.32)              | 17.52                | 16.74   | 23.45                | 30.08   | 26.44   |
| 29                                 | Verizon South Inc. (N. Carolina - CONC)                         |               | 32.13   | 25.23   | 26.27                | 10.10                | 14.77   | 21.97                | 22.17   | 17.75   |
| 30                                 | Verizon South Inc. (GTSC + COSC = GTST)                         |               | 20.34   | 34.45   | 26.00                | 39.63                | 28.19   | 29.82                | 32.44   | 31.19   |
|                                    | Verizon South Inc. (Alabama - GTAL)                             |               |         |         |                      |                      |         |                      | 24.02   | 20.24   |
|                                    | Verizon South Inc. (Kentucky - COKY)                            |               |         |         |                      |                      |         |                      | 30.95   | 20.60   |
|                                    | Verizon South Inc. (Kentucky - GTKY)                            |               |         |         |                      |                      |         |                      | 27.21   | 25.07   |
| 31                                 | Verizon South Inc. (Virginia - COVA)                            |               | 52.93   | 50.02   | 46.88                | 33.50                | 39.52   | 40.41                | 40.69   | 40.85   |
| 32                                 | Verizon South Inc. (Virginia - GTVA)                            |               | 49.72   | 13.94   | 19.98                | 24.17                | (22.01) | 1.76                 | 9.53    | 6.62    |
| 33                                 | GTE Southwest Inc. dba Verizon Southwest (Texas - COTX)         |               | 18.13   | 13.33   | 11.09                | 11.23                | 10.05   | 12.46                | 11.9    | 12.17   |
| 34                                 | GTE Southwest Inc. dba Verizon Southwest (Texas - GTTX)         |               | 21.36   | 16.33   | 18.38                | 18.21                | 18.74   | 20.47                | 24.35   | 21.65   |
|                                    | GTE Midwest Inc. (Missouri - COMO + COCM + COEM =COMT)          |               |         |         |                      |                      |         |                      | 20.33   | 17.06   |
|                                    | GTE Midwest Inc. (Missouri - GTMO)                              |               |         |         |                      |                      |         |                      | 23.92   | 19.15   |
|                                    | GTE Systems of The South (Alabama - COAL)                       |               |         |         |                      |                      |         |                      | 15.77   | 14.93   |
| <b>Embarq</b>                      |   |               |         |         |                      |                      |         |                      |         |         |
| 35                                 | Central Telephone Company - Nevada Division                     |               | 59.46 % | 47.08 % | 53.49 % <sup>8</sup> | 53.49 % <sup>8</sup> | 45.80 % | 43.37 % <sup>6</sup> | 34.16 % | 23.80 % |
| 36                                 | Embarq - Florida Incorporated                                   |               | 31.46   | 33.54   | 40.43 <sup>8</sup>   | 40.43 <sup>8</sup>   | 43.03   | 40.98 <sup>6</sup>   | 35.54   | 29.41   |
| 37                                 | Embarq Local Telephone Cos. - Eastern (NJ & PA)                 |               | 53.22   | 47.02   | 50.74 <sup>8</sup>   | 50.74 <sup>8</sup>   | 56.61   | 55.14 <sup>6</sup>   | 45.38   | 37.78   |
| 38                                 | Embarq Local Telephone Cos. - Midwest (MO, KS, MN, NE, WY, TX)  |               | 28.22   | 25.15   | 30.84 <sup>8</sup>   | 30.84 <sup>8</sup>   | 32.36   | 29.17 <sup>6</sup>   | 25.24   | 18.89   |
| 39                                 | Embarq Local Telephone Cos. - North Carolina                    |               | 34.06   | 34.94   | 46.08 <sup>8</sup>   | 46.08 <sup>8</sup>   | 50.82   | 51.62 <sup>6</sup>   | 45.89   | 36.64   |
| 40                                 | Embarq Local Telephone Cos. - Northwest (OR & WA)               |               | 32.21   | 27.39   | 32.06 <sup>8</sup>   | 32.06 <sup>8</sup>   | 33.80   | 23.90 <sup>6</sup>   | 33.51   | 34.62   |
| 41                                 | Embarq Local Telephone Cos. - Southeast (TN, VA & SC)           |               | 37.57   | 34.91   | 40.98 <sup>8</sup>   | 40.98 <sup>8</sup>   | 38.35   | 36.14 <sup>6</sup>   | 34.34   | 33.76   |
| 42                                 | United Telephone Co. of Indiana, Inc.                           |               | 55.12   | 58.90   | 64.24 <sup>8</sup>   | 64.24 <sup>8</sup>   | 71.95   | 68.80 <sup>6</sup>   | 46.47   | 41.75   |
| 43                                 | United Telephone Co. of Ohio                                    |               | 60.45   | 53.29   | 50.39 <sup>8</sup>   | 50.39 <sup>8</sup>   | 46.30   | 39.01 <sup>6</sup>   | 31.50   | 30.89   |

**Table 4.1**  
**Interstate Rate of Return Summary \***  
**Years 2000 through 2008**  
**Price-Cap Companies Reporting FCC Form 492A**  
**(Final Reports for 2000 Through 2007 and Initial Report for 2008) <sup>1</sup>**

| Reporting Entity  | 2008    | 2007    | 2006                | 2005                | 2004                 | 2003               | 2002               | 2001    | 2000    |
|---|---------|---------|---------------------|---------------------|----------------------|--------------------|--------------------|---------|---------|
| <b>All Other Companies</b>                                    |         |         |                     |                     |                      |                    |                    |         |         |
| 44 CenturyTel of Belle-Hermann/So Missouri/Sw Missouri (CNMO) | 23.24   | 17.20   | 26.29               | 30.75               | 22.94                | 14.53              | 4.69 <sup>2</sup>  |         |         |
| 46 CenturyTel of Northern Alabama (CNAN)                      | 42.67   | 42.23   | 44.51               | 26.77               | 11.97                | 8.23               | 7.49 <sup>3</sup>  |         |         |
| 47 CenturyTel of Southern Alabama (CNAS)                      | 43.83   | 41.26   | 39.47               | 32.36               | 23.21                | 24.13              | 15.78 <sup>3</sup> |         |         |
| 48 Cincinnati Bell Telephone Company                          | 72.35   | 56.54   | 47.98               | 53.10               | 33.71 <sup>6</sup>   | 32.48              | 28.64 <sup>4</sup> | 30.09   | 28.95   |
| 49 Citizens Comms Cos. dba Citizens Comms FCC Tariff 1 (CTC1) | 35.24   | 37.90   | 45.66               | 41.31               | 34.99 <sup>6</sup>   | 24.40              | 19.27              | 15.73   | 19.68   |
| 50 Citizens Comms Cos. dba Citizens Comms FCC Tariff 2 (CTC2) | 66.66   | 63.41   | 59.07               | 48.43               | 37.75 <sup>6</sup>   | 16.14              | 20.67              | 17.30   | 24.05   |
| 51 Citizens Comms Cos. dba Citizens Comms FCC Tariff 3 (CTC3) | 19.78   | 15.77   | 23.46               | 22.00               | 12.19 <sup>6</sup>   | 10.40              | 8.94               | 4.52    | 16.12   |
| 52 Citizens Comms Cos. dba Citizens Comms FCC Tariff 4 (CTC4) | 57.15   | 57.25   | 56.69               | 57.95               | 42.79 <sup>6</sup>   | 35.38              | 23.31              | 13.08   | 30.94   |
| 53 Citizens Telecommunications Cos. (CTC5)                    | 10.76   |         |                     |                     |                      | 40.37              | 4.90               | 0.86    | (11.23) |
| 54 Consolidated Communications of Fort Bend Company           | 15.45   |         |                     |                     |                      |                    |                    |         |         |
| 55 Consolidated CommunicaTIONS OF Texas Company               | 25.09   |         |                     |                     |                      |                    |                    |         |         |
| 56 Frontier Telephone of Rochester                            | 51.98   | 10.84   | 18.21               | 11.32               | 55.89 <sup>6</sup>   | 10.67              | 11.47              | 12.32   | 18.91   |
| 57 Frontier Tier 2 Concurring Companies                       | 35.45   | 48.89   | 51.56               | 59.64               | 11.45 <sup>6</sup>   | 38.49              | 33.34              | 38.12   | 38.95   |
| 58 Frontier Comms of Minnesota & Frontier Comms of Iowa       | 16.31   | 33.41   | 34.90               | 47.18               | 33.67 <sup>6</sup>   | 32.16              | 31.15              | 25.24   | 33.16   |
| 59 Hawaiian Telecom   | 23.43   | 21.43   | 22.41               | 21.88 <sup>10</sup> | 9.44 <sup>7</sup>    | 16.96              | 15.30              | 16.72   | 17.87   |
| 60 Illinois Consolidated Telephone Company                    | 38.89   |         |                     |                     |                      |                    |                    |         |         |
| 61 Iowa Telecom Service Group                                 | 35.15   | 28.05   | 25.51               | 19.36 <sup>10</sup> | 17.30 <sup>6</sup>   | 17.58 <sup>5</sup> | 14.26 <sup>4</sup> | 13.07   |         |
| 62 Iowa Telecom Systems Service Group                         |         | 17.19   | 15.20               | 19.14 <sup>10</sup> | 20.16                | 23.97 <sup>5</sup> | 20.47 <sup>4</sup> | 18.45   |         |
| 63 Micronesian Telecommunications Corp.                       | 51.51   | 51.05   | 45.48               | 43.52               | 43.52 <sup>6 7</sup> | 33.91              | 32.75              | 21.83   | 23.58   |
| <b>Windstream</b>   |         |         |                     |                     |                      |                    |                    |         |         |
| 64 Georgia Properties   | 25.88   |         |                     |                     |                      |                    |                    |         |         |
| 65 Oklahoma Properties  | 41.37   |         |                     |                     |                      |                    |                    |         |         |
| 66 Texas Windstream, Inc                                      | 19.51   |         |                     |                     |                      |                    |                    |         |         |
| 67 Valor Oklahoma   | 17.69   | 30.33   | (1.34) <sup>9</sup> | 19.38 <sup>10</sup> | 15.29 <sup>6</sup>   | 8.69               | 9.31               | 11.65   | 11.22   |
| 68 Valor Texas  | 28.12   | 24.03   | (1.13) <sup>9</sup> | 18.08 <sup>10</sup> | 13.47 <sup>6</sup>   | 15.21              | 10.66              | 5.70    | 5.24    |
| 69 Valor New Mexico #1  | 30.73   | 22.84   | 11.60 <sup>9</sup>  | 28.25 <sup>10</sup> | 22.96 <sup>6</sup>   | 18.45              | 16.86              | 11.45   | 20.67   |
| 70 Valor New Mexico #2  | 25.72   | 21.64   | 5.54 <sup>9</sup>   | 17.77 <sup>10</sup> | 21.16 <sup>6</sup>   | 20.41              | 15.88              | 8.39    | 13.35   |
| 71 Windstream Alabama, LLC                                    | 31.19   |         |                     |                     |                      |                    |                    |         |         |
| 72 Windstream Arkansas, LLC                                   | 24.61   |         |                     |                     |                      |                    |                    |         |         |
| 73 Windstream Concord, Inc                                    | 39.50   |         |                     |                     |                      |                    |                    |         |         |
| 74 Windstream Florida, Inc                                    | 29.08   |         |                     |                     |                      |                    |                    |         |         |
| 75 Windstream Kentucky East, LLC Lexington                    | 99.56   | 61.07   | 30.15 <sup>9</sup>  | 38.10 <sup>10</sup> | 33.40 <sup>6</sup>   | 26.75              | 27.78              | 12.57   | 12.99   |
| 76 Windstream Kentucky East, LLC London                       | 31.26   | 22.87   | 14.12 <sup>9</sup>  | 23.37 <sup>10</sup> | 25.50 <sup>6</sup>   | 26.26              | 28.76              |         |         |
| 77 Windstream Kentucky West, LLC                              | 35.05   |         |                     |                     |                      |                    |                    |         |         |
| 78 Windstream Kerrville                                       | 41.96   |         |                     |                     |                      |                    |                    |         |         |
| 79 Windstream Missouri, Inc                                   | 24.78   |         |                     |                     |                      |                    |                    |         |         |
| 80 Windstream Mississippi, LLC                                | 81.28   |         |                     |                     |                      |                    |                    |         |         |
| 81 Windstream Nebraska  | 53.55   | 24.89   | 23.87 <sup>9</sup>  | 28.40 <sup>10</sup> | 14.25 <sup>6</sup>   | 13.43              | 12.20              | 12.57   | 12.99   |
| 82 Windstream New York, Inc                                   | 56.59   |         |                     |                     |                      |                    |                    |         |         |
| 83 Windstream North Carolina, LLC                             | 11.41   |         |                     |                     |                      |                    |                    |         |         |
| 84 Windstream Ohio  | 17.73   |         |                     |                     |                      |                    |                    |         |         |
| 85 Windstream Pennsylvania, LLC                               | 16.57   |         |                     |                     |                      |                    |                    |         |         |
| 86 Windstream South Carolina, LLC                             | 28.99   |         |                     |                     |                      |                    |                    |         |         |
| 87 Windstream Standard, LLC                                   | 33.33   |         |                     |                     |                      |                    |                    |         |         |
| 88 Windstream Sugar Land                                      | 31.79   |         |                     |                     |                      |                    |                    |         |         |
| 89 Windstream Western Reserve                                 | 25.25   |         |                     |                     |                      |                    |                    |         |         |
| Maximum Rate of Return <sup>11</sup>                          | 99.56 % | 85.67 % | 64.24 %             | 71.84 %             | 68.80 %              | 59.89 %            | 54.09 %            | 53.67 % | 47.67 % |
| Minimum Rate of Return <sup>11</sup>                          | 10.76   | (7.20)  | (1.59)              | (33.60)             | (9.44)               | (17.50)            | (5.17)             | 0.86    | (11.23) |
| Weighted Arithmetic Mean <sup>11</sup>                        | 32.16   | 30.65   | 25.51               | 23.48               | 20.44                | 18.06              | 17.69              | 19.62   | 18.04   |
| Standard Deviation <sup>11</sup>                              | 15.51   | 12.87   | 11.58               | 9.13                | 9.00                 | 8.63               | 5.69               | 5.80    | 5.17    |

\* The carriers' interstate rates of return reported on the FCC Form 492A may not agree with the interstate rates of return reported by the carriers on other Commission reports.

For example, price-cap carriers report interstate rates of return on the Commission's Automated Reporting Management Information System's (ARMIS) 43-01 report.

The 43-01 Report interstate rates of return also includes revenues and costs for non-price-cap services. See footnote 11 for additional information regarding the 43-01 Report.

<sup>1</sup> For years 1991 - 1999, see Industry Analysis Division, Common Carrier Bureau, *Trends in Telephone Service* (August 2001).

<sup>2</sup> For the reporting period 9/1/02 - 12/31/02.

<sup>3</sup> For the reporting period 7/1/02 - 12/31/02.

<sup>4</sup> For final 2002, there were no changes to the preliminary.

<sup>5</sup> For final 2003, there were no changes to the preliminary.

<sup>6</sup> For final 2004, there were no changes to the preliminary.

<sup>7</sup> Verizon sold these entities in 2005.

<sup>8</sup> In December 2004 Sprint and Nextel merged and in February 2006 the Local Telecommunication Division was named EMBARQ.

<sup>9</sup> Windstream formed through spinoff of Alltel's landline business and merger with Valor Communications.

<sup>10</sup> For final 2005, there were no changes to the preliminary.

<sup>11</sup> The Commission's *MO&O in Petition of AT&T For Forbearance*, WC Docket No. 07-21, et al, 23 FCC Rcd 7302 (2008), granted AT&T conditional forbearance from filing FCC 492A, the Rate of Return Monitoring Report, subject to approval of a compliance plan. On December 12, 2008, the Commission extended the same relief, subject to the same conditions, to Verizon and Qwest. On December 31, 2008, in a Public Notice, the Wireline Competition Bureau approved the three plans effective immediately. Therefore, the 2007 preliminary reported data will also be their final data. AT&T, Verizon, and Qwest entities will no longer file Report Form 492A for year 2008 and subsequent years.

## 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.<sup>1</sup> These are classified according to the North American Industry Classification System (NAICS).

NAICS is a collaborative effort between the United States, Canada, and Mexico to provide comparability in statistics about business activity across North America. The telecommunications industry subsector (517) can be found in the 2007 NAICS *Information Sector – 50*.<sup>2</sup> The industry groups under telecommunications are as follows: wired telecommunications carriers (5171)<sup>3</sup>; wireless telecommunications carriers (5172)<sup>4</sup>; telecommunications resellers (517911)<sup>5</sup>; and other telecommunications (5179). Further information on NAICS can be found on the Bureau of Labor Statistics web site at <http://www.bls.gov/ces/cesnaics07.htm>.

Table 5.1 and the associated graph show the information compiled by BLS for the annual average employment figures for the telecommunications industry – NAICS 517, as well as the industry distributions for wired telecommunications carriers – NAICS 5171, wireless telecommunications carriers – NAICS 5172, telecommunications resellers – NAICS 517911, and other telecommunications – NAICS 5179. Monthly employment data for these categories from 1990 to the present can be found on the BLS web site at [www.bls.gov](http://www.bls.gov).

Table 5.2 and the associated graph show the information compiled by BLS for the labor productivity index for nonfarm business – NAICS 8500, for wired telecommunications carriers – NAICS 5171, and for wireless telecommunications carriers – NAICS 5172. The BLS index of labor productivity relates output to the employee hours expended in producing that output.

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<sup>1</sup> BLS used to compile data based on the Standard Industrial Classification (SIC) system. With the May 2003 data, the employment series underwent a complete industry reclassification, changing from the 1987 SIC system to the 2002 NAICS. Employment statistics from 1951 to 2002 based on the SIC system can be found in Table 5.1 of the Industry Analysis and Technology Division, Wireline Competition Bureau, *Trends in Telephone Service* (August 2003). The Labor Productivity Index for the telephone communications industry for the years 1951 to 2002 based on the SIC system can also be found in the August 2003 edition of *Trends* in Table 5.2.

<sup>2</sup> On February 1, 2008, the CES National Nonfarm Payroll series was updated to the 2007 NAICS from the 2002 NAICS basis. The conversion to NAICS 2007 resulted in minor definitional changes within manufacturing, telecommunications, financial activities, and professional and technical services. Several industry titles and descriptions were updated. The most significant revisions are in the Information sector, particularly within the telecommunications area.

<sup>3</sup> Wired telecommunications carriers (5171) now includes Cable and Other Program Distribution (5175).

<sup>4</sup> Wireless telecommunications carriers (5172) now includes Cellular and Other Wireless Carriers (517212).

<sup>5</sup> Telecommunications resellers changed their series from (5173) to (517911).



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

**Table 5.1**  
**Annual Average Number of Employees in the Telecommunications Industry**  
**(In Thousands)**

| Year | Telecom Carriers <sup>1</sup> | Wired Telecom Carriers <sup>2</sup> | Wireless Telecom Carriers <sup>3</sup> | Telecom Resellers | Other Telecom <sup>4</sup> |
|------|-------------------------------|-------------------------------------|--|-------------------|----------------------------|
|      | 517                           | 5171                                | 5172                                   | 517911            | 5179                       |
| 1990 | 1,008.5                       | 759.5                               | 35.8                                   | 179.5             | 33.7                       |
| 1991 | 999.9                         | 749.9                               | 41.8                                   | 178.1             | 30.1                       |
| 1992 | 972.9                         | 725.8                               | 47.8                                   | 172.6             | 26.7                       |
| 1993 | 969.5                         | 716.5                               | 56.3                                   | 170.5             | 26.2                       |
| 1994 | 989.5                         | 719.2                               | 71.7                                   | 171.8             | 26.8                       |
| 1995 | 1,009.3                       | 717.6                               | 90.3                                   | 171.2             | 30.2                       |
| 1996 | 1,038.1                       | 722.2                               | 110.1                                  | 171.6             | 34.2                       |
| 1997 | 1,108.0                       | 755.7                               | 132.1                                  | 181.3             | 38.9                       |
| 1998 | 1,167.4                       | 789.8                               | 144.2                                  | 188.7             | 44.7                       |
| 1999 | 1,270.8                       | 853.2                               | 159.9                                  | 200.2             | 57.5                       |
| 2000 | 1,396.6                       | 921.8                               | 185.6                                  | 213.6             | 75.6                       |
| 2001 | 1,423.9                       | 933.8                               | 201.4                                  | 214.1             | 74.6                       |
| 2002 | 1,280.9                       | 837.1                               | 197.3                                  | 179.5             | 67.0                       |
| 2003 | 1,166.8                       | 761.8                               | 189.9                                  | 154.9             | 60.2                       |
| 2004 | 1,115.1                       | 720.4                               | 189.7                                  | 147.3             | 57.7                       |
| 2005 | 1,071.3                       | 689.6                               | 191.3                                  | 135.1             | 55.3                       |
| 2006 | 1,047.6                       | 669.2                               | 200.2                                  | 125.6             | 52.6                       |
| 2007 | 1,030.6                       | 664.5                               | 203.4                                  | 117.2             | 45.5                       |
| 2008 | 1,021.4                       | 666.1                               | 202.7                                  | 109.3             | 43.3                       |

<sup>1</sup> Figures may not add up due to rounding.

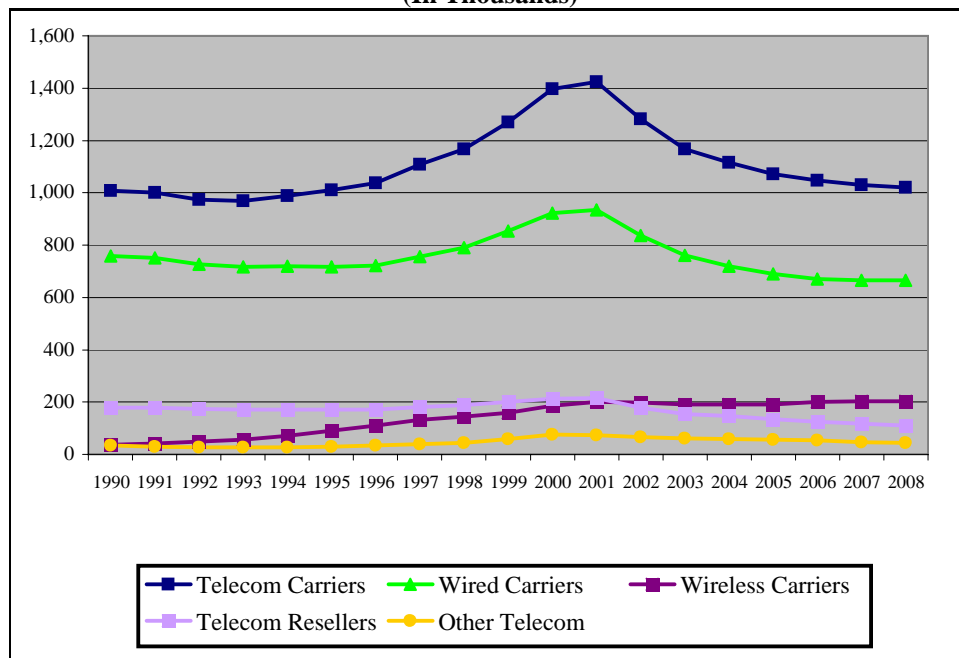
<sup>2</sup> Cable and Other Program Distribution (formerly 5175) is no longer reported separately and is reported in Wired Telecom Carriers (5171).

<sup>3</sup> Cellular and Other Wireless Carriers (formerly 517212) is no longer reported separately and is reported in Wireless Telecom Carriers (5172).

<sup>4</sup> Totals for Other Telecom (5179) exclude data reported for Telecom Resellers (517911).

Source: Bureau of Labor Statistics.

**Chart 5.1**  
**Annual Average Number of Employees in the Telecommunications Industry**  
**(In Thousands)**

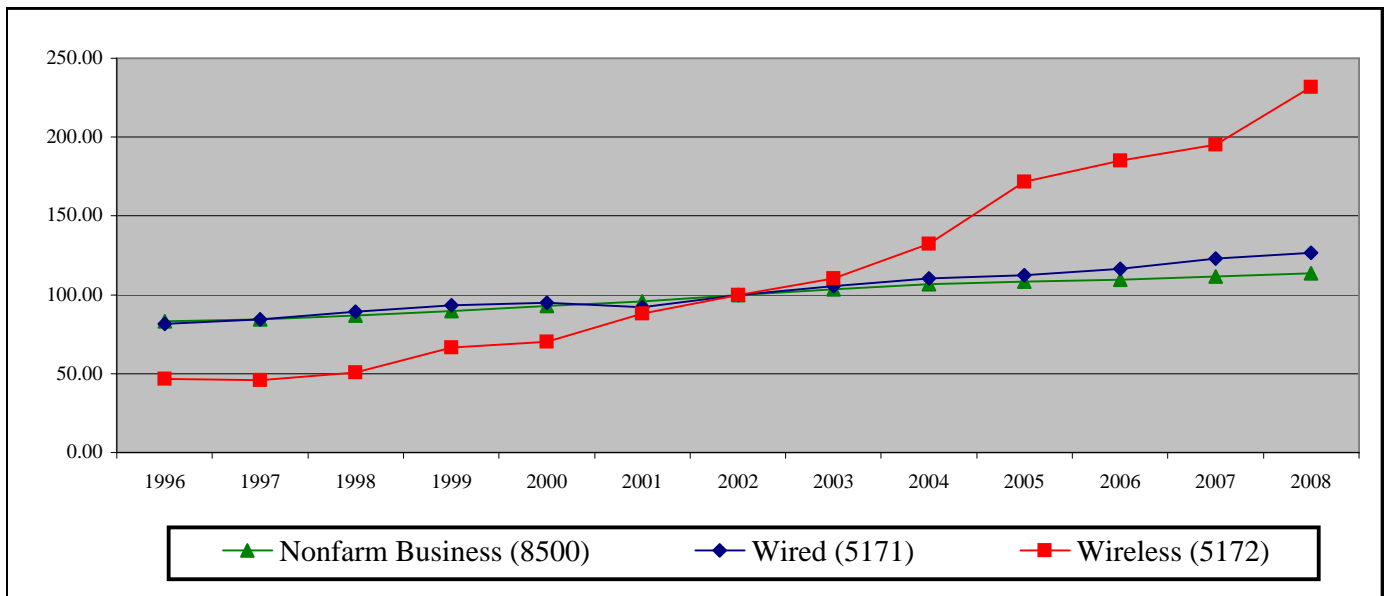


**Table 5.2**  
**Labor Productivity Index for Nonfarm Business and the Wired and Wireless**  
**Telecommunications Industry Measured in Output per Hour (OPH)**  
**(Base Year 2002 = 100)**

| Year | Nonfarm<br>Business<br>(NAICS 8500) | Wired<br>Carriers<br>(NAICS 5171) | Wireless<br>Carriers<br>(NAICS 5172) |
|------|-------------------------------------|-----------------------------------|--------------------------------------|
| 1996 | 83.22                               | 81.54                             | 46.64                                |
| 1997 | 84.50                               | 84.55                             | 45.88                                |
| 1998 | 86.98                               | 89.13                             | 50.69                                |
| 1999 | 89.87                               | 93.26                             | 66.63                                |
| 2000 | 92.92                               | 94.89                             | 70.09                                |
| 2001 | 95.64                               | 92.00                             | 88.04                                |
| 2002 | 100.00                              | 100.00                            | 100.00                               |
| 2003 | 103.66                              | 105.72                            | 110.51                               |
| 2004 | 106.59                              | 110.40                            | 132.28                               |
| 2005 | 108.37                              | 112.33                            | 171.74                               |
| 2006 | 109.40                              | 116.64                            | 185.09                               |
| 2007 | 111.41                              | 122.77                            | 195.15                               |
| 2008 | 113.69                              | 126.72                            | 231.89                               |

Source: Bureau of Labor Statistics.

**Chart 5.2**  
**Nonfarm Business, Wired, and Wireless Telecommunications Carriers**  
**(NAICS 8500, 5171, and 5172) Labor Productivity Index**



**Table 5.3**  
**Number of Telecommunications Service Providers by Size of Business**  
**(As of October 13, 2008)**

| Type of Provider  | Number of FCC Form 499-A Filers <sup>1</sup> | Filers that in Combination with Affiliates Have |  |
|---|--|---|--|
|   |  | 1,500 or Fewer Employees <sup>2</sup>           | More than 1,500 Employees <sup>2</sup> |
| Incumbent Local Exchange Carriers (ILECs)   | 1,307  | 1,006   | 301                                    |
| Competitive Access Providers (CAPs) and Competitive Local Exchange Carriers (CLECs)                     | 1,442  | 1,256   | 186                                    |
| Local Resellers   | 213  | 211   | 2                                      |
| Shared-Tenant Service Providers   | 17   | 17  | 0                                      |
| Other Local Service Providers   | 72   | 70  | 2                                      |
| Total Local Competitors   | 1,744  | 1,554   | 190                                    |
| Total Fixed Local Service Providers   | 3,051  | 2,560   | 491                                    |
| Payphone Service Providers  | 535  | 531   | 4                                      |
| Private Service Providers   | 137  | 125   | 12                                     |
| Wireless Telephony Including Cellular, Personal Communications Service (PCS) and SMR Telephony Carriers | 413  | 261   | 152                                    |
| Paging and Messaging Service Providers  | 291  | 289   | 2                                      |
| Specialized Mobile Radio (SMR) Dispatch   | 183  | 183   | 0                                      |
| Wireless Data and Other Mobile Service Providers  | 83   | 82  | 1                                      |
| Total Wireless Service Providers  | 970  | 815   | 155                                    |
| Interexchange Carriers (IXCs)   | 359  | 317   | 42                                     |
| Operator Service Providers (OSPs)   | 33   | 31  | 2                                      |
| Prepaid Calling Card Providers  | 193  | 193   | 0                                      |
| Satellite Service Providers   | 50   | 44  | 6                                      |
| Toll Resellers  | 881  | 857   | 24                                     |
| Other Toll Carriers   | 284  | 279   | 5                                      |
| Total Toll Service Providers  | 1,800  | 1,721   | 79                                     |
| All Filers  | 6,493  | 5,752   | 741                                    |

| Holding Company Analysis              |       |       |     |
|---------------------------------------|-------|-------|-----|
| Filers without Affiliates:            |       |       |     |
| Holding Company Level                 | 3,682 | 3,661 | 21  |
| Filer Level                           | 3,682 | 3,661 | 21  |
| Filers with Affiliates <sup>3</sup> : |       |       |     |
| Holding Company Level                 | 806   | 759   | 47  |
| Filer Level                           | 2,811 | 2,091 | 720 |
| Total, Holding Company Level          | 4,488 | 4,420 | 68  |
| Total, Filer Level                    | 6,493 | 5,752 | 741 |

Note: Estimates are based on gross revenue data filed on the 2007 FCC Form 499-A worksheets, and public employment data from ARMIS 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 file the FCC Form 499-A, such as firms that are not in the telecommunications business or firms that operate solely outside the United States.

<sup>1</sup> While FCC Form 499-A filings are not publicly available, filer registration information is published by the Industry Analysis and Technology Division (IATD) in the *Telecommunications Provider Locator* (January 2010), which can be accessed at <http://www.fcc.gov/wcb/iatd/locator.html>. This same information is searchable online at <http://fjallfoss.fcc.gov/cgb/form499/499a.cfm>.

<sup>2</sup> Employee counts are estimated at the holding company level, yet presented at the filer level. If our analysis indicates that, at the holding company level, a group of filers together employs more than 1,500 people, then each of the individual filers that comprise the holding company are entered in the column labeled as such. Therefore, our estimates **do not imply** that each or any of the individual filers alone employs more than 1,500 persons.

<sup>3</sup> In some cases, affiliated companies may file a single FCC Form 499A for all operations. Such consolidated filings are included in this category.

Source: FCC Form 499-A filings and IATD 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, lower prices and increased international trade and travel -- has skyrocketed. In 1980, customers in the United States were billed for almost 2 billion minutes of calls to international points. This figure increased to 8 billion in 1990, 30 billion in 2000, and 75 billion in 2008. Americans spent \$7.3 billion on international calls in 2008. On average, carriers billed 10 cents per minute for international calls in 2008, a decline of 93% since 1980, and 80% since 2000. International private line revenues increased through 2000 and then declined significantly through 2003. These trends are shown in Table 6.1. Chart 6.1 shows the trends in billed revenues per minute and per call since 1980.

U.S. and foreign carriers compensate each other when one carries traffic that the other bills. Because Americans place more international calls than they receive, and because U.S. carriers payout far more per minute of outbound traffic than they receive per minute of inbound traffic, U.S. carriers make substantial net payments to foreign carriers -- \$4.0 billion in 2008. The net payout has declined between 1996 and 2003 because falling compensation rates more than offset the growth in traffic. 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 Philippines, India and the United Kingdom -- currently account for about 47% of the international billed minutes in the United States in 2008. Chart 6.2 shows the percentage breakout for the five markets.

Since 1985, when MCI began to compete with AT&T for international calls, numerous carriers have begun to provide international service. In 2008, 77 carriers provided international telecommunications service between the United States and international points by using their own facilities or lines leased from other carriers. These carriers provided \$6.5 billion of international telephone service, \$817 million of international private line and other miscellaneous international services. Table 6.4 shows revenues for the 46 companies that did not request confidential treatment for 2008 filings.

Nine hundred and seventy seven carriers reported revenues for international message telephone service that they provided on a pure resale basis. These carriers reported \$7.0 billion of pure resale revenues in 2008. Table 6.5 shows pure resale revenues for the carriers with the highest pure resale messages, minutes and revenues.

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 Internet on the Wireline Competition Bureau Statistical Reports web page at [www.fcc.gov/web/stats](http://www.fcc.gov/web/stats).

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

|      | Telephone Service |          |                                |                            |          | Other Services  |           |                           |                                |
|------|-------------------|----------|--------------------------------|----------------------------|----------|-----------------|-----------|---------------------------|--------------------------------|
|      | Minutes           | Messages | Billed Revenues                |                            |          | Billed Revenues |           |                           |                                |
|      |                   |          | Total<br>End-User <sup>1</sup> | Per<br>Minute <sup>2</sup> | Per Call | Telex           | Telegraph | Private Line <sup>3</sup> | Misc.<br>Services <sup>3</sup> |
| 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             | 411      | 3,487                          | 1.01                       | 8.49     | 415             | 45        | 172                       |                                |
| 1986 | 4,126             | 482      | 4,004                          | 0.97                       | 8.30     | 390             | 42        | 175                       |                                |
| 1987 | 4,819             | 570      | 4,751                          | 0.99                       | 8.33     | 360             | 35        | 191                       |                                |
| 1988 | 5,679             | 687      | 5,806                          | 1.02                       | 8.45     | 310             | 30        | 194                       |                                |
| 1989 | 6,751             | 835      | 6,912                          | 1.02                       | 8.28     | 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     | 201             | 15        | 309                       | \$23                           |
| 1992 | 10,294            | 1,663    | 10,382                         | 1.01                       | 6.25     | 156             | 16        | 323                       | 24                             |
| 1993 | 11,513            | 1,945    | 11,564                         | 1.00                       | 5.95     | 136             | 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     | 120             | 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     | 64              | 2         | 921                       | 36                             |
| 1999 | 28,515            | 5,305    | 14,980                         | 0.53                       | 2.82     | 57              | 2         | 1,216                     | 31                             |
| 2000 | 30,135            | 5,742    | 14,909                         | 0.49                       | 2.60     | 33              | 1         | 1,480                     | 251                            |
| 2001 | 33,287            | 6,265    | 11,386                         | 0.34                       | 1.82     | 10              | *         | 1,419                     | 199                            |
| 2002 | 35,064            | 5,926    | 9,956                          | 0.28                       | 1.64     | **              | **        | 988                       | 113                            |
| 2003 | 42,664            | 7,350    | 9,294                          | 0.21                       | 1.22     | **              | **        | 899 <sup>3</sup>          |                                |
| 2004 | 63,553            | 10,895   | 9,176                          | 0.14                       | 0.84     | **              | **        | 711 <sup>3</sup>          |                                |
| 2005 | 70,064            | 13,134   | 7,975                          | 0.11                       | 0.61     | **              | **        | 738 <sup>3</sup>          |                                |
| 2006 | 72,440            | 13,673   | 7,907                          | 0.11                       | 0.58     | **              | **        | 792 <sup>3</sup>          |                                |
| 2007 | 69,975            | 13,695   | 7,132                          | 0.10                       | 0.52     | **              | **        | 717 <sup>3</sup>          |                                |
| 2008 | 74,934            | 15,028   | 7,305                          | 0.10                       | 0.49     | **              | **        | 817 <sup>3</sup>          |                                |

Note: Data represent traffic and circuits from all U.S. points. Data for some prior years have been revised.

\* Denotes revenues less than \$500,000.

\*\* Data not filed.

<sup>1</sup> Billed revenues in Table 6.1 differ from billed revenues 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. are the amounts reported by the underlying carriers that carried the traffic to foreign destinations.

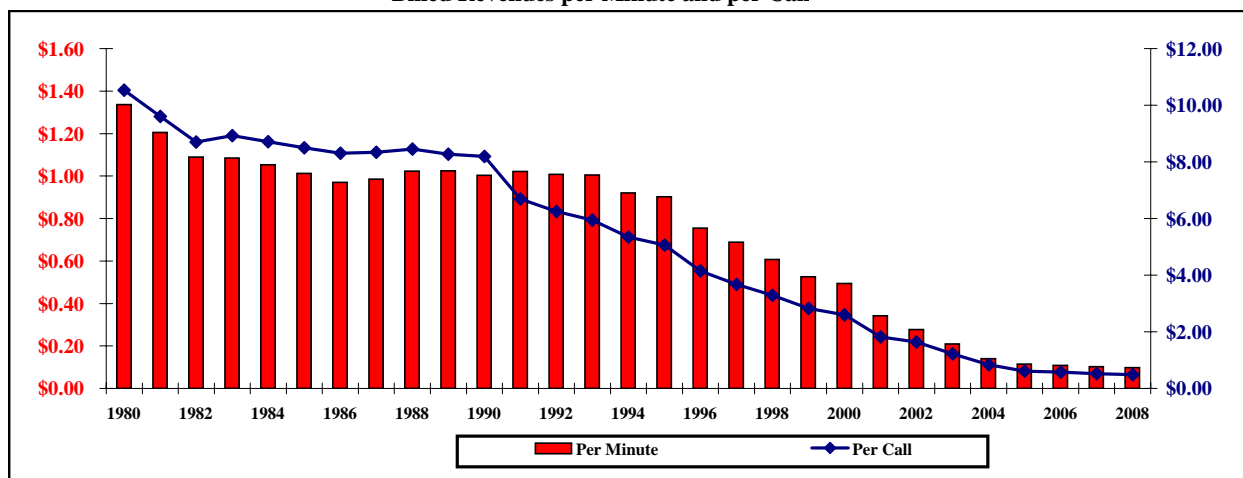
<sup>2</sup> Billed revenue per minute for international service differs in Table 6.1 and Table 13.3. Data in Table 6.1 are calculated using all U.S. billed minutes and revenues. Data for Table 13.3 represent charges for most U.S. billed calls that originate or terminate in the United States. International-to-international revenues and reorigination, country-beyond and country-direct minutes are not included in that table.

<sup>3</sup> Starting in 2003, private line and miscellaneous service revenue are combined because separate totals are not published including both publically filed amounts and amounts withheld to preserve confidential treatment.

Source:

Data through 2004 from International Bureau, *International Telecommunications Data* (March 2006). Data starting 2005 are from International Bureau, International Telecommunications Data.

**Chart 6.1**  
**Billed Revenues per Minute and per Call**



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

|      | End-User<br>Billed<br>Revenues<br>1/ | Owed to<br>Foreign<br>Carriers | Retained<br>End-User<br>Revenues<br>1/ | Due from<br>Foreign<br>Carriers<br>2/ | Net<br>Settlements | Net<br>End-User<br>Revenues<br>1/ | Average per Minute   |  |  |
|------|--------------------------------------|--------------------------------|--|---------------------------------------|--------------------|-----------------------------------|--|--|--|
|      |                                      |                                |  |                                       |                    |                                   | Settlement<br>Owed to<br>Foreign<br>Carriers<br>for U.S.<br>Billed Calls | Settlement<br>Due from<br>Foreign<br>Carriers<br>for Foreign<br>Billed Calls | U.S.<br>Carrier Net<br>End-User<br>Revenues<br>All<br>Traffic 3/ |
| 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                                | 2,398                          | 1,089                                  | 1,243                                 | (1,155)            | 2,332                             | 0.70   | 0.55   | 0.41   |
| 1986 | 4,004                                | 2,865                          | 1,140                                  | 1,396                                 | (1,469)            | 2,536                             | 0.69   | 0.56   | 0.38   |
| 1987 | 4,751                                | 3,423                          | 1,328                                  | 1,671                                 | (1,752)            | 2,999                             | 0.71   | 0.59   | 0.39   |
| 1988 | 5,806                                | 4,039                          | 1,767                                  | 1,906                                 | (2,133)            | 3,674                             | 0.71   | 0.59   | 0.41   |
| 1989 | 6,912                                | 4,735                          | 2,177                                  | 2,213                                 | (2,523)            | 4,390                             | 0.70   | 0.58   | 0.42   |
| 1990 | 8,059                                | 5,297                          | 2,762                                  | 2,426                                 | (2,871)            | 5,188                             | 0.66   | 0.56   | 0.42   |
| 1991 | 9,263                                | 5,852                          | 3,411                                  | 2,536                                 | (3,317)            | 5,946                             | 0.65   | 0.51   | 0.42   |
| 1992 | 10,382                               | 6,008                          | 4,375                                  | 2,650                                 | (3,357)            | 7,025                             | 0.58   | 0.46   | 0.44   |
| 1993 | 11,564                               | 6,372                          | 5,192                                  | 2,667                                 | (3,705)            | 7,859                             | 0.55   | 0.43   | 0.44   |
| 1994 | 12,543                               | 7,010                          | 5,533                                  | 2,719                                 | (4,291)            | 8,252                             | 0.51   | 0.39   | 0.40   |
| 1995 | 14,335                               | 7,569                          | 6,766                                  | 2,631                                 | (4,938)            | 9,397                             | 0.48   | 0.35   | 0.40   |
| 1996 | 14,598                               | 8,252                          | 6,345                                  | 2,594                                 | (5,658)            | 8,939                             | 0.43   | 0.30   | 0.32   |
| 1997 | 15,661                               | 8,031                          | 7,630                                  | 2,602                                 | (5,429)            | 10,232                            | 0.35   | 0.27   | 0.31   |
| 1998 | 14,726                               | 7,022                          | 7,704                                  | 2,538                                 | (4,484)            | 10,242                            | 0.29   | 0.21   | 0.28   |
| 1999 | 14,980                               | 6,383                          | 8,597                                  | 1,782                                 | (4,601)            | 10,379                            | 0.22   | 0.15   | 0.26   |
| 2000 | 14,909                               | 5,536                          | 9,373                                  | 1,609                                 | (3,927)            | 10,982                            | 0.18   | 0.11   | 0.25   |
| 2001 | 11,380                               | 4,526                          | 6,854                                  | 1,181                                 | (3,346)            | 8,034                             | 0.14   | 0.08   | 0.17   |
| 2002 | 9,956                                | 3,733                          | 6,223                                  | 892                                   | (2,842)            | 7,114                             | 0.11   | 0.05   | 0.14   |
| 2003 | 8,944                                | 3,649                          | 5,295                                  | 873                                   | (2,777)            | 6,167                             | 0.09   | 0.04   | 0.10   |
| 2004 | 9,188                                | 4,623                          | 4,530                                  | 1,016                                 | (3,642)            | 5,546                             | 0.07   | 0.04   | 0.07   |
| 2005 | 7,975                                | 4,098                          | 3,877                                  | 637                                   | (3,461)            | 4,514                             | 0.06   | 0.03   | 0.05   |
| 2006 | 7,907                                | 4,146                          | 3,761                                  | 517                                   | (3,630)            | 4,277                             | 0.06   | 0.02   | 0.05   |
| 2007 | 7,132                                | 4,029                          | 3,103                                  | 353                                   | (3,677)            | 3,455                             | 0.06   | 0.01   | 0.04   |
| 2008 | 7,305                                | 4,327                          | 2,977                                  | 343                                   | (3,985)            | 3,320                             | 0.06   | 0.01   | 0.04   |

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

1/ Billed revenues in Table 6.2 differ from billed revenues 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/ Beginning in 1991, includes net settlement receipts for transiting traffic.

3/ Beginning in 1991, includes transiting traffic.

Source: Data through 2004 from International Bureau, *Trends in the International Telecommunications Industry* (September 2005). Data after 2004 are from International Bureau, *International Telecommunications Data*.

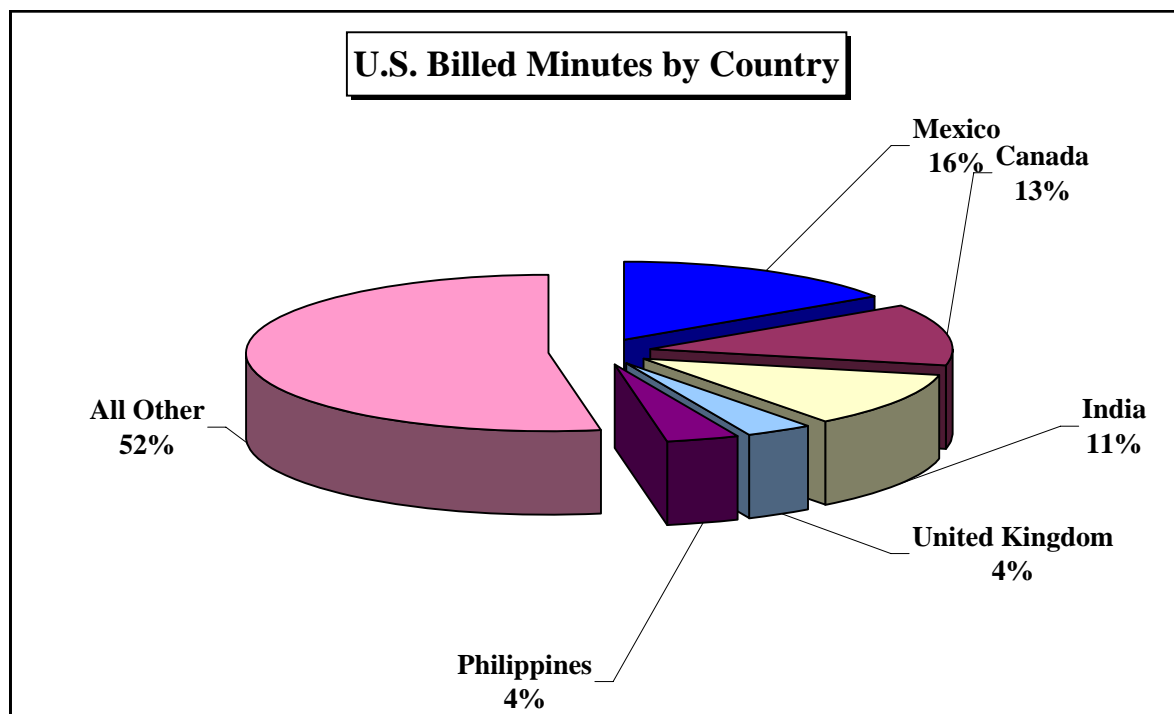
**Table 6.3**  
**International Message Telephone Service for 2008**  
**(Figures Rounded to the Nearest Million)**

| Region of the World <sup>1</sup>      | Traffic Billed in the United States |                         |                             |                                |                      | Traffic Billed in Foreign Countries                |                         |                                 |                      | Total                |
|---------------------------------------|-------------------------------------|-------------------------|-----------------------------|--------------------------------|----------------------|--|-------------------------|---------------------------------|----------------------|----------------------|
|                                       |                                     |                         |                             |                                |                      | Originating or Terminating<br>in the United States |                         |                                 | Transiting           | U.S.<br>Carrier      |
|                                       | Number<br>of<br>Messages            | Number<br>of<br>Minutes | U.S.<br>Carrier<br>Revenues | Owed to<br>Foreign<br>Carriers | Retained<br>Revenues | Number<br>of<br>Messages                           | Number<br>of<br>Minutes | Due from<br>Foreign<br>Carriers | Retained<br>Revenues | Retained<br>Revenues |
| Africa                                | 786                                 | 3,452                   | \$530                       | \$451                          | \$79                 | 131  | 500                     | \$16                            | \$31                 | \$126                |
| Asia                                  | 4,064                               | 18,502                  | 1,409                       | 980                            | 429                  | 907  | 4,195                   | 91                              | 70                   | 589                  |
| Caribbean                             | 847                                 | 4,453                   | 683                         | 610                            | 73                   | 298  | 957                     | 16                              | 14                   | 103                  |
| Eastern Europe                        | 549                                 | 2,489                   | 246                         | 173                            | 74                   | 42   | 221                     | 4                               | 5                    | 83                   |
| Middle East                           | 509                                 | 2,076                   | 265                         | 185                            | 80                   | 145  | 679                     | 11                              | 8                    | 99                   |
| North and Central America             | 4,084                               | 25,373                  | 1,786                       | 1,045                          | 741                  | 3,868  | 13,340                  | 103                             | 59                   | 903                  |
| Oceania                               | 392                                 | 1,199                   | 109                         | 54                             | 54                   | 103  | 592                     | 7                               | 4                    | 66                   |
| Other Regions                         | 2                                   | 2                       | 4                           | 2                              | 2                    | *  | *                       | *                               | *                    | 2                    |
| South America                         | 1,176                               | 8,045                   | 624                         | 444                            | 180                  | 161  | 936                     | 24                              | 60                   | 264                  |
| Western Europe                        | 2,617                               | 9,316                   | 797                         | 381                            | 416                  | 1,256  | 4,979                   | 71                              | 405                  | 892                  |
| Total for Foreign Points              | 15,008                              | 74,801                  | 6,453                       | 4,326                          | 2,127                | 6,898  | 26,334                  | 342                             | 656                  | 3,125                |
| Total for U.S. Points                 | 21                                  | 133                     | 6                           | 2                              | 4                    | 14   | 66                      | 1                               | *                    | 5                    |
| Total for All International<br>Points | 15,028                              | 74,934                  | \$6,459                     | \$4,327                        | \$2,131              | 6,911  | 26,400                  | \$343                           | \$656                | \$3,130              |

\* Denotes values that are less than half a million.

<sup>1</sup> 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 points also includes all traffic originating in American Samoa and the Northern Mariana Islands, which is excluded from the region totals.

**Chart 6.2**



Source: International Bureau, *International Telecommunications Data*.



**Table 6.4**  
**U.S. Billed Revenues of Facilities-Based and Facilities-Resale Carriers in 2008 1/**  
**(Revenue Amounts Shown in Millions)**

|  | International Service |                 |               | Total<br>International<br>Billed<br>Revenues |
|--|-----------------------|-----------------|---------------|--|
|  | Telephone             | Private<br>Line | Miscellaneous |  |
| ABS-CBN Telecom North America, Inc.          | 2                     |                 |               | 2  |
| Bharti Airtel Limited                        | 30                    |                 |               | 30   |
| BringCom International, LLC                  |                       |                 | 4             | 4  |
| Cable & Wireless Americas Operations, Inc.   |                       | 4               |               | 4  |
| Carrier PB Telco, Inc.                       | 13                    |                 |               | 13   |
| Centennial Puerto Rico Operations Corp.      | 3                     |                 |               | 3  |
| China Unicom USA Corp.                       | 7                     | *               |               | 7  |
| Chunghwa Telecom Global, Inc.                |                       | 1               |               | 1  |
| Cincinnati Bell, Inc.                        |                       | *               |               | *  |
| Colt Telecommunications                      |                       | 4               |               | 4  |
| Columbus Networks USA, Inc.                  |                       | 1               |               | 1  |
| EKU Solutions, LLC                           |                       | *               |               | *  |
| EPM Telecomunicaciones S.A. E.S.P.           | 107                   | 5               |               | 111  |
| France Telecom Long Distance USA, LLC        | 9                     |                 | *             | 9  |
| Global Caribbean Fiber                       |                       | 90              |               | 90   |
| Global Crossing North America, Inc.          |                       | 15              |               | 15   |
| Global Telecom and Technology Americas, Inc  |                       | 2               |               | 2  |
| Golden Holdings, Inc.                        |                       | *               |               | *  |
| Intelsat USA License Corp.                   |                       | *               |               | *  |
| KDDI America, Inc.                           | *                     | 10              |               | 10   |
| KT America, Inc.                             | 1                     |                 |               | 1  |
| Level 3 Communications, LLC                  |                       | 30              |               | 30   |
| New Edge Networks                            |                       | *               |               | *  |
| NTT America, Inc.                            |                       | 7               |               | 7  |
| Pacifica Telecom Inc. (PTI)                  | 11                    | 1               |               | 12   |
| Philippine Long Distance Telephone Co., Ltd. |                       | 2               | *             | 2  |
| PREPA.Net International Wholesale Transport  |                       | *               |               | *  |
| Qwest Services Corporation                   |                       | 4               |               | 4  |
| Reliance Communications, Inc.                | 236                   | 10              |               | 246  |
| Satellite Communication Systems, Inc.        | *                     | 2               |               | 2  |
| Sierra USA Communications, Inc.              |                       | *               |               | *  |
| Smitcoms, Inc.                               |                       |                 |               |  |
| Stratos Holdings, Inc.                       |                       | 2               |               | 2  |
| Syniverse Technologies, Inc.                 |                       | 90              |               | 90   |
| Telecom Argentina USA, Inc.                  | 6                     |                 |               | 6  |
| Telecom Colombia USA, Inc.                   | 5                     |                 |               | 5  |
| Telecom Italia Sparkle of North America, Inc | 136                   |                 |               | 136  |
| Telefonica Larga Distancia, Inc. (TLD)       | 2                     | *               |               | 2  |
| Telekom Malaysia (USA), Inc.                 |                       | 1               |               | 1  |
| Telenor Global Services AS                   | 1                     |                 |               | 1  |
| Telmex                                       |                       | 18              |               | 18   |
| Thrane & Thrane Airtime Ltd.                 | *                     |                 |               | *  |
| Tricom USA, Inc.                             | 35                    |                 |               | 35   |
| Universal Telecom Services, Inc.             |                       | *               |               | *  |
| Verizon Communications Inc.                  | 1,111                 | 65              |               | 1,176  |
| Viatel Holding (Bermuda) Limited             |                       | *               | *             | *  |
| Total All Carriers 2/                        | \$6,459               | \$363           | \$4           | \$7,275                                      |

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

1/ Thirty one filers that requested confidential treatment and are not listed in this table, but their revenues are included in the totals. Data exclude pure resale services. Data do not show settlement receipts for terminating foreign billed traffic.

2/ Revenue totals are for Domestic U.S. points (which include Puerto Rico) and Off-shore U.S. points (which include American Samoa, Guam, the Northern Mariana Islands, and the U.S. Virgin Islands). The totals include \$11 million of revenue for calls between Domestic U.S. points and Off-shore U.S. points and calls between Off-shore U.S. points.

Source: International Bureau, *International Telecommunications Data*.

**Table 6.5**  
**Top Providers of Pure Resale International MTS in 2008**

|   | Number of<br>Messages<br>(Millions) | Number of<br>Minutes<br>(Millions) | U.S. Carrier<br>Revenues<br>(\$ Millions) | Percent<br>of Total<br>IMTS<br>Resale<br>Revenues |
|---|-------------------------------------|------------------------------------|---|---|
| Allcom Distribution Corp. d/b/a Allcom Telecommunications | 78                                  | 497                                | \$46                                      | 0.66 %  |
| STi Prepaid, LLC  | 20                                  | 84                                 | 9   | 0.13  |
| Verizon Communications, Inc.                              | 33                                  | 200                                | 21  | 0.30  |
| Dollar Phone Corp.  | 219                                 | 319                                | 35  | 0.50  |
| Locus Telecommunications, Inc                             | 8                                   | 65                                 | 11  | 0.15  |
| KDDI Corporation  | 3                                   | 15                                 | 8   | 0.11  |
| Sprint Nextel Corporation                                 | 25                                  | 252                                | 32  | 0.45  |
| Network Enhanced Telecom, LLP                             | 4                                   | 21                                 | 11  | 0.15  |
| Qwest Communications International, Inc.                  | 3                                   | 20                                 | 14  | 0.20  |
| Reliance Communications International, Inc                | 5                                   | 34                                 | 8   | 0.11  |
| Total Call  | 7                                   | 74                                 | 9   | 0.13  |
| Epana Networks, Inc.                                      | 69                                  | 686                                | 86  | 1.23  |
| Global Crossing North America, Inc.                       | 18                                  | 167                                | 38  | 0.55  |
| Computer Tel, Inc.  | 282                                 | 1,689                              | 539                                       | 7.74  |
| NobelTel, LLC   | 299                                 | 3,354                              | 250                                       | 3.59  |
| Level 3 Communications, Inc.                              | 16                                  | 92                                 | 36  | 0.52  |
| Logical Telecom, LP                                       | 280                                 | 3,946                              | 113                                       | 1.63  |
| Platinum Equity, LLC                                      | 522                                 | 2,447                              | 87  | 1.25  |
| Telmex  | 34                                  | 122                                | 20  | 0.28  |
| Allcom Distribution Corp. d/b/a Allcom Telecommunications | 5                                   | 51                                 | 16  | 0.23  |
| Telecom Italia Sparkle of North America, Inc              | 358                                 | 2,355                              | 223                                       | 3.20  |
| Cox Communications, Inc.                                  | 566                                 | 1,846                              | 58  | 0.83  |
| Embarq Communications, Inc.                               | 337                                 | 4,120                              | 247                                       | 3.55  |
| Belgacom International Carriers Services S.A              | 82                                  | 1,288                              | 52  | 0.75  |
| CIMA Telecom, Inc.  | 10                                  | 118                                | 11  | 0.16  |
| One Phone, Inc.   | 10                                  | 72                                 | 9   | 0.12  |
| Virgin Mobile USA, LP                                     | 19                                  | 179                                | 19  | 0.28  |
| NovaTel Ltd., Inc.  | 304                                 | 3,248                              | 136                                       | 1.95  |
| PaeTec Corporation  | 46                                  | 541                                | 22  | 0.32  |
| NetworkIP, LLC  | 86                                  | 581                                | 70  | 1.01  |
| Auris, LLC  | 6                                   | 63                                 | 8   | 0.11  |
| Gold Line Telemanagement, Inc                             | 72                                  | 751                                | 24  | 0.35  |
| NECC Telecom, Inc.  | 15                                  | 158                                | 31  | 0.44  |
| Hawaiian Telcom Services Company, Inc                     | 44                                  | 143                                | 24  | 0.34  |
| United States Cellular Corporation                        | 37                                  | 348                                | 50  | 0.72  |
| Citizens Communications Company                           | 36                                  | 665                                | 14  | 0.20  |
| Progress International, LLC                               | 1,459                               | 6,921                              | 134                                       | 1.93  |
| Redes Modernas de la Frontera SA de CV                    | 10                                  | 100                                | 13  | 0.18  |
| Telscape Communications, Inc.                             | 79                                  | 949                                | 129                                       | 1.85  |
| Lunex Telecom, Inc.                                       | 865                                 | 2,254                              | 198                                       | 2.85  |
| Cincinnati Bell, Inc.                                     | 591                                 | 6,466                              | 465                                       | 6.69  |
| Cavalier Telephone Corporation                            | 189                                 | 775                                | 41  | 0.58  |
| Communication Technology, Inc.                            | 32                                  | 93                                 | 8   | 0.11  |
| VoIP Tel, L.P   | 10                                  | 344                                | 48  | 0.69  |
| Alltel Communications, Inc.                               | 7                                   | 77                                 | 12  | 0.17  |
| MetroPCS, Inc.  | 303                                 | 1,956                              | 126                                       | 1.82  |
| Cleartel Communications, Inc.                             | 9                                   | 33                                 | 14  | 0.20  |
| Telekom Malaysia (USA), Inc.                              | 694                                 | 2,795                              | 264                                       | 3.80  |
| CenturyTel, Inc.  | 17                                  | 87                                 | 25  | 0.36  |
| NOS Communications, Inc.                                  | 31                                  | 243                                | 9   | 0.13  |
| Total for 66 Companies Requesting Confidential Treatment  | 3,544                               | 19,918                             | 2,865                                     | 41.18   |
| Total for 861 Companies Not Shown Above 1/                | 1,262                               | 10,903                             | 283                                       | 4.07  |
| Total for all Reporting Carriers                          | 12,393                              | 75,844                             | \$6,959                                   | 100.00 %  |

1/ Data are consolidated for affiliated carriers. A total of 977 carriers made a total of 1,109 filings.

Source: International Bureau, *International Telecommunications Data*.

## 7 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. Until 2000, line growth over time, averaging about 3% per year, has historically reflected growth in the population and the economy. Since then, the number of lines provided by wireline carriers has declined, likely due to some consumers substituting wireless service for wireline service, and some households eliminating second lines when they move from dial-up Internet service to broadband service.

Table 7.1 shows the nation's total number of telephone lines using three alternative measures. The first measure is the number of end-user switched access lines for both incumbent local exchange carriers (LECs) and competitive local exchange carriers (CLECs) as reported to the Commission on the FCC Form 477. These data undercount lines by a small amount because carriers with less than 10,000 lines in a state were not required to file the FCC Form 477 prior to 2005. The second 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 eligible telecommunications carriers. The number of local loops includes end-user access lines, lines resold to other carriers and UNE loops with switching (UNE-P). This measure excludes CLEC lines provided over their own facilities. The third measure, access lines, represents estimates for the whole incumbent LEC industry based on data filed with the Commission by large incumbent LECs through the Automated Reporting Management Information System (ARMIS). This measure excludes a substantial number of incumbent LEC lines provided to CLECs as UNE-P lines between 2001 and 2007.

Table 7.2 shows the number of local exchange operating areas (study areas – company's operations in one state) and loops in each state, and shows breakdowns by loops for price-cap and average-schedule companies.<sup>1</sup> Table 7.3 shows the number of loops by holding companies, and Chart 7.1 shows the five largest holding companies' share of loops.

Table 7.4 presents estimates of the number of households that have only wireline telephone service versus those households that have only wireless telephone service. The number of households that have only wireline telephone service declined from 27.9 million in the first half of 2007 to 17.5 million households in the second half of 2009. In contrast, wireless only households increased from 15.9 million households in the first half

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<sup>1</sup> Average schedule companies have been permitted by the Commission to estimate their access settlements and universal service support through the use of average schedules to avoid the difficulties and expenses involved with conducting company-specific cost studies.

of 2007 to 28.7 million in the second half of 2009. The FCC staff estimates are based on the Center for Disease Control and Prevention's National Center for Health Statistics survey, and data from the Census Bureau's Current Population Survey.<sup>2</sup>

Tables 7.5 and 7.6 display payphone line information. Long distance carriers are required to pay payphone owners 49 cents for every completed dial-around call (calls where the consumer chooses the long distance carrier over the payphone's presubscribed long distance carrier).<sup>3</sup> 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<sup>4</sup> supplies the FCC with data that allow the number of payphones in each state to be calculated.

Table 7.5 shows the number of payphones owned by LECs and by independent payphone operators in each state. The number of payphones is broken down by whether the payphones are served by an RBOC or by another LEC. Payphones located in RBOC territories but served by a CLEC are accounted for in the RBOC territories columns. Similarly, payphones located in non-RBOC territories (i.e., other incumbent LEC territories) but served by a CLEC are accounted for in the all other LEC territories columns. Data for earlier years can be found in earlier editions of *Trends*.

Table 7.6 shows the number of payphones over time. The National Payphone Clearinghouse began providing detailed data to the Commission starting with data as of March 31, 1999. Where possible, data from the payphone proceedings were used to fill values for 1997 and 1998 (see the footnotes to Table 7.6 for citations).

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<sup>2</sup> Source: Household data are from the Census Bureau's Current Population Survey. Distribution of wireless versus wireline is from Table 1 of Blumberg SJ, Luke JV. *Wireless Substitution: Early Release of Estimates From the National Health Interview Survey, July–December 2009*, National Center for Health Statistics, May 2010. Available from: <http://www.cdc.gov/nchs/nhis.htm>.

<sup>3</sup> See *Report and Order*, CC Docket 03-225, adopted Jul. 27, 2004.

<sup>4</sup> Further information on the National Payphone Clearinghouse can be found at <https://www.npc.cc/home.aspx>.

**Table 7.1**  
**Total U.S. Wireline Telephone Lines at Year-End**  
**(In Thousands)**

| <b>Year End</b> | <b>CLEC and ILEC End-User Switched Access Lines and VoIP Subscriptions <sup>1</sup></b> | <b>Annual Growth (%)</b> | <b>ILEC Local Loops <sup>2</sup></b> | <b>Annual Growth (%)</b> | <b>ILEC Access Lines <sup>3</sup></b> | <b>Annual Growth (%)</b> |
|-----------------|---|--------------------------|--------------------------------------|--------------------------|---------------------------------------|--------------------------|
| 1980            |   |                          | 102,216                              |                          |                                       |                          |
| 1981            |   |                          | 105,559                              | 3.3 %                    |                                       |                          |
| 1982            |   |                          | 107,519                              | 1.9                      |                                       |                          |
| 1983            |   |                          | 110,613                              | 2.9                      |                                       |                          |
| 1984            |   |                          | 112,551                              | 1.8                      | 113,832                               |                          |
| 1985            |   |                          | 115,986                              | 3.1                      | 117,385                               | 3.1 %                    |
| 1986            |   |                          | 118,289                              | 2.0                      | 120,730                               | 2.8                      |
| 1987            |   |                          | 122,789                              | 3.8                      | 124,626                               | 3.2                      |
| 1988            |   |                          | 127,087                              | 3.5                      | 126,900                               | 1.8                      |
| 1989            |   |                          | 131,505                              | 3.5                      | 130,860                               | 3.1                      |
| 1990            |   |                          | 136,114                              | 3.5                      | 134,686                               | 2.9                      |
| 1991            |   |                          | 139,413                              | 2.4                      | 139,613                               | 3.7                      |
| 1992            |   |                          | 143,342                              | 2.8                      | 142,367                               | 2.0                      |
| 1993            |   |                          | 148,106                              | 3.3                      | 147,033                               | 3.3                      |
| 1994            |   |                          | 153,448                              | 3.6                      | 151,543                               | 3.1                      |
| 1995            |   |                          | 159,659                              | 4.0                      | 158,153                               | 4.4                      |
| 1996            |   |                          | 166,446                              | 4.3                      | 165,350                               | 4.6                      |
| 1997            |   |                          | 173,867                              | 4.5                      | 173,857                               | 5.1                      |
| 1998            |   |                          | 179,849                              | 3.4                      | 180,516                               | 3.8                      |
| 1999            | 189,397   |                          | 185,003                              | 2.9                      | 186,594                               | 3.4                      |
| 2000            | 192,432   | 1.6 %                    | 188,500                              | 1.9                      | 187,581                               | 0.5                      |
| 2001            | 191,571   | -0.4                     | 185,587                              | -1.5                     | 179,811                               | -4.1                     |
| 2002            | 189,250   | -1.2                     | 180,095                              | -3.0                     | 172,246                               | -4.2                     |
| 2003            | 182,933   | -3.3                     | 173,141                              | -3.9                     | 161,374                               | -6.3                     |
| 2004            | 177,691   | -2.9                     | 165,980                              | -4.1                     | 154,039                               | -4.5                     |
| 2005            | 175,161   | -1.4                     | 157,038                              | -5.4                     | 147,993                               | -3.9                     |
| 2006            | 167,460   | -4.4                     | 146,843                              | -6.5                     | 140,029                               | -5.4                     |
| 2007            | 158,437   | -5.4                     | 135,790                              | -7.5                     | 131,586                               | -6.0                     |
| 2008            | 162,627   | 2.6                      | 122,597                              | -9.7                     | 121,675                               | -7.5                     |

<sup>1</sup> Includes end-user switched access lines for competitive local exchange carriers (CLECs) and incumbent local exchange carrier (ILECs) as reported in FCC Form 477 through December 2008. Prior to June 2005, only carriers with greater than 10,000 lines in a state were required to report. Beginning in June 2005 all carriers were required to report. Beginning in December 2008, Form 477 required interconnected VoIP service to be reported. Prior to December 2008, individual incumbent LECs and competitive LECs - to a varying and largely unknown degree -included or excluded VoIP.

<sup>2</sup> Includes end-user switched access lines, resold lines, and UNE-P lines.

<sup>3</sup> Between 2001 and 2007, a substantial number of ILEC lines provided to CLECs as UNE-P lines are not included in the total.

Sources: CLEC and ILEC access lines: Industry Analysis and Technology Division, Wireline Competition Bureau, *Local Telephone Competition: Status as of December 31, 2008* (June 2010).

Local loops: National Exchange Carrier Association, Universal Service Fund filings.

Access Lines: Industry Analysis and Technology Division, Wireline Competition Bureau, *Statistics of Communications Common Carriers*, Table 4.10, after inflating access lines of reporting carriers to represent the total industry. The 1996 adjustment factor was used for the years prior to 1996.

**Table 7.2**  
**Telephone Loops of Incumbent Local Exchange Carriers by State**  
**(As of December 31, 2007)**

|                          | Study Areas | Price Cap                       |                     | Non-Price Cap                               |                     | Total Loops |
|--------------------------|-------------|---------------------------------|---------------------|---|---------------------|-------------|
|                          |             | Bell Company Loops <sup>1</sup> | Other Company Loops | Average Schedule Company Loops <sup>2</sup> | Other Company Loops |             |
| Alabama                  | 28          | 1,523,645                       | 256,974             | 27,869                                      | 162,320             | 1,970,808   |
| Alaska                   | 25          | 0                               | 0                   | 221   | 337,393             | 337,614     |
| American Samoa           | 1           | 0                               | 0                   | 0   | 10,594              | 10,594      |
| Arizona                  | 17          | 1,884,555                       | 152,416             | 0   | 39,154              | 2,076,125   |
| Arkansas                 | 28          | 777,072                         | 0                   | 12,064                                      | 373,703             | 1,162,839   |
| California               | 22          | 18,071,665                      | 138,362             | 0   | 196,856             | 18,406,883  |
| Colorado                 | 28          | 2,011,718                       | 0                   | 1,086                                       | 119,233             | 2,132,037   |
| Connecticut              | 1           | 1,709,510                       | 0                   | 0   | 0                   | 1,709,510   |
| Delaware                 | 1           | 444,456                         | 0                   | 0   | 0                   | 444,456     |
| District of Columbia     | 1           | 668,803                         | 0                   | 0   | 0                   | 668,803     |
| Florida                  | 12          | 6,573,039                       | 1,674,790           | 0   | 174,675             | 8,422,504   |
| Georgia                  | 36          | 3,074,899                       | 2,419               | 47,706                                      | 749,948             | 3,874,972   |
| Guam                     | 1           | 0                               | 0                   | 0   | 62,004              | 62,004      |
| Hawaii                   | 2           | 0                               | 541,852             | 0   | 1,876               | 543,728     |
| Idaho                    | 20          | 567,563                         | 21,078              | 1,347                                       | 42,884              | 632,872     |
| Illinois                 | 56          | 5,687,714                       | 101,207             | 28,008                                      | 183,959             | 6,000,888   |
| Indiana                  | 42          | 2,500,130                       | 211,330             | 29,562                                      | 113,540             | 2,854,562   |
| Iowa                     | 154         | 799,979                         | 273,137             | 151,189                                     | 69,865              | 1,294,170   |
| Kansas                   | 39          | 883,589                         | 98,975              | 0   | 121,478             | 1,104,042   |
| Kentucky                 | 19          | 882,950                         | 603,367             | 64,429                                      | 117,195             | 1,667,941   |
| Louisiana                | 20          | 1,642,790                       | 0                   | 1,246                                       | 158,315             | 1,802,351   |
| Maine                    | 20          | 545,264                         | 0                   | 32,300                                      | 97,450              | 675,014     |
| Maryland                 | 2           | 3,033,677                       | 0                   | 0   | 6,783               | 3,040,460   |
| Massachusetts            | 3           | 2,965,978                       | 0                   | 0   | 3,764               | 2,969,742   |
| Michigan                 | 39          | 3,965,623                       | 21,254              | 23,411                                      | 144,335             | 4,154,623   |
| Minnesota                | 88          | 1,525,566                       | 365,551             | 181,783                                     | 185,556             | 2,258,456   |
| Mississippi              | 19          | 1,031,779                       | 0                   | 8,774                                       | 76,622              | 1,117,175   |
| Missouri                 | 44          | 1,978,065                       | 495,586             | 9,419                                       | 276,443             | 2,759,513   |
| Montana                  | 18          | 257,952                         | 7,756               | 3,378                                       | 148,117             | 417,203     |
| Nebraska                 | 40          | 288,967                         | 293,543             | 11,457                                      | 85,262              | 679,229     |
| Nevada                   | 14          | 353,602                         | 691,230             | 0   | 32,845              | 1,077,677   |
| New Hampshire            | 10          | 566,144                         | 0                   | 2,194                                       | 49,338              | 617,676     |
| New Jersey               | 3           | 4,339,459                       | 169,892             | 0   | 7,597               | 4,516,948   |
| New Mexico               | 17          | 687,998                         | 90,977              | 0   | 44,567              | 823,542     |
| New York                 | 44          | 7,408,210                       | 671,129             | 8,865                                       | 216,047             | 8,304,251   |
| North Carolina           | 26          | 2,076,198                       | 1,142,574           | 205,494                                     | 436,725             | 3,860,991   |
| North Dakota             | 22          | 127,680                         | 0                   | 49,037                                      | 108,093             | 284,810     |
| Northern Mariana Islands | 1           | 0                               | 0                   | 0   | 18,719              | 18,719      |
| Ohio                     | 42          | 3,513,794                       | 1,044,004           | 34,693                                      | 331,450             | 4,923,941   |
| Oklahoma                 | 39          | 1,138,519                       | 76,831              | 2,573                                       | 214,095             | 1,432,018   |
| Oregon                   | 33          | 1,374,059                       | 75,009              | 2,505                                       | 135,546             | 1,587,119   |
| Pennsylvania             | 36          | 5,023,358                       | 348,012             | 515,689                                     | 221,612             | 6,108,671   |
| Puerto Rico              | 2           | 0                               | 0                   | 0   | 924,692             | 924,692     |
| Rhode Island             | 1           | 348,325                         | 0                   | 0   | 0                   | 348,325     |
| South Carolina           | 26          | 1,263,278                       | 82,804              | 54,706                                      | 439,059             | 1,839,847   |
| South Dakota             | 31          | 144,278                         | 0                   | 64,169                                      | 75,224              | 283,671     |
| Tennessee                | 25          | 1,983,839                       | 298,316             | 79,684                                      | 255,260             | 2,617,099   |
| Texas                    | 58          | 8,585,551                       | 589,742             | 8,528                                       | 509,102             | 9,692,923   |
| Utah                     | 14          | 828,285                         | 21,872              | 7,474                                       | 62,853              | 920,484     |
| Vermont                  | 10          | 301,380                         | 0                   | 4,539                                       | 57,355              | 363,274     |
| Virgin Islands           | 1           | 0                               | 0                   | 0   | 64,964              | 64,964      |
| Virginia                 | 21          | 3,139,584                       | 361,934             | 74,246                                      | 36,108              | 3,611,872   |
| Washington               | 26          | 2,440,423                       | 69,904              | 4,285                                       | 228,567             | 2,743,179   |
| West Virginia            | 10          | 698,467                         | 144,954             | 1,406                                       | 14,961              | 859,788     |
| Wisconsin                | 90          | 1,735,356                       | 50,405              | 166,780                                     | 525,016             | 2,477,557   |
| Wyoming                  | 10          | 185,933                         | 6,094               | 0   | 43,146              | 235,173     |
| Total                    | 1,438       | 113,560,668                     | 11,195,280          | 1,922,116                                   | 9,112,265           | 135,790,329 |

<sup>1</sup> Includes loops owned by Verizon/GTE and SBC/Southern New England Telephone.

<sup>2</sup> Average schedule companies have been permitted by the Commission to estimate their access settlements and universal service support through the use of average schedules to avoid the difficulties and expenses involved with conducting company-specific cost studies.

Source: NECA, *Universal Service Fund 2009 Submission of 2007 Study Results* (October 1, 2009).

**Table 7.2**  
**Telephone Loops of Incumbent Local Exchange Carriers by State - Continued**  
**(As of December 31, 2008)**

|                          | Study Areas  | Price Cap                          |                           | Non-Price Cap  |                           | Total Loops        |
|--------------------------|--------------|------------------------------------|---------------------------|--|---------------------------|--------------------|
|                          |              | Bell Company<br>Loops <sup>1</sup> | Other<br>Company<br>Loops | Average<br>Schedule<br>Company<br>Loops <sup>2</sup> | Other<br>Company<br>Loops |                    |
| Alabama                  | 28           | 1,367,788                          | 238,546                   | 26,706   | 156,389                   | 1,789,429          |
| Alaska                   | 25           | 0                                  | 0                         | 216  | 304,807                   | 305,023            |
| American Samoa           | 1            | 0                                  | 0                         | 0  | 10,435                    | 10,435             |
| Arizona                  | 17           | 1,680,099                          | 141,593                   | 0  | 38,546                    | 1,860,238          |
| Arkansas                 | 28           | 703,247                            | 0                         | 11,503   | 351,068                   | 1,065,818          |
| California               | 22           | 16,382,604                         | 125,892                   | 0  | 174,082                   | 16,682,578         |
| Colorado                 | 28           | 1,799,321                          | 0                         | 1,040  | 113,614                   | 1,913,975          |
| Connecticut              | 1            | 1,520,344                          | 0                         | 0  | 0                         | 1,520,344          |
| Delaware                 | 1            | 399,716                            | 0                         | 0  | 0                         | 399,716            |
| District of Columbia     | 1            | 603,803                            | 0                         | 0  | 0                         | 603,803            |
| Florida                  | 12           | 5,726,555                          | 1,467,518                 | 0  | 164,971                   | 7,359,044          |
| Georgia                  | 36           | 2,716,616                          | 2,268                     | 42,206   | 707,138                   | 3,468,228          |
| Guam                     | 1            | 0                                  | 0                         | 0  | 56,381                    | 56,381             |
| Hawaii                   | 2            | 0                                  | 489,167                   | 0  | 2,091                     | 491,258            |
| Idaho                    | 20           | 518,223                            | 19,654                    | 1,297  | 40,590                    | 579,764            |
| Illinois                 | 56           | 5,173,033                          | 153,710                   | 26,095   | 111,323                   | 5,464,161          |
| Indiana                  | 42           | 2,264,853                          | 197,863                   | 27,755   | 107,251                   | 2,597,722          |
| Iowa                     | 154          | 730,742                            | 252,975                   | 141,883  | 69,236                    | 1,194,836          |
| Kansas                   | 39           | 793,720                            | 91,271                    | 0  | 116,942                   | 1,001,933          |
| Kentucky                 | 19           | 778,293                            | 548,829                   | 61,642   | 110,701                   | 1,499,465          |
| Louisiana                | 20           | 1,518,814                          | 0                         | 1,099  | 149,504                   | 1,669,417          |
| Maine                    | 20           | 0                                  | 483,998                   | 28,331   | 88,718                    | 601,047            |
| Maryland                 | 2            | 2,687,562                          | 0                         | 0  | 6,469                     | 2,694,031          |
| Massachusetts            | 3            | 2,693,252                          | 0                         | 0  | 3,590                     | 2,696,842          |
| Michigan                 | 39           | 3,442,719                          | 19,098                    | 23,568   | 135,197                   | 3,620,582          |
| Minnesota                | 88           | 1,384,731                          | 331,962                   | 170,154  | 178,030                   | 2,064,877          |
| Mississippi              | 19           | 937,848                            | 0                         | 8,291  | 71,979                    | 1,018,118          |
| Missouri                 | 44           | 1,814,200                          | 466,748                   | 8,964  | 264,040                   | 2,553,952          |
| Montana                  | 18           | 231,522                            | 7,619                     | 3,198  | 142,549                   | 384,888            |
| Nebraska                 | 40           | 260,036                            | 277,000                   | 11,055   | 82,398                    | 630,489            |
| Nevada                   | 14           | 322,286                            | 586,610                   | 0  | 31,562                    | 940,458            |
| New Hampshire            | 10           | 0                                  | 489,599                   | 2,155  | 46,480                    | 538,234            |
| New Jersey               | 3            | 3,855,791                          | 155,971                   | 0  | 6,947                     | 4,018,709          |
| New Mexico               | 17           | 625,477                            | 87,522                    | 0  | 42,652                    | 755,651            |
| New York                 | 44           | 6,578,650                          | 624,064                   | 8,410  | 198,990                   | 7,410,114          |
| North Carolina           | 26           | 1,854,921                          | 1,049,324                 | 193,867  | 415,782                   | 3,513,894          |
| North Dakota             | 22           | 114,195                            | 0                         | 47,448   | 105,587                   | 267,230            |
| Northern Mariana Islands | 1            | 0                                  | 0                         | 0  | 17,576                    | 17,576             |
| Ohio                     | 42           | 3,124,758                          | 959,215                   | 32,543   | 297,715                   | 4,414,231          |
| Oklahoma                 | 39           | 1,051,039                          | 72,323                    | 2,442  | 203,528                   | 1,329,332          |
| Oregon                   | 33           | 1,219,808                          | 69,195                    | 2,452  | 129,206                   | 1,420,661          |
| Pennsylvania             | 36           | 4,575,642                          | 320,929                   | 480,927  | 210,473                   | 5,587,971          |
| Puerto Rico              | 2            | 0                                  | 834,149                   | 0  | 0                         | 834,149            |
| Rhode Island             | 1            | 318,993                            | 0                         | 0  | 0                         | 318,993            |
| South Carolina           | 26           | 1,129,673                          | 77,867                    | 51,602   | 409,002                   | 1,668,144          |
| South Dakota             | 31           | 129,519                            | 0                         | 61,528   | 73,218                    | 264,265            |
| Tennessee                | 25           | 1,768,955                          | 244,434                   | 76,557   | 239,330                   | 2,329,276          |
| Texas                    | 58           | 7,876,006                          | 716,734                   | 7,961  | 347,876                   | 8,948,577          |
| Utah                     | 14           | 742,087                            | 21,166                    | 7,294  | 60,983                    | 831,530            |
| Vermont                  | 10           | 0                                  | 271,850                   | 4,446  | 55,704                    | 332,000            |
| Virgin Islands           | 1            | 0                                  | 0                         | 0  | 62,514                    | 62,514             |
| Virginia                 | 21           | 2,826,151                          | 345,558                   | 71,193   | 34,726                    | 3,277,628          |
| Washington               | 26           | 2,160,053                          | 66,585                    | 4,132  | 214,023                   | 2,444,793          |
| West Virginia            | 10           | 634,698                            | 141,560                   | 1,422  | 14,876                    | 792,556            |
| Wisconsin                | 90           | 1,562,872                          | 47,511                    | 159,633  | 493,351                   | 2,263,367          |
| Wyoming                  | 10           | 169,192                            | 5,733                     | 0  | 41,421                    | 216,346            |
| <b>Total</b>             | <b>1,438</b> | <b>100,770,407</b>                 | <b>12,503,610</b>         | <b>1,811,015</b>                                     | <b>7,511,561</b>          | <b>122,596,593</b> |

<sup>1</sup> Includes loops owned by Verizon/GTE and SBC/Southern New England Telephone.

<sup>2</sup> Average schedule companies have been permitted by the Commission to estimate their access settlements and universal service support through the use of average schedules to avoid the difficulties and expenses involved with conducting company-specific cost studies.

Source: NECA, *Universal Service Fund 2009 Submission of 2008 Study Results* (October 1, 2009), and NECA's Non-Rural Wire Center Data as of December 31, 2008.

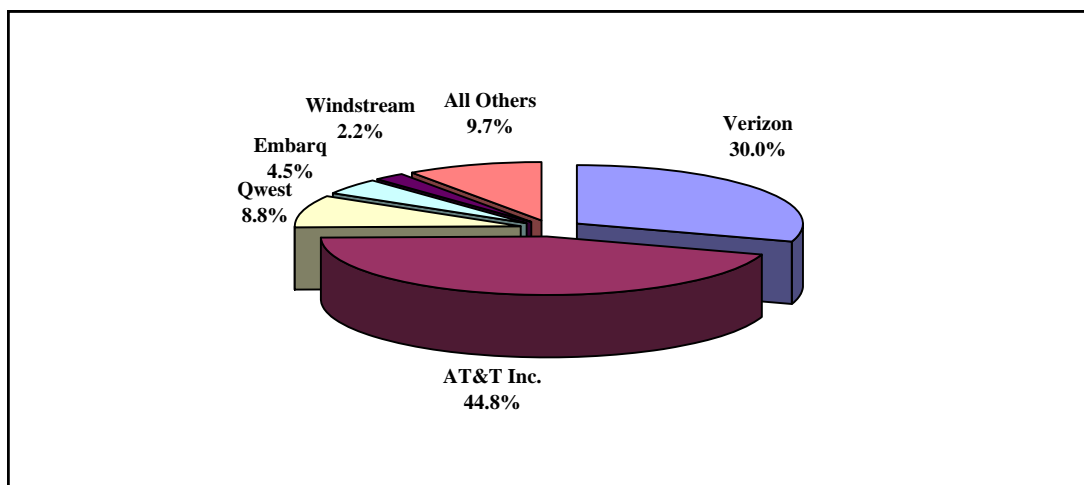
**Table 7.3**  
**Telephone Loops of Incumbent Local Exchange Carriers by Holding Company <sup>1</sup>**  
**(As of December 31, 2007)**

| Holding Companies                                | Loops       | Percent of Loops |
|--|-------------|------------------|
| AT&T Inc.  | 60,827,401  | 44.80 %          |
| Verizon Communications Inc.                      | 40,718,592  | 29.99            |
| Qwest Communications International, Inc.         | 12,014,675  | 8.85             |
| Embarq   | 6,147,117   | 4.53             |
| Windstream Corporation                           | 2,964,396   | 2.18             |
| Citizens Communications Company                  | 2,181,905   | 1.61             |
| CenturyTel, Inc.                                 | 2,101,532   | 1.55             |
| America Movil                                    | 924,692     | 0.68             |
| Cincinnati Bell Inc.                             | 729,320     | 0.54             |
| Telephone and Data Systems, Inc.                 | 589,696     | 0.43             |
| Hawaiian Telcom Communications, Inc.             | 541,852     | 0.40             |
| Consolidated Communications, Inc.                | 270,398     | 0.20             |
| FairPoint Communications, Inc.                   | 232,840     | 0.17             |
| Iowa Telecom                                     | 228,387     | 0.17             |
| Alaska Communications Systems Holdings, Inc.     | 213,795     | 0.16             |
| D & E Communications, Inc.                       | 123,754     | 0.09             |
| SureWest Communications                          | 110,063     | 0.08             |
| North-State Telephone Co. (NC)                   | 100,840     | 0.07             |
| Rock Hill Telephone Company                      | 99,609      | 0.07             |
| Horry Telephone Cooperative, Inc.                | 90,009      | 0.07             |
| Hargray Communications Group, Inc.               | 72,976      | 0.05             |
| Farmers Telephone Cooperative, Inc.              | 70,894      | 0.05             |
| Virgin Islands Telephone Corporation             | 64,964      | 0.05             |
| TeleGuam Holdings LLC                            | 62,004      | 0.05             |
| Matanuska Telephone Association, Inc.            | 57,304      | 0.04             |
| Pioneer Telephone Cooperative (OK)               | 52,154      | 0.04             |
| Hickory Tech Corporation                         | 50,210      | 0.04             |
| Lynch Interactive Corporation                    | 48,409      | 0.04             |
| NTELOS, Inc.                                     | 43,886      | 0.03             |
| Atlantic Telephone Membership Corporation        | 42,895      | 0.03             |
| Guadalupe Valley Telephone Cooperative, Inc.     | 40,969      | 0.03             |
| Golden West Telecommunications Cooperative, Inc. | 40,893      | 0.03             |
| Twin Lakes Telephone Cooperative Corporation     | 37,240      | 0.03             |
| SRT Services Corporation                         | 37,096      | 0.03             |
| Skyline Telephone Membership Corporation         | 35,746      | 0.03             |
| EATEL Corp., Inc.                                | 35,202      | 0.03             |
| Otelco Inc.                                      | 34,733      | 0.03             |
| Ben Lomand                                       | 34,149      | 0.03             |
| All Other Companies                              | 3,717,732   | 2.74             |
| Total  | 135,790,329 | 100.00 %         |

<sup>1</sup> Includes incumbent local exchange carriers' loops for holding companies with more than 32,500 loops.

Source: NECA, *Universal Service Fund 2009 Submission of 2007 Study Results* (October 1, 2009).

**Chart 7.1**  
**Five Largest Holding Companies' Share of Loops as of December 31, 2007**





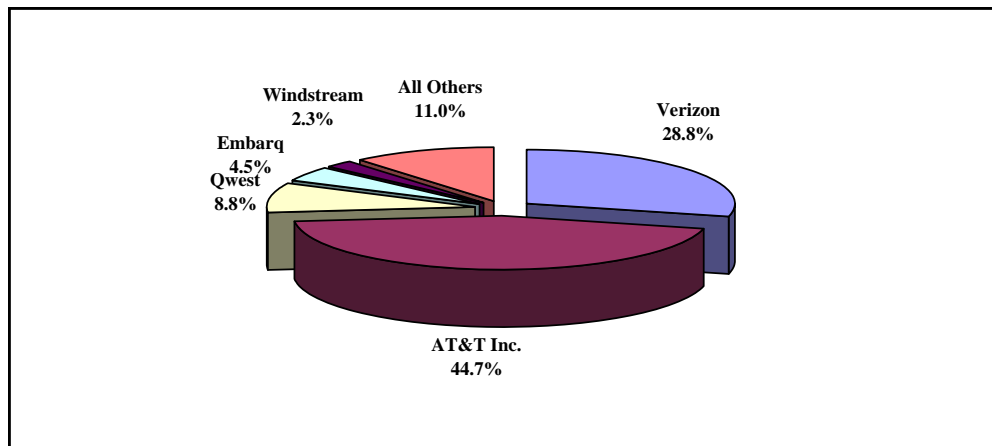
**Table 7.3**  
**Telephone Loops of Incumbent Local Exchange Carriers by Holding Company - Continued <sup>1</sup>**  
**(As of December 31, 2008)**

| Holding Companies                                | Loops       | Percent of Loops |
|--|-------------|------------------|
| AT&T Inc.  | 54,748,156  | 44.66 %          |
| Verizon Communications Inc.                      | 35,252,762  | 28.76            |
| Qwest Communications International, Inc.         | 10,769,489  | 8.78             |
| Embarq   | 5,507,418   | 4.49             |
| Windstream Corporation                           | 2,817,678   | 2.30             |
| CenturyTel, Inc.                                 | 1,967,338   | 1.60             |
| Frontier Communications Corporation              | 1,718,677   | 1.40             |
| FairPoint Communications, Inc.                   | 1,459,312   | 1.19             |
| America Movil                                    | 834,149     | 0.68             |
| Cincinnati Bell Inc.                             | 679,326     | 0.55             |
| Telephone and Data Systems, Inc.                 | 567,754     | 0.46             |
| Hawaiian Telcom Communications, Inc.             | 489,167     | 0.40             |
| Citizens Communications Company                  | 310,627     | 0.25             |
| Consolidated Communications, Inc.                | 247,020     | 0.20             |
| Iowa Telecom                                     | 222,579     | 0.18             |
| Alaska Communications Systems Holdings, Inc.     | 188,815     | 0.15             |
| D & E Communications, Inc.                       | 118,346     | 0.10             |
| Rock Hill Telephone Company                      | 113,085     | 0.09             |
| North-State Telephone Co. (NC)                   | 92,834      | 0.08             |
| SureWest Communications                          | 91,404      | 0.07             |
| Horry Telephone Cooperative, Inc.                | 82,755      | 0.07             |
| Farmers Telephone Cooperative, Inc.              | 67,170      | 0.05             |
| Hargray Communications Group, Inc.               | 66,722      | 0.05             |
| Virgin Islands Telephone Corporation             | 62,514      | 0.05             |
| TeleGuam Holdings LLC                            | 56,381      | 0.05             |
| Matanuska Telephone Association, Inc.            | 52,718      | 0.04             |
| Otelco Inc.                                      | 49,883      | 0.04             |
| Pioneer Telephone Cooperative (OK)               | 49,533      | 0.04             |
| Lynch Interactive Corporation                    | 46,162      | 0.04             |
| Hickory Tech Corporation                         | 45,535      | 0.04             |
| Atlantic Telephone Membership Corporation        | 41,854      | 0.03             |
| NTELOS, Inc.                                     | 41,443      | 0.03             |
| Golden West Telecommunications Cooperative, Inc. | 39,787      | 0.03             |
| Guadalupe Valley Telephone Cooperative, Inc.     | 39,684      | 0.03             |
| Twin Lakes Telephone Cooperative Corporation     | 36,105      | 0.03             |
| SRT Services Corporation                         | 35,622      | 0.03             |
| Skyline Telephone Membership Corporation         | 34,807      | 0.03             |
| EATEL Corp., Inc.                                | 34,024      | 0.03             |
| Ben Lomand                                       | 33,156      | 0.03             |
| All Other Companies                              | 3,484,802   | 2.84             |
| Total  | 122,596,593 | 100.00 %         |

<sup>1</sup> Includes incumbent local exchange carriers' loops for holding companies with more than 32,500 loops.

Source: NECA, *Universal Service Fund 2009 Submission of 2008 Study Results* (October 1, 2009), and NECA's Non-Rural Wire Center Data as of December 31, 2008.

**Chart 7.2**  
**Five Largest Holding Companies' Share of Loops as of December 31, 2008**



**Table 7.4**  
**Distribution of Households with Wireless and Wireline Telephone Service**  
**Households In Millions**

| Year | Period   | Wireline Only | Wireless Only | Both Wireline and Wireless | Wireline and Wireless Unknown | No Telephone Service <sup>1</sup> | Total Households |
|------|----------|---------------|---------------|----------------------------|-------------------------------|-----------------------------------|------------------|
| 2007 | 1st Half | 28.0          | 16.0          | 69.3                       | 2.0                           | 2.4                               | 117.7            |
| 2007 | 2nd Half | 25.7          | 18.6          | 69.2                       | 1.5                           | 2.7                               | 118.2            |
| 2008 | 1st Half | 24.2          | 20.6          | 68.9                       | 1.1                           | 2.9                               | 118.0            |
| 2008 | 2nd Half | 20.5          | 23.8          | 70.1                       | 1.1                           | 2.2                               | 118.6            |
| 2009 | 1st Half | 18.2          | 26.7          | 69.9                       | 0.5                           | 2.4                               | 118.4            |
| 2009 | 2nd Half | 17.5          | 28.8          | 68.5                       | 0.5                           | 2.4                               | 119.2            |

**Percentage**

| Year | Period   | Wireline Only | Wireless Only | Both Wireline and Wireless | Wireline and Wireless Unknown | No Telephone Service <sup>1</sup> | Total Households |
|------|----------|---------------|---------------|----------------------------|-------------------------------|-----------------------------------|------------------|
| 2007 | 1st Half | 23.8%         | 13.6%         | 58.9%                      | 1.7%                          | 2.0%                              | 100.0%           |
| 2007 | 2nd Half | 21.8          | 15.8          | 58.8                       | 1.3                           | 2.3                               | 100.0            |
| 2008 | 1st Half | 20.6          | 17.5          | 58.5                       | 0.9                           | 2.5                               | 100.0            |
| 2008 | 2nd Half | 17.4          | 20.2          | 59.6                       | 0.9                           | 1.9                               | 100.0            |
| 2009 | 1st Half | 15.5          | 22.7          | 59.4                       | 0.4                           | 2.0                               | 100.0            |
| 2009 | 2nd Half | 14.9          | 24.5          | 58.2                       | 0.4                           | 2.0                               | 100.0            |

Source: Household data are from the Censu Bureau's Current Population Survey. Distribution of wireless versus wireline is from Table 1 of Blumberg SJ, Luke JV. *Wireless Substitution: Early Release of Estimates from the National Health Interview Survey, July–December 2009*, National Center for Health Statistics (NCHS), May 2010. Available from: <http://www.cdc.gov/nchs/nhis.htm> and from FCC staff estimates.

<sup>1</sup> Includes households reporting "no telephone service" and households reporting "nonlandline with unknown wireless telephone status" in the NCHS report.

**Table 7.5**  
**Number of Payphones Owned by LECs and Independent Operators**  
**(As of March 31, 2008)**

| State                | RBOC Territories |             | All Other LEC Territories |             | Statewide |             | Grand Total |
|----------------------|------------------|-------------|---------------------------|-------------|-----------|-------------|-------------|
|                      | LEC-Owned        | Independent | LEC-Owned                 | Independent | LEC-Owned | Independent |             |
| Alabama              | 13               | 5,864       | 120                       | 215         | 133       | 6,079       | 6,212       |
| Alaska               | 0                | 0           | 1,886                     | 1,744       | 1,886     | 1,744       | 3,630       |
| Arizona              | 59               | 12,362      | 725                       | 834         | 784       | 13,196      | 13,980      |
| Arkansas             | 191              | 1,981       | 592                       | 364         | 783       | 2,345       | 3,128       |
| California           | 29,079           | 65,557      | 953                       | 739         | 30,032    | 66,296      | 96,328      |
| Colorado             | 0                | 8,164       | 23                        | 37          | 23        | 8,201       | 8,224       |
| Connecticut          | 2,665            | 2,767       | 0                         | 0           | 2,665     | 2,767       | 5,432       |
| Delaware             | 1,411            | 1,005       | 0                         | 0           | 1,411     | 1,005       | 2,416       |
| District of Columbia | 3,468            | 488         | 0                         | 0           | 3,468     | 488         | 3,956       |
| Florida              | 4,186            | 21,591      | 4,877                     | 3,758       | 9,063     | 25,349      | 34,412      |
| Georgia              | 107              | 11,394      | 1,681                     | 1,635       | 1,788     | 13,029      | 14,817      |
| Hawaii               | 0                | 0           | 5,251                     | 452         | 5,251     | 452         | 5,703       |
| Idaho                | 364              | 1,620       | 218                       | 97          | 582       | 1,717       | 2,299       |
| Illinois             | 8,262            | 13,562      | 527                       | 608         | 8,789     | 14,170      | 22,959      |
| Indiana              | 3,800            | 6,113       | 1,030                     | 498         | 4,830     | 6,611       | 11,441      |
| Iowa                 | 15               | 3,406       | 536                       | 670         | 551       | 4,076       | 4,627       |
| Kansas               | 430              | 2,422       | 483                       | 340         | 913       | 2,762       | 3,675       |
| Kentucky             | 8                | 3,696       | 1,944                     | 1,878       | 1,952     | 5,574       | 7,526       |
| Louisiana            | 13               | 5,949       | 31                        | 128         | 44        | 6,077       | 6,121       |
| Maine                | 2,833            | 391         | 12                        | 174         | 2,845     | 565         | 3,410       |
| Maryland             | 13,605           | 4,197       | 0                         | 6           | 13,605    | 4,203       | 17,808      |
| Massachusetts        | 15,155           | 6,287       | 0                         | 0           | 15,155    | 6,287       | 21,442      |
| Michigan             | 4,547            | 9,559       | 268                       | 146         | 4,815     | 9,705       | 14,520      |
| Minnesota            | 31               | 6,149       | 1,153                     | 664         | 1,184     | 6,813       | 7,997       |
| Mississippi          | 21               | 3,974       | 48                        | 50          | 69        | 4,024       | 4,093       |
| Missouri             | 1,392            | 4,504       | 994                       | 1,270       | 2,386     | 5,774       | 8,160       |
| Montana              | 43               | 1,402       | 288                       | 221         | 331       | 1,623       | 1,954       |
| Nebraska             | 0                | 1,844       | 2,304                     | 498         | 2,304     | 2,342       | 4,646       |
| Nevada               | 82               | 1,221       | 1,268                     | 5,201       | 1,350     | 6,422       | 7,772       |
| New Hampshire        | 2,541            | 1,029       | 73                        | 5           | 2,614     | 1,034       | 3,648       |
| New Jersey           | 27,298           | 8,710       | 767                       | 57          | 28,065    | 8,767       | 36,832      |
| New Mexico           | 0                | 3,774       | 213                       | 627         | 213       | 4,401       | 4,614       |
| New York             | 60,922           | 26,219      | 6,539                     | 1,196       | 67,461    | 27,415      | 94,876      |
| North Carolina       | 918              | 7,092       | 5,536                     | 4,359       | 6,454     | 11,451      | 17,905      |
| North Dakota         | 0                | 520         | 74                        | 111         | 74        | 631         | 705         |
| Ohio                 | 5,604            | 7,947       | 4,048                     | 1,736       | 9,652     | 9,683       | 19,335      |
| Oklahoma             | 964              | 3,590       | 907                       | 425         | 1,871     | 4,015       | 5,886       |
| Oregon               | 603              | 6,848       | 322                       | 478         | 925       | 7,326       | 8,251       |
| Pennsylvania         | 18,120           | 10,852      | 5,194                     | 1,038       | 23,314    | 11,890      | 35,204      |
| Rhode Island         | 1,944            | 1,337       | 0                         | 0           | 1,944     | 1,337       | 3,281       |
| South Carolina       | 503              | 6,082       | 916                       | 1,012       | 1,419     | 7,094       | 8,513       |
| South Dakota         | 1                | 1,087       | 279                       | 109         | 280       | 1,196       | 1,476       |
| Tennessee            | 5                | 7,447       | 1,244                     | 1,010       | 1,249     | 8,457       | 9,706       |
| Texas                | 10,606           | 30,642      | 1,102                     | 2,466       | 11,708    | 33,108      | 44,816      |
| Utah                 | 2                | 3,333       | 229                       | 333         | 231       | 3,666       | 3,897       |
| Vermont              | 1,380            | 198         | 35                        | 51          | 1,415     | 249         | 1,664       |
| Virginia             | 12,976           | 7,082       | 1,484                     | 921         | 14,460    | 8,003       | 22,463      |
| Washington           | 1,684            | 12,719      | 241                       | 355         | 1,925     | 13,074      | 14,999      |
| West Virginia        | 3,925            | 938         | 553                       | 320         | 4,478     | 1,258       | 5,736       |
| Wisconsin            | 1,840            | 4,111       | 559                       | 441         | 2,399     | 4,552       | 6,951       |
| Wyoming              | 1                | 1,282       | 22                        | 75          | 23        | 1,357       | 1,380       |
| Totals               | 243,617          | 360,308     | 57,549                    | 39,352      | 301,166   | 399,660     | 700,826     |

Source: Raw data provided by National Payphone Clearinghouse. Rollups performed by the Industry Analysis and Technology Division staff, Wireline Competition Bureau.

**Table 7.5**  
**Number of Payphones Owned by LECs and Independent Operators - Continued**  
**(As of March 31, 2009)**

| State                | RBOC Territories |             | All Other LEC Territories |             | Statewide |             | Grand Total |
|----------------------|------------------|-------------|---------------------------|-------------|-----------|-------------|-------------|
|                      | LEC-Owned        | Independent | LEC-Owned                 | Independent | LEC-Owned | Independent |             |
| Alabama              | 13               | 4,644       | 1,068                     | 644         | 1,081     | 5,288       | 6,369       |
| Alaska               | 0                | 0           | 1,681                     | 688         | 1,681     | 688         | 2,369       |
| Arizona              | 71               | 10,999      | 699                       | 614         | 770       | 11,613      | 12,383      |
| Arkansas             | 0                | 1,583       | 1,321                     | 381         | 1,321     | 1,964       | 3,285       |
| California           | 13,199           | 57,910      | 879                       | 593         | 14,078    | 58,503      | 72,581      |
| Colorado             | 12               | 7,056       | 179                       | 217         | 191       | 7,273       | 7,464       |
| Connecticut          | 105              | 2,883       | 0                         | 0           | 105       | 2,883       | 2,988       |
| Delaware             | 967              | 582         | 0                         | 0           | 967       | 582         | 1,549       |
| District of Columbia | 2,767            | 351         | 0                         | 0           | 2,767     | 351         | 3,118       |
| Florida              | 2,774            | 17,403      | 2,654                     | 3,554       | 5,428     | 20,957      | 26,385      |
| Georgia              | 83               | 9,204       | 1,627                     | 1,475       | 1,710     | 10,679      | 12,389      |
| Hawaii               | 0                | 0           | 5,171                     | 378         | 5,171     | 378         | 5,549       |
| Idaho                | 276              | 1,492       | 242                       | 85          | 518       | 1,577       | 2,095       |
| Illinois             | 1,618            | 14,905      | 801                       | 248         | 2,419     | 15,153      | 17,572      |
| Indiana              | 1,973            | 5,473       | 606                       | 405         | 2,579     | 5,878       | 8,457       |
| Iowa                 | 14               | 2,932       | 474                       | 528         | 488       | 3,460       | 3,948       |
| Kansas               | 4                | 2,028       | 260                       | 216         | 264       | 2,244       | 2,508       |
| Kentucky             | 8                | 2,718       | 1,774                     | 1,531       | 1,782     | 4,249       | 6,031       |
| Louisiana            | 13               | 4,532       | 160                       | 181         | 173       | 4,713       | 4,886       |
| Maine                | 0                | 2,776       | 35                        | 172         | 35        | 2,948       | 2,983       |
| Maryland             | 10,874           | 3,560       | 0                         | 0           | 10,874    | 3,560       | 14,434      |
| Massachusetts        | 12,269           | 5,295       | 0                         | 0           | 12,269    | 5,295       | 17,564      |
| Michigan             | 1,036            | 7,571       | 565                       | 190         | 1,601     | 7,761       | 9,362       |
| Minnesota            | 161              | 4,859       | 900                       | 424         | 1,061     | 5,283       | 6,344       |
| Mississippi          | 21               | 2,952       | 68                        | 93          | 89        | 3,045       | 3,134       |
| Missouri             | 48               | 3,727       | 1,694                     | 1,275       | 1,742     | 5,002       | 6,744       |
| Montana              | 41               | 1,175       | 363                       | 242         | 404       | 1,417       | 1,821       |
| Nebraska             | 0                | 1,270       | 2,112                     | 349         | 2,112     | 1,619       | 3,731       |
| Nevada               | 26               | 1,028       | 1,433                     | 3,341       | 1,459     | 4,369       | 5,828       |
| New Hampshire        | 0                | 3,106       | 70                        | 27          | 70        | 3,133       | 3,203       |
| New Jersey           | 22,361           | 6,829       | 389                       | 39          | 22,750    | 6,868       | 29,618      |
| New Mexico           | 1                | 3,180       | 160                       | 468         | 161       | 3,648       | 3,809       |
| New York             | 51,659           | 21,018      | 6,196                     | 806         | 57,855    | 21,824      | 79,679      |
| North Carolina       | 719              | 5,855       | 3,874                     | 3,879       | 4,593     | 9,734       | 14,327      |
| North Dakota         | 0                | 309         | 64                        | 97          | 64        | 406         | 470         |
| Ohio                 | 1,555            | 7,498       | 3,489                     | 1,412       | 5,044     | 8,910       | 13,954      |
| Oklahoma             | 9                | 3,240       | 693                       | 211         | 702       | 3,451       | 4,153       |
| Oregon               | 422              | 6,340       | 406                       | 500         | 828       | 6,840       | 7,668       |
| Pennsylvania         | 13,709           | 8,108       | 4,307                     | 728         | 18,016    | 8,836       | 26,852      |
| Rhode Island         | 1,554            | 1,234       | 0                         | 0           | 1,554     | 1,234       | 2,788       |
| South Carolina       | 395              | 4,797       | 771                       | 775         | 1,166     | 5,572       | 6,738       |
| South Dakota         | 4                | 826         | 239                       | 96          | 243       | 922         | 1,165       |
| Tennessee            | 5                | 6,132       | 887                       | 909         | 892       | 7,041       | 7,933       |
| Texas                | 3,097            | 25,973      | 1,236                     | 1,951       | 4,333     | 27,924      | 32,257      |
| Utah                 | 7                | 3,372       | 196                       | 182         | 203       | 3,554       | 3,757       |
| Vermont              | 0                | 1,488       | 34                        | 37          | 34        | 1,525       | 1,559       |
| Virginia             | 9,155            | 5,216       | 914                       | 713         | 10,069    | 5,929       | 15,998      |
| Washington           | 1,212            | 9,350       | 373                       | 609         | 1,585     | 9,959       | 11,544      |
| West Virginia        | 3,149            | 767         | 504                       | 214         | 3,653     | 981         | 4,634       |
| Wisconsin            | 438              | 3,992       | 2,541                     | 937         | 2,979     | 4,929       | 7,908       |
| Wyoming              | 0                | 1,038       | 43                        | 162         | 43        | 1,200       | 1,243       |
| Totals               | 157,824          | 310,576     | 54,152                    | 32,576      | 211,976   | 343,152     | 555,128     |

Source: Raw data provided by National Payphone Clearinghouse. Rollups performed by the Industry Analysis and Technology Division staff, Wireline Competition Bureau.

**Table 7.6**  
**Number of Payphones Over Time**  
**(As of March 31 of Each Year)**

| Year | RBOCs' Territories     |             |           | All Other LECs' Territories |             |         |           |             | Grand Total            |
|------|------------------------|-------------|-----------|-----------------------------|-------------|---------|-----------|-------------|------------------------|
|      | LEC-Owned              | Independent | Total     | LEC Owned                   | Independent | Total   | LEC Owned | Independent |                        |
| 1997 | 1,399,600 <sup>1</sup> | NA          | NA        | NA                          | NA          | NA      | NA        | NA          | 2,086,540 <sup>2</sup> |
| 1998 | 1,381,800 <sup>1</sup> | NA          | NA        | NA                          | NA          | NA      | NA        | NA          | 2,100,558 <sup>2</sup> |
| 1999 | 1,305,463              | 572,503     | 1,877,966 | 80,491                      | 163,069     | 243,560 | 1,385,954 | 735,572     | 2,121,526              |
| 2000 | 1,244,535              | 633,022     | 1,877,557 | 63,808                      | 122,353     | 186,161 | 1,308,343 | 755,375     | 2,063,718              |
| 2001 | 1,131,377              | 571,778     | 1,703,155 | 88,399                      | 128,086     | 216,485 | 1,219,776 | 699,864     | 1,919,640              |
| 2002 | 964,999                | 531,801     | 1,496,800 | 95,639                      | 118,622     | 214,261 | 1,060,638 | 650,423     | 1,711,061              |
| 2003 | 854,295                | 464,479     | 1,318,774 | 75,885                      | 101,127     | 177,012 | 930,180   | 565,606     | 1,495,786              |
| 2004 | 737,146                | 455,506     | 1,192,652 | 78,642                      | 73,705      | 152,347 | 815,788   | 529,211     | 1,344,999              |
| 2005 | 587,373                | 486,384     | 1,073,757 | 78,815                      | 63,603      | 142,418 | 666,188   | 549,987     | 1,216,175              |
| 2006 | 444,649                | 453,283     | 897,932   | 59,197                      | 49,673      | 108,870 | 503,846   | 502,956     | 1,006,802              |
| 2007 | 334,117                | 413,074     | 747,191   | 61,009                      | 64,056      | 125,065 | 395,126   | 477,130     | 872,256                |
| 2008 | 243,617                | 360,308     | 603,925   | 57,549                      | 39,352      | 96,901  | 301,166   | 399,660     | 700,826                |
| 2009 | 157,824                | 310,576     | 468,400   | 54,152                      | 32,576      | 86,728  | 211,976   | 343,152     | 555,128                |

NA - Not Available.

<sup>1</sup> See RBOC/GTE/SNET Payphone Coalition Comments on Remand Issues in CC Docket No. 96-128, Report of Arthur Andersen on Per-Call Compensation, Carl R. Geppert at 10 (July 13, 1998).

<sup>2</sup> See Letter from Denny Reuss, NPC Product Manager, to Craig Stroup, Federal Communications Commission, CC Docket 96-128 at 1 (Filed October 22, 1998. The 1997 data point is as of June 30, 1997.)

Source: Unless otherwise noted, raw data provided by National Payphone Clearinghouse. Rollups performed by the Industry Analysis and Technology Division staff, Wireline Competition Bureau.

## **8 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 access services provided over CAPs' wired networks to business customers. 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 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. These 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 elements (UNEs) loops and transport. Third, CLECs may build the complete set of facilities they need to compete. Individual CLECs have used various combinations of these methods at different times.

Since about 2002, cable companies and others have begun offering retail interconnected Voice over Internet Protocol (interconnected VoIP) service, which enables voice communications over a broadband connection and allows users both to receive calls from, and place calls to, the public switched telephone network, like traditional phone service. The service represents a rapidly growing part of the U.S. voice services market. Providers include companies like Vonage as well as cable and telephone companies that own their own networks.

### **1. Non-ILEC Share of Switched Access Lines and Interconnected VoIP Subscriptions**

All ILECs and non-ILECs (collectively, CLECs and those interconnected VoIP providers who do not have ILEC regulatory status) were required to report to the Commission basic information about their local telephone and interconnected VoIP services starting in December 2008. From June 2005 through June 2008, only local exchange carriers were required to report.<sup>1</sup> From December 1999 through December

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<sup>1</sup> Prior to the December 2008 data, companies that solely provide interconnected VoIP service did not file Form 477. Local exchange carriers were required to file Form 477, but were not required to report interconnected VoIP subscriptions. However, some local exchange carriers chose to include interconnected VoIP subscriptions in the number of retail (end-user) switched access lines that they reported.

2004, only local exchange carriers with at least 10,000 switched access lines in service in a particular state were required to report. Small carriers, many of whom serve rural areas with relatively small populations, were therefore underrepresented in those data.<sup>2</sup>

Table 8.1 and the associated chart show the number of ILEC and non-ILEC end-user switched access lines and interconnected VoIP subscriptions from December 1999 through December 2008. Table 8.2 and the associated chart show the relative shares of the residential end-user switched access lines and interconnected VoIP subscriptions provisioned by ILECs and non-ILECs from December 1999 through December 2008.

Table 8.3 shows the percentages of non-ILEC end-user access lines and interconnected VoIP subscriptions that were provisioned over CLEC-owned local loop facilities, over lines acquired from unaffiliated carriers, and as interconnected VoIP, from December 1999 through December 2008. Chart 8.3 displays that information graphically for December 2008. Data reported by ILECs, presented in Table 8.4, show the lines that ILECs provided to other carriers as UNE loops provided with ILEC switching (including the UNE-platform), UNE loops provided without switching, and resale. Chart 8.4 shows the trend, from December 1999 through December 2008, of ILEC total switched access lines and the percentages provided to other carriers.

Table 8.5 shows ILEC and non-ILEC end-user switched access lines and interconnected VoIP subscriptions by state as of December 31, 2008. Tables 8.6 and 8.7 present similar data for residential and business end-user switched access lines and interconnected VoIP subscriptions. Table 8.8 presents historical data on non-ILEC share of total end-user switched access lines and interconnected VoIP subscriptions by state.

## **2. New Competitors Share of Local Telephone Service Revenues**

As discussed in Section 15, the Commission has been collecting revenue data from local exchange carriers since 1993. Table 8.9 shows new competitors and ILEC local telephone service revenues from 1997 through 2007. Chart 8.5 shows the ILEC and new competitor's shares of local service revenues from 1998 through 2007.

## **3. Ported Telephone Numbers**

When telecommunications customers switch service providers, they have the option of taking their local telephone number with them. This is called *porting*. All ported numbers reside in one of seven regional databases. These databases contain several elements of information about ported numbers, including identifiers for the old and new carriers, and the date the number was ported. The porting databases are

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<sup>2</sup> As of December, 2005, filers with fewer than 10,000 switched access lines in a state (including entities that previously filed on a voluntary basis) reported about 4.5 million lines (about 2.0 million ILEC lines and about 2.5 million CLEC lines).

overseen by the local number portability administrator, currently NeuStar, Inc. NeuStar provides the FCC with two sets of information on ported numbers.

The first set of information is a rollup of the quantity of telephone numbers that were ported each month. This information forms the basis for Table 8.10. Unlike Tables 8.11 and 8.12 (see footnote 2 in Table 8.12), these figures include instances where the customer ports the number back to the original carrier.

The second set of information that the FCC receives from NeuStar on a monthly basis is a current list of all ported numbers where the customer changed carriers. For each number, the list includes identifiers for the old and new carriers for that number, and the date the number was ported. In order to protect consumer privacy, the Commission receives the information in a manner that prevents it from determining if any particular telephone number has been ported. This information forms the basis for Tables 8.11 and 8.12.

Table 8.11 shows the quantities of ports in the porting databases at the end of each quarter. The ports are broken out by service type: from landline to landline, landline to mobile, mobile to mobile, and mobile to landline. Table 8.12 examines the ports in the databases as of March 31, 2009. It shows, by service type, when each number in the database was ported.



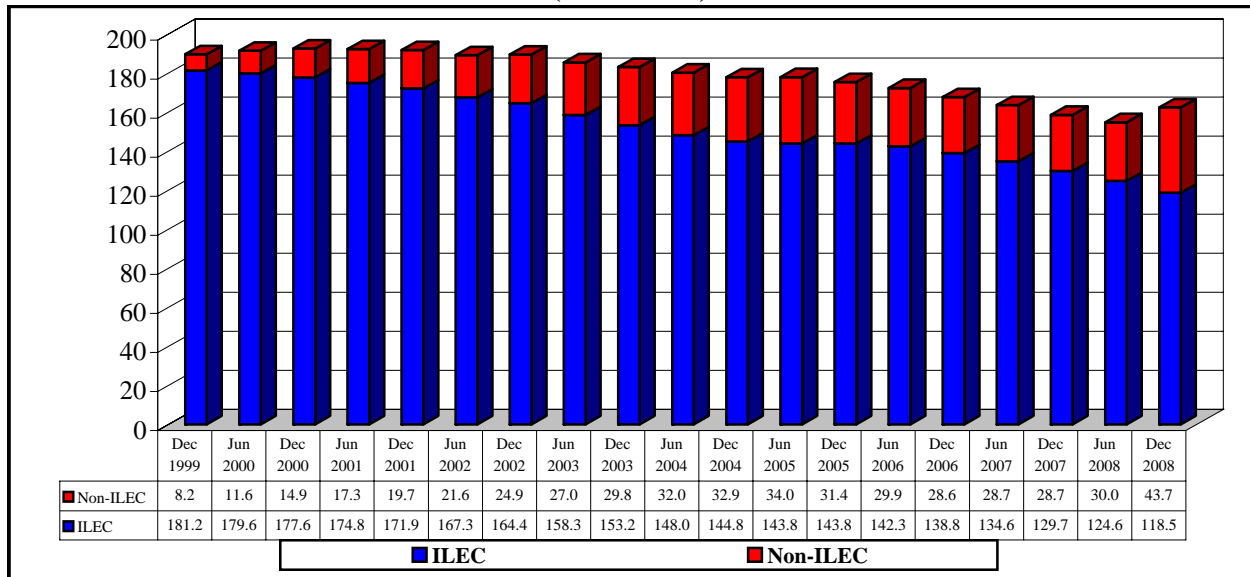
**Table 8.1**  
**End-User Switched Access Lines and VoIP Subscriptions<sup>1</sup>**  
**(In Thousands)**

| Date     | Provided by |          | Total   | Non-ILEC Share |
|----------|-------------|----------|---------|----------------|
|          | ILEC        | Non-ILEC |         |                |
| Dec 1999 | 181,203     | 8,194    | 189,397 | 4.3 %          |
| Jun 2000 | 179,649     | 11,557   | 191,206 | 6.0            |
| Dec 2000 | 177,561     | 14,871   | 192,432 | 7.7            |
| Jun 2001 | 174,752     | 17,275   | 192,027 | 9.0            |
| Dec 2001 | 171,917     | 19,653   | 191,571 | 10.3           |
| Jun 2002 | 167,330     | 21,645   | 188,975 | 11.5           |
| Dec 2002 | 164,386     | 24,864   | 189,250 | 13.1           |
| Jun 2003 | 158,275     | 26,985   | 185,260 | 14.6           |
| Dec 2003 | 153,158     | 29,775   | 182,933 | 16.3           |
| Jun 2004 | 147,993     | 32,034   | 180,027 | 17.8           |
| Dec 2004 | 144,810     | 32,881   | 177,691 | 18.5           |
| Jun 2005 | 143,758     | 33,975   | 177,733 | 19.1           |
| Dec 2005 | 143,773     | 31,388   | 175,161 | 17.9           |
| Jun 2006 | 142,293     | 29,896   | 172,189 | 17.4           |
| Dec 2006 | 138,834     | 28,626   | 167,460 | 17.1           |
| Jun 2007 | 134,640     | 28,729   | 163,369 | 17.6           |
| Dec 2007 | 129,693     | 28,725   | 158,418 | 18.1           |
| Jun 2008 | 124,606     | 30,049   | 154,655 | 19.4           |
| Dec 2008 | 118,503     | 43,726   | 162,230 | 27.0           |

<sup>1</sup> Only incumbent local exchange carriers (ILECs) and competitive local exchange carriers (CLECs) with at least 10,000 retail or wholesale switched access lines in service in a state were required to report through December 2004. All were required to report June 2005 and later data. Providers of interconnected VoIP service were first required to report subscribers as of December 2008, and individual ILECs and CLECs, to a varying and largely unknown degree, included or excluded VoIP subscribers in the earlier data. Interconnected VoIP is distinguished from VoIP service more generally by permitting users to receive calls that originate on the public switched telephone network and to terminate calls to the public switched telephone network. See 47 C.F.R. § 9.3. Form 477 counts both switched access lines and interconnected VoIP subscriptions as the maximum number of calls that may be active, simultaneously, from the end user's location under the purchased service plan.

Source: Industry Analysis & Technology Division, Wireline Competition Bureau, *Local Telephone Competition: Status as of December 31, 2008* (June 2010).

**Chart 8.1**  
**End-User Switched Access Lines and VoIP Subscriptions**  
**(In Millions)**



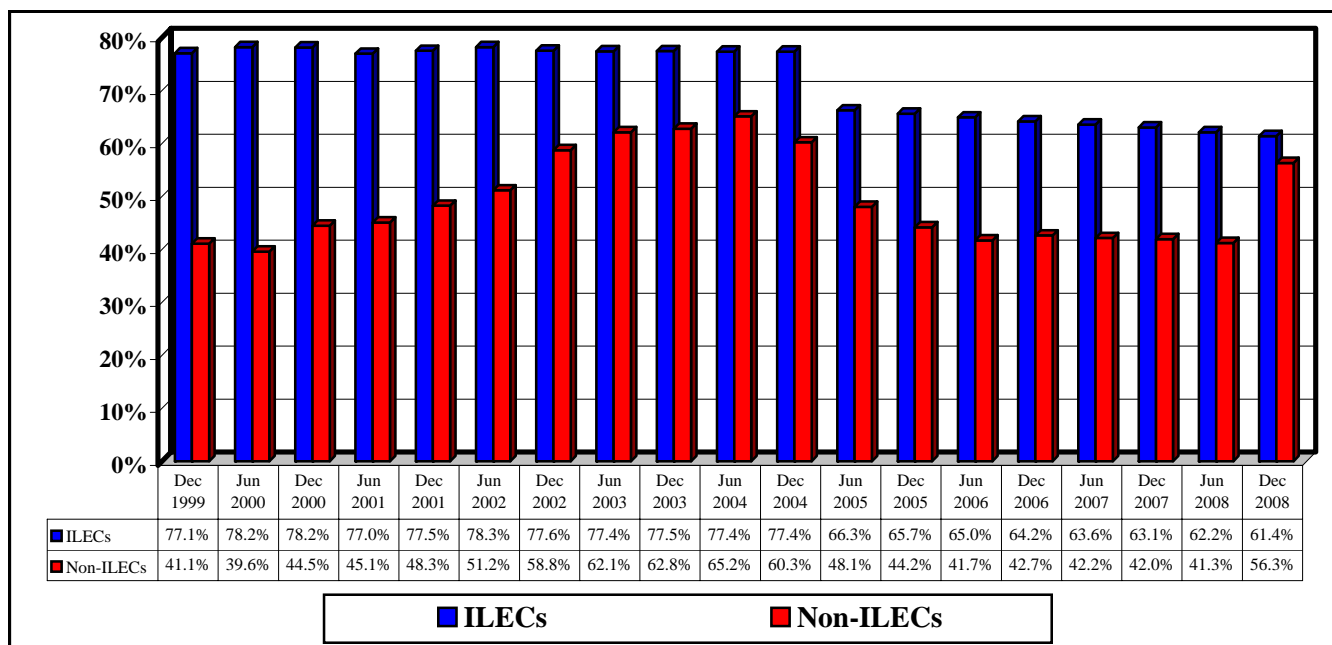
**Table 8.2**  
**End-User Switched Access Lines and VoIP Subscriptions by Customer Type<sup>1</sup>**  
**(In Thousands)**

| Date     | Reporting ILECs |          |               | Reporting Non-ILECs |          |               |
|----------|-----------------|----------|---------------|---------------------|----------|---------------|
|          | Residential     | Business | % Residential | Residential         | Business | % Residential |
| Dec 1999 | 139,694         | 41,508   | 77.1 %        | 3,369               | 4,826    | 41.1 %        |
| Jun 2000 | 140,566         | 39,083   | 78.2          | 4,580               | 6,978    | 39.6          |
| Dec 2000 | 138,824         | 38,737   | 78.2          | 6,620               | 8,251    | 44.5          |
| Jun 2001 | 134,531         | 40,221   | 77.0          | 7,793               | 9,482    | 45.1          |
| Dec 2001 | 133,320         | 38,597   | 77.5          | 9,489               | 10,164   | 48.3          |
| Jun 2002 | 130,937         | 36,393   | 78.3          | 11,081              | 10,564   | 51.2          |
| Dec 2002 | 127,495         | 36,892   | 77.6          | 14,608              | 10,255   | 58.8          |
| Jun 2003 | 122,574         | 35,701   | 77.4          | 16,771              | 10,215   | 62.1          |
| Dec 2003 | 118,659         | 34,499   | 77.5          | 18,702              | 11,073   | 62.8          |
| Jun 2004 | 114,533         | 33,460   | 77.4          | 20,872              | 11,162   | 65.2          |
| Dec 2004 | 112,054         | 32,755   | 77.4          | 19,812              | 13,069   | 60.3          |
| Jun 2005 | 95,316          | 48,442   | 66.3          | 16,338              | 17,637   | 48.1          |
| Dec 2005 | 94,393          | 49,381   | 65.7          | 13,873              | 17,515   | 44.2          |
| Jun 2006 | 92,453          | 49,840   | 65.0          | 12,474              | 17,422   | 41.7          |
| Dec 2006 | 89,167          | 49,667   | 64.2          | 12,211              | 16,415   | 42.7          |
| Jun 2007 | 85,633          | 49,007   | 63.6          | 12,117              | 16,612   | 42.2          |
| Dec 2007 | 81,798          | 47,894   | 63.1          | 12,051              | 16,675   | 42.0          |
| Jun 2008 | 77,457          | 47,149   | 62.2          | 12,396              | 17,654   | 41.3          |
| Dec 2008 | 72,785          | 45,718   | 61.4          | 24,634              | 19,092   | 56.3          |

<sup>1</sup> In 2004, the Commission modified instructions for reporting lines serving small businesses. They were counted with residential lines through December 2004 and with business lines thereafter. This change caused a one-time drop in the percentages of ILEC and CLEC lines reported as residential. The December 2008 data are the first for which comprehensive reporting of interconnected VoIP subscribers was required. See footnote 1, Table 8.1.

Source: Industry Analysis & Technology Division, Wireline Competition Bureau, *Local Telephone Competition: Status as of December 31, 2008* (June 2010).

**Chart 8.2**  
**Percent of Lines and VoIP Subscriptions that Serve Residential Customers<sup>1</sup>**



**Table 8.3**  
**End-User Switched Access Lines and VoIP Subscriptions Reported by Non-ILECs<sup>1</sup>**  
**(Lines and Subscriptions in Thousands)**

| Date     | Reporting Non-ILECs | End-User Switched Access Lines and VoIP Subscriptions | End-User Switched Access Lines |                        |                                     | VoIP   | Percent            |           |                        |       |
|----------|---------------------|---|--------------------------------|------------------------|-------------------------------------|--------|--------------------|-----------|------------------------|-------|
|          |                     |   | Acquired from other LECs       |                        | CLEC-owned local loops <sup>3</sup> |        | Resold LEC service | ILEC UNEs | CLEC-owned local loops | VoIP  |
|          |                     |   | Resold LEC service             | ILEC UNEs <sup>2</sup> |                                     |        |                    |           |                        |       |
| Dec 1999 | 81                  | 8,194   | 3,513                          | 1,959                  | 2,723                               | -      | 42.9%              | 23.9%     | 33.2%                  | -     |
| Jun 2000 | 78                  | 11,557  | 4,315                          | 3,201                  | 4,042                               | -      | 37.3               | 27.7      | 35.0                   | -     |
| Dec 2000 | 89                  | 14,871  | 4,114                          | 5,540                  | 5,217                               | -      | 27.7               | 37.3      | 35.1                   | -     |
| Jun 2001 | 91                  | 17,275  | 3,919                          | 7,580                  | 5,776                               | -      | 22.7               | 43.9      | 33.4                   | -     |
| Dec 2001 | 94                  | 19,653  | 4,250                          | 9,332                  | 6,072                               | -      | 21.6               | 47.5      | 30.9                   | -     |
| Jun 2002 | 96                  | 21,645  | 4,478                          | 10,930                 | 6,236                               | -      | 20.7               | 50.5      | 28.8                   | -     |
| Dec 2002 | 112                 | 24,864  | 4,677                          | 13,709                 | 6,479                               | -      | 18.8               | 55.1      | 26.1                   | -     |
| Jun 2003 | 125                 | 26,985  | 4,887                          | 15,728                 | 6,370                               | -      | 18.1               | 58.3      | 23.6                   | -     |
| Dec 2003 | 136                 | 29,775  | 4,842                          | 17,888                 | 7,045                               | -      | 16.3               | 60.1      | 23.7                   | -     |
| Jun 2004 | 137                 | 32,034  | 4,927                          | 19,624                 | 7,483                               | -      | 15.4               | 61.3      | 23.4                   | -     |
| Dec 2004 | 149                 | 32,881  | 5,417                          | 18,961                 | 8,503                               | -      | 16.5               | 57.7      | 25.9                   | -     |
| Jun 2005 | 326                 | 33,975  | 5,826                          | 19,025                 | 9,124                               | -      | 17.1               | 56.0      | 26.9                   | -     |
| Dec 2005 | 382                 | 31,388  | 6,704                          | 14,521                 | 10,163                              | -      | 21.4               | 46.3      | 32.4                   | -     |
| Jun 2006 | 400                 | 29,896  | 6,548                          | 12,547                 | 10,802                              | -      | 21.9               | 42.0      | 36.1                   | -     |
| Dec 2006 | 397                 | 28,626  | 5,819                          | 11,663                 | 11,144                              | -      | 20.3               | 40.7      | 38.9                   | -     |
| Jun 2007 | 406                 | 28,729  | 6,193                          | 11,511                 | 11,025                              | -      | 21.6               | 40.1      | 38.4                   | -     |
| Dec 2007 | 443                 | 28,725  | 6,430                          | 10,582                 | 11,713                              | -      | 22.4               | 36.8      | 40.8                   | -     |
| Jun 2008 | 469                 | 30,049  | 6,073                          | 10,884                 | 13,093                              | -      | 20.2               | 36.2      | 43.6                   | -     |
| Dec 2008 | 701                 | 43,726  | 7,065                          | 9,597                  | 6,338                               | 20,726 | 16.2               | 21.9      | 14.5                   | 47.4% |

<sup>1</sup> See footnote 1, Table 8.1.

<sup>2</sup> Includes unbundled network element (UNE) loops leased from an unaffiliated ILEC on a stand-alone basis and also UNE loops leased in combination with UNE switching or any other unbundled network element.

<sup>3</sup> Lines provided over CLEC-owned "last-mile" facilities.

Source: Industry Analysis & Technology Division, Wireline Competition Bureau, *Local Telephone Competition: Status as of December 31, 2008* (June 2010).

**Chart 8.3**  
**Non-ILEC End-User Switched Access Lines and VoIP Subscriptions**

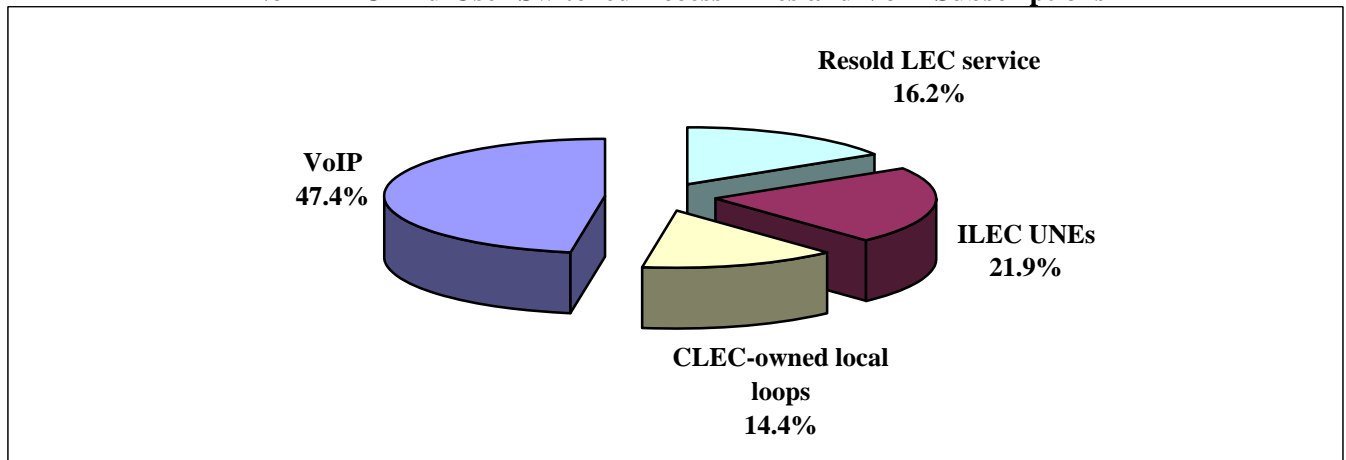


Table 8.4

**ILEC End-User (Retail) and Wholesale Switched Access Lines, VoIP Subscriptions, and UNEs<sup>1</sup>**  
**(Lines, Subscriptions, and UNEs in Thousands)**

| Date     | Reporting ILECs <sup>2</sup> | ILEC Total Lines <sup>3</sup> | End-User Switched Access Lines | VoIP | Switched Access Lines and UNEs Provided to CLECs |                   |                             |            |                           |                  |
|----------|------------------------------|-------------------------------|--------------------------------|------|--|-------------------|-----------------------------|------------|---------------------------|------------------|
|          |                              |                               |                                |      | Resold Lines                                     | UNEs              |                             |            | Total UNEs & Resold Lines | % of Total Lines |
|          |                              |                               |                                |      |  | Without Switching | With Switching <sup>4</sup> | Total UNEs |                           |                  |
| Dec 1999 | 168                          | 187,190                       | 181,203                        | -    | 4,494  | 1,004             | 489                         | 1,493      | 5,987                     | 3.2 %            |
| Jun 2000 | 159                          | 188,058                       | 179,679                        | -    | 5,098  | 1,696             | 1,616                       | 3,312      | 8,409                     | 4.5              |
| Dec 2000 | 166                          | 188,223                       | 177,561                        | -    | 5,388  | 2,436             | 2,838                       | 5,274      | 10,662                    | 5.7              |
| Jun 2001 | 156                          | 187,092                       | 174,752                        | -    | 4,417  | 3,161             | 4,761                       | 7,922      | 12,340                    | 6.6              |
| Dec 2001 | 164                          | 185,391                       | 171,917                        | -    | 4,014  | 3,679             | 5,781                       | 9,460      | 13,474                    | 7.3              |
| Jun 2002 | 166                          | 182,345                       | 167,330                        | -    | 3,475  | 4,061             | 7,478                       | 11,540     | 15,015                    | 8.2              |
| Dec 2002 | 174                          | 181,616                       | 164,386                        | -    | 2,743  | 4,259             | 10,227                      | 14,487     | 17,229                    | 9.5              |
| Jun 2003 | 181                          | 177,770                       | 158,275                        | -    | 2,232  | 4,227             | 13,036                      | 17,263     | 19,495                    | 11.0             |
| Dec 2003 | 185                          | 174,453                       | 153,158                        | -    | 1,833  | 4,287             | 15,176                      | 19,463     | 21,296                    | 12.2             |
| Jun 2004 | 185                          | 171,050                       | 147,993                        | -    | 1,600  | 4,322             | 17,136                      | 21,458     | 23,057                    | 13.5             |
| Dec 2004 | 190                          | 167,063                       | 144,810                        | -    | 1,490  | 4,217             | 16,546                      | 20,763     | 22,253                    | 13.3             |
| Jun 2005 | 757                          | 164,449                       | 143,758                        | -    | 1,796  | 4,300             | 14,596                      | 18,895     | 20,691                    | 12.6             |
| Dec 2005 | 807                          | 160,881                       | 143,773                        | -    | 1,793  | 4,469             | 10,846                      | 15,315     | 17,108                    | 10.6             |
| Jun 2006 | 805                          | 156,872                       | 142,293                        | -    | 1,723  | 4,413             | 8,443                       | 12,856     | 14,579                    | 9.3              |
| Dec 2006 | 814                          | 151,958                       | 138,834                        | -    | 1,613  | 4,408             | 7,103                       | 11,511     | 13,124                    | 8.6              |
| Jun 2007 | 816                          | 146,672                       | 134,640                        | -    | 1,517  | 4,285             | 6,230                       | 10,515     | 12,032                    | 8.2              |
| Dec 2007 | 805                          | 140,808                       | 129,693                        | -    | 1,460  | 4,122             | 5,534                       | 9,655      | 11,115                    | 7.9              |
| Jun 2008 | 800                          | 134,846                       | 124,606                        | -    | 1,473  | 3,827             | 4,941                       | 8,768      | 10,241                    | 7.6              |
| Dec 2008 | 780                          | 128,295                       | 117,975                        | 529  | 3,209  | 3,844             | 2,740                       | 6,583      | 9,792                     | 7.6              |

Figures may not add to totals due to rounding.

<sup>1</sup> See footnote 1, Table 8.1.

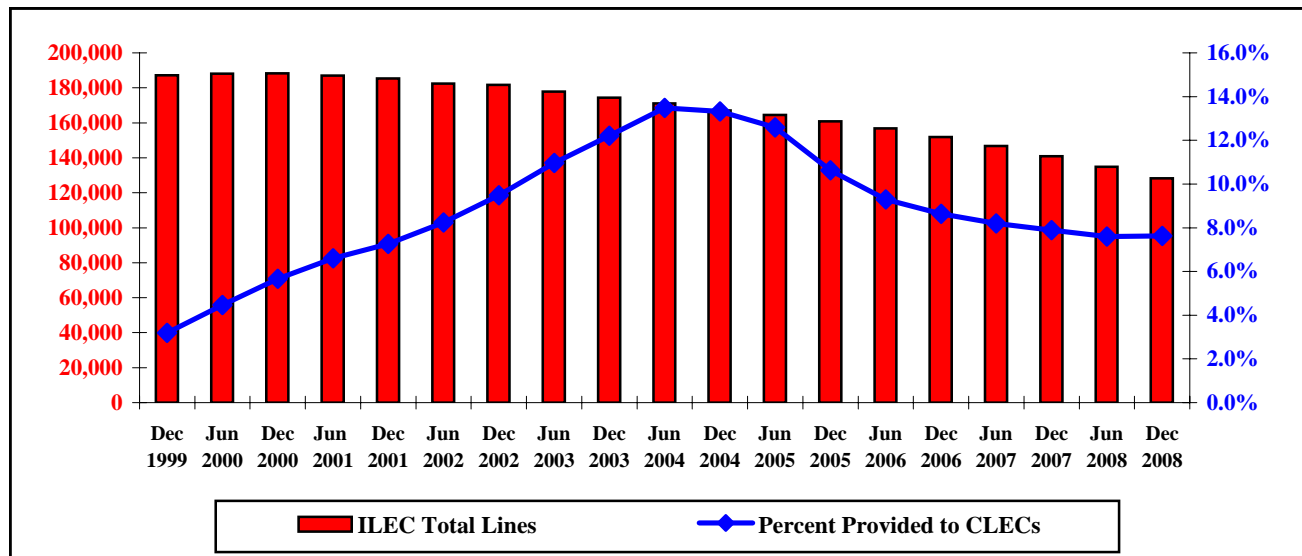
<sup>2</sup> Fewer ILECs were counted for year-end 2008 than year-end 2007 primarily because FCC staff identified additional common-control relationships among filers.

<sup>3</sup> This figure is the sum of ILEC-reported end-user (retail) switched access lines, ILEC interconnected VoIP subscriptions, and ILEC wholesale switched access lines and UNEs provided to CLECs.

<sup>4</sup> ILEC loops provided with ILEC switching, including the combination of ILEC loop UNE, switching UNE, and transport UNE, collectively referred to as the UNE-Platform ("UNE-P"). The Commission directed CLECs to migrate their retail customers served by these methods to an alternative arrangement by March 11, 2006, i.e., within 12 months of the effective date of the *Triennial Review Remand Order*. See C.F.R. § 51.319(d)(2)(ii).

Source: Industry Analysis & Technology Division, Wireline Competition Bureau, *Local Telephone Competition: Status as of December 31, 2008* (June 2010).

**Chart 8.4**  
**ILEC Total Lines and the Percent Provided to CLECs**



**Table 8.5**  
**Total End-User Switched Access Lines and VoIP Subscriptions by State as of December 31, 2008**  
**(In Thousands)**

| State                 | ILECs                       |                   |                             |         | Non-ILECs                   |                   |                             |        | Total   | Non-ILEC<br>% of Total |
|-----------------------|-----------------------------|-------------------|-----------------------------|---------|-----------------------------|-------------------|-----------------------------|--------|---------|------------------------|
|                       | Switched<br>Access<br>Lines | VoIP purchased as |                             | Total   | Switched<br>Access<br>Lines | VoIP purchased as |                             | Total  |         |                        |
|                       |                             | Stand-<br>alone   | Bundled<br>with<br>Internet |         |                             | Stand-<br>alone   | Bundled<br>with<br>Internet |        |         |                        |
| Alabama               | 1,745                       | #                 | #                           | 1,746   | 307                         | 57                | 95                          | 460    | 2,205   | 21%                    |
| Alaska                | 289                         | 0                 | 0                           | 289     | *                           | 1                 | *                           | *      | *       | *                      |
| American Samoa        | 10                          | 0                 | 0                           | 10      | 0                           | 0                 | 0                           | 0      | 10      | 0                      |
| Arizona               | 1,847                       | #                 | #                           | 1,847   | 956                         | 73                | 175                         | 1,204  | 3,051   | 39                     |
| Arkansas              | 1,018                       | #                 | 3                           | 1,021   | 143                         | 19                | 61                          | 223    | 1,245   | 18                     |
| California            | 16,274                      | 6                 | 66                          | 16,345  | 2,464                       | 413               | 1,659                       | 4,536  | 20,882  | 22                     |
| Colorado              | 1,873                       | 0                 | 0                           | 1,873   | 430                         | 88                | 320                         | 838    | 2,711   | 31                     |
| Connecticut           | 1,515                       | 1                 | 24                          | 1,540   | 247                         | 45                | 333                         | 625    | 2,165   | 29                     |
| Delaware              | 379                         | #                 | 1                           | 380     | 79                          | *                 | *                           | 164    | 544     | 30                     |
| District of Columbia  | 733                         | #                 | 4                           | 737     | 131                         | 12                | 38                          | 182    | 919     | 20                     |
| Florida               | 7,395                       | 4                 | 40                          | 7,440   | 1,179                       | 385               | 1,125                       | 2,690  | 10,130  | 27                     |
| Georgia               | 3,465                       | 2                 | 2                           | 3,468   | 622                         | 158               | 376                         | 1,157  | 4,626   | 25                     |
| Guam                  | 54                          | 0                 | 0                           | 54      | *                           | *                 | *                           | *      | *       | *                      |
| Hawaii                | 512                         | #                 | 0                           | 512     | 40                          | *                 | *                           | 114    | 626     | 18                     |
| Idaho                 | 581                         | #                 | #                           | 582     | 81                          | 10                | 30                          | 122    | 703     | 17                     |
| Illinois              | 5,282                       | 2                 | 58                          | 5,342   | 738                         | 246               | 662                         | 1,646  | 6,989   | 24                     |
| Indiana               | 2,524                       | 1                 | 22                          | 2,547   | 266                         | 73                | 219                         | 559    | 3,106   | 18                     |
| Iowa                  | 1,113                       | #                 | #                           | 1,113   | 198                         | 97                | 13                          | 307    | 1,421   | 22                     |
| Kansas                | 933                         | #                 | 6                           | 939     | 264                         | 25                | 128                         | 417    | 1,356   | 31                     |
| Kentucky              | 1,458                       | #                 | #                           | 1,458   | 292                         | 25                | 176                         | 493    | 1,951   | 25                     |
| Louisiana             | 1,634                       | #                 | #                           | 1,634   | 289                         | 41                | 158                         | 488    | 2,122   | 23                     |
| Maine                 | 539                         | #                 | 2                           | 542     | 108                         | *                 | *                           | 211    | 753     | 28                     |
| Maryland              | 2,581                       | 1                 | 7                           | 2,588   | 462                         | 88                | 304                         | 854    | 3,443   | 25                     |
| Massachusetts         | 2,477                       | 1                 | 15                          | 2,493   | 794                         | 134               | 661                         | 1,590  | 4,084   | 39                     |
| Michigan              | 3,444                       | 2                 | 67                          | 3,512   | 607                         | 177               | 658                         | 1,442  | 4,954   | 29                     |
| Minnesota             | 1,922                       | 0                 | #                           | 1,922   | 554                         | 84                | 234                         | 873    | 2,794   | 31                     |
| Mississippi           | 963                         | #                 | #                           | 963     | 111                         | 21                | 49                          | 182    | 1,145   | 16                     |
| Missouri              | 2,463                       | 1                 | 2                           | 2,465   | 256                         | 62                | 196                         | 514    | 2,980   | 17                     |
| Montana               | 387                         | 0                 | 0                           | 387     | 46                          | 7                 | 47                          | 101    | 488     | 21                     |
| Nebraska              | 584                         | #                 | #                           | 584     | 250                         | 10                | 38                          | 298    | 882     | 34                     |
| Nevada                | 970                         | #                 | 2                           | 972     | 188                         | 54                | 172                         | 414    | 1,386   | 30                     |
| New Hampshire         | 469                         | 0                 | 1                           | 470     | 172                         | 33                | 137                         | 343    | 813     | 42                     |
| New Jersey            | 3,715                       | 1                 | 25                          | 3,741   | 784                         | 118               | 1,015                       | 1,917  | 5,658   | 34                     |
| New Mexico            | 754                         | #                 | #                           | 754     | 72                          | 14                | 35                          | 121    | 875     | 14                     |
| New York              | 6,534                       | 2                 | 20                          | 6,557   | 2,063                       | 191               | 2,257                       | 4,511  | 11,068  | 41                     |
| North Carolina        | 3,511                       | 3                 | 5                           | 3,519   | 463                         | 106               | 516                         | 1,084  | 4,603   | 24                     |
| North Dakota          | 241                         | 0                 | 0                           | 241     | 79                          | *                 | *                           | 113    | 354     | 32                     |
| Northern Mariana Isl. | 17                          | 0                 | 0                           | 17      | 0                           | 0                 | 0                           | 0      | 17      | 0                      |
| Ohio                  | 4,291                       | 1                 | 34                          | 4,326   | 644                         | 74                | 745                         | 1,463  | 5,790   | 25                     |
| Oklahoma              | 1,210                       | #                 | 6                           | 1,216   | 318                         | 39                | 162                         | 519    | 1,736   | 30                     |
| Oregon                | 1,284                       | #                 | 1                           | 1,286   | 301                         | 49                | 221                         | 571    | 1,856   | 31                     |
| Pennsylvania          | 5,233                       | 1                 | 9                           | 5,243   | 1,326                       | 194               | 667                         | 2,186  | 7,430   | 29                     |
| Puerto Rico           | 755                         | 0                 | 0                           | 755     | 121                         | 8                 | 81                          | 210    | 965     | 22                     |
| Rhode Island          | 292                         | #                 | #                           | 292     | 259                         | *                 | *                           | 316    | 608     | 52                     |
| South Carolina        | 1,625                       | #                 | 4                           | 1,629   | 243                         | 50                | 179                         | 472    | 2,101   | 22                     |
| South Dakota          | 251                         | 0                 | 0                           | 251     | 98                          | *                 | *                           | 140    | 391     | 36                     |
| Tennessee             | 2,296                       | 1                 | #                           | 2,297   | 426                         | 69                | 255                         | 751    | 3,048   | 25                     |
| Texas                 | 8,634                       | 5                 | 34                          | 8,673   | 1,242                       | 200               | 908                         | 2,350  | 11,022  | 21                     |
| Utah                  | 776                         | 0                 | 0                           | 776     | 134                         | 32                | 103                         | 269    | 1,046   | 26                     |
| Vermont               | 289                         | 0                 | #                           | 289     | 54                          | *                 | *                           | 88     | 378     | 23                     |
| Virgin Islands        | 61                          | 0                 | 0                           | 61      | 0                           | *                 | *                           | *      | *       | *                      |
| Virginia              | 3,254                       | 1                 | 9                           | 3,265   | 1,015                       | 122               | 290                         | 1,427  | 4,692   | 30                     |
| Washington            | 2,363                       | #                 | 3                           | 2,367   | 444                         | 105               | 471                         | 1,020  | 3,386   | 30                     |
| West Virginia         | 714                         | #                 | 1                           | 714     | 121                         | 16                | 58                          | 195    | 909     | 21                     |
| Wisconsin             | 2,231                       | #                 | 15                          | 2,246   | 372                         | 54                | 340                         | 765    | 3,012   | 25                     |
| Wyoming               | 209                         | #                 | #                           | 209     | 15                          | 6                 | 33                          | 54     | 263     | 20                     |
| Nationwide            | 117,975                     | 38                | 491                         | 118,503 | 23,000                      | 3,957             | 16,769                      | 43,726 | 162,230 | 27                     |

# = Rounds to zero. \* Data withheld to maintain firm confidentiality.

Source: Industry Analysis & Technology Division, Wireline Competition Bureau, *Local Telephone Competition: Status as of December 31, 2008* (June 2010).

**Table 8.6**  
**Residential End-User Switched Access Lines and VoIP Subscriptions by State as of December 31, 2008**  
**(In Thousands)**

| State                 | ILECs                 |                   |                       |        | Non-ILECs             |                   |                       |        | Total  | Non-ILEC % of Total |
|-----------------------|-----------------------|-------------------|-----------------------|--------|-----------------------|-------------------|-----------------------|--------|--------|---------------------|
|                       | Switched Access Lines | VoIP purchased as |                       | Total  | Switched Access Lines | VoIP purchased as |                       | Total  |        |                     |
|                       |                       | Stand-alone       | Bundled with Internet |        |                       | Stand-alone       | Bundled with Internet |        |        |                     |
| Alabama               | 1,174                 | #                 | #                     | 1,174  | 102                   | 55                | 90                    | 247    | 1,422  | 17%                 |
| Alaska                | 147                   | 0                 | 0                     | 147    | *                     | 1                 | *                     | *      | *      | *                   |
| American Samoa        | 5                     | 0                 | 0                     | 5      | 0                     | 0                 | 0                     | 0      | 5      | 0                   |
| Arizona               | 1,133                 | #                 | 0                     | 1,133  | 538                   | 63                | 144                   | 746    | 1,879  | 40                  |
| Arkansas              | 661                   | #                 | 3                     | 665    | 28                    | 17                | 54                    | 99     | 763    | 13                  |
| California            | 9,378                 | 6                 | 29                    | 9,412  | 796                   | 355               | 1,339                 | 2,490  | 11,902 | 21                  |
| Colorado              | 1,209                 | 0                 | 0                     | 1,209  | 27                    | 76                | 279                   | 382    | 1,591  | 24                  |
| Connecticut           | 917                   | 1                 | 23                    | 940    | 64                    | 41                | 317                   | 421    | 1,361  | 31                  |
| Delaware              | 230                   | #                 | 0                     | 231    | 13                    | *                 | *                     | 95     | 326    | 29                  |
| District of Columbia  | 168                   | #                 | 0                     | 168    | 19                    | 10                | 22                    | 50     | 218    | 23                  |
| Florida               | 4,680                 | 4                 | 0                     | 4,684  | 115                   | 346               | 1,049                 | 1,510  | 6,195  | 24                  |
| Georgia               | 2,060                 | 2                 | 0                     | 2,062  | 112                   | 146               | 346                   | 603    | 2,665  | 23                  |
| Guam                  | 31                    | 0                 | 0                     | 31     | *                     | *                 | *                     | *      | *      | *                   |
| Hawaii                | 293                   | 0                 | 0                     | 293    | 0                     | *                 | *                     | 73     | 366    | 20                  |
| Idaho                 | 380                   | #                 | #                     | 380    | 21                    | 9                 | 26                    | 56     | 437    | 13                  |
| Illinois              | 2,957                 | 2                 | 24                    | 2,983  | 114                   | 230               | 600                   | 944    | 3,927  | 24                  |
| Indiana               | 1,616                 | 1                 | 16                    | 1,633  | 72                    | 70                | 207                   | 348    | 1,981  | 18                  |
| Iowa                  | 775                   | #                 | #                     | 775    | 94                    | 96                | 1                     | 191    | 966    | 20                  |
| Kansas                | 542                   | #                 | 6                     | 548    | 120                   | 22                | 119                   | 261    | 808    | 32                  |
| Kentucky              | 933                   | #                 | 0                     | 934    | 153                   | 23                | 171                   | 347    | 1,281  | 27                  |
| Louisiana             | 1,005                 | #                 | 0                     | 1,005  | 106                   | 39                | 145                   | 291    | 1,296  | 22                  |
| Maine                 | 400                   | #                 | 2                     | 402    | 13                    | *                 | *                     | 115    | 517    | 22                  |
| Maryland              | 1,484                 | 1                 | 0                     | 1,485  | 125                   | 80                | 289                   | 493    | 1,978  | 25                  |
| Massachusetts         | 1,440                 | 1                 | 0                     | 1,441  | 96                    | 126               | 627                   | 848    | 2,289  | 37                  |
| Michigan              | 1,938                 | 2                 | 58                    | 1,997  | 222                   | 163               | 632                   | 1,017  | 3,014  | 34                  |
| Minnesota             | 1,341                 | 0                 | #                     | 1,341  | 121                   | 79                | 198                   | 397    | 1,738  | 23                  |
| Mississippi           | 605                   | #                 | 0                     | 605    | 37                    | 19                | 45                    | 101    | 707    | 14                  |
| Missouri              | 1,603                 | 1                 | #                     | 1,604  | 47                    | 59                | 172                   | 278    | 1,882  | 15                  |
| Montana               | 250                   | 0                 | 0                     | 250    | 16                    | 7                 | 43                    | 66     | 317    | 21                  |
| Nebraska              | 334                   | #                 | #                     | 334    | 126                   | 9                 | 32                    | 167    | 502    | 33                  |
| Nevada                | 575                   | #                 | 1                     | 576    | 16                    | 50                | 158                   | 224    | 800    | 28                  |
| New Hampshire         | 331                   | 0                 | 0                     | 331    | 7                     | 30                | 133                   | 171    | 501    | 34                  |
| New Jersey            | 2,135                 | 1                 | 0                     | 2,136  | 149                   | 105               | 961                   | 1,215  | 3,352  | 36                  |
| New Mexico            | 507                   | #                 | #                     | 507    | 12                    | 13                | 27                    | 52     | 559    | 9                   |
| New York              | 3,876                 | 2                 | 0                     | 3,878  | 381                   | 159               | 2,122                 | 2,661  | 6,539  | 41                  |
| North Carolina        | 2,266                 | 3                 | 0                     | 2,269  | 40                    | 97                | 497                   | 635    | 2,903  | 22                  |
| North Dakota          | 161                   | 0                 | 0                     | 161    | 46                    | *                 | *                     | 76     | 237    | 32                  |
| Northern Mariana Isl. | 8                     | 0                 | 0                     | 8      | 0                     | 0                 | 0                     | 0      | 8      | 0                   |
| Ohio                  | 2,740                 | 1                 | 22                    | 2,764  | 194                   | 62                | 720                   | 975    | 3,739  | 26                  |
| Oklahoma              | 767                   | #                 | 6                     | 773    | 162                   | 36                | 152                   | 350    | 1,123  | 31                  |
| Oregon                | 886                   | #                 | 0                     | 886    | 20                    | 45                | 200                   | 265    | 1,151  | 23                  |
| Pennsylvania          | 3,568                 | 1                 | 0                     | 3,569  | 196                   | 174               | 622                   | 992    | 4,561  | 22                  |
| Puerto Rico           | 589                   | 0                 | 0                     | 589    | 2                     | 7                 | 74                    | 84     | 673    | 12                  |
| Rhode Island          | 184                   | #                 | 0                     | 184    | 135                   | *                 | *                     | 188    | 372    | 51                  |
| South Carolina        | 1,079                 | #                 | 0                     | 1,079  | 52                    | 45                | 174                   | 271    | 1,350  | 20                  |
| South Dakota          | 158                   | 0                 | 0                     | 158    | 63                    | *                 | *                     | 99     | 257    | 38                  |
| Tennessee             | 1,528                 | 1                 | 0                     | 1,528  | 58                    | 65                | 237                   | 360    | 1,888  | 19                  |
| Texas                 | 5,258                 | 5                 | 16                    | 5,279  | 201                   | 175               | 844                   | 1,220  | 6,499  | 19                  |
| Utah                  | 502                   | 0                 | 0                     | 502    | 27                    | 29                | 90                    | 146    | 648    | 23                  |
| Vermont               | 207                   | 0                 | 0                     | 207    | 7                     | *                 | *                     | 40     | 246    | 16                  |
| Virgin Islands        | 41                    | 0                 | 0                     | 41     | 0                     | *                 | *                     | *      | *      | *                   |
| Virginia              | 1,886                 | 1                 | 0                     | 1,887  | 329                   | 110               | 266                   | 705    | 2,592  | 27                  |
| Washington            | 1,570                 | #                 | 0                     | 1,570  | 46                    | 98                | 441                   | 585    | 2,155  | 27                  |
| West Virginia         | 548                   | #                 | 0                     | 548    | 14                    | 14                | 56                    | 84     | 633    | 13                  |
| Wisconsin             | 1,356                 | #                 | 12                    | 1,369  | 101                   | 50                | 316                   | 467    | 1,836  | 25                  |
| Wyoming               | 113                   | 0                 | #                     | 113    | 6                     | 6                 | 31                    | 42     | 156    | 27                  |
| Nationwide            | 72,531                | 36                | 218                   | 72,785 | 5,643                 | 3,572             | 15,419                | 24,634 | 97,419 | 25                  |

# = Rounds to zero. \* Data withheld to maintain firm confidentiality.

Source: Industry Analysis & Technology Division, Wireline Competition Bureau, *Local Telephone Competition: Status as of December 31, 2008* (June 2010).

**Table 8.7**  
**Business End-User Switched Access Lines and VoIP Subscriptions by State as of December 31, 2008**  
**(In Thousands)**

| State                 | ILECs                       |                   |                             |        | Non-ILECs                   |                   |                             |        | Total  | Non-ILEC<br>% of Total |
|-----------------------|-----------------------------|-------------------|-----------------------------|--------|-----------------------------|-------------------|-----------------------------|--------|--------|------------------------|
|                       | Switched<br>Access<br>Lines | VoIP purchased as |                             | Total  | Switched<br>Access<br>Lines | VoIP purchased as |                             | Total  |        |                        |
|                       |                             | Stand-<br>alone   | Bundled<br>with<br>Internet |        |                             | Stand-<br>alone   | Bundled<br>with<br>Internet |        |        |                        |
| Alabama               | 571                         | #                 | #                           | 571    | 205                         | 2                 | 5                           | 212    | 784    | 27%                    |
| Alaska                | 142                         | 0                 | 0                           | 142    | 0                           | #                 | 0                           | 0      | 0      | *                      |
| American Samoa        | 5                           | 0                 | 0                           | 5      | 0                           | 0                 | 0                           | 0      | 5      | 0                      |
| Arizona               | 714                         | #                 | #                           | 714    | 417                         | 10                | 31                          | 458    | 1,172  | 39                     |
| Arkansas              | 357                         | 0                 | #                           | 357    | 115                         | 2                 | 8                           | 125    | 481    | 26                     |
| California            | 6,896                       | #                 | 37                          | 6,933  | 1,668                       | 58                | 321                         | 2,047  | 8,980  | 23                     |
| Colorado              | 664                         | 0                 | 0                           | 664    | 404                         | 11                | 41                          | 455    | 1,120  | 41                     |
| Connecticut           | 599                         | #                 | 1                           | 600    | 183                         | 4                 | 16                          | 203    | 803    | 25                     |
| Delaware              | 149                         | #                 | 1                           | 149    | 66                          | 0                 | 0                           | 69     | 218    | 31                     |
| District of Columbia  | 565                         | #                 | 4                           | 569    | 112                         | 3                 | 16                          | 132    | 701    | 19                     |
| Florida               | 2,715                       | #                 | 40                          | 2,756  | 1,064                       | 39                | 76                          | 1,179  | 3,935  | 30                     |
| Georgia               | 1,404                       | #                 | 2                           | 1,406  | 511                         | 13                | 31                          | 554    | 1,960  | 28                     |
| Guam                  | 23                          | 0                 | 0                           | 23     | 0                           | 0                 | 0                           | 0      | 0      | *                      |
| Hawaii                | 218                         | #                 | 0                           | 219    | 40                          | 0                 | 0                           | 41     | 259    | 16                     |
| Idaho                 | 201                         | #                 | #                           | 201    | 61                          | 1                 | 4                           | 65     | 267    | 25                     |
| Illinois              | 2,325                       | #                 | 34                          | 2,359  | 624                         | 16                | 62                          | 702    | 3,061  | 23                     |
| Indiana               | 908                         | #                 | 6                           | 914    | 194                         | 4                 | 13                          | 211    | 1,125  | 19                     |
| Iowa                  | 338                         | #                 | #                           | 339    | 104                         | 1                 | 12                          | 117    | 455    | 26                     |
| Kansas                | 391                         | #                 | #                           | 391    | 144                         | 4                 | 9                           | 157    | 548    | 29                     |
| Kentucky              | 524                         | #                 | #                           | 524    | 138                         | 2                 | 5                           | 146    | 670    | 22                     |
| Louisiana             | 629                         | #                 | #                           | 629    | 183                         | 2                 | 12                          | 197    | 826    | 24                     |
| Maine                 | 139                         | #                 | 1                           | 140    | 95                          | 0                 | 0                           | 96     | 236    | 41                     |
| Maryland              | 1,096                       | #                 | 7                           | 1,103  | 337                         | 8                 | 16                          | 361    | 1,464  | 25                     |
| Massachusetts         | 1,037                       | #                 | 15                          | 1,052  | 699                         | 9                 | 35                          | 742    | 1,795  | 41                     |
| Michigan              | 1,506                       | #                 | 9                           | 1,515  | 384                         | 14                | 26                          | 425    | 1,940  | 22                     |
| Minnesota             | 581                         | 0                 | #                           | 581    | 433                         | 5                 | 37                          | 475    | 1,056  | 45                     |
| Mississippi           | 358                         | 0                 | #                           | 358    | 75                          | 2                 | 4                           | 80     | 438    | 18                     |
| Missouri              | 860                         | #                 | 2                           | 861    | 209                         | 3                 | 24                          | 236    | 1,098  | 22                     |
| Montana               | 136                         | 0                 | 0                           | 136    | 30                          | #                 | 4                           | 35     | 171    | 20                     |
| Nebraska              | 250                         | 0                 | #                           | 250    | 124                         | 1                 | 6                           | 131    | 381    | 34                     |
| Nevada                | 396                         | #                 | #                           | 396    | 172                         | 4                 | 14                          | 190    | 586    | 32                     |
| New Hampshire         | 139                         | 0                 | 1                           | 140    | 165                         | 3                 | 5                           | 172    | 312    | 55                     |
| New Jersey            | 1,580                       | #                 | 25                          | 1,605  | 635                         | 13                | 53                          | 702    | 2,307  | 30                     |
| New Mexico            | 247                         | #                 | #                           | 247    | 60                          | 1                 | 8                           | 69     | 316    | 22                     |
| New York              | 2,658                       | #                 | 20                          | 2,679  | 1,683                       | 32                | 135                         | 1,850  | 4,529  | 41                     |
| North Carolina        | 1,246                       | #                 | 5                           | 1,251  | 422                         | 9                 | 18                          | 450    | 1,700  | 26                     |
| North Dakota          | 80                          | 0                 | 0                           | 80     | 34                          | 0                 | 0                           | 37     | 117    | 32                     |
| Northern Mariana Isl. | 9                           | 0                 | 0                           | 9      | 0                           | 0                 | 0                           | 0      | 9      | 0                      |
| Ohio                  | 1,551                       | #                 | 12                          | 1,563  | 450                         | 12                | 25                          | 488    | 2,051  | 24                     |
| Oklahoma              | 443                         | 0                 | #                           | 443    | 156                         | 3                 | 10                          | 170    | 613    | 28                     |
| Oregon                | 398                         | #                 | 1                           | 399    | 281                         | 4                 | 21                          | 306    | 705    | 43                     |
| Pennsylvania          | 1,665                       | #                 | 9                           | 1,674  | 1,130                       | 20                | 45                          | 1,195  | 2,869  | 42                     |
| Puerto Rico           | 166                         | 0                 | 0                           | 166    | 119                         | 1                 | 6                           | 126    | 292    | 43                     |
| Rhode Island          | 108                         | #                 | #                           | 108    | 124                         | 0                 | 0                           | 128    | 237    | 54                     |
| South Carolina        | 546                         | #                 | 4                           | 550    | 191                         | 5                 | 5                           | 201    | 751    | 27                     |
| South Dakota          | 93                          | 0                 | 0                           | 93     | 35                          | 0                 | 0                           | 41     | 134    | 31                     |
| Tennessee             | 769                         | #                 | #                           | 769    | 368                         | 5                 | 18                          | 391    | 1,160  | 34                     |
| Texas                 | 3,376                       | #                 | 18                          | 3,394  | 1,041                       | 25                | 64                          | 1,130  | 4,523  | 25                     |
| Utah                  | 275                         | 0                 | 0                           | 275    | 108                         | 3                 | 13                          | 123    | 398    | 31                     |
| Vermont               | 82                          | 0                 | #                           | 83     | 47                          | 0                 | 0                           | 49     | 131    | 37                     |
| Virgin Islands        | 20                          | 0                 | 0                           | 20     | 0                           | 0                 | 0                           | 0      | 0      | *                      |
| Virginia              | 1,368                       | #                 | 9                           | 1,378  | 686                         | 12                | 24                          | 722    | 2,100  | 34                     |
| Washington            | 793                         | #                 | 3                           | 796    | 398                         | 7                 | 30                          | 435    | 1,231  | 35                     |
| West Virginia         | 166                         | #                 | 1                           | 166    | 106                         | 2                 | 2                           | 110    | 277    | 40                     |
| Wisconsin             | 874                         | #                 | 3                           | 877    | 270                         | 4                 | 24                          | 298    | 1,175  | 25                     |
| Wyoming               | 95                          | #                 | #                           | 96     | 10                          | #                 | 2                           | 11     | 107    | 11                     |
| Nationwide            | 45,444                      | 2                 | 272                         | 45,718 | 17,357                      | 385               | 1,350                       | 19,092 | 64,810 | 29                     |

# = Rounds to zero. \* Data withheld to maintain firm confidentiality.

Source: Industry Analysis & Technology Division, Wireline Competition Bureau, *Local Telephone Competition: Status as of December 31, 2008* (June 2010).

**Table 8.8**  
**Non-ILEC Share of Total End-User Switched Access Lines and VoIP Subscriptions by State<sup>1</sup>**

| State                 | 2005 |      | 2006 |      | 2007 |      | 2008 |      |
|-----------------------|------|------|------|------|------|------|------|------|
|                       | Jun  | Dec  | Jun  | Dec  | Jun  | Dec  | Jun  | Dec  |
| Alabama               | 16 % | 15 % | 16 % | 13 % | 13 % | 14 % | 16 % | 21 % |
| Alaska                | *    | *    | 26   | *    | *    | *    | *    | *    |
| American Samoa        | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Arizona               | 27   | 30   | 30   | 32   | 33   | 34   | 37   | 39   |
| Arkansas              | 13   | 11   | 12   | 13   | 14   | 14   | 14   | 18   |
| California            | 18   | 13   | 13   | 14   | 14   | 14   | 15   | 22   |
| Colorado              | 17   | 20   | 19   | 17   | 17   | 16   | 19   | 31   |
| Connecticut           | 14   | 11   | 12   | 12   | 13   | 14   | 15   | 29   |
| Delaware              | 20   | 20   | 18   | 18   | 19   | 17   | 18   | 30   |
| District of Columbia  | 20   | 17   | 14   | 14   | 14   | 14   | 15   | 20   |
| Florida               | 16   | 17   | 15   | 13   | 13   | 13   | 14   | 27   |
| Georgia               | 21   | 18   | 19   | 14   | 16   | 16   | 17   | 25   |
| Guam                  | NA   | 0    | 0    | 0    | 0    | *    | *    | *    |
| Hawaii                | 6    | 7    | 9    | 11   | 13   | 16   | 18   | 18   |
| Idaho                 | 10   | 10   | 11   | 10   | 11   | 11   | 11   | 17   |
| Illinois              | 20   | 15   | 15   | 15   | 14   | 14   | 14   | 24   |
| Indiana               | 14   | 10   | 10   | 10   | 9    | 9    | 11   | 18   |
| Iowa                  | 14   | 14   | 15   | 16   | 17   | 18   | 19   | 22   |
| Kansas                | 25   | 21   | 24   | 23   | 25   | 26   | 28   | 31   |
| Kentucky              | 14   | 15   | 16   | 15   | 16   | 19   | 18   | 25   |
| Louisiana             | 19   | 17   | 18   | 16   | 17   | 18   | 21   | 23   |
| Maine                 | 20   | 20   | 16   | 16   | 17   | 20   | 24   | 28   |
| Maryland              | 18   | 18   | 16   | 15   | 15   | 14   | 15   | 25   |
| Massachusetts         | 25   | 25   | 24   | 24   | 23   | 24   | 25   | 39   |
| Michigan              | 25   | 19   | 18   | 17   | 18   | 19   | 20   | 29   |
| Minnesota             | 21   | 24   | 23   | 22   | 24   | 23   | 22   | 31   |
| Mississippi           | 14   | 12   | 13   | 10   | 10   | 10   | 11   | 16   |
| Missouri              | 14   | 11   | 13   | 13   | 14   | 14   | 15   | 17   |
| Montana               | 8    | 10   | 12   | 14   | 16   | 18   | 19   | 21   |
| Nebraska              | 25   | 26   | 27   | 28   | 29   | 30   | 31   | 34   |
| Nevada                | 13   | 13   | 17   | 15   | 24   | 22   | 26   | 30   |
| New Hampshire         | 25   | 25   | 24   | 23   | 23   | 23   | 25   | 42   |
| New Jersey            | 22   | 21   | 17   | 18   | 17   | 17   | 18   | 34   |
| New Mexico            | 8    | 7    | 8    | 8    | 8    | 8    | 9    | 14   |
| New York              | 30   | 31   | 27   | 27   | 28   | 29   | 31   | 41   |
| North Carolina        | 13   | 15   | 16   | 16   | 18   | 19   | 20   | 24   |
| North Dakota          | 20   | 19   | 20   | 21   | 21   | 22   | 24   | 32   |
| Northern Mariana Isl. | NA   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Ohio                  | 15   | 15   | 15   | 16   | 18   | 20   | 23   | 25   |
| Oklahoma              | 18   | 18   | 20   | 21   | 23   | 25   | 27   | 30   |
| Oregon                | 13   | 19   | 16   | 17   | 18   | 18   | 18   | 31   |
| Pennsylvania          | 23   | 23   | 20   | 19   | 20   | 20   | 21   | 29   |
| Puerto Rico           | *    | *    | *    | *    | *    | *    | 19   | 22   |
| Rhode Island          | 40   | 42   | 43   | 46   | 47   | 48   | 50   | 52   |
| South Carolina        | 13   | 13   | 15   | 14   | 16   | 17   | 19   | 22   |
| South Dakota          | 30   | 33   | 33   | 30   | 30   | 31   | 32   | 36   |
| Tennessee             | 16   | 17   | 18   | 15   | 16   | 17   | 18   | 25   |
| Texas                 | 19   | 16   | 16   | 17   | 16   | 17   | 18   | 21   |
| Utah                  | 23   | 22   | 24   | 21   | 22   | 20   | 21   | 26   |
| Vermont               | 14   | 12   | 12   | 12   | 12   | 12   | 13   | 23   |
| Virgin Islands        | *    | *    | *    | 0    | 0    | 0    | 0    | *    |
| Virginia              | 21   | 22   | 21   | 22   | 22   | 23   | 23   | 30   |
| Washington            | 14   | 14   | 14   | 14   | 15   | 14   | 16   | 30   |
| West Virginia         | 12   | 12   | 12   | 13   | 13   | 14   | 16   | 21   |
| Wisconsin             | 19   | 18   | 19   | 20   | 21   | 23   | 24   | 25   |
| Wyoming               | 11   | 12   | 14   | 15   | 17   | 18   | 19   | 20   |
| Nationwide            | 19 % | 18 % | 17 % | 17 % | 18 % | 18 % | 19 % | 27 % |

\* Data withheld to maintain firm confidentiality. NA is an abbreviation for not available.

<sup>1</sup> See footnote 1, Table 8.1.

Source: Industry Analysis & Technology Division, Wireline Competition Bureau, *Local Telephone Competition: Status as of December 31, 2008* (June 2010).

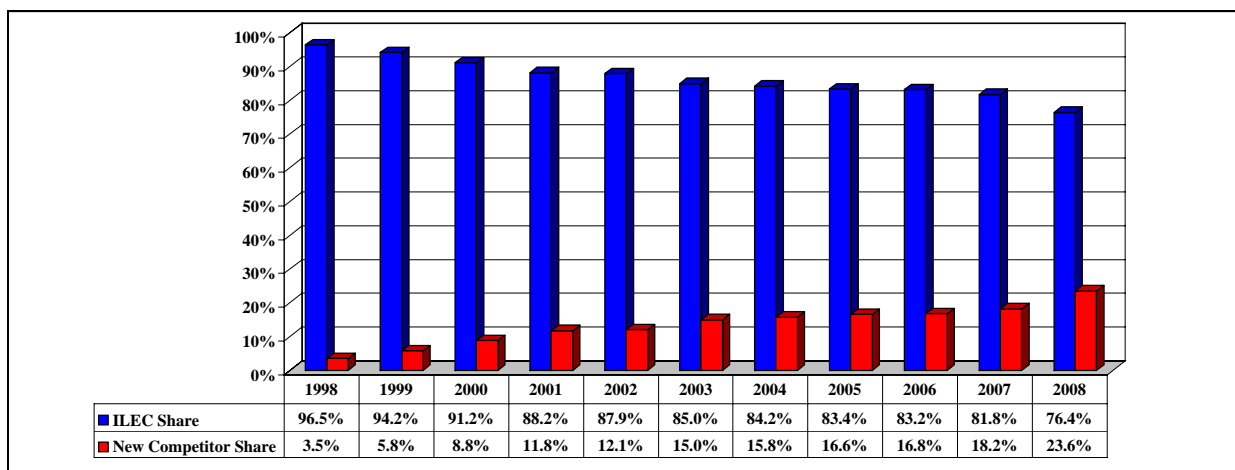


**Table 8.9**  
**Nationwide Local Service Revenues and New Competitors' Share<sup>1</sup>**  
**(Dollar Amounts Shown in Millions)**

|   | TRS & USF Data | FCC Form 499 Data |           |           |           |           |           |           |           |           |           |
|---|----------------|-------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|   | 1998           | 1999              | 2000      | 2001      | 2002      | 2003      | 2004      | 2005      | 2006      | 2007      | 2008      |
| <b>Number of Local Competitors<sup>1</sup></b>  |                |                   |           |           |           |           |           |           |           |           |           |
| RBOCs & Other Incumbent LECs  | 1,348          | 1,318             | 1,335     | 1,335     | 1,309     | 1,301     | 1,304     | 1,303     | 1,311     | 1,304     | 1,297     |
| CAPs & CLECs  | 212            | 298               | 479       | 511       | 542       | 601       | 690       | 734       | 985       | 774       | 813       |
| Local Resellers, Shared Tenant, Interconnected VoIP, Private Carriers, & Other Local All Other Carriers Reporting       | 64             | 96                | 128       | 158       | 186       | 172       | 228       | 885       | 649       | 538       | 649       |
| Local Exchange Service Revenues   | 133            | 143               | 229       | 168       | 176       | 179       | 186       | 188       | 211       | 206       | 210       |
| Total <sup>2</sup>  | 1,757          | 1,855             | 2,171     | 2,172     | 2,213     | 2,253     | 2,408     | 3,110     | 3,156     | 2,822     | 2,962     |
| <b>Local Service Revenues<sup>3</sup></b>   |                |                   |           |           |           |           |           |           |           |           |           |
| Incumbent LECs  |                |                   |           |           |           |           |           |           |           |           |           |
| Bell Operating Companies  | \$69,801       | \$76,586          | \$93,135  | \$93,388  | \$91,158  | \$85,558  | \$82,555  | \$81,032  | \$77,282  | \$71,507  | \$67,853  |
| Other Incumbent LECs  | 26,989         | 26,084            | 15,166    | 17,490    | 17,590    | 18,141    | 18,326    | 18,205    | 17,862    | 18,387    | 17,867    |
| Total   | 96,790         | 102,670           | 108,301   | 110,879   | 108,749   | 103,699   | 100,881   | 99,237    | 95,144    | 89,894    | 85,720    |
| Local Service Competitors   |                |                   |           |           |           |           |           |           |           |           |           |
| CAPs & CLECs  | 2,393          | 4,505             | 7,552     | 10,629    | 10,001    | 12,373    | 12,363    | 13,569    | 13,769    | 13,612    | 15,674    |
| Local Resellers, Shared Tenant, Private Carriers, & Other Local All Other Filers (Local Exchange Service Revenues Only) | 809            | 1,319             | 2,028     | 2,796     | 3,337     | 4,979     | 5,136     | 5,405     | 4,269     | 3,463     | 2,365     |
| Total   | 3,530          | 6,347             | 10,494    | 14,820    | 14,982    | 18,295    | 18,904    | 19,814    | 19,230    | 19,993    | 21,720    |
| Total   | \$100,320      | \$109,016         | \$118,795 | \$125,698 | \$123,730 | \$121,994 | \$119,785 | \$119,051 | \$114,374 | \$109,887 | \$107,440 |
| <b>Share of Local Service Revenues</b>  |                |                   |           |           |           |           |           |           |           |           |           |
| Incumbent LECs  |                |                   |           |           |           |           |           |           |           |           |           |
| Bell Operating Companies  | 69.6%          | 70.3%             | 78.4%     | 74.3%     | 73.7%     | 70.1%     | 68.9%     | 68.1%     | 67.6%     | 65.1%     | 60.5%     |
| Other Incumbent LECs  | 26.9%          | 23.9%             | 12.8%     | 13.9%     | 14.2%     | 14.9%     | 15.3%     | 15.3%     | 15.6%     | 16.7%     | 15.9%     |
| Total   | 96.5%          | 94.2%             | 91.2%     | 88.2%     | 87.9%     | 85.0%     | 84.2%     | 83.4%     | 83.2%     | 81.8%     | 76.4%     |
| Local Service Competitors   |                |                   |           |           |           |           |           |           |           |           |           |
| CAPs & CLECs  | 2.4%           | 4.1%              | 6.4%      | 8.5%      | 8.1%      | 10.1%     | 10.3%     | 11.4%     | 12.0%     | 12.4%     | 14.0%     |
| Local Resellers, Shared Tenant, Private Carriers, & Other Local Providers   | 0.3%           | 0.5%              | 0.8%      | 1.1%      | 1.3%      | 0.8%      | 1.2%      | 0.7%      | 1.0%      | 2.7%      | 3.3%      |
| All Other Filers  | 0.8%           | 1.2%              | 1.7%      | 2.2%      | 2.7%      | 4.1%      | 4.3%      | 4.5%      | 3.7%      | 3.2%      | 6.4%      |
| Total   | 3.5%           | 5.8%              | 8.8%      | 11.8%     | 12.1%     | 15.0%     | 15.8%     | 16.6%     | 16.8%     | 18.2%     | 23.6%     |
| <b>Total Telecommunications Revenues</b><br>(Including Payphone, Mobile, & Toll Service)                                |                |                   |           |           |           |           |           |           |           |           |           |
| Incumbent LECs  | \$108,234      | \$112,216         | \$116,158 | \$117,885 | \$114,999 | \$109,480 | \$105,496 | \$103,561 | \$99,997  | \$93,885  | \$89,732  |
| Local Competitors   | 4,034          | 6,508             | 10,945    | 14,781    | 15,309    | 16,857    | 17,126    | 18,568    | 19,473    | 21,690    | 26,440    |
| Ratio of ILEC Total Telecommunications Revenues to Local Competitor Total Telecommunications Revenues                   | 27 : 1         | 17 : 1            | 11 : 1    | 8 : 1     | 8 : 1     | 6 : 1     | 6 : 1     | 6 : 1     | 5 : 1     | 4 : 1     | 3 : 1     |

See notes on following page.

**Chart 8.5**  
**ILEC and New Local Competitor Share of Local Service Revenue**



## Notes to Table 8.9.

Note: Detail may not add to totals due to rounding. Data for 1993 through 1997 are available in prior year reports.

<sup>1</sup> Counts for incumbent LECs, CLECs, CAPs, local resellers, shared tenant service providers, private carriers and other local service providers are based on the numbers of filers actually reporting revenues. The category All Other Filers includes payphone, mobile service, and toll providers that reported local exchange service revenues. Non-incumbent LEC affiliates of incumbent LECs are classified as local service competitors, not as incumbent LECs.

<sup>2</sup> The total number of local service providers shown in Table 8.9 differs from the total fixed local service providers shown in Table 15.3 because the number shown in Table 8.9 represents filers that self identify as mobile or toll providers, and that report some end-user local exchange service revenues.

<sup>3</sup> For most categories of carriers for 1996, 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 four. 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.

Sources: Data filed on FCC Forms 431, 457, 499-Q and 499-A worksheets. See also: Industry Analysis and Technology Division, Wireline Competition Bureau, *Telecommunications Industry Revenues*.

**Table 8.10**  
**Telephone Number Porting Activity Since Wireless Porting Started<sup>1</sup>**

| Month                      | Landline to Landline<br>(thousands) | Landline to Mobile | Mobile to Mobile <sup>2</sup><br>(thousands) | Cellular/PCS to Landline | Total<br>(thousands) |
|----------------------------|-------------------------------------|--------------------|--|--------------------------|----------------------|
| 2003 November <sup>3</sup> | 561                                 | 2                  | 61   | 1                        | 625                  |
| December                   | 638                                 | 12                 | 756  | 1                        | 1,407                |
| 2004 January               | 809                                 | 24                 | 713  | 1                        | 1,547                |
| February                   | 711                                 | 65                 | 591  | 2                        | 1,369                |
| March                      | 776                                 | 79                 | 632  | 1                        | 1,488                |
| April                      | 718                                 | 49                 | 613  | 1                        | 1,381                |
| May                        | 756                                 | 73                 | 689  | 1                        | 1,519                |
| June                       | 789                                 | 165                | 873  | 2                        | 1,829                |
| July                       | 656                                 | 143                | 806  | 3                        | 1,608                |
| August <sup>4</sup>        | 786                                 | 95                 | 824  | *                        | 1,705                |
| September                  | 701                                 | 43                 | 787  | 1                        | 1,532                |
| October                    | 899                                 | 97                 | 738  | 1                        | 1,735                |
| November                   | 736                                 | 131                | 736  | 2                        | 1,605                |
| December                   | 692                                 | 86                 | 910  | 1                        | 1,689                |
| 2005 January               | 698                                 | 53                 | 808  | 2                        | 1,561                |
| February                   | 936                                 | 81                 | 735  | 1                        | 1,753                |
| March                      | 1,257                               | 74                 | 815  | 2                        | 2,148                |
| April                      | 959                                 | 55                 | 797  | 1                        | 1,812                |
| May                        | 892                                 | 56                 | 862  | 1                        | 1,811                |
| June                       | 1,064                               | 38                 | 1,153  | 2                        | 2,257                |
| July                       | 1,006                               | 62                 | 982  | 2                        | 2,052                |
| August                     | 1,203                               | 42                 | 933  | 2                        | 2,179                |
| September                  | 1,114                               | 31                 | 835  | 2                        | 1,982                |
| October                    | 991                                 | 37                 | 866  | 2                        | 1,896                |
| November                   | 1,023                               | 29                 | 826  | 2                        | 1,880                |
| December                   | 1,079                               | 22                 | 1,031  | 2                        | 2,135                |
| 2006 January               | 1,242                               | 37                 | 879  | 4                        | 2,162                |
| February                   | 1,347                               | 22                 | 807  | 3                        | 2,178                |
| March                      | 1,422                               | 19                 | 876  | 2                        | 2,319                |
| April                      | 1,095                               | 19                 | 747  | 2                        | 1,863                |
| May                        | 1,213                               | 46                 | 813  | 2                        | 2,073                |
| June                       | 1,010                               | 30                 | 862  | 2                        | 1,904                |
| July                       | 960                                 | 55                 | 866  | 1                        | 1,883                |
| August                     | 1,111                               | 61                 | 953  | 2                        | 2,127                |
| September                  | 941                                 | 36                 | 839  | 2                        | 1,818                |
| October                    | 1,049                               | 33                 | 823  | 2                        | 1,908                |
| November                   | 907                                 | 40                 | 812  | 3                        | 1,762                |
| December                   | 977                                 | 41                 | 993  | 2                        | 2,013                |
| 2007 January               | 902                                 | 31                 | 1,021  | 2                        | 1,956                |
| February                   | 864                                 | 45                 | 1,049  | 2                        | 1,960                |
| March                      | 1,035                               | 40                 | 1,155  | 2                        | 2,232                |
| April                      | 926                                 | 33                 | 1,112  | 2                        | 2,072                |
| May                        | 973                                 | 45                 | 1,083  | 3                        | 2,103                |
| June                       | 1,026                               | 82                 | 1,095  | 3                        | 2,207                |
| July                       | 1,288                               | 124                | 1,136  | 3                        | 2,550                |
| August                     | 1,440                               | 149                | 1,135  | 5                        | 2,728                |
| September                  | 1,235                               | 90                 | 1,012  | 3                        | 2,340                |
| October                    | 1,539                               | 93                 | 1,027  | 2                        | 2,661                |
| November                   | 1,302                               | 111                | 1,187  | 3                        | 2,603                |
| December                   | 2,500                               | 53                 | 1,274  | 2                        | 3,829                |
| 2008 January               | 1,293                               | 19 <sup>5</sup>    | 1,102  | 3                        | 2,418                |
| February                   | 1,220                               | 24                 | 1,079  | 2                        | 2,326                |
| March                      | 1,473                               | 19                 | 1,085  | 4                        | 2,582                |
| April                      | 1,420                               | 21                 | 987  | 3                        | 2,430                |
| May                        | 1,232                               | 22                 | 1,069  | 3                        | 2,326                |
| June                       | 1,176                               | 19                 | 1,113  | 2                        | 2,311                |
| July                       | 1,289                               | 39                 | 1,383  | 3                        | 2,715                |
| August                     | 1,410                               | 48                 | 1,410  | 4                        | 2,873                |
| September                  | 1,207                               | 47                 | 1,212  | 4                        | 2,471                |
| October                    | 1,332                               | 39                 | 1,258  | 5                        | 2,634                |
| November                   | 1,107                               | 59                 | 1,213  | 4                        | 2,382                |
| December                   | 1,257                               | 36                 | 1,513  | 4                        | 2,810                |
| 2009 January               | 1,112                               | 33                 | 1,334  | 4                        | 2,483                |
| February                   | 1,112                               | 33                 | 1,334  | 4                        | 2,483                |
| March                      | 1,262                               | 43                 | 1,389  | 5                        | 2,698                |
| April                      | 1,232                               | 38                 | 1,184  | 5                        | 2,459                |
| May                        | 1,295                               | 36                 | 1,203  | 5                        | 2,539                |
| June                       | 1,317                               | 39                 | 1,415  | 4                        | 2,775                |
| July                       | 1,333                               | 40                 | 1,445  | 5                        | 2,823                |
| August                     | 1,304                               | 44                 | 1,397  | 5                        | 2,750                |
| September                  | 1,336                               | 131                | 1,292  | 5                        | 2,764                |
| Cumulative Total           | 77,474                              | 3,811              | 70,345                                       | 180                      | 151,811              |

\* Indicates a number between 1 and 499.

<sup>1</sup> Monthly figures include numbers that were ported back to the original carrier, or where the subscriber with the ported number terminated service.

<sup>2</sup> Excludes significant porting activity between Cingular and AT&T Wireless following the closing of their merger in October 2004.

<sup>3</sup> Wireless porting started November 24, 2003. These figures include all ports during the month of November, which for ports from or to a wireless carrier, include a small number of test ports that happened prior to November 24.

<sup>4</sup> Due to a data problem, does not include numbers that were ported back to the original carrier, or where the subscriber with the ported number terminated service.

<sup>5</sup> In late 2007, some wireline carriers completed plans to transfer groups of numbers to the wireless carriers that were providing service to end users using those numbers. In many cases, the whole block could not be reassigned in the Local Exchange Routing Guide so number porting was used to effectuate the transfer.

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

**Table 8.11**  
**Telephone Numbers Remaining in the Porting Database at the End of Each Quarter**<sup>1</sup>

| Year | Quarter            | Landline to<br>Landline | Landline to<br>Mobile | Mobile to<br>Mobile <sup>2</sup> | Mobile to<br>Landline | Total       |
|------|--------------------|-------------------------|-----------------------|----------------------------------|-----------------------|-------------|
|      |                    | (thousands)             | (thousands)           | (thousands)                      | (thousands)           | (thousands) |
| 1999 | Second             | 1,840                   | *                     | *                                | *                     | 1,840       |
|      | Third              | 2,658                   | *                     | *                                | *                     | 2,658       |
|      | Fourth             | 3,854                   | *                     | *                                | *                     | 3,854       |
| 2000 | First              | 5,029                   | *                     | *                                | *                     | 5,029       |
|      | Second             | 5,781                   | *                     | *                                | *                     | 5,781       |
|      | Third              | 7,595                   | *                     | *                                | *                     | 7,595       |
|      | Fourth             | 9,146                   | *                     | *                                | *                     | 9,146       |
| 2001 | First              | 10,567                  | *                     | *                                | *                     | 10,567      |
|      | Second             | 12,310                  | *                     | *                                | *                     | 12,310      |
|      | Third              | 14,610                  | *                     | *                                | *                     | 14,610      |
|      | Fourth             | 15,519                  | *                     | *                                | *                     | 15,519      |
| 2002 | First              | 16,810                  | *                     | *                                | *                     | 16,810      |
|      | Second             | 18,210                  | *                     | *                                | *                     | 18,210      |
|      | Third              | 19,862                  | *                     | *                                | *                     | 19,862      |
|      | Fourth             | 21,449                  | *                     | *                                | *                     | 21,449      |
| 2003 | First              | 22,781                  | *                     | *                                | *                     | 22,781      |
|      | Second             | 23,723                  | *                     | *                                | *                     | 23,723      |
|      | Third              | 24,796                  | *                     | *                                | *                     | 24,796      |
|      | Fourth             | 25,869                  | 16                    | 795                              | 2                     | 26,682      |
| 2004 | First              | 28,462                  | 173                   | 2,686                            | 3                     | 31,324      |
|      | Second             | 28,371                  | 406                   | 4,635                            | 4                     | 33,417      |
|      | Third              | 29,396                  | 667                   | 6,874                            | 9                     | 36,945      |
|      | Fourth             | 30,607                  | 832                   | 9,041                            | 11                    | 41,491      |
| 2005 | First              | 32,399                  | 1,001                 | 10,860                           | 16                    | 44,276      |
|      | Second             | 34,136                  | 1,092                 | 12,926                           | 19                    | 48,173      |
|      | Third              | 35,959                  | 1,201                 | 14,327                           | 23                    | 51,510      |
|      | Fourth             | 37,607                  | 1,226                 | 16,101                           | 29                    | 54,963      |
| 2006 | First              | 40,194                  | 1,272                 | 17,577                           | 34                    | 59,077      |
|      | Second             | 42,130                  | 1,333                 | 19,032                           | 42                    | 62,538      |
|      | Third              | 43,743                  | 1,407                 | 20,509                           | 46                    | 65,705      |
|      | Fourth             | 45,149                  | 1,480                 | 21,920                           | 50                    | 68,600      |
| 2007 | First              | 46,761                  | 1,541                 | 23,518                           | 50                    | 71,870      |
|      | Second             | 48,396                  | 1,659                 | 25,399                           | 54                    | 75,508      |
|      | Third <sup>3</sup> | 50,222                  | 2,057                 | 27,068                           | 116                   | 79,463      |
|      | Fourth             | 53,168                  | 2,031                 | 29,065                           | 120                   | 84,384      |
| 2008 | First              | 55,095                  | 2,075                 | 30,605                           | 127                   | 87,902      |
|      | Second             | 56,114                  | 2,067                 | 32,024                           | 153                   | 90,359      |
|      | Third              | 57,217                  | 2,175                 | 34,089                           | 156                   | 93,637      |
|      | Fourth             | 58,924                  | 2,255                 | 35,851                           | 171                   | 97,202      |
| 2009 | First              | 60,609                  | 2,353                 | 37,663                           | 177                   | 100,801     |
|      | Second             | 62,508                  | 2,433                 | 39,221                           | 182                   | 104,344     |
|      | Third              | 64,333                  | 2,539                 | 40,522                           | 181                   | 107,576     |

\* Wireless portability started November 24, 2003. A small number of test ports were conducted before then.

<sup>1</sup> Numbers ported because customer changed carriers. The database contains the date when the telephone number record was last updated. For most telephone numbers, this was the most recent port. For those telephone numbers affected by area code changes, however, the date refers to when the record was updated to reflect the new area code. See the text for a fuller discussion.

<sup>2</sup> Excludes significant porting activity between Cingular and AT&T Wireless following the closing of their merger.

<sup>3</sup> Starting with the July 2007 data, the method of determining whether a port came from a wireline or wireless carrier changed. For numbers that have been ported multiple times, the original carrier is now used to determine the porting carrier's type. Previously, the porting carrier's type was based on the most recent port.

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

**Table 8.12**  
**Numbers in the Porting Database by Quarter in Which They Were Most Recently Ported<sup>1</sup>**  
**March 31, 2009<sup>2</sup>**

| Ported During<br>Year | Quarter | Landline to<br>Landline | Landline to<br>Mobile | Mobile to<br>Mobile | Mobile to<br>Landline |
|-----------------------|---------|-------------------------|-----------------------|---------------------|-----------------------|
|                       |         | (thousands)             |                       | (thousands)         |                       |
| 1998                  | First   | 0 <sup>3</sup>          | *                     | *                   | *                     |
|                       | Second  | 3                       | *                     | *                   | *                     |
|                       | Third   | 36                      | *                     | *                   | *                     |
|                       | Fourth  | 110                     | *                     | *                   | *                     |
| 1999                  | First   | 192                     | *                     | *                   | *                     |
|                       | Second  | 302                     | *                     | *                   | *                     |
|                       | Third   | 313                     | *                     | *                   | *                     |
|                       | Fourth  | 396                     | *                     | *                   | *                     |
| 2000                  | First   | 422                     | *                     | *                   | *                     |
|                       | Second  | 483                     | *                     | *                   | *                     |
|                       | Third   | 602                     | *                     | *                   | *                     |
|                       | Fourth  | 672                     | *                     | *                   | *                     |
| 2001                  | First   | 594                     | *                     | *                   | *                     |
|                       | Second  | 754                     | *                     | *                   | *                     |
|                       | Third   | 770                     | *                     | *                   | *                     |
|                       | Fourth  | 957                     | *                     | *                   | *                     |
| 2002                  | First   | 792                     | *                     | *                   | *                     |
|                       | Second  | 892                     | *                     | *                   | *                     |
|                       | Third   | 1,055                   | *                     | *                   | *                     |
|                       | Fourth  | 890                     | *                     | *                   | *                     |
| 2003                  | First   | 806                     | *                     | *                   | *                     |
|                       | Second  | 974                     | *                     | *                   | *                     |
|                       | Third   | 971                     | *                     | *                   | *                     |
|                       | Fourth  | 954                     | 8                     | 321                 | 2                     |
| 2004                  | First   | 1,302                   | 110                   | 711                 | 3                     |
|                       | Second  | 1,313                   | 99                    | 827                 | 8                     |
|                       | Third   | 1,325                   | 159                   | 992                 | 7                     |
|                       | Fourth  | 1,275                   | 101                   | 1,033               | 5                     |
| 2005                  | First   | 1,543                   | 78                    | 999                 | 4                     |
|                       | Second  | 1,643                   | 69                    | 1,096               | 3                     |
|                       | Third   | 1,857                   | 90                    | 1,272               | 4                     |
|                       | Fourth  | 1,681                   | 61                    | 1,305               | 13                    |
| 2006                  | First   | 2,442                   | 51                    | 1,293               | 4                     |
|                       | Second  | 1,981                   | 65                    | 1,350               | 4                     |
|                       | Third   | 1,771                   | 117                   | 1,569               | 5                     |
|                       | Fourth  | 1,760                   | 97                    | 1,635               | 5                     |
| 2007                  | First   | 1,909                   | 93                    | 1,713               | 5                     |
|                       | Second  | 2,156                   | 134                   | 1,867               | 4                     |
|                       | Third   | 2,739                   | 249                   | 2,230               | 24                    |
|                       | Fourth  | 4,292                   | 223                   | 2,556               | 9                     |
| 2008                  | First   | 3,018                   | 70 <sup>4</sup>       | 2,451               | 8                     |
|                       | Second  | 3,065                   | 76                    | 2,452               | 7                     |
|                       | Third   | 3,189                   | 129                   | 3,290               | 7                     |
|                       | Fourth  | 3,207                   | 138                   | 3,307               | 8                     |
| 2009                  | First   | 3,052                   | 127                   | 2,974               | 8                     |
|                       | Second  | 3,335                   | 127                   | 3,052               | 7                     |
|                       | Third   | 3,572                   | 236                   | 3,645               | 9                     |

\* Wireless portability started November 24, 2003. A small number of test ports were conducted before then. NeuStar supplies information indicating which carriers are wireless and which are wireline. Occasionally, a carrier that had been identified as a wireline carrier is later identified as a wireless carrier, and vice-versa.

<sup>1</sup> Numbers ported because customer changed carriers.

<sup>2</sup> The local number portability database was designed solely for the purpose of routing calls. As such, it retains only the most recent porting activity for any given number. So if a consumer ports a number from Carrier A to Carrier B, and later the consumer then ports the number from Carrier B to Carrier C, the database will not reflect the original port from Carrier A to Carrier B. Also, numbers that revert back to the original carrier (either because the customer ports the number back to the original carrier or because the customer discontinues service with that number) are dropped from the database. Lastly, area code splits can make a number appear to be ported later than it actually was.

<sup>3</sup> Number is between 0 and 499.

<sup>4</sup> In late 2007, some wireline carriers completed plans to transfer groups of numbers to the wireless carriers that were providing service to end users using those numbers. In many cases, the whole block could not be reassigned for routing purposes in the Local Exchange Routing Guide (LERG) so number porting was used to effectuate the transfer.

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

## **9 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 1,900 toll companies now offer long distance service of which more than 1,400 are wireline carriers. 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.

### **1. Toll Revenues**

In 2008, telecommunications companies generated \$59.9 billion in toll revenues. These include toll revenues from long distance carriers, wireless toll from wireless carriers, and toll revenues from local exchange carriers. These revenues are shown in Table 9.1. Table 9.1 also shows the share of toll revenues by the five largest and the next twenty largest providers. The trend is for smaller firms to have a greater share of industry toll revenues.

Toll calls can be divided into three jurisdictional categories - intrastate calls, domestic interstate calls, and international calls. The revenues, from 1980 through 2007, for each of the three jurisdictional categories are shown in Table 9.2.

Toll revenues also can be divided between residential and nonresidential services, as in Table 9.3. In 2007, residential customers generated 30% of all end-user toll revenues.

### **2. Number of Companies**

The number and types of carriers reporting long distance revenues are shown in Table 9.4. The Telecommunications Reporting Worksheet (FCC Form 499-A) requires each filer to select up to five of 20 categories that best describe its primary lines 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. Additional information on the FCC Form 499-A has been used to categorize some filers as Voice Over Internet Protocol (VoIP) Toll providers and as Audio Bridge Service Providers.

In 2008, 1,418 filers were categorized using one of the above toll service provider categories.

Prior to 1986, carrier identification codes (CICs) provided information on the number of firms seeking to acquire certain types of interconnecting arrangements with local telephone companies. 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. The number of codes assigned over time can be found in the long distance section of the May 2004 *Trends* report which can be accessed at [www.fcc.gov/wcb/stats.html](http://www.fcc.gov/wcb/stats.html).

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](http://www.nanpa.com).

### **3. Long Distance Market Shares**

A generation ago, before the breakup of the Bell System, AT&T's local telephone companies provided local service to most of the United States. 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), i.e., they were precluded from offering toll service that crossed LATA boundaries. As a result, two separate and distinct toll markets emerged.

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

Over time, the distinctions between the two markets have become blurred as customers acquired the ability to select among competing carriers for their intraLATA calls as well as their interLATA calls. As discussed in greater detail in the following section, the 1996 Telecommunications Act established a procedure for Bell companies to offer in-region, interLATA long distance service after complying with certain preconditions to open their own markets.

Bill Harvesting® data collected by TNS Telecoms (TNS) are used to calculate residential market shares. Further information on TNS and its Bill Harvesting® data can be found in Section 14 and in Appendix B. Table 9.5, which is based on this information, presents nationwide market shares of households, and directly dialed intraLATA and interLATA minutes from 1995 to 2008. Chart 9.2 shows the residential household market shares for the largest carriers for 2008. Table 9.6 presents market shares by region for 2008. Chart 9.3 shows residential market shares for the largest carriers for the northeast and southwest regions for 2008.

#### **4. Section 271 Applications**

Section 271 of the Communications Act required 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 RBOC had to demonstrate that it satisfied the 14-point competitive checklist, that it complied with the separate affiliate and nondiscrimination requirements of section 272, and that the requested authorization was consistent with the public interest, convenience, and necessity. After a section 271 application was filed with the Commission, the Commission had 90 days to determine whether the RBOC had taken the statutorily required steps to open its local telecommunications markets to competition.

A RBOC applicant had to demonstrate either that: A) one or more unaffiliated competing providers of local telephone service to residential and business subscribers was connected to the RBOC's network, and that such local telephone service was 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 had requested to connect to a RBOC's network, the RBOC had 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").

On December 22, 1999, the first regional Bell operating company's application (Bell Atlantic, now known as Verizon) was approved by the Commission to provide in-region interLATA service in the state of New York. On December 3, 2003, the final Bell operating company's application (Qwest) was approved to provide in-region interLATA service in the state of Arizona. Table 9.7 shows the states in which the BOCs filed section 271 applications, the Bell operating company's name, and the application's resolution date.

The companies approved must continue to comply with the section 271 requirements. The Commission has a number of enforcement tools at its disposal, including imposing penalties or suspension of approval.



**Table 9.1 -- Toll Service Revenues <sup>1/</sup> by Provider <sup>2/</sup>**  
**(Revenue Amounts Shown in Millions)**

|   | 2000  | 2001     | 2002     | 2003     | 2004     | 2005     | 2006     | 2007     | 2008     |
|---|---|----------|----------|----------|----------|----------|----------|----------|----------|
| <b>Totals for the five companies that report the most toll revenue</b>        |   |          |          |          |          |          |          |          |          |
| Total Toll Revenue  | \$81,546  | \$73,486 | \$59,864 | \$52,172 | \$46,511 | \$46,599 | \$45,015 | \$42,907 | \$37,070 |
| Percentage of total U.S. End User Toll Revenue                                | 74.4%   | 74.0%    | 71.5%    | 67.6%    | 65.3%    | 67.3%    | 69.9%    | 66.2%    | 61.9%    |
| <b>Totals for the next twenty companies that report the most toll revenue</b> |   |          |          |          |          |          |          |          |          |
| Revenue   | \$17,024  | \$15,122 | \$13,808 | \$13,837 | \$13,534 | \$10,683 | \$7,991  | \$8,753  | \$8,867  |
| Percentage of total   | 15.5%   | 15.2%    | 16.5%    | 17.9%    | 19.0%    | 15.4%    | 12.4%    | 13.5%    | 14.8%    |
| <b>Totals for all other companies</b>   |   |          |          |          |          |          |          |          |          |
| Revenue   | \$11,045  | \$10,722 | \$10,026 | \$11,179 | \$11,168 | \$11,968 | \$11,373 | \$13,142 | \$13,973 |
| Percentage of total   | 10.1%   | 10.8%    | 12.0%    | 14.5%    | 15.7%    | 17.3%    | 17.7%    | 20.3%    | 23.3%    |
| <b>Totals for all companies</b>   |   |          |          |          |          |          |          |          |          |
| Total Service Revenue   | \$109,615   | \$99,053 | \$83,697 | \$77,188 | \$71,214 | \$69,250 | \$64,379 | \$64,802 | \$59,910 |
| Companies reporting toll service revenue                                      | 1,401   | 1,715    | 1,668    | 1,835    | 2,173    | 2,117    | 1,811    | 2,058    | 2,393    |
| <b>2000</b>   | <b>Five companies reporting the most toll service revenue:</b><br>AT&T Communications; Qwest Services Corp.; SBC Communications, Inc.; Sprint Corp.; WorldCom, Inc.<br><br><b>Next twenty:</b><br>ALLTEL Corp.; Atlas Telecommunications S.A.; BCE, Inc. (Bell Canada Enterprises); BellSouth Corporation; Broadwing, Inc.; Cable & Wireless Holdings, Inc.; Global Crossing, Ltd.; IDS Telecom, LLC; IDT Corp.; Intermedia Communications, Inc.; McLeod USA Inc.; Pacific Gateway Exchange, Inc.; Primus Telecommunications Group, Inc.; Star Telecommunications; Talk.com, Inc.; VarTec Telecom, Inc.; Verizon; Viatel, Inc.; Williams Communications Group, Inc.; World Access, Inc.                     |          |          |          |          |          |          |          |          |
| <b>2001</b>   | <b>Five companies reporting the most toll service revenue:</b><br>AT&T Communications; SBC Communications, Inc.; Sprint Corp.; Verizon Communications, Inc.; WorldCom, Inc.<br><br><b>Next twenty:</b><br>ALLTEL Corp.; BellSouth Corp.; Broadwing, Inc.; Cable & Wireless USA, Inc.; Citizens Communication; Empresa Nacional de Telecomunicaciones SSA; Global Crossing; IDT Corp.; ITC^DeltaCom, Inc.; McLeodUSA, Inc.; Network Plus Corp.; Nextel Communications, Inc.; Pacific Gateway Exchange, Inc.; Primus Telecommunications Group, Inc.; Qwest Services Corp.; Star Telecommunications, Inc.; Touch America Holdings, Inc.; VarTec Telecom; WilTel Communications Group, Inc.; World Access, Inc. |          |          |          |          |          |          |          |          |
| <b>2002</b>   | <b>Five companies reporting the most toll service revenue:</b><br>AT&T Communications; SBC Communications, Inc.; Sprint Corp.; Verizon Communications, Inc.; WorldCom, Inc.<br><br><b>Next twenty:</b><br>ALLTEL Corp.; BellSouth Corp.; Broadwing, Inc.; Cable & Wireless USA, Inc.; CenturyTel, Inc.; Cincinnati Bell, Inc.; Citizens Communications; Comcast Corp.; Empresa Nacional de Telecomunicaciones SSA; Evercom, Inc.; Global Crossing North American Holdings, Inc.; IDT Corp.; ITC^DeltaCom, Inc.; McLeod USA Inc.; Qwest Services Corp.; Telco Group, Inc.; Touch America Holdings, Inc.; VarTec Telecom, Inc.; WilTel Communications Group, Inc.; XO Communications, Inc.                    |          |          |          |          |          |          |          |          |
| <b>2003</b>   | <b>Five companies reporting the most toll service revenue:</b><br>AT&T Communications; MCI, Inc.; SBC Communications, Inc.; Sprint Corp.; Verizon Communications, Inc.<br><br><b>Next twenty:</b><br>ALLTEL Corp.; BellSouth Corp.; Broadwing Corp.; CenturyTel, Inc.; Cincinnati Bell, Inc.; Citizens Communications; Evercom, Inc.; Global Crossing North America, Inc.; IDT Corporation; ITC^DeltaCom, Inc.; McLeod USA Inc.; Primus Telecommunications Group, Inc.; Qwest Services Corp.; Telco Group, Inc.; Teleglobe Netherlands Holdings B.V.; Telenor Global Services AS; T-Mobile USA, Inc.; VarTec Telecom, Inc.; WilTel Communications Group, Inc.; XO Communications, Inc.                      |          |          |          |          |          |          |          |          |

**Table 9.1 -- Toll Service Revenues <sup>1/</sup> by Provider <sup>2/</sup> -- Continued**

|             |  |
|-------------|--|
| <b>2004</b> | <p><b>Five companies reporting the most toll service revenue:</b><br/>AT&amp;T Corp.; SBC Communications, Inc.; Sprint Corporation; Verizon Communications Inc.; WorldCom, Inc.;</p> <p><b>Next twenty:</b><br/>ALLTEL Corporation; BellSouth Corporation; Broadwing Communications, LLC; CenturyTel, Inc.; Citizens Communications Company; Deutsche Telekom AG; Evercom, Inc.; Excel Telecommunications, Inc.; Global Crossing North America, Inc.; GTE Corporation; IDT Corporation; ITC^DeltaCom, Inc.; McLeod USA Inc.; Primus Telecommunications Group, Inc.; Qwest Services Corp.; Telco Group, Inc. (Really Verizon Wireless?); Teleglobe Netherlands Holdings B.V.; Telenor Global Services AS; VarTec Telecom, Inc. ; WilTel Communications Group, Inc.;</p> |
| <b>2005</b> | <p><b>Five companies reporting the most toll service revenue:</b><br/>AT&amp;T, Inc.; Qwest Services Corp.; SBC Long Distance, LLC; Sprint Nextel Corporation; Verizon Communications, Inc.;</p> <p><b>Next twenty:</b><br/>ALLTEL Corporation; BellSouth Corporation; Broadwing Corporation; BT United States LLC; CenturyTel, Inc.; Deutsche Telekom AG; Dialaround Enterprises, Inc.; Epana Networks; Global Crossing North America, Inc.; IDT Corporation; ITC DeltaCom, Inc.; Level 3 Financing, Inc.; Locus Telecommunications, Inc.; New Cingular Wireless Services, Inc. ; Pacific Gateway Exchange, Inc.; Reliance Infocomm Ltd.; T-NETIX, INC.; VarTec Telecom, Inc.; Videsh Sanchar Nigam Limited; WilTel Communications Group, Inc.;</p>                   |
| <b>2006</b> | <p><b>Five companies reporting the most toll service revenue:</b><br/>AT&amp;T Inc.; Level 3 Financing, Inc.; Qwest Services Corp.; Sprint Nextel Corporation; Verizon Communications, Inc.;</p> <p><b>Next twenty:</b><br/>ALLTEL Corporation; CenturyTel, Inc.; Comcast Corporation; CoxCom, Inc.; Deutsche Telekom AG; Embarq Corporation; Epana Networks; Global Crossing ; Gtel Holdings, Inc.; iBasis, Inc.; IDT Telecom, Inc.; Locus Telecommunications, Inc.; Reliance Infocomm Ltd.; Telecom Corporation of New Zealand LTD; T-NETIX, INC.; Touch-Tel USA, LLC; VarTec Telecom, Inc.; Videsh Sanchar Nigam Limited; Windstream Corp.; XO Communications, Inc.;</p>  |
| <b>2007</b> | <p><b>Five companies reporting the most toll service revenue:</b><br/>AT&amp;T, Inc; Level 3 Financing, Inc.; Qwest Services Corp.; Sprint Nextel Corporation; Verizon Communications, Inc.;</p> <p><b>Next twenty:</b><br/>Atlantis Holdings; CenturyTel, Inc.; Comcast Corporation; CoxCom, Inc.; Deutsche Telekom AG; Dollar Phone Corp.; Embarq Corporation; Epana Networks; Global Crossing ; Gtel Holdings, Inc.; iBasis, Inc.; IDT Telecom, Inc.; Locus Telecommunications, Inc.; Reliance Infocomm Ltd.; STi Prepaid, LLC; Telecom Corporation of New Zealand LTD; T-NETIX, INC.; Touch-Tel USA, LLC; Videsh Sanchar Nigam Limited; Windstream Corp.;</p>  |
| <b>2008</b> | <p><b>Five companies reporting the most toll service revenue:</b><br/>AT&amp;T, Inc; Level 3 Financing, Inc.; Qwest Services Corp.; Sprint Nextel Corporation; Verizon Communications, Inc.;</p> <p><b>Next twenty:</b><br/>BT United States LLC; CenturyTel, Inc.; Comcast Corporation; CoxCom, Inc.; Deutsche Telekom AG; Dollar Phone Corp.; Embarq Corporation; Epana Networks; Global Crossing ; Gtel Holdings, Inc.; iBasis, Inc.; IDT Telecom, Inc.; Locus Telecommunications, Inc.; MetroPCS Communications, Inc.; Reliance Infocomm Ltd.; STi Prepaid, LLC; Telecom Corporation of New Zealand LTD; T-NETIX, INC.; Videsh Sanchar Nigam Limited; Windstream Corp.;</p>  |

1/ Toll revenues consist of carrier's carrier revenues reported on the FCC Form 499-A Lines 310 through 314; end user revenues reported on Lines 404.2 and 411 through 417; and a portion of USF pass-through revenue reported on Line 403.

2/ Filings of affiliated companies have been consolidated to create this table. Companies are treated as affiliated if they were known to be affiliated on December 31. The annual *Telecommunications Provider Locator* reports are one source of information showing which filers are treated as affiliates. For the purpose of this table, revenues for Cingular were divided between Bell South and SBC in proportion to their ownership interest. Revenues for CellCo Partnership historically were consolidated with Verizon.

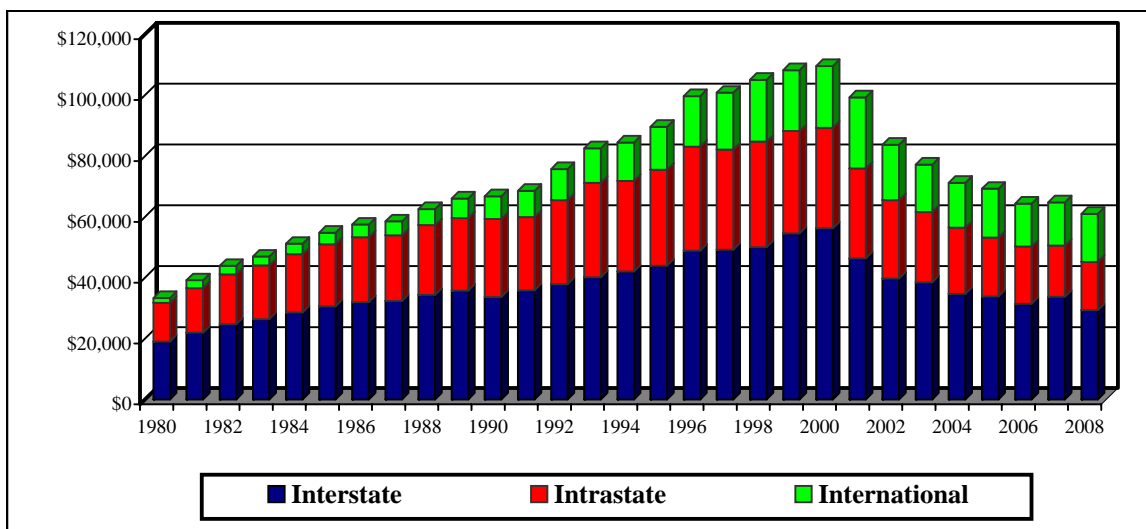
Source: Data filed on FCC Form 499A and press reports. See also: Industry Analysis and Technology Division, Wireline Competition Bureau, *Telecommunications Provider Locator*.

**Table 9.2**  
**Intrastate, Interstate, and International Toll Revenues**  
(Dollar Amounts Shown in Millions)

| Year | Toll Revenues |            |               |                     | End-User Revenues |            |               |                     |
|------|---------------|------------|---------------|---------------------|-------------------|------------|---------------|---------------------|
|      | Intrastate    | Interstate | International | Total Toll Revenues | Intrastate        | Interstate | International | Total Toll Revenues |
| 1980 | \$12,700      | \$19,049   | \$1,586       | \$33,335            |                   |            | \$1,475       |                     |
| 1981 | 14,632        | 21,948     | 2,599         | 39,180              |                   |            | 2,485         |                     |
| 1982 | 16,457        | 24,685     | 2,777         | 43,919              |                   |            | 2,651         |                     |
| 1983 | 17,612        | 26,418     | 2,940         | 46,970              |                   |            | 2,802         |                     |
| 1984 | 19,077        | 28,616     | 3,463         | 51,156              |                   |            | 3,309         |                     |
| 1985 | 20,408        | 30,613     | 3,794         | 54,815              |                   |            | 3,636         |                     |
| 1986 | 21,340        | 32,010     | 4,119         | 57,468              |                   |            | 3,947         |                     |
| 1987 | 21,563        | 32,345     | 4,611         | 58,519              |                   |            | 4,436         |                     |
| 1988 | 22,900        | 34,350     | 5,350         | 62,600              |                   |            | 5,146         |                     |
| 1989 | 23,850        | 35,775     | 6,399         | 66,024              |                   |            | 6,340         |                     |
| 1990 | 25,622        | 33,678     | 7,492         | 66,792              |                   |            | 7,390         |                     |
| 1991 | 24,090        | 35,837     | 8,631         | 68,558              |                   |            | 8,480         |                     |
| 1992 | 27,667        | 37,871     | 10,207        | 75,744              |                   |            | 9,810         |                     |
| 1993 | 30,950        | 40,212     | 11,364        | 82,525              |                   |            | 10,901        |                     |
| 1994 | 29,815        | 42,028     | 12,635        | 84,478              |                   |            | 12,100        |                     |
| 1995 | 31,519        | 43,955     | 14,155        | 89,629              |                   |            | 13,144        |                     |
| 1996 | 34,181        | 48,903     | 16,607        | 99,691              |                   |            | 15,023        |                     |
| 1997 | 32,859        | 49,247     | 18,688        | 100,793             | \$30,144          | \$43,640   | 15,409        | \$89,193            |
| 1998 | 34,699        | 50,000     | 20,356        | 105,055             | 30,800            | 44,153     | 16,654        | 91,607              |
| 1999 | 33,600        | 54,590     | 20,056        | 108,246             | 29,976            | 47,598     | 15,737        | 93,311              |
| 2000 | 33,030        | 56,225     | 20,361        | 109,615             | 28,501            | 42,980     | 16,286        | 87,767              |
| 2001 | 29,530        | 46,389     | 23,381        | 99,301              | 25,891            | 36,660     | 16,751        | 79,302              |
| 2002 | 25,772        | 39,725     | 18,200        | 83,697              | 22,122            | 31,707     | 13,392        | 67,222              |
| 2003 | 23,160        | 38,501     | 15,527        | 77,188              | 18,889            | 28,088     | 12,006        | 58,983              |
| 2004 | 21,748        | 34,664     | 14,802        | 71,214              | 17,762            | 27,487     | 10,262        | 55,511              |
| 2005 | 19,397        | 33,839     | 16,014        | 69,250              | 15,489            | 26,811     | 10,238        | 52,538              |
| 2006 | 18,791        | 31,420     | 14,168        | 64,379              | 15,415            | 25,164     | 8,699         | 49,278              |
| 2007 | 16,874        | 33,728     | 14,200        | 64,802              | 13,535            | 27,237     | 7,937         | 48,709              |
| 2008 | 15,962        | 29,292     | 15,734        | 60,988              | 13,223            | 25,021     | 8,121         | 46,365              |

Source: Industry Analysis and Technology Division, Wireline Competition Bureau, *Telecommunications Industry Revenues*, International Bureau, *Trends in the U.S. International Telecommunications Industry* and *International Traffic Data*, 47 CFR § 43.21(c) data through 1991. Through 1996, some breakouts based on staff estimates.

**Chart 9.1**  
**Toll Revenues by Market Segment**  
(Dollar Amounts Shown in Billions)



**Table 9.3**  
**End-User Toll Revenues**  
**(Dollar Amounts Shown in Millions)**

| Year | Residential<br>Toll as a<br>Percentage<br>of all End-<br>User Toll<br>Revenues <sup>1/</sup> | End-User<br>Toll<br>Revenues <sup>2/</sup> | End-User Toll Revenues<br>By Customer Type |          |
|------|--|--|--|----------|
|      |  |  | Residential                                | Other    |
| 1995 | 48 %   | \$75,638                                   | \$36,425                                   | \$39,213 |
| 1996 | 47   | 82,616                                     | 39,187                                     | 43,430   |
| 1997 | 47   | 89,193                                     | 41,766                                     | 47,427   |
| 1998 | 45   | 91,607                                     | 41,401                                     | 50,205   |
| 1999 | 44   | 93,311                                     | 40,784                                     | 52,527   |
| 2000 | 40   | 87,767                                     | 35,440                                     | 52,327   |
| 2001 | 37   | 79,302                                     | 29,584                                     | 49,718   |
| 2002 | 38   | 67,222                                     | 25,284                                     | 41,938   |
| 2003 | 39   | 58,983                                     | 23,190                                     | 35,793   |
| 2004 | 37   | 55,511                                     | 20,329                                     | 35,182   |
| 2005 | 33   | 52,538                                     | 17,588                                     | 34,950   |
| 2006 | 31   | 49,278                                     | 15,364                                     | 33,914   |
| 2007 | 30   | 48,709                                     | 14,808                                     | 33,901   |
| 2008 | 30   | 46,365                                     | 13,969                                     | 32,396   |

Note: Data for all years were revised.

1/ Staff estimates are based on market segment data in carrier annual reports to shareholders; average household payments to long distance carriers shown in Table 3.2; and residential toll revenues published by the U.S. Census Bureau in the *Service Annual Survey*: Table 3.3.7; Bureau Of Economic Analysis, *National Economic Accounts, Table 2.4.5U. Personal Consumption Expenditures by Type of Product*; and previous reports.

2/ Toll services are telecommunications services that enable customers to communicate outside of local exchange calling areas. Toll service revenues include revenues from ordinary long distance, subscriber toll-free, operator service, prepaid calling card, long distance private line, satellite services, and other long distance services. End-user toll revenues consist of toll service revenues from end-user customers, governments, non-profits, *de minimis* resellers, and any other customer that does not contribute directly to universal service.

Source: End-user toll revenues for 1997 through 2008 are taken from Industry Analysis and Technology Division, Wireline Competition Bureau, *Telecommunications Industry Revenues* current and previous editions. The breakout between Residential and Other, and total end-user toll revenues for 1995 and 1996, are staff estimates.

**Table 9.4**  
**Number of Toll Service Providers**

|   | TRS & USF Data |              | FCC Form 499-A Data |              |              |              |              |              |              |              |              |              |
|---|----------------|--------------|---------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|   | 1997           | 1998         | 1999                | 2000         | 2001         | 2002         | 2003         | 2004         | 2005         | 2006         | 2007         | 2008         |
| <b>Carriers That Provide Toll Service 1/</b>  |                |              |                     |              |              |              |              |              |              |              |              |              |
| Toll Carriers   |                |              |                     |              |              |              |              |              |              |              |              |              |
| Interexchange Carriers (IXCs)   | 151            | 171          | 178                 | 212          | 233          | 229          | 232          | 257          | 262          | 270          | 250          | 272          |
| Other Toll Carriers   |                |              |                     |              |              |              |              |              |              |              |              |              |
| Operator Service Providers (OSPs)   | 32             | 24           | 15                  | 20           | 19           | 18           | 17           | 19           | 23           | 24           | 23           | 24           |
| Pre-paid Calling Card Providers   | 18             | 20           | 18                  | 23           | 27           | 27           | 50           | 67           | 69           | 85           | 93           | 127          |
| Satellite Service Providers   | 13             | 13           | 17                  | 25           | 34           | 33           | 40           | 40           | 40           | 39           | 41           | 42           |
| Toll Resellers  | 340            | 388          | 406                 | 493          | 558          | 574          | 642          | 751          | 721          | 744          | 693          | 727          |
| VoIP Toll Providers   |                |              |                     |              |              |              |              |              |              |              | 12           | 91           |
| Audio Bridge Service Providers  |                |              |                     |              |              |              |              |              |              |              |              | 69           |
| Other Toll Carriers   | <u>15</u>      | <u>31</u>    | <u>17</u>           | <u>35</u>    | <u>69</u>    | <u>51</u>    | <u>45</u>    | <u>70</u>    | <u>63</u>    | <u>76</u>    | <u>80</u>    | <u>66</u>    |
| Total Toll Service Providers  | 569            | 647          | 651                 | 808          | 940          | 932          | 1,026        | 1,204        | 1,178        | 1,267        | 1,192        | 1,418        |
| Fixed Local Service, Payphone, and Mobile Service Filers with Toll Service Revenues | 1,537          | 1,740        | 1,870               | 1,678        | 1,884        | 1,602        | 1,678        | 1,680        | 1,879        | 1,937        | 1,952        | 1,961        |
| <b>All Toll Service Providers 2/</b>  | <b>2,106</b>   | <b>2,387</b> | <b>2,521</b>        | <b>2,486</b> | <b>2,824</b> | <b>2,534</b> | <b>2,704</b> | <b>2,884</b> | <b>3,057</b> | <b>3,204</b> | <b>3,144</b> | <b>3,379</b> |

Note: Some data have been revised. Data for 1992 through 1996 are available in prior year reports.

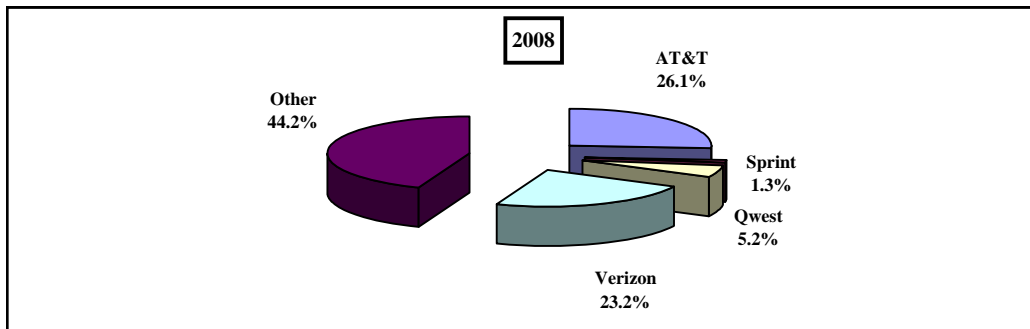
- 1/ Counts of toll carriers represent the numbers of filers that reported telecommunications revenues and that identified themselves using a toll carrier category. Filers that identified themselves as Fixed Local Service, Payphone, and Mobile Service providers were counted as toll providers only if they reported toll service revenues.
- 2/ Toll carrier counts in Table 9.4 differ from toll carrier counts in Table 9.1 for two reasons. Counts in this table include firms that identify themselves as toll carriers even if they reported only non-toll telecommunications revenues. In addition, counts in this table were made by filing entity whereas Table 9.1 consolidates affiliated filers. Toll carrier counts also differ from toll carrier counts in Table 5.3. Table 5.3 includes companies that made an FCC Form 499-A filing for registration purposes but that had not yet reported revenues.

Sources: Data filed on FCC Forms 431, 457, and 499-A worksheets. See also: Industry Analysis and Technology Division, Wireline Competition Bureau, *Telecommunications Industry Revenues* and *Telecommunications Provider Locator*.

**Table 9.5**  
**Residential Household Market Shares**  
**(1995 - 2008)**

|                                      | AT&T <sup>1</sup> | MCI <sup>2</sup> | Sprint <sup>3</sup> | BellSouth <sup>4</sup> | Qwest <sup>5</sup> | SBC <sup>6</sup> | Verizon <sup>7</sup> | Other <sup>8</sup> |
|--------------------------------------|-------------------|------------------|---------------------|------------------------|--------------------|------------------|----------------------|--------------------|
| <b>Households <sup>9</sup></b>       |                   |                  |                     |                        |                    |                  |                      |                    |
| 1995                                 | 74.6 %            | 13.0 %           | 4.2 %               | (8) %                  | (8) %              | (8) %            | (8) %                | 8.2 %              |
| 1996                                 | 69.9              | 14.1             | 5.0                 | (8)                    | (8)                | (8)              | (8)                  | 11.0               |
| 1997                                 | 67.2              | 13.2             | 5.7                 | (8)                    | (8)                | (8)              | (8)                  | 13.8               |
| 1998                                 | 62.6              | 15.1             | 5.7                 | (8)                    | (8)                | (8)              | (8)                  | 16.6               |
| 1999                                 | 62.5              | 16.0             | 6.2                 | (8)                    | (8)                | (8)              | (8)                  | 15.4               |
| 2000                                 | 51.1              | 18.0             | 6.6                 | 0.1                    | 1.6                | 1.0              | 4.6                  | 17.0               |
| 2001                                 | 42.3              | 18.5             | 6.8                 | 0.1                    | 2.9                | 2.6              | 6.7                  | 20.0               |
| 2002                                 | 36.7              | 15.8             | 7.6                 | 0.2                    | 2.5                | 3.8              | 9.3                  | 24.1               |
| 2003                                 | 31.7              | 13.0             | 7.1                 | 2.2                    | 3.2                | 7.5              | 10.8                 | 24.4               |
| 2004                                 | 23.5              | 9.9              | 6.9                 | 4.4                    | 5.7                | 13.2             | 12.9                 | 23.5               |
| 2005                                 | 18.1              | 7.7              | 6.2                 | 5.9                    | 5.9                | 15.9             | 16.2                 | 24.1               |
| 2006                                 | 29.3              | --               | 3.8                 | 6.6                    | 6.1                | --               | 25.2                 | 29.0               |
| 2007                                 | 28.5              | --               | 2.1                 | --                     | 5.3                | --               | 27.3                 | 36.8               |
| 2008                                 | 26.1              | --               | 1.3                 | --                     | 5.2                | --               | 23.2                 | 44.2               |
| <b>Direct Dial IntraLATA Minutes</b> |                   |                  |                     |                        |                    |                  |                      |                    |
| 1995                                 | 8.9 %             | 2.4 %            | 4.6 %               | (8) %                  | (8) %              | (8) %            | (8) %                | 84.1 %             |
| 1996                                 | 9.5               | 5.4              | 4.4                 | (8)                    | (8)                | (8)              | (8)                  | 80.6               |
| 1997                                 | 13.9              | 6.7              | 3.7                 | (8)                    | (8)                | (8)              | (8)                  | 75.7               |
| 1998                                 | 15.6              | 8.7              | 3.8                 | (8)                    | (8)                | (8)              | (8)                  | 71.8               |
| 1999                                 | 16.9              | 12.0             | 3.6                 | (8)                    | (8)                | (8)              | (8)                  | 67.5               |
| 2000                                 | 17.3              | 12.8             | 5.0                 | 1.6                    | 5.0                | 18.6             | 18.0                 | 21.7               |
| 2001                                 | 15.4              | 13.2             | 4.8                 | 1.4                    | 4.3                | 17.9             | 17.6                 | 25.3               |
| 2002                                 | 14.0              | 11.8             | 4.8                 | 1.1                    | 2.9                | 18.5             | 16.3                 | 30.7               |
| 2003                                 | 10.7              | 11.4             | 8.1                 | 0.9                    | 2.7                | 17.7             | 13.2                 | 35.4               |
| 2004                                 | 7.5               | 9.4              | 5.0                 | 1.0                    | 4.6                | 30.5             | 12.2                 | 29.9               |
| 2005                                 | 5.5               | 9.2              | 5.3                 | 1.3                    | 5.3                | 34.3             | 12.2                 | 26.7               |
| 2006                                 | 38.1              | --               | 1.8                 | 1.2                    | 6.9                | --               | 17.8                 | 34.2               |
| 2007                                 | 33.9              | --               | 0.8                 | --                     | 5.7                | --               | 20.0                 | 39.7               |
| 2008                                 | 32.9              | --               | 0.4                 | --                     | 6.1                | --               | 14.2                 | 46.5               |
| <b>Direct Dial InterLATA Minutes</b> |                   |                  |                     |                        |                    |                  |                      |                    |
| 1995                                 | 69.5 %            | 16.1 %           | 5.8 %               | (8) %                  | (8) %              | (8) %            | (8) %                | 8.6 %              |
| 1996                                 | 62.5              | 15.9             | 7.1                 | (8)                    | (8)                | (8)              | (8)                  | 14.5               |
| 1997                                 | 62.4              | 14.9             | 6.5                 | (8)                    | (8)                | (8)              | (8)                  | 16.2               |
| 1998                                 | 58.4              | 17.0             | 6.5                 | (8)                    | (8)                | (8)              | (8)                  | 18.1               |
| 1999                                 | 53.2              | 20.9             | 6.6                 | (8)                    | (8)                | (8)              | (8)                  | 19.3               |
| 2000                                 | 44.7              | 22.0             | 7.3                 | 0.1                    | 1.6                | 0.5              | 2.5                  | 21.3               |
| 2001                                 | 36.3              | 20.5             | 7.6                 | 0.1                    | 1.9                | 1.8              | 3.6                  | 28.1               |
| 2002                                 | 31.2              | 18.1             | 9.0                 | 0.3                    | 1.6                | 3.1              | 5.6                  | 31.0               |
| 2003                                 | 26.0              | 16.6             | 7.9                 | 1.4                    | 1.8                | 6.6              | 6.6                  | 32.9               |
| 2004                                 | 17.0              | 12.5             | 8.1                 | 1.9                    | 6.4                | 20.3             | 6.7                  | 27.0               |
| 2005                                 | 10.8              | 11.3             | 8.6                 | 2.6                    | 8.5                | 23.7             | 8.2                  | 26.3               |
| 2006                                 | 35.6              | --               | 3.3                 | 2.4                    | 10.3               | --               | 16.4                 | 32.0               |
| 2007                                 | 32.7              | --               | 1.5                 | --                     | 10.8               | --               | 12.7                 | 42.4               |
| 2008                                 | 34.1              | --               | 1.2                 | --                     | 12.2               | --               | 9.5                  | 43.0               |

**Chart 9.2**  
**Residential Household Market Shares**



## Notes for Table 9.5

**Note: Market shares are estimates based on sample data.** Shares for past years have been revised to take into account mergers and acquisitions and changes in methodology. Columns may not sum to 100% due to rounding.

<sup>1</sup> AT&T Long Distance, Lucky Dog Phone Co., ACC Long Distance, AT&T U-verse. Starting in 2006, AT&T includes the former SBC.

<sup>2</sup> MCI Long Distance, Telecom USA, Touch 1, TTI National, LDDS WorldCom and WorldCom Network Service. Starting in 2006, MCI's figures were included in the totals for Verizon.

<sup>3</sup> Excluding Embarq starting in 2006.

<sup>4</sup> BellSouth Long Distance and BellSouth Public Communications. Starting in 2007, BellSouth's figures were included in the totals for AT&T.

<sup>5</sup> Qwest and U S WEST Long Distance.

<sup>6</sup> Ameritech Communications, Ameritech 800, Pacific Bell, Southwest Long Distance, SBC Long Distance and SNET All Distance. Starting in 2006, SBC's figures were included in the totals for AT&T. Starting in 2007, BellSouth's figures were included in the totals for AT&T.

<sup>7</sup> Bell Atlantic Long Distance, NYNEX/Bell Atlantic North, Verizon Select Services ,GTE, and Verizon VoiceWing. Starting in 2006, MCI's figures were included in the totals for Verizon.

<sup>8</sup> Until 2000, the regional Bell operating companies are not broken out of the "Other" category.

<sup>9</sup> Each household is assumed to have a single access line (less than 8% of households in the 2003 sample had more than one access line). These lines are allocated across carriers based on the household's primary long distance carrier which is imputed by the provider of the data, TNS Telecoms. In 1995, 1996 and 1999-2003, TNS 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 Industry Analysis and Technology Division staff using survey data from TNS Telecoms *ReQuest Market Monitor*™, *Bill Harvesting*®.

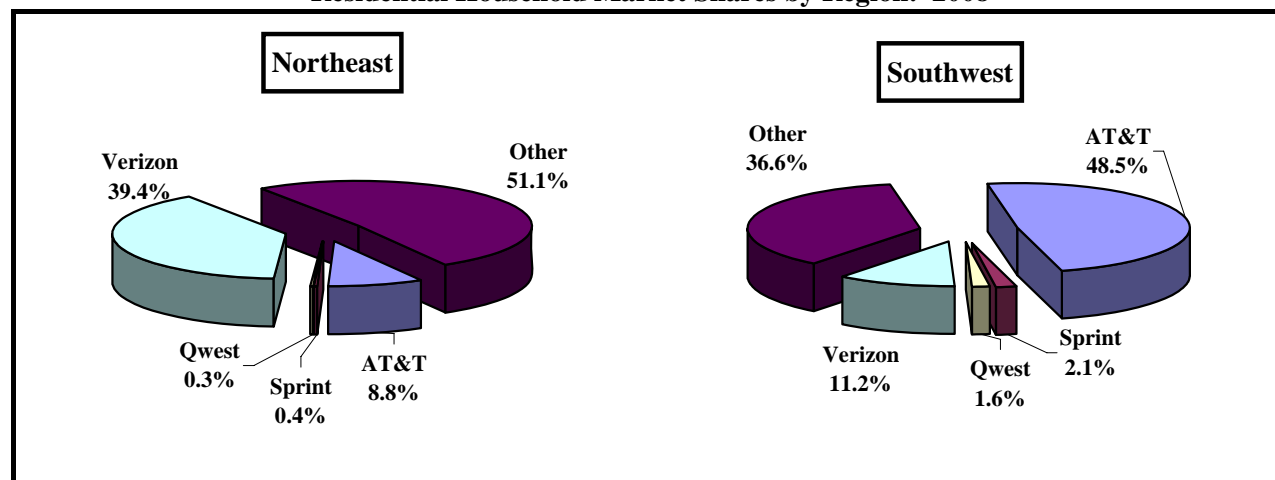
**Table 9.6**  
**Residential Household Market Shares**  
**By Region: 2008**

| Region <sup>1</sup>                  | AT&T <sup>2</sup> | MCI <sup>3</sup> | Sprint <sup>4</sup> | BellSouth <sup>5</sup> | Qwest <sup>6</sup> | SBC <sup>7</sup> | Verizon <sup>8</sup> | Other <sup>9</sup> | Sample Size |
|--------------------------------------|-------------------|------------------|---------------------|------------------------|--------------------|------------------|----------------------|--------------------|-------------|
| <b>Households</b>                    |                   |                  |                     |                        |                    |                  |                      |                    |             |
| Southeast                            | 38.8 %            | -- %             | 1.4 %               | -- %                   | 1.2 %              | -- %             | 10.6 %               | 48.0 %             | 3,494       |
| West                                 | 5.4               | --               | 1.0                 | --                     | 35.2               | --               | 7.5                  | 50.9               | 2,261       |
| West Coast                           | 47.2              | --               | 2.0                 | --                     | 1.6                | --               | 18.4                 | 30.8               | 1,820       |
| Mid-Atlantic                         | 6.4               | --               | 0.7                 | --                     | 0.5                | --               | 52.3                 | 40.1               | 3,244       |
| Mid-West                             | 35.5              | --               | 1.6                 | --                     | 2.2                | --               | 15.1                 | 45.6               | 3,404       |
| Northeast                            | 8.8               | --               | 0.4                 | --                     | 0.3                | --               | 39.4                 | 51.1               | 2,927       |
| Southwest                            | 48.5              | --               | 2.1                 | --                     | 1.6                | --               | 11.2                 | 36.6               | 2,062       |
| Total                                | 26.1 %            | -- %             | 1.3 %               | -- %                   | 5.2 %              | -- %             | 23.2 %               | 44.2 %             | 19,212      |
| <b>Direct Dial IntraLATA Minutes</b> |                   |                  |                     |                        |                    |                  |                      |                    |             |
| Southeast                            | 13.5 %            | -- %             | 0.8 %               | -- %                   | 0.7 %              | -- %             | 15.1 %               | 70.0 %             | 34,189      |
| West                                 | 0.3               | --               | 0.0                 | --                     | 43.5               | --               | 7.2                  | 49.1               | 50,248      |
| West Coast                           | 58.1              | --               | 0.8                 | --                     | 0.2                | --               | 19.4                 | 21.6               | 56,007      |
| Mid-Atlantic                         | 4.4               | --               | 0.5                 | --                     | 2.3                | --               | 23.0                 | 69.9               | 46,871      |
| Mid-West                             | 52.9              | --               | 0.1                 | --                     | 0.1                | --               | 10.0                 | 36.9               | 103,984     |
| Northeast                            | 14.8              | --               | 0.1                 | --                     | 0.0                | --               | 30.2                 | 54.9               | 37,393      |
| Southwest                            | 47.4              | --               | 0.7                 | --                     | 0.2                | --               | 4.6                  | 47.2               | 55,970      |
| Total                                | 32.9 %            | -- %             | 0.4 %               | -- %                   | 6.1 %              | -- %             | 14.2 %               | 46.5 %             | 384,663     |
| <b>Direct Dial InterLATA Minutes</b> |                   |                  |                     |                        |                    |                  |                      |                    |             |
| Southeast                            | 16.2 %            | -- %             | 2.3 %               | -- %                   | 0.9 %              | -- %             | 10.9 %               | 69.7 %             | 137,802     |
| West                                 | 2.6               | --               | 0.2                 | --                     | 64.5               | --               | 4.0                  | 28.7               | 131,847     |
| West Coast                           | 57.2              | --               | 0.9                 | --                     | 0.2                | --               | 8.6                  | 33.2               | 93,885      |
| Mid-Atlantic                         | 8.9               | --               | 1.3                 | --                     | 0.4                | --               | 18.9                 | 70.5               | 70,281      |
| Mid-West                             | 58.5              | --               | 1.0                 | --                     | 0.5                | --               | 9.2                  | 30.8               | 146,416     |
| Northeast                            | 24.6              | --               | 0.1                 | --                     | 0.4                | --               | 18.4                 | 56.5               | 44,127      |
| Southwest                            | 64.4              | --               | 2.1                 | --                     | 0.8                | --               | 5.7                  | 27.0               | 101,337     |
| Total                                | 34.1 %            | -- %             | 1.2 %               | -- %                   | 12.2 %             | -- %             | 9.5 %                | 43.0 %             | 725,695     |

**Note:** Market shares are estimates based on sample data. Columns may not sum to 100% due to rounding. For footnotes, please see the next page.

Source: Calculated by Industry Analysis and Technology Division staff using survey data from TNS Telecoms *ReQuest Market Monitor*™, Bill Harvesting®.

**Chart 9.3**  
**Residential Household Market Shares by Region: 2008**





## Notes for Table 9.6

<sup>1</sup> Southeast: Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina and Tennessee.

West: Arizona, Colorado, Idaho, Iowa, Minnesota, Montana, Nebraska, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington and Wyoming.

West Coast: California and Nevada.

Mid-Atlantic: Delaware, District of Columbia, Maryland, New Jersey, Pennsylvania, Virginia and West Virginia

Mid-West: Illinois, Indiana, Michigan, Ohio and Wisconsin.

Northeast: Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island and Vermont.

Southwest: Arkansas, Kansas, Missouri, Oklahoma and Texas.

<sup>2</sup> AT&T Long Distance, Lucky Dog Phone Co. and ACC Long Distance. Starting in 2006, AT&T includes the former SBC.

<sup>3</sup> MCI Long Distance, Telecom USA, Touch 1, TTI National, LDDS WorldCom and WorldCom Network Service

<sup>4</sup> Not including Embarq.

<sup>5</sup> BellSouth Long Distance and BellSouth Public Communications.

<sup>6</sup> Qwest and U S WEST Long Distance.

<sup>7</sup> Ameritech Communications, Ameritech 800, Pacific Bell, Southwest Long Distance, SBC Long Distance and SNET All Distance. Starting in 2006, SBC's figures were included in the totals for AT&T.

<sup>8</sup> Bell Atlantic Long Distance, NYNEX/Bell Atlantic North, Verizon Select Services and GTE. Starting in 2006, MCI's figures were included in the totals for Verizon.

<sup>9</sup> Households with any other presubscribed carrier. **Note that households for which the presubscribed carrier is unknown or could not be determined have been excluded from the sample.**

**Table 9.7**  
**Regional Bell Operating Companies' Applications**  
**To Provide In-Region InterLATA Service**  
**(Section 271 Applications)**

| <b>State</b>         | <b>Bell Operating Company</b> | <b>Date Application Resolved</b> |
|----------------------|-------------------------------|----------------------------------|
| Alabama              | BellSouth                     | 09/18/02                         |
| Arkansas             | SBC                           | 11/16/01                         |
| Arizona              | Qwest                         | 12/03/03                         |
| California           | SBC                           | 12/19/02                         |
| Colorado             | Qwest                         | 12/23/02                         |
| Connecticut          | Verizon                       | 07/20/01                         |
| Delaware             | Verizon                       | 09/25/02                         |
| District of Columbia | Verizon                       | 03/19/03                         |
| Florida              | BellSouth                     | 12/19/02                         |
| Georgia              | BellSouth                     | 05/15/02                         |
| Idaho                | Qwest                         | 12/23/02                         |
| Illinois             | SBC                           | 10/15/03                         |
| Indiana              | SBC                           | 10/15/03                         |
| Iowa                 | Qwest                         | 12/23/02                         |
| Kansas               | SBC                           | 01/22/01                         |
| Kentucky             | BellSouth                     | 09/18/02                         |
| Louisiana            | BellSouth                     | 05/15/02                         |
| Maine                | Verizon                       | 06/19/02                         |
| Maryland             | Verizon                       | 03/19/03                         |
| Massachusetts        | Verizon                       | 04/16/01                         |
| Michigan             | SBC                           | 09/17/03                         |
| Minnesota            | Qwest                         | 06/26/03                         |
| Mississippi          | BellSouth                     | 09/18/02                         |
| Missouri             | SBC                           | 11/16/01                         |
| Montana              | Qwest                         | 12/23/02                         |
| Nebraska             | Qwest                         | 12/23/02                         |
| Nevada               | SBC                           | 04/14/03                         |
| New Hampshire        | Verizon                       | 09/25/02                         |
| New Jersey           | Verizon                       | 06/24/02                         |
| New Mexico           | Qwest                         | 04/15/03                         |
| New York             | Verizon                       | 12/22/99                         |
| North Carolina       | BellSouth                     | 09/18/02                         |
| North Dakota         | Qwest                         | 12/23/02                         |
| Ohio                 | SBC                           | 10/15/03                         |
| Oklahoma             | SBC                           | 01/22/01                         |
| Oregon               | Qwest                         | 04/15/03                         |
| Pennsylvania         | Verizon                       | 09/19/01                         |
| Rhode Island         | Verizon                       | 02/22/02                         |
| South Carolina       | BellSouth                     | 09/18/02                         |
| South Dakota         | Qwest                         | 04/15/03                         |
| Tennessee            | BellSouth                     | 12/19/02                         |
| Texas                | SBC                           | 06/30/00                         |
| Utah                 | Qwest                         | 12/23/02                         |
| Vermont              | Verizon                       | 04/17/02                         |
| Virginia             | Verizon                       | 10/30/02                         |
| Washington           | Qwest                         | 12/23/02                         |
| West Virginia        | Verizon                       | 03/19/03                         |
| Wisconsin            | SBC                           | 10/15/03                         |
| Wyoming              | Qwest                         | 12/23/02                         |

## 10 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 local calls are not metered. Periodic studies have been 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) historically were used to estimate the proportion of calling that is interstate and to allocate costs between interstate and intrastate services. However, DEMs are no longer being used for separations purposes because the separations factors are now frozen. Historical data for DEMs can be found in the August 2003 issue of *Trends in Telephone Service*.

### 1. Interstate Switched Access Minutes

Switched access minutes are those minutes transmitted by long distance carriers that also use the distribution networks of local telephone companies, i.e., calls made on private telecommunications networks and on leased lines are excluded. On ordinary long distance calls, minutes are counted both where the call originates and where the call terminates. Access minutes include only the domestic portion of international calls. WATS and toll-free (800/888/877/866) calls are counted only on one end of the call. WATS calls generate access minutes only at the terminating end of the call and toll-free (800/888/877/866) calls generate access minutes only at the originating end of the call; both types of minutes are counted in the terminating minutes because they are billed at the terminating rate. Originating WATS and terminating toll-free minutes are covered under special access arrangements, and hence are not subject to switched access charges. Finally, switched access minutes include time for incomplete calls and setup time.

Table 10.1 and Chart 10.1 show the total number of interstate switched access minutes handled by all long distance carriers starting with mid-1984, when the data first became available. The number of minutes grew steadily from mid-1984 to 2000 stemming from a combination of overall economic growth and price reductions. Since 2001, interstate switched access minutes have declined, due to a number of reasons including substitution of other services.

### 2. Billed Access Minutes and Calls

Another measure of usage is the number of interLATA billed access minutes and the number of local calls and toll calls. The large incumbent LECs have filed data on this as part of their Automated Reporting Management Information System (ARMIS) reports. The individual carrier's data can be obtained from the ARMIS Report 43-08 on the ARMIS web page at [www.fcc.gov/wcb/armis](http://www.fcc.gov/wcb/armis). However, ARMIS filing requirements were reduced significantly for 2008 data by Commission forbearance orders and these data are no longer submitted.

The number of interLATA access minutes is based on bills sent to interexchange carriers. They include total originating and terminating access minutes of use. Where these data are

unavailable, a statistically valid calculation is sometimes used. The number of local calls refers to the number of originating calls completed or unanswered between points both of which are within the local service area of the calling telephone, or total originating calls minus total originating toll calls. The number of toll calls completed refers to the number of completed calls directed to a point outside the local service area of the calling telephone. IntraLATA toll calls completed (originating) consist of the number of completed toll calls carried by the reporting local operating company within a given local access and transport area (LATA) and interLATA toll calls completed (originating) consist of completed calls directed to and carried by interexchange carriers. IntraLata toll calls carried by interexchange carriers are not included. More detailed definitions can be found on the ARMIS web site. Intralata toll calls carried by Interexchange carriers are not included.

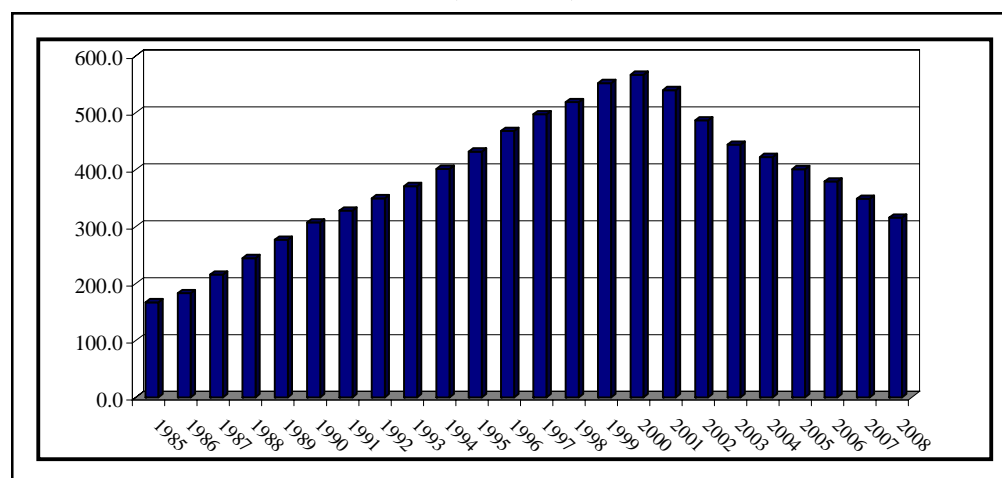
Table 10.2 shows historical data on the number of local and toll calls and the number of interLATA billed access minutes for the large ILECs reporting to the Commission. Toll calls are further categorized by intraLATA, interLATA interstate and interLATA intrastate. Interstate and intrastate billed access minutes are also shown.

**Table 10.1**  
**ILEC Quarterly Interstate Switched Access Minutes**  
**(In Billions)**

| Year | Period            | Access Minutes | Year | Period            | Access Minutes | Year | Period            | Access Minutes |
|------|-------------------|----------------|------|-------------------|----------------|------|-------------------|----------------|
| 1984 | Third Quarter     | 37.5           |      |                   |                |      |                   |                |
|      | Fourth Quarter    | 39.6           |      |                   |                |      |                   |                |
| 1985 | First Quarter     | 39.6           | 1993 | First Quarter     | 90.6           | 2001 | First Quarter     | 138.1          |
|      | Second Quarter    | 41.5           |      | Second Quarter    | 91.2           |      | Second Quarter    | 137.1          |
|      | Third Quarter     | 42.8           |      | Third Quarter     | 93.6           |      | Third Quarter     | 133.3          |
|      | Fourth Quarter    | 43.3           |      | Fourth Quarter    | 95.9           |      | Fourth Quarter    | 131.3          |
|      | <b>Total 1985</b> | <b>167.1</b>   |      | <b>Total 1993</b> | <b>371.2</b>   |      | <b>Total 2001</b> | <b>539.8</b>   |
| 1986 | First Quarter     | 43.0           | 1994 | First Quarter     | 98.7           | 2002 | First Quarter     | 124.7          |
|      | Second Quarter    | 44.8           |      | Second Quarter    | 97.9           |      | Second Quarter    | 124.3          |
|      | Third Quarter     | 46.7           |      | Third Quarter     | 101.9          |      | Third Quarter     | 119.6          |
|      | Fourth Quarter    | 48.5           |      | Fourth Quarter    | 102.9          |      | Fourth Quarter    | 118.0          |
|      | <b>Total 1986</b> | <b>183.1</b>   |      | <b>Total 1994</b> | <b>401.4</b>   |      | <b>Total 2002</b> | <b>486.6</b>   |
| 1987 | First Quarter     | 51.2           | 1995 | First Quarter     | 105.6          | 2003 | First Quarter     | 114.2          |
|      | Second Quarter    | 52.5           |      | Second Quarter    | 106.8          |      | Second Quarter    | 112.1          |
|      | Third Quarter     | 55.0           |      | Third Quarter     | 109.0          |      | Third Quarter     | 109.9          |
|      | Fourth Quarter    | 57.0           |      | Fourth Quarter    | 110.6          |      | Fourth Quarter    | 107.7          |
|      | <b>Total 1987</b> | <b>215.7</b>   |      | <b>Total 1995</b> | <b>431.9</b>   |      | <b>Total 2003</b> | <b>443.9</b>   |
| 1988 | First Quarter     | 59.0           | 1996 | First Quarter     | 115.7          | 2004 | First Quarter     | 109.3          |
|      | Second Quarter    | 59.6           |      | Second Quarter    | 114.7          |      | Second Quarter    | 106.2          |
|      | Third Quarter     | 62.1           |      | Third Quarter     | 117.5          |      | Third Quarter     | 105.0          |
|      | Fourth Quarter    | 64.0           |      | Fourth Quarter    | 120.2          |      | Fourth Quarter    | 102.0          |
|      | <b>Total 1988</b> | <b>244.6</b>   |      | <b>Total 1996</b> | <b>468.1</b>   |      | <b>Total 2004</b> | <b>422.4</b>   |
| 1989 | First Quarter     | 66.2           | 1997 | First Quarter     | 122.1          | 2005 | First Quarter     | 101.2          |
|      | Second Quarter    | 68.5           |      | Second Quarter    | 124.4          |      | Second Quarter    | 100.5          |
|      | Third Quarter     | 69.7           |      | Third Quarter     | 124.9          |      | Third Quarter     | 100.4          |
|      | Fourth Quarter    | 72.6           |      | Fourth Quarter    | 125.8          |      | Fourth Quarter    | 98.8           |
|      | <b>Total 1989</b> | <b>277.1</b>   |      | <b>Total 1997</b> | <b>497.3</b>   |      | <b>Total 2005</b> | <b>401.0</b>   |
| 1990 | First Quarter     | 74.7           | 1998 | First Quarter     | 124.0          | 2006 | First Quarter     | 98.2           |
|      | Second Quarter    | 75.8           |      | Second Quarter    | 131.3          |      | Second Quarter    | 95.3           |
|      | Third Quarter     | 77.9           |      | Third Quarter     | 130.7          |      | Third Quarter     | 94.0           |
|      | Fourth Quarter    | 79.1           |      | Fourth Quarter    | 132.8          |      | Fourth Quarter    | 91.9           |
|      | <b>Total 1990</b> | <b>307.4</b>   |      | <b>Total 1998</b> | <b>518.8</b>   |      | <b>Total 2006</b> | <b>379.3</b>   |
| 1991 | First Quarter     | 79.2           | 1999 | First Quarter     | 135.6          | 2007 | First Quarter     | 90.6           |
|      | Second Quarter    | 81.9           |      | Second Quarter    | 138.1          |      | Second Quarter    | 88.5           |
|      | Third Quarter     | 82.6           |      | Third Quarter     | 138.3          |      | Third Quarter     | 86.4           |
|      | Fourth Quarter    | 84.4           |      | Fourth Quarter    | 140.3          |      | Fourth Quarter    | 83.4           |
|      | <b>Total 1991</b> | <b>328.0</b>   |      | <b>Total 1999</b> | <b>552.3</b>   |      | <b>Total 2007</b> | <b>348.9</b>   |
| 1992 | First Quarter     | 85.6           | 2000 | First Quarter     | 142.8          | 2008 | First Quarter     | 83.6           |
|      | Second Quarter    | 86.5           |      | Second Quarter    | 142.9          |      | Second Quarter    | 80.4           |
|      | Third Quarter     | 87.9           |      | Third Quarter     | 141.3          |      | Third Quarter     | 77.1           |
|      | Fourth Quarter    | 89.8           |      | Fourth Quarter    | 139.9          |      | Fourth Quarter    | 74.6           |
|      | <b>Total 1992</b> | <b>349.7</b>   |      | <b>Total 2000</b> | <b>566.9</b>   |      | <b>Total 2008</b> | <b>315.7</b>   |

Source: National Exchange Carrier Association (NECA), MOU/Data/Summary of NECA's Total Pool Results, March 17, 2009. Industry Analysis and Technology Division, Wireline Competition Bureau, *Universal Service Monitoring Report* (December 2008).

**Chart 10.1**  
**Interstate Switched Access Minutes for Incumbent Local Exchange Carriers**  
**(In Billions)**



**Table 10.2**  
**Telephone Calls and Billed Access Minutes of Large ILECs Reporting to the Commission**

| Year | Number of Carriers | Number of Telephone Calls<br>(Thousands) |                                       |            |                 |                      |                      | InterLATA Billed Access Minutes<br>(Originating and Terminating)<br>(Thousands) |             |             |
|------|--------------------|--|---------------------------------------|------------|-----------------|----------------------|----------------------|---|-------------|-------------|
|      |                    | Local Calls                              | Toll Calls Completed<br>(Originating) |            |                 |                      |                      | Total   | Interstate  | Intrastate  |
|      |                    |  | Total                                 | IntraLATA  | Total InterLATA | InterLATA Interstate | InterLATA Intrastate |   |             |             |
| 1985 | 55                 | 365,304,830                              | NA                                    | NA         | NA              | NA                   | NA                   | NA  | NA          | NA          |
| 1986 | 57                 | 372,296,473                              | NA                                    | NA         | NA              | NA                   | NA                   | NA  | NA          | NA          |
| 1987 | 52                 | 379,864,264                              | NA                                    | NA         | NA              | NA                   | NA                   | NA  | NA          | NA          |
| 1988 | 52                 | 379,035,883                              | 67,547,342                            | 18,983,768 | 48,563,574      | 36,752,925           | 11,810,649           | NA  | NA          | NA          |
| 1989 | 51                 | 389,383,322                              | 68,547,451                            | 19,406,222 | 49,141,229      | 37,593,867           | 11,547,362           | NA  | NA          | NA          |
| 1990 | 51                 | 402,492,293                              | 63,359,346                            | 20,263,554 | 43,095,792      | 31,888,748           | 11,207,044           | NA  | NA          | NA          |
| 1991 | 52                 | 416,213,954                              | 67,333,207                            | 23,337,553 | 43,995,654      | 32,126,555           | 11,869,099           | 405,456,048   | 305,745,611 | 99,710,437  |
| 1992 | 54                 | 434,175,743                              | 71,502,090                            | 22,612,572 | 48,889,518      | 36,036,032           | 12,853,486           | 432,356,515   | 327,821,281 | 104,535,234 |
| 1993 | 53                 | 447,473,714                              | 78,077,246                            | 23,757,662 | 54,319,584      | 38,746,788           | 15,572,796           | 465,270,369   | 351,022,599 | 114,247,770 |
| 1994 | 52                 | 465,207,539                              | 83,441,709                            | 23,796,633 | 59,645,076      | 43,244,593           | 16,400,483           | 500,297,267   | 374,996,101 | 125,301,166 |
| 1995 | 53                 | 484,195,345                              | 94,051,667                            | 23,327,801 | 70,723,866      | 50,618,771           | 20,105,095           | 549,982,263   | 405,579,546 | 144,402,717 |
| 1996 | 51                 | 504,131,507                              | 94,905,927                            | 21,376,847 | 73,529,080      | 52,677,037           | 20,852,043           | 598,563,946   | 438,772,880 | 159,791,066 |
| 1997 | 51                 | 522,025,261                              | 98,424,977                            | 21,844,925 | 76,580,052      | 54,563,338           | 22,016,714           | 647,813,708   | 469,638,292 | 178,175,416 |
| 1998 | 52                 | 544,288,934                              | 96,934,938                            | 18,469,316 | 78,465,622      | 55,974,210           | 22,491,412           | 690,523,467   | 497,138,901 | 193,384,566 |
| 1999 | 52                 | 553,853,237                              | 102,245,666                           | 18,116,240 | 84,129,426      | 57,806,961           | 26,322,465           | 739,042,459   | 519,272,905 | 219,769,554 |
| 2000 | 52                 | 536,523,081                              | 105,978,596                           | 16,157,912 | 89,820,684      | 59,212,055           | 30,608,629           | 792,263,836   | 535,011,649 | 257,252,187 |
| 2001 | 52                 | 515,335,676                              | 97,849,444                            | 14,970,794 | 82,878,650      | 53,319,645           | 29,559,005           | 745,754,124   | 504,026,109 | 241,728,015 |
| 2002 | 53                 | 453,603,777                              | 95,709,932                            | 13,324,887 | 82,385,045      | 52,905,686           | 29,479,359           | 666,477,372   | 451,602,651 | 214,874,720 |
| 2003 | 54                 | 418,024,360                              | 87,670,954                            | 11,794,327 | 75,876,627      | 48,968,414           | 26,908,213           | 611,329,124   | 414,524,141 | 196,804,983 |
| 2004 | 56                 | 380,783,208                              | 82,254,901                            | 10,132,759 | 72,122,142      | 47,575,750           | 24,546,392           | 600,762,941   | 406,173,324 | 194,589,617 |
| 2005 | 56                 | 330,018,175                              | 79,451,371                            | 9,308,449  | 70,142,922      | 45,381,539           | 24,761,383           | 577,328,125   | 388,561,466 | 188,766,659 |
| 2006 | 56                 | 280,182,070                              | 73,111,230                            | 8,610,165  | 64,501,065      | 42,003,740           | 22,497,325           | 543,337,469   | 371,990,523 | 171,346,945 |
| 2007 | 55                 | 235,428,403                              | 69,608,967                            | 7,810,818  | 61,798,149      | 40,692,976           | 21,105,173           | 504,462,125   | 348,506,441 | 155,955,683 |

NA - Not available.

Source: Industry Analysis and Technology Division, Wireline Competition Division, *Universal Service Monitoring Report* (December 2008).

Note: Between 1987 and 1988, there were significant changes in the definitions of many of the items in this table. With the implementation of a new Uniform System of Accounts (USOA) in 1988, new categories of reporting units of network usage were created and defined. In 1992, some of these definitions were further refined when the reporting mechanism of the carriers was changed for the filing of 1991 data. For these reasons, there may be inconsistencies in the data reported for 1985-1987 compared to what was reported for 1988, and also between 1988 and subsequent years, as the carriers were adapting to the new USOA and automated reporting requirements.

# 11 Mobile Wireless Service

## 1. Industry Statistics

There are several measures of mobile wireless subscribers. While there are some differences in these data series, they all show significant growth in mobile wireless subscribers. The Commission collects data on the number of wireless subscribers by 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. Prior to June 2005, only wireless carriers with at least 10,000 subscribers in a state were required to report.<sup>1</sup> The Commission also collects data on wireless numbers as part of the data collection on Numbering Resources and Utilization/Forecasting (FCC Form 502). Wireless numbers are a good proxy for wireless subscribers since wireless carriers generally assign only one subscriber per number. The CTIA-The Wireless Association<sup>TM</sup> periodically publishes summary information on the industry. CTIA can be found on the Internet at [www.ctia.org](http://www.ctia.org).

Table 11.1 and Chart 11.1 show three measures of mobile wireless subscribers over time. In 1984, there were 92,000 subscribers, as compared with about 270 million subscribers as of December 31, 2008. Table 11.2 shows the number of wireless subscribers per state as of June 30, 2008 using data from FCC Form 477. Table 11.3 provides information on the industry published by CTIA. These trends include revenues, cell sites, employees, and average monthly bills. The table shows that the industry had more than 268,000 employees as of December 2008, as compared to about 3,500 employees in 1986; and there was a significant drop in the average monthly bill from \$96.83 at the end of 1987 to \$50.07 as of December 2008.

## 2. Residential Wireless Toll Calling Patterns

The summary of residential wireless usage presented in Tables 11.4 through 11.7 is based on calling data captured from a sample of consumer bills by TNS Telecoms. (For additional information on TNS Telecoms, see Appendix B.) While these tables were constructed in a manner similar to those describing wireline toll calling patterns in Section 14, the two sets of tables should be compared with caution. One important issue is that, if wireless bills itemize calls, all calls, rather than just toll calls, are listed.<sup>2</sup> As a result, these tables characterize wireless local and long-distance calling where the tables in Section 14 only cover wireline long distance. To provide some frame of reference,

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<sup>1</sup> Mobile telephony service providers with fewer than 10,000 subscribers in a state reported about 389,000 subscribers as of June 30, 2005. Such filers reported (on a voluntary basis) about 69,000 subscribers six months earlier.

<sup>2</sup> In fact, since this analysis generally includes all outgoing wireless calls, many of the calls in the data are not traditional voice calls. The data include calls made to access voicemail, move data, access the Internet, send faxes or text messages, etc.

wireline distinctions have been imposed on the wireless calling data. That is, we distinguished wireless interstate from intrastate calls. Another issue is that not all bills, wireline or wireless, itemize any calls. The extent to which certain types of providers are more or less likely to provide itemization could affect comparisons.

Table 11.4 shows the estimated distribution of residential wireless calls and minutes over time. The vast majority of both calls and minutes were intrastate. The number of interstate calls rose from about 9% to 13% of the total from 2000 to 2003, and interstate minutes rose from 16% to 27% of the total over the same period. This was likely an adjustment to the introduction of flat-rate pricing during that time. Since 2003, the jurisdictional distribution of calls and minutes has been relatively stable. We note that these figures are estimates, based on sample data, and the distribution of calls and minutes may vary across carriers.

A snapshot of the duration of wireless calls is presented in Table 11.5. In the 2008 data shown, wireless calls were generally brief. About 71% of intrastate wireless calls (which, again, represent the vast majority of calls) were 2 minutes or less. Like wireline traffic, the data are right-skewed such that a handful of long calls pull the average call duration far above the median duration. As a measure of central tendency, the median is more representative of the duration of a typical call than is the average in this context.

Tables 11.6 and 11.7 show when wireless intrastate and interstate calls, respectively, were made. Over the years shown, patterns in intrastate calls have changed only slightly. Daytime minutes gained share from nighttime minutes (from about 72.1% in 2005 to 73.5% in 2007), and weekend use fell slightly as a share of total use. Traffic was typically heaviest on Friday and lightest on Sunday.

Patterns in interstate calling were different. Unlike intrastate calls, interstate calls were generally most likely on the weekend, particularly on Sunday. Further, though both types of calls were more likely during the day than at night, relative to intrastate calls, interstate calls were allocated more heavily to the nighttime hours. Nonetheless, the same forces acting to change intrastate calling patterns seem to be having similar, yet more dramatic effects on interstate calling. For example, like intrastate calls, the share of interstate minutes made during the day has continued to increase, from about 63% of the total in 2005 to almost 66% in 2007. Weekend use has also continued to fall, from 38.1% in 2005 to 35.5% in 2007.



**Table 11.1**  
**Measures of Mobile Wireless Telephone Subscribers**  
**(In Thousands)**

|               | Reported by CTIA | FCC Form 477 <sup>1</sup> | FCC Form 502 <sup>2</sup> |
|---------------|------------------|---------------------------|---------------------------|
| 1984 December | 92               |                           |                           |
| 1985 December | 340              |                           |                           |
| 1986 December | 682              |                           |                           |
| 1987 December | 1,231            |                           |                           |
| 1988 December | 2,069            |                           |                           |
| 1989 December | 3,509            |                           |                           |
| 1990 December | 5,283            |                           |                           |
| 1991 December | 7,557            |                           |                           |
| 1992 December | 11,033           |                           |                           |
| 1993 December | 16,009           |                           |                           |
| 1994 December | 24,134           |                           |                           |
| 1995 December | 33,786           |                           |                           |
| 1996 December | 44,043           |                           |                           |
| 1997 December | 55,312           |                           |                           |
| 1998 December | 69,209           |                           |                           |
| 1999 June     | 76,285           |                           |                           |
| December      | 86,047           | 79,696                    |                           |
| 2000 June     | 97,036           | 90,643                    |                           |
| December      | 109,478          | 101,043                   | 99,019                    |
| 2001 June     | 118,398          | 114,029                   | 111,734                   |
| December      | 128,375          | 123,991                   | 128,493                   |
| 2002 June     | 134,561          | 130,751                   | 136,927                   |
| December      | 140,767          | 138,878                   | 141,776                   |
| 2003 June     | 148,066          | 147,624                   | 151,861                   |
| December      | 158,722          | 157,042                   | 160,637                   |
| 2004 June     | 169,467          | 167,313                   | 170,406                   |
| December      | 182,140          | 181,105                   | 184,819                   |
| 2005 June     | 194,479          | 192,053                   | 198,381                   |
| December      | 207,896          | 203,667                   | 213,212                   |
| 2006 June     | 219,652          | 217,418                   | 227,135                   |
| December      | 233,041          | 229,619                   | 241,834                   |
| 2007 June     | 243,428          | 238,316                   | 251,945                   |
| December      | 255,396          | 249,332                   | 262,091                   |
| 2008 June     | 262,720          | 255,729                   | 271,370                   |
| December      | 270,334          | 261,284                   | 279,646                   |

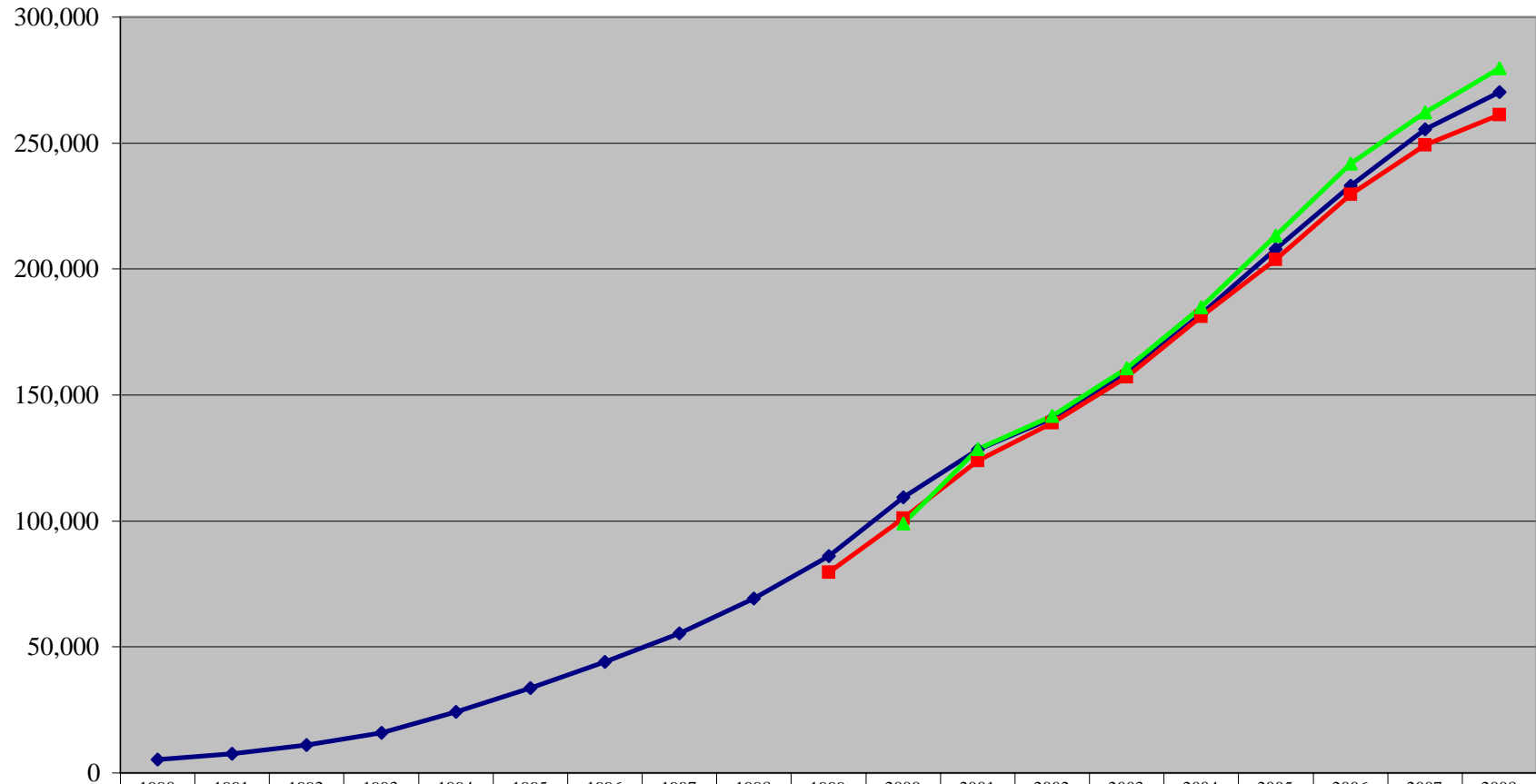
NA indicates not available.

<sup>1</sup> See Industry Analysis and Technology Division, Wireline Competition Bureau, *Local Telephone Competition: Status as of December 31, 2008* (June 2010). Carriers with under 10,000 subscribers in a state were not required to report until June 2005.

<sup>2</sup> Numbers are adjusted for porting. See current and previous editions of Industry Analysis and Technology Division, Wireline Competition Bureau, *Numbering Resource Utilization in the United States*.

Source: CTIA-The Wireless Association<sup>TM</sup> and FCC Forms 477 and 502. FCC Form 502 contains assigned wireless numbers.

**Chart 11.1**  
**Mobile Wireless Telephone Subscribers As of December**  
**(Subscribers in Thousands)**



|              |       |       |        |        |        |        |        |        |        |        |         |         |         |         |         |         |         |         |         |
|--------------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| CTIA         | 5,283 | 7,557 | 11,033 | 16,009 | 24,134 | 33,786 | 44,043 | 55,312 | 69,209 | 86,047 | 109,478 | 128,375 | 140,767 | 158,722 | 182,140 | 207,896 | 233,041 | 255,396 | 270,334 |
| FCC Form 477 |       |       |        |        |        |        |        |        |        | 79,696 | 101,043 | 123,991 | 138,878 | 157,042 | 181,105 | 203,667 | 229,619 | 249,332 | 261,284 |
| FCC Form 502 |       |       |        |        |        |        |        |        |        |        | 99,019  | 128,493 | 141,776 | 160,673 | 184,819 | 213,212 | 241,834 | 262,091 | 279,646 |

**Table 11.2**  
**Mobile Telephone Facilities-based Carriers and Mobile Telephony Subscribers**

| State                 | Dec 2008 |                       | Subscribers (In Thousands) |         |         |         |         |         |         |         |
|-----------------------|----------|-----------------------|----------------------------|---------|---------|---------|---------|---------|---------|---------|
|                       | Carriers | % Resold <sup>1</sup> | 2005                       |         | 2006    |         | 2007    |         | 2008    |         |
|                       |          |                       | Jun                        | Dec     | Jun     | Dec     | Jun     | Dec     | Jun     | Dec     |
| Alabama               | 15       | 7 %                   | 2,874                      | 3,105   | 3,276   | 3,375   | 3,605   | 3,765   | 3,887   | 3,960   |
| Alaska                | 12       | 13                    | 341                        | 377     | 397     | 412     | 432     | 460     | 480     | 383     |
| American Samoa        | *        | *                     | *                          | *       | *       | *       | *       | *       | *       | *       |
| Arizona               | 13       | 8                     | 3,543                      | 3,844   | 4,153   | 4,405   | 4,637   | 4,800   | 4,936   | 4,983   |
| Arkansas              | 9        | 9                     | 1,681                      | 1,781   | 1,924   | 2,044   | 2,149   | 2,288   | 2,446   | 2,530   |
| California            | 18       | 7                     | 24,572                     | 25,537  | 27,497  | 29,717  | 30,204  | 32,247  | 31,946  | 32,177  |
| Colorado              | 12       | 11                    | 3,041                      | 3,247   | 3,428   | 3,608   | 3,756   | 3,968   | 4,066   | 4,311   |
| Connecticut           | 8        | 7                     | 2,329                      | 2,463   | 2,582   | 2,705   | 2,787   | 2,884   | 2,959   | 3,030   |
| Delaware              | 7        | 8                     | 585                        | 618     | 650     | 683     | 724     | 751     | 775     | 778     |
| District of Columbia  | 7        | 9                     | 753                        | 825     | 879     | 880     | 966     | 936     | 1,047   | 1,096   |
| Florida               | 13       | 9                     | 12,620                     | 12,568  | 14,177  | 14,762  | 15,255  | 15,605  | 15,809  | 16,158  |
| Georgia               | 14       | 5                     | 6,001                      | 6,079   | 6,865   | 7,282   | 7,598   | 7,941   | 8,142   | 8,322   |
| Guam                  | *        | *                     | *                          | *       | *       | *       | *       | *       | *       | *       |
| Hawaii                | 7        | 4                     | 934                        | 983     | 1,010   | 1,035   | 1,067   | 1,096   | 1,115   | 1,184   |
| Idaho                 | 18       | 7                     | 774                        | 834     | 901     | 973     | 1,019   | 1,086   | 1,125   | 1,167   |
| Illinois              | 15       | 7                     | 8,227                      | 8,655   | 9,148   | 9,589   | 9,949   | 10,330  | 10,634  | 10,919  |
| Indiana               | 12       | 11                    | 3,443                      | 3,716   | 3,973   | 4,271   | 4,448   | 4,675   | 4,824   | 4,956   |
| Iowa                  | 67       | 8                     | 1,634                      | 1,811   | 1,867   | 2,010   | 2,058   | 2,166   | 2,245   | 2,319   |
| Kansas                | 15       | 11                    | 1,660                      | 1,794   | 1,905   | 2,047   | 2,133   | 2,261   | 2,326   | 2,421   |
| Kentucky              | 13       | 10                    | 2,508                      | 2,662   | 2,821   | 2,966   | 3,101   | 3,291   | 3,343   | 3,445   |
| Louisiana             | 11       | 7                     | 2,942                      | 3,192   | 3,356   | 3,492   | 3,612   | 3,765   | 3,896   | 4,012   |
| Maine                 | 8        | 17                    | 711                        | 746     | 787     | 845     | 882     | 941     | 972     | 1,012   |
| Maryland              | 9        | 8                     | 3,968                      | 4,239   | 4,471   | 4,691   | 4,818   | 5,024   | 5,124   | 5,234   |
| Massachusetts         | 7        | 7                     | 4,488                      | 4,728   | 4,917   | 5,129   | 5,289   | 5,470   | 5,624   | 5,749   |
| Michigan              | 13       | 8                     | 6,230                      | 6,604   | 6,863   | 7,094   | 7,333   | 7,608   | 7,821   | 8,027   |
| Minnesota             | 9        | 11                    | 3,132                      | 3,380   | 3,543   | 3,702   | 3,834   | 4,048   | 4,164   | 4,345   |
| Mississippi           | 12       | 8                     | 1,631                      | 1,821   | 1,923   | 2,030   | 2,070   | 2,196   | 2,252   | 2,312   |
| Missouri              | 14       | 9                     | 3,595                      | 3,853   | 4,068   | 4,322   | 4,480   | 4,674   | 4,835   | 4,940   |
| Montana               | 8        | 7                     | 466                        | 525     | 575     | 620     | 650     | 694     | 723     | 748     |
| Nebraska              | 13       | 5                     | 1,071                      | 1,160   | 1,199   | 1,272   | 1,325   | 1,387   | 1,451   | 1,496   |
| Nevada                | 13       | 7                     | 1,605                      | 1,777   | 1,883   | 1,990   | 2,093   | 2,167   | 2,249   | 2,268   |
| New Hampshire         | 8        | 11                    | 791                        | 849     | 897     | 943     | 973     | 1,022   | 1,045   | 1,080   |
| New Jersey            | 7        | 6                     | 6,234                      | 6,617   | 6,954   | 7,207   | 7,419   | 7,654   | 7,834   | 8,008   |
| New Mexico            | 11       | 9                     | 1,025                      | 1,170   | 1,253   | 1,333   | 1,416   | 1,489   | 1,555   | 1,536   |
| New York              | 11       | 10                    | 12,996                     | 13,805  | 14,574  | 15,262  | 15,901  | 16,395  | 17,260  | 16,702  |
| North Carolina        | 14       | 8                     | 5,503                      | 5,792   | 6,209   | 6,627   | 6,962   | 7,306   | 7,428   | 8,024   |
| North Dakota          | 9        | 6                     | 368                        | 432     | 457     | 473     | 492     | 513     | 541     | 581     |
| Northern Mariana Isl. | *        | *                     | *                          | *       | *       | *       | *       | *       | *       | *       |
| Ohio                  | 14       | 9                     | 6,994                      | 7,504   | 7,939   | 8,380   | 8,723   | 9,099   | 9,357   | 9,565   |
| Oklahoma              | 19       | 8                     | 2,002                      | 2,189   | 2,317   | 2,480   | 2,572   | 2,723   | 2,808   | 2,889   |
| Oregon                | 10       | 9                     | 2,056                      | 2,339   | 2,484   | 2,656   | 2,781   | 2,923   | 3,007   | 3,084   |
| Pennsylvania          | 14       | 10                    | 7,397                      | 7,942   | 8,349   | 8,831   | 9,201   | 9,615   | 9,895   | 10,214  |
| Puerto Rico           | 7        | 2                     | 2,003                      | 2,111   | 2,171   | 2,301   | 2,323   | 2,411   | 2,502   | 2,624   |
| Rhode Island          | 7        | 9                     | 689                        | 749     | 765     | 798     | 829     | 848     | 874     | 888     |
| South Carolina        | 15       | 9                     | 2,607                      | 2,784   | 3,001   | 3,209   | 3,340   | 3,500   | 3,573   | 3,323   |
| South Dakota          | 10       | 6                     | 434                        | 481     | 514     | 548     | 570     | 596     | 611     | 631     |
| Tennessee             | 14       | 8                     | 4,066                      | 4,417   | 4,731   | 5,127   | 4,971   | 5,246   | 5,791   | 5,518   |
| Texas                 | 28       | 6                     | 14,424                     | 15,644  | 16,928  | 17,822  | 18,792  | 19,677  | 20,390  | 21,008  |
| Utah                  | 15       | 7                     | 1,414                      | 1,530   | 1,649   | 1,775   | 1,874   | 1,971   | 2,046   | 2,095   |
| Vermont               | 7        | 16                    | 295                        | 314     | 334     | 358     | 375     | 402     | 421     | 435     |
| Virgin Islands        | *        | *                     | *                          | *       | *       | *       | *       | *       | *       | *       |
| Virginia              | 11       | 9                     | 4,851                      | 5,073   | 5,325   | 5,607   | 6,148   | 6,416   | 6,242   | 6,856   |
| Washington            | 11       | 9                     | 4,062                      | 4,249   | 4,495   | 4,799   | 5,035   | 5,292   | 5,461   | 5,624   |
| West Virginia         | 11       | 17                    | 821                        | 858     | 965     | 1,040   | 1,095   | 1,173   | 1,236   | 1,295   |
| Wisconsin             | 12       | 10                    | 3,200                      | 3,366   | 3,517   | 3,510   | 3,641   | 3,842   | 3,966   | 4,265   |
| Wyoming               | 13       | 9                     | 315                        | 342     | 359     | 387     | 410     | 441     | 457     | 484     |
| Nationwide            | 175      | 8 %                   | 192,053                    | 203,667 | 217,418 | 229,619 | 238,316 | 249,332 | 255,729 | 261,284 |

\* Data withheld to maintain firm confidentiality. Some data for June 2008 have been revised.

<sup>1</sup> Percentage of mobile telephony subscribers purchasing their service subscriptions from a mobile wireless reseller.

**Table 11.3**  
**Mobile Wireless Telephone Service: Industry Survey Results**  
**(As Reported by CTIA-The Wireless Association™)**

|           | <b>Subscribers</b> | <b>Six-Month Revenues (Thousands)</b> | <b>Roamer Service Revenues (Thousands)</b> | <b>Cell Sites</b> | <b>Employees</b> | <b>Average Monthly Bill *</b> | <b>Average Minutes of Use per Month *</b> |
|-----------|--------------------|---------------------------------------|--|-------------------|------------------|-------------------------------|---|
| 1986 June | 500,000            | \$360,585                             |  | 1,194             | 3,556            |                               |   |
| December  | 681,825            | 462,467                               |  | 1,531             | 4,334            |                               |   |
| 1987 June | 883,778            | 479,514                               |  | 1,732             | 5,656            |                               |   |
| December  | 1,230,855          | 672,005                               |  | 2,305             | 7,147            | \$96.83                       |   |
| 1988 June | 1,608,697          | 886,075                               |  | 2,789             | 9,154            | 95.00                         |   |
| December  | 2,069,441          | 1,073,473                             | \$89,331                                   | 3,209             | 11,400           | 98.02                         |   |
| 1989 June | 2,691,793          | 1,406,463                             | 121,368                                    | 3,577             | 13,719           | 85.52                         |   |
| December  | 3,508,944          | 1,934,132                             | 173,199                                    | 4,169             | 15,927           | 89.30                         |   |
| 1990 June | 4,368,686          | 2,126,362                             | 192,350                                    | 4,768             | 18,973           | 83.94                         |   |
| December  | 5,283,055          | 2,422,458                             | 263,660                                    | 5,616             | 21,382           | 80.90                         |   |
| 1991 June | 6,380,053          | 2,653,505                             | 302,329                                    | 6,685             | 25,545           | 74.56                         |   |
| December  | 7,557,148          | 3,055,017                             | 401,325                                    | 7,847             | 26,327           | 72.74                         |   |
| 1992 June | 8,892,535          | 3,633,285                             | 436,725                                    | 8,901             | 30,595           | 68.51                         |   |
| December  | 11,032,753         | 4,189,441                             | 537,146                                    | 10,307            | 34,348           | 68.68                         |   |
| 1993 June | 13,067,318         | 4,819,259                             | 587,347                                    | 11,551            | 36,501           | 67.31                         |   |
| December  | 16,009,461         | 6,072,906                             | 774,266                                    | 12,824            | 39,775           | 61.48                         | 140                                       |
| 1994 June | 19,283,306         | 6,519,030                             | 778,116                                    | 14,740            | 45,606           | 58.65                         |   |
| December  | 24,134,421         | 7,710,890                             | 1,052,666                                  | 17,920            | 53,902           | 56.21                         | 119                                       |
| 1995 June | 28,154,414         | 8,740,352                             | 1,120,337                                  | 19,833            | 60,624           | 52.42                         |   |
| December  | 33,785,661         | 10,331,614                            | 1,422,233                                  | 22,663            | 68,165           | 51.00                         | 119                                       |
| 1996 June | 38,195,466         | 11,194,247                            | 1,314,943                                  | 24,802            | 73,365           | 48.84                         |   |
| December  | 44,042,992         | 12,440,724                            | 1,465,992                                  | 30,045            | 84,161           | 47.70                         | 125                                       |
| 1997 June | 48,705,553         | 13,134,551                            | 1,392,440                                  | 38,650            | 97,039           | 43.86                         |   |
| December  | 55,312,293         | 14,351,082                            | 1,581,765                                  | 51,600            | 109,387          | 42.78                         | 117                                       |
| 1998 June | 60,831,431         | 15,286,660                            | 1,584,891                                  | 57,674            | 113,111          | 39.88                         |   |
| December  | 69,209,321         | 17,846,515                            | 1,915,578                                  | 65,887            | 134,754          | 39.43                         | 136                                       |
| 1999 June | 76,284,753         | 19,368,304                            | 1,922,416                                  | 74,157            | 141,929          | 40.24                         |   |
| December  | 86,047,003         | 20,650,185                            | 2,163,001                                  | 81,698            | 155,817          | 41.24                         | 185                                       |
| 2000 June | 97,035,925         | 24,645,365                            | 1,971,625                                  | 95,733            | 159,645          | 45.15                         |   |
| December  | 109,478,031        | 27,820,655                            | 1,911,356                                  | 104,288           | 184,449          | 45.27                         | 255                                       |
| 2001 June | 118,397,734        | 30,905,721                            | 1,727,058                                  | 114,059           | 186,317          | 45.56                         |   |
| December  | 128,374,512        | 34,410,513                            | 2,209,387                                  | 127,540           | 203,580          | 47.37                         | 380                                       |
| 2002 June | 134,561,370        | 36,707,086                            | 1,846,267                                  | 131,350           | 186,956          | 47.42                         |   |
| December  | 140,766,842        | 39,801,101                            | 2,049,245                                  | 139,338           | 192,410          | 48.40                         | 427                                       |
| 2003 June | 148,065,824        | 41,384,171                            | 1,825,243                                  | 147,719           | 187,169          | 49.46                         |   |
| December  | 158,721,981        | 46,239,922                            | 1,941,024                                  | 162,986           | 205,629          | 49.91                         | 507                                       |
| 2004 June | 169,467,393        | 49,275,671                            | 2,015,780                                  | 174,368           | 212,368          | 49.49                         |   |
| December  | 182,140,362        | 52,845,539                            | 2,194,532                                  | 175,725           | 226,016          | 50.64                         | 584                                       |
| 2005 June | 194,479,364        | 55,689,208                            | 1,941,960                                  | 178,025           | 225,162          | 49.52                         |   |
| December  | 207,896,198        | 57,849,013                            | 1,844,371                                  | 183,689           | 233,067          | 49.98                         | 708                                       |
| 2006 June | 219,652,457        | 60,450,669                            | 1,713,680                                  | 197,576           | 238,236          | 49.30                         |   |
| December  | 233,040,781        | 65,006,156                            | 1,780,614                                  | 195,613           | 253,793          | 50.56                         | 714                                       |
| 2007 June | 243,428,202        | 67,887,668                            | 1,830,435                                  | 210,360           | 257,401          | 49.94                         |   |
| December  | 255,395,599        | 70,981,636                            | 1,911,579                                  | 213,299           | 266,782          | 49.79                         | 769                                       |
| 2008 June | 262,720,165        | 72,728,764                            | 1,778,519                                  | 220,472           | 267,855          | 48.54                         |   |
| December  | 270,333,881        | 75,355,406                            | 1,960,755                                  | 242,130           | 268,528          | 50.07                         | 708                                       |

\* Represents the average per month for the previous six months.

Source: CTIA-The Wireless Association™: Estimates for Total Industry.

**Table 11.4**  
**Distribution of Residential Wireless Calls and Minutes <sup>1</sup>**

| Year              | Calls               |            |                     |                       | Minutes               |            |                     |                         |
|-------------------|---------------------|------------|---------------------|-----------------------|-----------------------|------------|---------------------|-------------------------|
|                   | Percentage of Calls |            |                     | Total Calls in Sample | Percentage of Minutes |            |                     | Total Minutes in Sample |
|                   | Intrastate          | Interstate | Others <sup>2</sup> |                       | Intrastate            | Interstate | Others <sup>2</sup> |                         |
| 2000              | 87                  | 9          | 4                   | 295,892               | 82                    | 16         | 2                   | 760,380                 |
| 2001              | 84                  | 11         | 5                   | 330,444               | 76                    | 22         | 2                   | 952,993                 |
| 2002              | 82                  | 13         | 5                   | 502,946               | 71                    | 26         | 2                   | 1,614,341               |
| 2003              | 82                  | 13         | 5                   | 547,767               | 71                    | 27         | 3                   | 1,797,559               |
| 2004              | 82                  | 14         | 4                   | 508,799               | 70                    | 28         | 2                   | 1,690,428               |
| 2005              | 81                  | 15         | 4                   | 506,072               | 70                    | 28         | 2                   | 1,717,643               |
| 2006              | 81                  | 14         | 5                   | 610,693               | 71                    | 27         | 3                   | 2,123,705               |
| 2007              | 81                  | 15         | 4                   | 381,996               | 71                    | 28         | 1                   | 1,366,040               |
| 2008 <sup>3</sup> | 81                  | 15         | 4                   | 203,365               | 68                    | 30         | 2                   | 751,896                 |

**Note:** Individual figures may not add to totals due to rounding. Some previously published figures have been revised.

<sup>1</sup> Outgoing, itemized calls only.

<sup>2</sup> Inter-, intrastate status could not be determined.

<sup>3</sup> 2008 calculations based on first, second and third quarter data only.

Source: Calculated by Industry Analysis and Technology Division staff using survey data from TNS Telecoms *ReQuest Market Monitor*<sup>TM</sup>, *Bill Harvesting*®.

**Table 11.5**  
**Duration of Residential Wireless Calls: 2008**<sup>1</sup>

| <b>Duration of Call<br/>(Minutes)</b> | <b>Intrastate</b> | <b>Interstate</b> | <b>All Calls</b> |
|---------------------------------------|-------------------|-------------------|------------------|
| 1                                     | 48.5 %            | 39.4 %            | 46.9 %           |
| 2                                     | 22.6              | 20.0              | 22.2             |
| 3                                     | 8.5               | 7.2               | 8.2              |
| 4                                     | 4.6               | 4.5               | 4.6              |
| 5                                     | 3.0               | 3.5               | 3.1              |
| 6                                     | 2.2               | 2.7               | 2.3              |
| 7                                     | 1.6               | 2.3               | 1.7              |
| 8                                     | 1.3               | 1.9               | 1.4              |
| 9                                     | 1.0               | 1.6               | 1.1              |
| 10                                    | 0.8               | 1.4               | 0.9              |
| 11-15                                 | 2.6               | 4.9               | 3.0              |
| 16-20                                 | 1.2               | 3.1               | 1.5              |
| 21-25                                 | 0.7               | 2.0               | 0.9              |
| 26-30                                 | 0.4               | 1.5               | 0.6              |
| 31-45                                 | 0.6               | 2.2               | 0.8              |
| 46-60                                 | 0.2               | 0.9               | 0.3              |
| > 60                                  | 0.2               | 0.9               | 0.3              |
| Average Duration                      | 3.3               | 6.2               | 3.8              |
| Median Duration                       | 2.0               | 2.0               | 2.0              |
| Sample Size                           | 152,483           | 32,010            | 184,493          |

**Note:** Individual figures may not add to totals due to rounding.

<sup>1</sup> Outgoing, itemized calls only. All seven-digit dialed calls are considered intrastate. 800-type calls and calls for which a cross-state distinction could not be made were excluded from this analysis. Note also that only data from first, second and third quarter 2008 were available for these calculations.

Source: Calculated by Industry Analysis and Technology Division staff using survey data from TNS Telecoms *ReQuest Market Monitor*<sup>TM</sup>, *Bill Harvesting*<sup>®</sup>.

**Table 11.6**  
**Distribution of Residential Intrastate Wireless Minutes**  
**By Day and Time <sup>1</sup>**

**2008**

| <b>Day</b>   | <b>7:00 AM - 6:59 PM</b> | <b>7:00 PM - 6:59 AM</b> | <b>Total</b>   |
|--------------|--------------------------|--------------------------|----------------|
| Monday       | 10.9 %                   | 4.0 %                    | 14.9 %         |
| Tuesday      | 10.9                     | 4.0                      | 14.9           |
| Wednesday    | 10.9                     | 3.9                      | 14.8           |
| Thursday     | 11.5                     | 4.3                      | 15.8           |
| Friday       | 11.6                     | 3.9                      | 15.5           |
| Saturday     | 9.8                      | 3.2                      | 13.0           |
| Sunday       | 7.6                      | 3.5                      | 11.1           |
| <b>Total</b> | <b>73.3 %</b>            | <b>26.7 %</b>            | <b>100.0 %</b> |

**Calls in sample = 152,483.**

**2007**

| <b>Day</b>   | <b>7:00 AM - 6:59 PM</b> | <b>7:00 PM - 6:59 AM</b> | <b>Total</b>   |
|--------------|--------------------------|--------------------------|----------------|
| Monday       | 10.3 %                   | 3.7 %                    | 14.0 %         |
| Tuesday      | 11.1                     | 4.0                      | 15.1           |
| Wednesday    | 10.9                     | 4.2                      | 15.1           |
| Thursday     | 11.2                     | 4.2                      | 15.5           |
| Friday       | 11.9                     | 3.9                      | 15.8           |
| Saturday     | 10.1                     | 3.2                      | 13.3           |
| Sunday       | 7.9                      | 3.3                      | 11.2           |
| <b>Total</b> | <b>73.5 %</b>            | <b>26.5 %</b>            | <b>100.0 %</b> |

**Calls in sample =291,142.**

**2006**

| <b>Day</b>   | <b>7:00 AM - 6:59 PM</b> | <b>7:00 PM - 6:59 AM</b> | <b>Total</b>   |
|--------------|--------------------------|--------------------------|----------------|
| Monday       | 10.7 %                   | 3.7 %                    | 14.4 %         |
| Tuesday      | 10.8                     | 4.1                      | 14.9           |
| Wednesday    | 11.0                     | 4.0                      | 15.1           |
| Thursday     | 11.1                     | 4.2                      | 15.3           |
| Friday       | 11.8                     | 3.9                      | 15.7           |
| Saturday     | 10.2                     | 3.3                      | 13.5           |
| Sunday       | 7.7                      | 3.4                      | 11.1           |
| <b>Total</b> | <b>73.4 %</b>            | <b>26.6 %</b>            | <b>100.0 %</b> |

**Calls in sample = 463,098.**

**Note:** Individual figures may not add to totals due to rounding.

<sup>1</sup> Outgoing, itemized calls only. All seven-digit dialed calls are considered intrastate. 800-type calls and calls for which a cross-state distinction could not be made were excluded from this analysis. Note also that only data from first, second and third quarter 2008 were available for these calculations.

Source: Calculated by Industry Analysis and Technology Division staff using survey data from TNS Telecoms *ReQuest Market Monitor*<sup>TM</sup>, *Bill Harvesting*<sup>®</sup>.

**Table 11.7**  
**Distribution of Residential Interstate Wireless Minutes**  
**By Day and Time <sup>1</sup>**

**2008**

| <b>Day</b>   | <b>7:00 AM - 6:59 PM</b> | <b>7:00 PM - 6:59 AM</b> | <b>Total</b>   |
|--------------|--------------------------|--------------------------|----------------|
| Monday       | 8.3 %                    | 5.2 %                    | 13.5 %         |
| Tuesday      | 8.8                      | 4.5                      | 13.2           |
| Wednesday    | 8.3                      | 4.5                      | 12.8           |
| Thursday     | 8.5                      | 4.2                      | 12.7           |
| Friday       | 8.4                      | 4.3                      | 12.7           |
| Saturday     | 11.8                     | 4.7                      | 16.5           |
| Sunday       | 12.3                     | 6.3                      | 18.6           |
| <b>Total</b> | <b>66.2 %</b>            | <b>33.8 %</b>            | <b>100.0 %</b> |

**Calls in sample = 32,010.**

**2007**

| <b>Day</b>   | <b>7:00 AM - 6:59 PM</b> | <b>7:00 PM - 6:59 AM</b> | <b>Total</b>   |
|--------------|--------------------------|--------------------------|----------------|
| Monday       | 8.7 %                    | 4.6 %                    | 13.3 %         |
| Tuesday      | 8.2                      | 4.6                      | 12.8           |
| Wednesday    | 7.7                      | 4.7                      | 12.3           |
| Thursday     | 8.5                      | 5.0                      | 13.5           |
| Friday       | 8.5                      | 4.1                      | 12.6           |
| Saturday     | 12.5                     | 4.1                      | 16.6           |
| Sunday       | 12.4                     | 6.5                      | 18.9           |
| <b>Total</b> | <b>66.5 %</b>            | <b>33.5 %</b>            | <b>100.0 %</b> |

**Calls in sample = 52,047.**

**2006**

| <b>Day</b>   | <b>7:00 AM - 6:59 PM</b> | <b>7:00 PM - 6:59 AM</b> | <b>Total</b>   |
|--------------|--------------------------|--------------------------|----------------|
| Monday       | 7.9 %                    | 4.8 %                    | 12.7 %         |
| Tuesday      | 8.1                      | 4.7                      | 12.8           |
| Wednesday    | 7.9                      | 5.0                      | 12.9           |
| Thursday     | 8.1                      | 5.0                      | 13.1           |
| Friday       | 8.2                      | 4.2                      | 12.4           |
| Saturday     | 12.4                     | 4.3                      | 16.7           |
| Sunday       | 12.7                     | 6.6                      | 19.3           |
| <b>Total</b> | <b>65.3 %</b>            | <b>34.7 %</b>            | <b>100.0 %</b> |

**Calls in sample = 81,632.**

**Note:** Individual figures may not add to totals due to rounding.

<sup>1</sup> Outgoing, itemized calls only. All seven-digit dialed calls are considered intrastate. 800-type calls and calls for which a cross-state distinction could not be made were excluded from this analysis. Note also that only data from first, second and third quarter 2008 were available for these calculations.

Source: Calculated by Industry Analysis and Technology Division staff using survey data from TNS Telecoms *ReQuest Market Monitor*<sup>TM</sup>, *Bill Harvesting*<sup>®</sup>.



## **12 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](http://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 12.1 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. Chart 12.1 shows the CPI telephone services trend as compared to the CPI all items trend from 1958 through 2008.

### **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. Beginning in 1988, the CPI for all items has consistently been higher than the CPI for telephone services as shown in Chart 12.1. The annual rates of change are shown in Table 12.2 and the associated chart for the overall CPI (which measures the impact of inflation on consumers) and the CPI for telephone services. In addition, Table 12.2 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. Chart 12.2 shows the annual percentage changes for the overall CPI and CPI for telephone services.

### **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 12.3 and Chart 12.3.

### **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 12.3 and Chart 12.3.

## **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 12.1**  
**Long-Term Changes for Various Price Indices**  
**(Annual Rates of Change)**

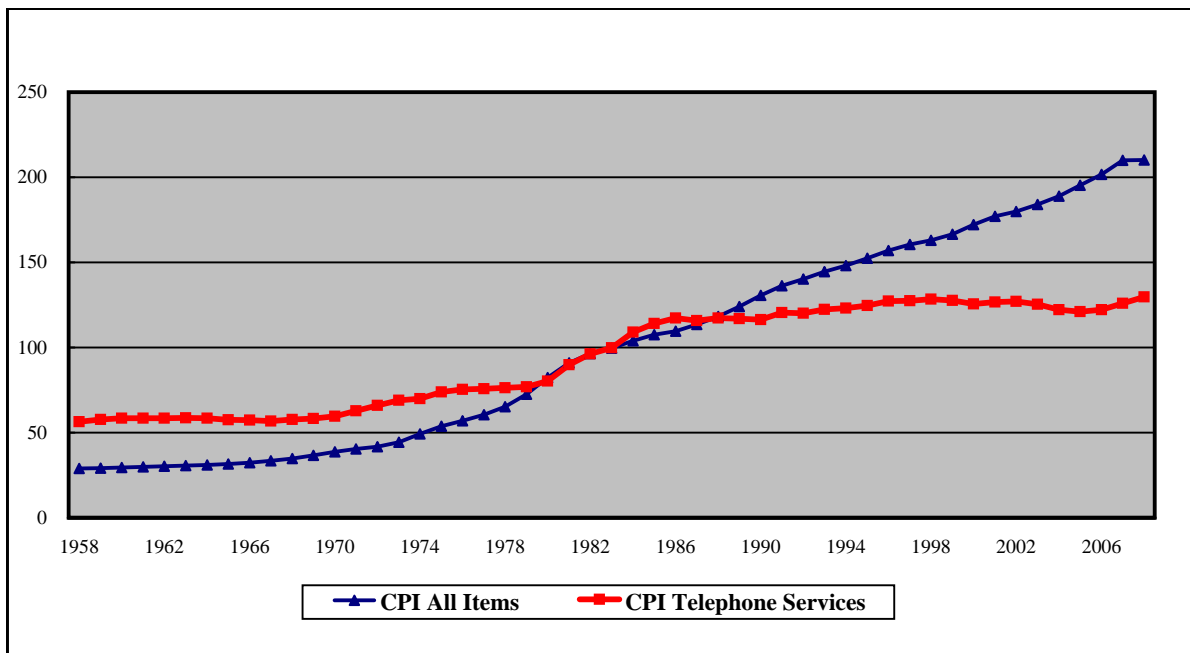
|                                     | 1958 - 2008 | 1998 - 2008 |
|-------------------------------------|-------------|-------------|
| CPI All Items                       | 4.0 %       | 2.5 %       |
| CPI All Services                    | 5.0         | 3.3         |
| CPI Telephone Services <sup>1</sup> | 1.7         | 0.1         |
| CPI Major Categories:               |             |             |
| - Food & Beverages                  | *           | 3.0         |
| - Housing                           | *           | 3.0         |
| - Apparel                           | 1.9         | -1.1        |
| - Transportation                    | 3.5         | 1.6         |
| - Medical Care                      | 5.9         | 4.1         |
| - Recreation                        | *           | 1.2         |
| - Other Goods & Services            | *           | 3.4         |
| CPI Public Transportation           | 4.9         | 2.3         |
| CPI Utility (Piped) Gas Service     | 5.5         | 7.3         |
| CPI Electricity                     | 3.8         | 4.4         |
| CPI Water & Sewerage Maintenance    | 5.6         | 4.5         |
| CPI Postage                         | 4.6         | 3.0         |

\* Series not established until after 1955.

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

Source: Bureau of Labor Statistics.

**Chart 12.1**  
**CPI All Items and CPI Telephone Services**  
**Base Periods: 1982-84 = 100**



**Table 12.2**  
**Annual Changes in Major Price Indices**

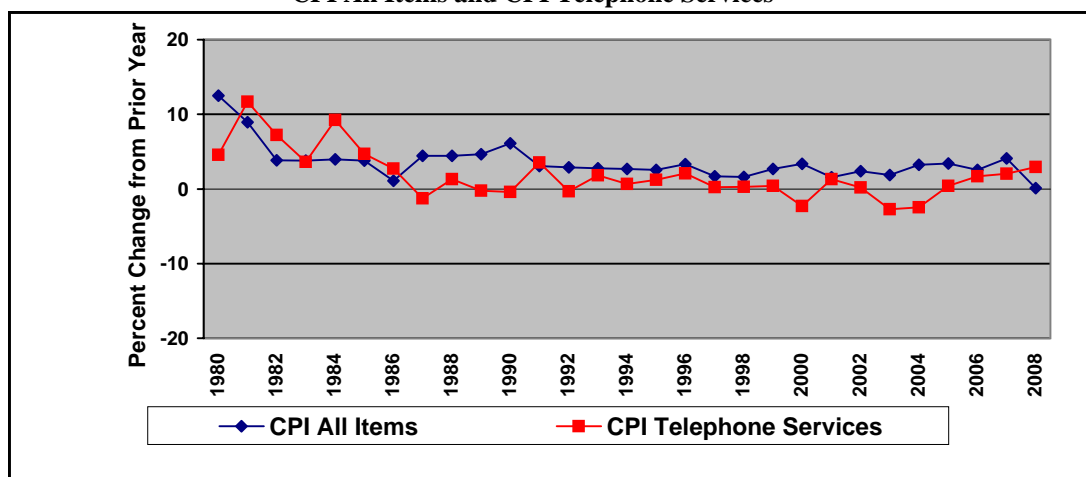
|      | <b>GDP Chain-Type Price Index</b> | <b>CPI - All Items</b> | <b>CPI - Telephone Services</b> |
|------|-----------------------------------|------------------------|---------------------------------|
| 1980 | 9.7                               | 12.5                   | 4.6                             |
| 1981 | 8.3                               | 8.9                    | 11.7                            |
| 1982 | 5.2                               | 3.8                    | 7.2                             |
| 1983 | 3.4                               | 3.8                    | 3.6                             |
| 1984 | 3.6                               | 3.9                    | 9.2                             |
| 1985 | 2.8                               | 3.8                    | 4.7                             |
| 1986 | 2.3                               | 1.1                    | 2.7                             |
| 1987 | 2.9                               | 4.4                    | -1.3                            |
| 1988 | 3.7                               | 4.4                    | 1.3                             |
| 1989 | 3.5                               | 4.6                    | -0.3                            |
| 1990 | 4.1                               | 6.1                    | -0.4                            |
| 1991 | 3.1                               | 3.1                    | 3.5                             |
| 1992 | 2.1                               | 2.9                    | -0.3                            |
| 1993 | 2.3                               | 2.7                    | 1.8                             |
| 1994 | 2.2                               | 2.7                    | 0.7                             |
| 1995 | 2.0                               | 2.5                    | 1.2                             |
| 1996 | 1.9                               | 3.3                    | 2.1                             |
| 1997 | 1.5                               | 1.7                    | 0.2                             |
| 1998 | 1.1                               | 1.6                    | 0.3 *                           |
| 1999 | 1.5                               | 2.7                    | 0.4                             |
| 2000 | 2.3                               | 3.4                    | -2.3                            |
| 2001 | 2.5                               | 1.6                    | 1.3                             |
| 2002 | 1.7                               | 2.4                    | 0.2                             |
| 2003 | 2.2                               | 1.9                    | -2.7                            |
| 2004 | 3.2                               | 3.3                    | -2.5                            |
| 2005 | 3.5                               | 3.4                    | 0.4                             |
| 2006 | 2.8                               | 2.5                    | 1.7                             |
| 2007 | 2.6                               | 4.1                    | 2.1                             |
| 2008 | 2.1                               | 0.1                    | 2.9                             |

Note: All values calculated as the percent change from December of the previous year through December of the year shown, except the GDP price index, which is based on changes from the 4th quarter to 4th quarter.

\* The CPI telephone service index was revised in December of 1997.

Sources: Bureau of Labor Statistics and Bureau of Economic Analysis.

**Chart 12.2**  
**CPI All Items and CPI Telephone Services**



**Table 12.3**  
**Annual Changes in Price Indices for Local and Long Distance Telephone Services**

|      | Local Residential Service |              | Toll Service <sup>1</sup> |              |            |              |
|------|---------------------------|--------------|---------------------------|--------------|------------|--------------|
|      |                           |              | Interstate                |              | Intrastate |              |
|      | CPI                       | PPI          | CPI                       | PPI          | CPI        | PPI          |
| 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                       | <sup>2</sup> | 0.1                       | <sup>2</sup> | -3.8       | <sup>2</sup> |
| 1996 | 0.9                       | 0.2          | 3.7                       | 0.8          | 6.1        | 0.9          |
| 1997 | 1.0                       | 0.1          | -4.3                      | 7.8          | 2.8        | -4.3         |
| 1998 | 1.3                       | 0.0          | -0.8                      | -0.4         | 1.5        | -3.7         |
| 1999 | 2.8                       | 0.2          | -0.7                      | 2.4          | -1.6       | -2.8         |
| 2000 | 5.5                       | 1.5          | -11.2                     | -4.3         | -6.0       | 0.2          |
| 2001 | 4.5                       | 2.7          | -2.0                      | -9.4         | -1.7       | 1.7          |
| 2002 | 5.3                       | 1.6          | -5.9                      | -18.5        | -6.1       | -0.3         |
| 2003 | 2.6                       | 1.9          | -10.9                     | -2.4         | -9.4       | -12.6        |
| 2004 | 1.1                       | 0.7          | -8.7                      | 0.7          | -6.6       | -2.9         |
| 2005 | 3.3                       | 0.9          | -3.0                      | 7.4          | 0.4        | 0.2          |
| 2006 | 2.2                       | 2.7          | 5.0                       | 20.6         | 3.3        | 1.2          |
| 2007 | 4.1                       | 1.6          | 2.4                       | 10.8         | 5.9        | 9.2          |
| 2008 | 3.0                       | 0.5          | 9.1                       | 15.3         | 9.5        | 4.2          |

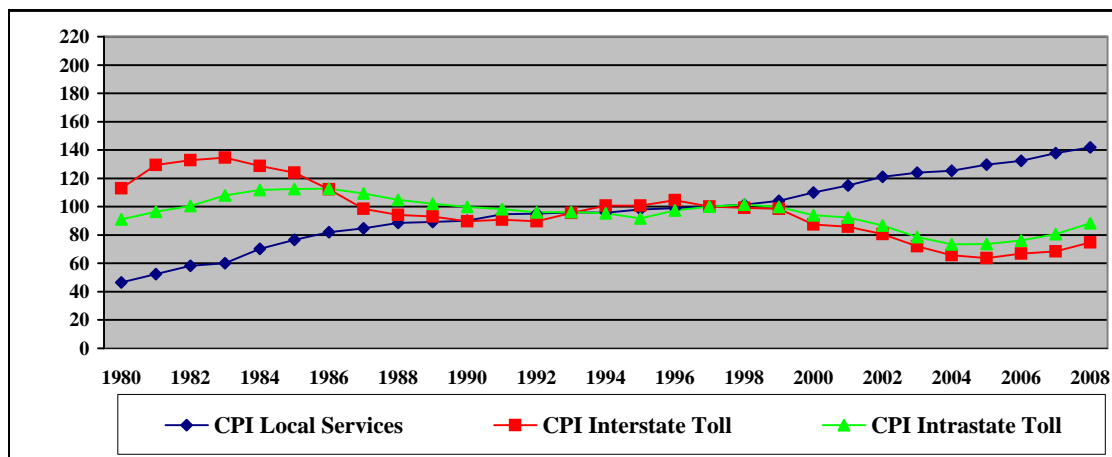
Note: Data reflect the percent change from December of the previous year through December of the year shown.

<sup>1</sup> 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.

<sup>2</sup> The PPI telephone indices were revised in June of 1995. The series are not comparable.

Source: Bureau of Labor Statistics.

**Chart 12.3**  
**CPI Telephone Service Price Indices**  
**Base Periods: December 1997 = 100**



## **13 Price Levels**

### **1. Local Rates**

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 13.1 presents average local rates for residential customers in urban areas. In October 2007, the average monthly charge was \$25.62 while the average charge for connecting phone service was \$43.22.

Table 13.2 presents average local rates for a business with a single phone line in an urban area. In October 2007, the average monthly charge was \$48.17 while the average charge for connecting phone service was \$68.74.

Table 13.3 presents the average local rate for a residential phone line from 1940 to 2007. The table shows, after adjusting for inflation, the price of a local exchange line declined from 1940 through the early 1980s.

### **2. Long Distance Rates**

Table 13.4 contains measures of average revenue per minute (ARPM) for long distance calls. Estimates of ARPM are often used interchangeably with estimates of the average price. From 1984 to 2007 the price of long distance calling dropped from 32 cents per minute to 8 cents per minute. The average price of 8 cents per minute represents a mix of international calling (9 cents per minute) and domestic interstate calling (7 cents per minute). The decline in prices since 1984 is more than 75% after adjusting for the impact of inflation.

Chart 13.1 shows that on a per minute basis, the cost of access and of contributing to universal service support has declined through 2002. These declines account for much of the decrease in interstate toll rates.

**Table 13.1**  
**Average Residential Rates for Local Service in Urban Areas, 1995 - 2007**  
**(As of October 15)**

|  | 1995           | 1996           | 1997           | 1998           | 1999           | 2000           | 2001           | 2002           | 2003           | 2004           | 2005           | 2006           | 2007           |
|--|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Representative Monthly Charge <sup>1 2</sup>               | \$13.62        | \$13.71        | \$13.67        | \$13.75        | \$13.77        | \$13.64        | \$14.49        | \$14.38        | \$14.54        | \$14.57        | \$14.66        | \$15.03        | \$15.62        |
| Subscriber Line Charges                                    | 3.54           | 3.54           | 3.53           | 3.52           | 3.58           | 4.50           | 5.05           | 5.74           | 5.86           | 5.81           | 5.82           | 5.97           | 5.74           |
| Additional Monthly Charge for Touch-Tone Service           | 0.44           | 0.30           | 0.25           | 0.10           | 0.09           | 0.06           | 0.04           | <sup>2</sup>   | <sup>2</sup>   | <sup>2</sup>   | <sup>2</sup>   | <sup>2</sup>   | <sup>2</sup>   |
| Taxes, 911, and Other Charges                              | 2.41           | 2.40           | 2.42           | 2.39           | 2.48           | 2.57           | 3.03           | 3.94           | 4.12           | 4.14           | 4.15           | 4.26           | 4.26           |
| <b>Total Monthly Charge</b>                                | <b>\$20.01</b> | <b>\$19.95</b> | <b>\$19.88</b> | <b>\$19.76</b> | <b>\$19.93</b> | <b>\$20.78</b> | <b>\$22.62</b> | <b>\$24.07</b> | <b>\$24.52</b> | <b>\$24.52</b> | <b>\$24.64</b> | <b>\$25.26</b> | <b>\$25.62</b> |
| Basic Connection Charge                                    | \$40.91        | \$41.11        | \$41.04        | \$41.24        | \$41.26        | \$41.45        | \$40.02        | \$39.83        | \$39.22        | \$39.26        | \$39.62        | \$39.68        | \$39.81        |
| Additional Connection Charge for Touch-Tone Service        | 0.23           | 0.23           | 0.17           | 0.12           | 0.12           | 0.12           | 0.12           | <sup>2</sup>   | <sup>2</sup>   | <sup>2</sup>   | <sup>2</sup>   | <sup>2</sup>   | <sup>2</sup>   |
| Taxes, 911, and Other Charges                              | 2.44           | 2.36           | 2.46           | 2.38           | 2.57           | 2.53           | 2.81           | 1.33           | 3.32           | 3.44           | 3.17           | 3.45           | 3.41           |
| <b>Total Connection Charge</b>                             | <b>\$43.58</b> | <b>\$43.70</b> | <b>\$43.67</b> | <b>\$43.74</b> | <b>\$43.95</b> | <b>\$44.10</b> | <b>\$42.95</b> | <b>\$41.16</b> | <b>\$42.54</b> | <b>\$42.71</b> | <b>\$42.80</b> | <b>\$43.13</b> | <b>\$43.22</b> |
| Additional Charge if Drop Line and Connection Block Needed | \$5.90         | \$5.74         | \$5.65         | \$5.64         | \$5.86         | \$5.84         | \$5.84         | \$5.85         | \$12.13        | \$12.45        | \$12.65        | \$13.91        | \$12.65        |
| Lowest-Cost Inside Wiring Maintenance Plan                 | \$1.52         | \$1.78         | \$1.68         | \$2.22         | \$2.66         | \$3.03         | \$3.62         | \$3.62         | \$3.64         | \$4.08         | \$4.42         | \$4.96         | \$5.38         |

Note: Details may not add to totals due to rounding. Some previously published were revised. Data for 1986 through 1994 are available in prior year reports.

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

<sup>2</sup> Beginning in 2002, additional monthly charges for touch-tone service are included in the monthly charge.

Source: Industry Analysis and Technology Division, Wireline Competition Bureau, *Reference Book of Rates, Price Indices, and Household Expenditures for Telephone Service* (2008).

**Table 13.2**  
**Average Local Rates for Businesses with a Single Line in Urban Areas**  
**(As of October 15)**

|  | 1995           | 1996           | 1997           | 1998           | 1999           | 2000           | 2001           | 2002           | 2003           | 2004           | 2005           | 2006           | 2007           |
|--|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Monthly Representative Service Charge <sup>1</sup>               | \$32.48        | \$32.58        | \$32.76        | \$32.44        | \$32.41        | \$32.18        | \$31.88        | \$30.86        | \$30.65        | \$32.11        | \$32.21        | \$33.54        | \$36.58        |
| Subscriber Line Charges  | 3.57           | 3.54           | 3.54           | 3.54           | 3.52           | 4.39           | 4.91           | 5.63           | 5.76           | 5.71           | 5.71           | 5.90           | 5.73           |
| Extra for Touch-Tone Service <sup>2</sup>                        | 0.97           | 0.82           | 0.38           | 0.32           | 0.25           | 0.19           | 0.18           | <sup>2</sup>   | <sup>2</sup>   | <sup>2</sup>   | <sup>2</sup>   | <sup>2</sup>   | <sup>2</sup>   |
| Taxes, 911, and Other Charges                                    | 4.79           | 4.87           | 4.99           | 4.97           | 5.03           | 5.04           | 5.45           | 5.47           | 5.55           | 5.67           | 5.83           | 5.88           | 5.87           |
| <b>Total Monthly Charge</b>                                      | <b>\$41.80</b> | <b>\$41.81</b> | <b>\$41.67</b> | <b>\$41.27</b> | <b>\$41.21</b> | <b>\$41.80</b> | <b>\$42.43</b> | <b>\$41.95</b> | <b>\$41.96</b> | <b>\$43.49</b> | <b>\$43.75</b> | <b>\$45.32</b> | <b>\$48.17</b> |
| Monthly Charge for Flat-Rate Service                             | \$34.45        | \$34.42        | \$34.68        | \$34.39        | \$33.73        | \$33.45        | \$32.02        | \$32.92        | \$33.17        | \$34.20        | \$34.19        | \$34.56        | \$35.17        |
| Subscriber Line Charges  | 3.69           | 3.61           | 3.61           | 3.56           | 3.50           | 4.35           | 4.77           | 5.77           | 6.03           | 6.01           | 6.03           | 6.16           | 6.16           |
| Extra for Touch-Tone Service <sup>2</sup>                        | 1.00           | 0.89           | 0.53           | 0.49           | 0.47           | 0.43           | 0.39           | <sup>2</sup>   | <sup>2</sup>   | <sup>2</sup>   | <sup>2</sup>   | <sup>2</sup>   | <sup>2</sup>   |
| Taxes, 911, and Other Charges                                    | 5.58           | 5.55           | 5.58           | 5.63           | 5.49           | 5.68           | 5.98           | 8.16           | 7.91           | 7.53           | 7.77           | 7.68           | 7.35           |
| <b>Total Monthly Charge for Flat-Rate Service</b>                | <b>\$44.71</b> | <b>\$44.47</b> | <b>\$44.39</b> | <b>\$44.07</b> | <b>\$43.20</b> | <b>\$43.90</b> | <b>\$43.15</b> | <b>\$46.85</b> | <b>\$47.12</b> | <b>\$47.74</b> | <b>\$47.99</b> | <b>\$48.39</b> | <b>\$48.67</b> |
| Number of Sample Cities with Flat-Rate Service                   | 53             | 53             | 53             | 54             | 54             | 54             | 56             | 52             | 52             | 56             | 56             | 56             | 56             |
| Monthly Charge for Measured/Message Service                      | \$17.06        | \$17.26        | \$17.28        | \$17.16        | \$17.06        | \$16.92        | \$17.16        | \$17.56        | \$17.21        | \$18.49        | 18.30          | \$16.41        | \$18.59        |
| 200 Five-Minute Same-Zone Business-Day Calls                     | 17.15          | 17.10          | 17.18          | 17.15          | 17.24          | 17.63          | 17.56          | 16.78          | 17.17          | 17.86          | 18.16          | 16.93          | 17.77          |
| Subscriber Line Charges  | 3.54           | 3.51           | 3.51           | 3.53           | 3.52           | 4.39           | 4.90           | 5.56           | 5.65           | 5.86           | 5.80           | 5.49           | 5.57           |
| Extra for Touch-Tone Service <sup>2</sup>                        | 0.98           | 0.83           | 0.39           | 0.33           | 0.25           | 0.20           | 0.19           | <sup>2</sup>   | <sup>2</sup>   | <sup>2</sup>   | <sup>2</sup>   | <sup>2</sup>   | <sup>2</sup>   |
| Taxes, Including 911 Charges                                     | 5.01           | 5.13           | 5.22           | 5.19           | 5.28           | 5.32           | 5.76           | 4.71           | 4.78           | 5.07           | 5.14           | 4.74           | 5.07           |
| <b>Total Monthly Charge for Measured/Message Service</b>         | <b>\$43.75</b> | <b>\$43.84</b> | <b>\$43.57</b> | <b>\$43.35</b> | <b>\$43.35</b> | <b>\$44.45</b> | <b>\$45.57</b> | <b>\$44.61</b> | <b>\$44.82</b> | <b>\$47.29</b> | <b>\$47.40</b> | <b>\$43.57</b> | <b>\$47.00</b> |
| Number of Sample Cities with Measured/Message Service            | 87             | 86             | 85             | 85             | 85             | 85             | 85             | 86             | 85             | 86             | 85             | 78             | 78             |
| 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         | \$0.10         | \$0.10         | \$0.09         | \$0.11         |
| Basic Connection Charge  | \$67.87        | \$68.47        | \$68.67        | \$65.83        | \$67.87        | \$67.77        | \$67.04        | \$67.29        | \$67.23        | \$67.24        | \$67.35        | \$62.55        | \$62.67        |
| Additional Connection Charge for Touch-Tone Service <sup>2</sup> | 0.27           | 0.17           | 0.17           | 0.12           | 0.12           | 0.12           | 0.12           | <sup>2</sup>   | <sup>2</sup>   | <sup>2</sup>   | <sup>2</sup>   | <sup>2</sup>   | <sup>2</sup>   |
| Taxes, Including 911 Charges                                     | 4.17           | 4.20           | 4.45           | 4.13           | 4.53           | 4.40           | 4.69           | 5.09           | 6.95           | 6.42           | 6.15           | 6.41           | 6.06           |
| <b>Total Connection Charge</b>                                   | <b>\$72.31</b> | <b>\$72.85</b> | <b>\$73.29</b> | <b>\$70.09</b> | <b>\$72.55</b> | <b>\$72.29</b> | <b>\$71.86</b> | <b>\$72.39</b> | <b>\$74.18</b> | <b>\$73.66</b> | <b>\$73.50</b> | <b>\$68.96</b> | <b>\$68.74</b> |
| Additional Charge if Drop Line and Connection Block Needed       | \$7.28         | \$6.98         | \$6.54         | \$6.54         | \$6.65         | \$6.62         | \$6.62         | \$6.52         | \$13.43        | \$13.76        | \$13.96        | \$11.45        | \$11.45        |
| Lowest-Cost Inside Wiring Maintenance Plan                       | \$2.39         | \$2.63         | \$2.84         | \$3.04         | \$3.53         | \$3.92         | \$4.86         | \$4.73         | \$4.65         | \$4.94         | \$6.27         | \$5.77         | \$5.62         |

Note: Details may not add to totals due to rounding. Some previously published were revised. Data for 1989 through 1994 are available in prior year reports.

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

<sup>2</sup> Beginning in 2002, additional monthly charges for touch-tone service are included in the monthly charge.

Source: Industry Analysis and Technology Division, Wireline Competition Bureau, *Reference Book of Rates, Price Indices, and Household Expenditures for Telephone Service* (2008).



**Table 13.3**  
**Average Rate for a Residential Access Line**

|      | Consumer Price Index<br><br>All Urban<br>All Goods and Services<br>(1982-1984 = 100) | Average Rate for a Residential Access Line |                          |      | Consumer Price Index<br><br>All Urban<br>All Goods and Services<br>(1982-1984 = 100) | Average Rate for a Residential Access Line |                          |
|------|--|--|--------------------------|------|--|--|--------------------------|
|      |  | Survey Rate                                | Restated in 2008 Dollars |      |  | Survey Rate                                | Restated in 2008 Dollars |
| 1940 | 14.0   | \$3.67                                     | \$56.44                  | 1978 | 65.2   | \$8.31                                     | \$27.44                  |
| 1941 | 14.7   | 3.67                                       | 53.75                    | 1979 | 72.6   | 8.40                                       | 24.91                    |
| 1942 | 16.3   | 3.64                                       | 48.08                    | 1980 | 82.4   | 8.61                                       | 22.50                    |
| 1943 | 17.3   | 3.64                                       | 45.30                    | 1981 | 90.9   | 9.16                                       | 21.70                    |
| 1944 | 17.6   | 3.66                                       | 44.77                    | 1982 | 96.5   | 10.18                                      | 22.71                    |
| 1945 | 18.0   | 3.67                                       | 43.90                    | 1983 | 99.6   | 13.58                                      | 29.36                    |
| 1946 | 19.5   | 3.67                                       | 40.52                    | 1984 | 103.9  | 15.18                                      | 31.46                    |
| 1947 | 22.3   | 3.70                                       | 35.72                    | 1985 | 107.6  | 16.26                                      | 32.54                    |
| 1948 | 24.1   | 3.91                                       | 34.93                    | 1986 | 109.6  | 17.70                                      | 34.77                    |
| 1949 | 23.8   | 4.02                                       | 36.37                    | 1987 | 113.6  | 18.18                                      | 34.46                    |
| 1950 | 24.1   | 4.29                                       | 38.33                    | 1988 | 118.3  | 18.11                                      | 32.96                    |
| 1951 | 26.0   | 4.48                                       | 37.10                    | 1989 | 124.0  | 19.05                                      | 33.08                    |
| 1952 | 26.5   | 4.62                                       | 37.54                    | 1990 | 130.7  | 19.24                                      | 31.69                    |
| 1953 | 26.7   | 4.93                                       | 39.75                    | 1991 | 136.2  | 19.77                                      | 31.25                    |
| 1954 | 26.9   | 5.10                                       | 40.82                    | 1992 | 140.3  | 19.72                                      | 30.26                    |
| 1955 | 26.8   | 5.19                                       | 41.69                    | 1993 | 144.5  | 19.95                                      | 29.73                    |
| 1956 | 27.2   | 5.24                                       | 41.48                    | 1994 | 148.2  | 19.81                                      | 28.78                    |
| 1957 | 28.1   | 5.28                                       | 40.46                    | 1995 | 152.4  | 20.01                                      | 28.27                    |
| 1958 | 28.9   | 5.36                                       | 39.93                    | 1996 | 156.9  | 19.95                                      | 27.38                    |
| 1959 | 29.1   | 5.51                                       | 40.77                    | 1997 | 160.5  | 19.88                                      | 26.67                    |
| 1960 | 29.6   | 5.55                                       | 40.37                    | 1998 | 163.0  | 19.76                                      | 26.10                    |
| 1961 | 29.9   | 5.61                                       | 40.40                    | 1999 | 166.6  | 19.93                                      | 25.76                    |
| 1962 | 30.2   | 5.62                                       | 40.07                    | 2000 | 172.2  | 20.78                                      | 25.98                    |
| 1963 | 30.6   | 5.65                                       | 39.75                    | 2001 | 177.1  | 22.62                                      | 27.50                    |
| 1964 | 31.0   | 5.66                                       | 39.31                    | 2002 | 179.9  | 24.07                                      | 28.81                    |
| 1965 | 31.5   | 5.67                                       | 38.75                    | 2003 | 184.0  | 24.52                                      | 28.69                    |
| 1966 | 32.4   | 5.64                                       | 37.48                    | 2004 | 188.9  | 24.52                                      | 27.95                    |
| 1967 | 33.4   | 5.60                                       | 36.10                    | 2005 | 195.3  | 24.64                                      | 27.16                    |
| 1968 | 34.8   | 5.61                                       | 34.71                    | 2006 | 201.6  | 25.26                                      | 26.98                    |
| 1969 | 36.7   | 5.68                                       | 33.32                    | 2007 | 207.3  | 25.62                                      | 26.61                    |
| 1970 | 38.8   | 5.76                                       | 31.96                    | 2008 | 215.3  |  |                          |
| 1971 | 40.5   | 6.04                                       | 32.11                    |      |  |  |                          |
| 1972 | 41.8   | 6.38                                       | 32.86                    |      |  |  |                          |
| 1973 | 44.4   | 6.69                                       | 32.44                    |      |  |  |                          |
| 1974 | 49.3   | 7.08                                       | 30.92                    |      |  |  |                          |
| 1975 | 53.8   | 7.32                                       | 29.29                    |      |  |  |                          |
| 1976 | 56.9   | 7.81                                       | 29.55                    |      |  |  |                          |
| 1977 | 60.6   | 8.07                                       | 28.67                    |      |  |  |                          |

Sources: Averages for 1940 through 1982 are from an AT&T local rate survey and represent January 1 rates. These averages exclude taxes and are for rotary service including the cost of a telephone. See *Reference Book of Rates, Price Indices and Expenditures for Telephone Service*, Wireline Competition Bureau. Starting in 1983, averages are from the *Urban Rates Survey* and represent October 15 rates. These averages include taxes and are for touch tone service but do not include telephone rental charges or any unbundled inside wiring maintenance plan charges. The 2005 and 2006 rates are revised.

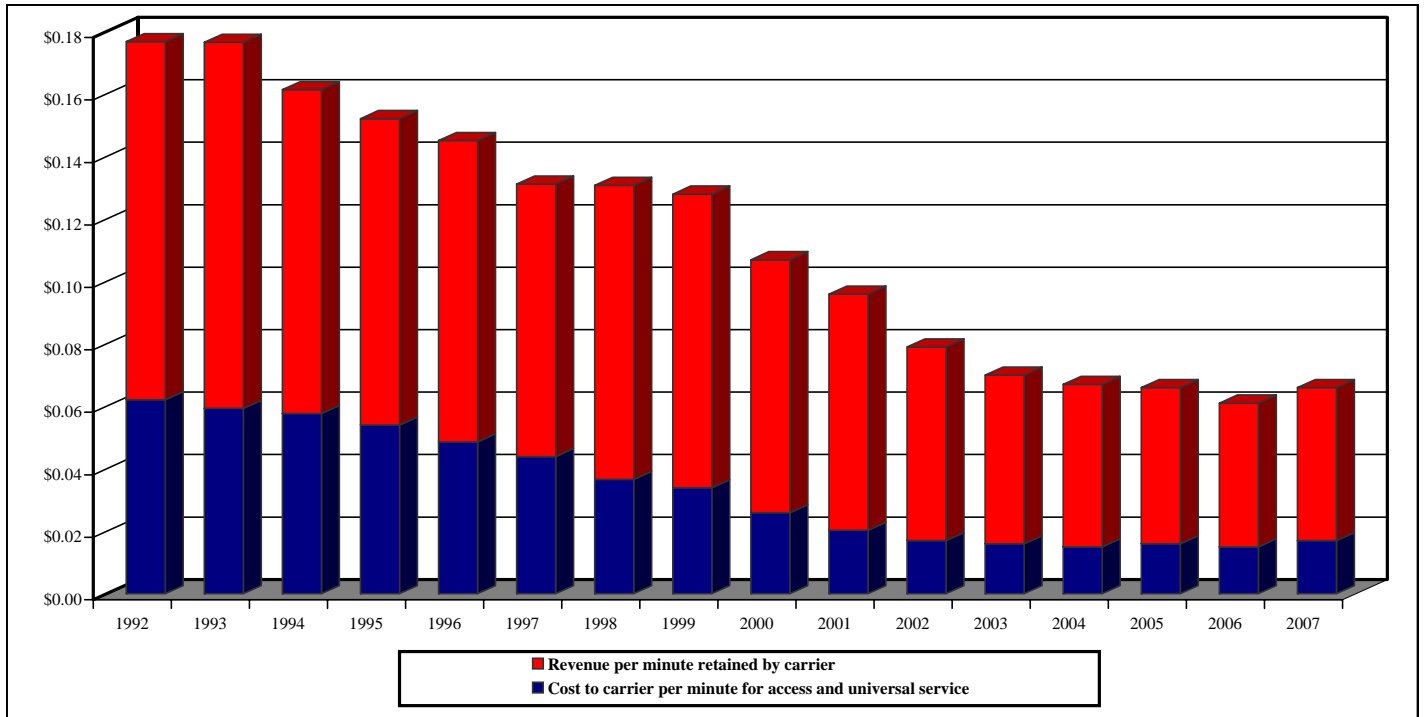
**Table 13.4**  
**Average Revenue per Minute**

|      | Consumer Price Index<br><br>All Goods and Services<br>(1982-1984 = 100) | Average Revenue Per Minute for Interstate and International Calls |                          |      | Consumer Price Index<br><br>All Goods and Services<br>(1982-1984 = 100) | Average Revenue Per Minute for Interstate and International Calls |                          |                        |                  |  |
|------|---|---|--------------------------|------|---|---|--------------------------|------------------------|------------------|--|
|      |   |   | Restated in 2008 Dollars |      |   | Interstate and International Calls                                |                          | International Calls 1/ | Interstate Calls |  |
|      |   |   |                          |      |   |   | Restated in 2008 Dollars |                        |                  | Net of Access and Universal Service Cost |
| 1930 | 16.7  | \$0.27  | \$3.54                   | 1970 | 38.8  | \$0.23  | \$1.28                   | \$2.43                 | \$0.20           |  |
| 1931 | 15.2  | 0.27  | 3.81                     | 1971 | 40.5  | 0.25  | 1.30                     | 2.35                   | 0.22             |  |
| 1932 | 13.7  | 0.26  | 4.12                     | 1972 | 41.8  | 0.24  | 1.26                     | 2.31                   | 0.21             |  |
| 1933 | 13.0  | 0.28  | 4.56                     | 1973 | 44.4  | 0.25  | 1.23                     | 2.29                   | 0.22             |  |
| 1934 | 13.4  | 0.27  | 4.37                     | 1974 | 49.3  | 0.26  | 1.12                     | 2.25                   | 0.22             |  |
| 1935 | 13.7  | 0.27  | 4.17                     | 1975 | 53.8  | 0.27  | 1.09                     | 2.23                   | 0.24             |  |
| 1936 | 13.9  | 0.25  | 3.89                     | 1976 | 56.9  | 0.29  | 1.08                     | 2.20                   | 0.25             |  |
| 1937 | 14.4  | 0.22  | 3.24                     | 1977 | 60.6  | 0.28  | 1.01                     | 2.18                   | 0.25             |  |
| 1938 | 14.1  | 0.21  | 3.27                     | 1978 | 65.2  | 0.29  | 0.95                     | 2.09                   | 0.25             |  |
| 1939 | 13.9  | 0.22  | 3.34                     | 1979 | 72.6  | 0.29  | 0.86                     | 1.76                   | 0.26             |  |
| 1940 | 14.0  | 0.21  | 3.23                     | 1980 | 82.4  | 0.30  | 0.79                     | 1.34                   | 0.27             |  |
| 1941 | 14.7  | 0.21  | 3.04                     | 1981 | 90.9  | 0.33  | 0.77                     | 1.21                   | 0.31             |  |
| 1942 | 16.3  | 0.22  | 2.85                     | 1982 | 96.5  | 0.34  | 0.76                     | 1.09                   | 0.32             |  |
| 1943 | 17.3  | 0.21  | 2.62                     | 1983 | 99.6  | 0.35  | 0.75                     | 1.09                   | 0.33             |  |
| 1944 | 17.6  | 0.22  | 2.64                     | 1984 | 103.9   | 0.32  | 0.67                     | 1.05                   | 0.30             |  |
| 1945 | 18.0  | 0.21  | 2.54                     | 1985 | 107.6   | 0.31  | 0.62                     | 1.01                   | 0.29             |  |
| 1946 | 19.5  | 0.20  | 2.18                     | 1986 | 109.6   | 0.28  | 0.55                     | 0.97                   | 0.26             |  |
| 1947 | 22.3  | 0.19  | 1.85                     | 1987 | 113.6   | 0.25  | 0.46                     | 0.99                   | 0.22             |  |
| 1948 | 24.1  | 0.19  | 1.67                     | 1988 | 118.3   | 0.23  | 0.43                     | 1.02                   | 0.21             |  |
| 1949 | 23.8  | 0.19  | 1.71                     | 1989 | 124.0   | 0.22  | 0.38                     | 1.02                   | 0.19             |  |
| 1950 | 24.1  | 0.19  | 1.73                     | 1990 | 130.7   | 0.20  | 0.33                     | 1.00                   | 0.17             |  |
| 1951 | 26.0  | 0.20  | 1.66                     | 1991 | 136.2   | 0.20  | 0.31                     | 1.02                   | 0.15             |  |
| 1952 | 26.5  | 0.20  | 1.64                     | 1992 | 140.3   | 0.19  | 0.30                     | 1.01                   | 0.15             | \$0.09                                   |
| 1953 | 26.7  | 0.21  | 1.68                     | 1993 | 144.5   | 0.19  | 0.29                     | 1.02                   | 0.15             | 0.09                                     |
| 1954 | 26.9  | 0.22  | 1.78                     | 1994 | 148.2   | 0.18  | 0.26                     | 0.93                   | 0.14             | 0.08                                     |
| 1955 | 26.8  | 0.23  | 1.84                     | 1995 | 152.4   | 0.17  | 0.24                     | 0.91                   | 0.12             | 0.07                                     |
| 1956 | 27.2  | 0.23  | 1.85                     | 1996 | 156.9   | 0.16  | 0.22                     | 0.76                   | 0.12             | 0.08                                     |
| 1957 | 28.1  | 0.24  | 1.82                     | 1997 | 160.5   | 0.15  | 0.20                     | 0.69                   | 0.11             | 0.06                                     |
| 1958 | 28.9  | 0.24  | 1.78                     | 1998 | 163.0   | 0.14  | 0.19                     | 0.58                   | 0.11             | 0.08                                     |
| 1959 | 29.1  | 0.24  | 1.79                     | 1999 | 166.6   | 0.14  | 0.18                     | 0.54                   | 0.11             | 0.08                                     |
| 1960 | 29.6  | 0.24  | 1.76                     | 2000 | 172.2   | 0.12  | 0.15                     | 0.52                   | 0.09             | 0.06                                     |
| 1961 | 29.9  | 0.25  | 1.79                     | 2001 | 177.1   | 0.10  | 0.12                     | 0.35                   | 0.08             | 0.06                                     |
| 1962 | 30.2  | 0.25  | 1.80                     | 2002 | 179.9   | 0.09  | 0.11                     | 0.28                   | 0.07             | 0.05                                     |
| 1963 | 30.6  | 0.25  | 1.75                     | 2003 | 184.0   | 0.08  | 0.09                     | 0.21                   | 0.06             | 0.05                                     |
| 1964 | 31.0  | 0.25  | 1.73                     | 2004 | 188.9   | 0.08  | 0.09                     | 0.14                   | 0.06             | 0.05                                     |
| 1965 | 31.5  | 0.24  | 1.64                     | 2005 | 195.3   | 0.07  | 0.08                     | 0.10                   | 0.07             | 0.05                                     |
| 1966 | 32.4  | 0.24  | 1.61                     | 2006 | 201.6   | 0.07  | 0.07                     | 0.10                   | 0.06             | 0.04                                     |
| 1967 | 33.4  | 0.24  | 1.56                     | 2007 | 207.3   | 0.08  | 0.08                     | 0.09                   | 0.07             | 0.04                                     |
| 1968 | 34.8  | 0.24  | 1.46                     | 2008 | 215.3   |   |                          |                        |                  |  |
| 1969 | 36.7  | 0.24  | 1.41                     |      |   |   |                          |                        |                  |  |

1/ Starting in 1992, billed revenue per minute for international service differs in Table 6.1 and Table 13.4. Data in Table 6.1 are calculated using all U.S. billed minutes and revenues. Data for Table 13.4 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: Estimates for 1930 through 1981 are based on information in AT&T's *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 the Industry Analysis and Technology Division, Wireline Competition Bureau, *Telecommunications Industry Revenues*. For 1970 through 1991, interstate revenue per minute was estimated using the combined interstate and international revenue per minute estimates shown in the table, and international revenue and revenue per minute data in Table 1 and Table 2 of *Trends in the International Telecommunications Industry*.

**Chart 13.1**  
**Revenue per Minute for Interstate Calls**



| Item  | 1992    | 1993    | 1994    | 1995    | 1996    | 1997    | 1998    | 1999    | 2000    | 2001    | 2002    | 2003    | 2004    | 2005    | 2006    | 2007    |
|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Revenue per minute retained by carrier                      | \$0.115 | \$0.117 | \$0.104 | \$0.098 | \$0.097 | \$0.087 | \$0.094 | \$0.094 | \$0.081 | \$0.076 | \$0.062 | \$0.054 | \$0.052 | \$0.050 | \$0.046 | \$0.049 |
| Cost to carrier per minute for access and universal service | \$0.062 | \$0.059 | \$0.058 | \$0.054 | \$0.049 | \$0.044 | \$0.037 | \$0.034 | \$0.026 | \$0.020 | \$0.017 | \$0.016 | \$0.015 | \$0.016 | \$0.015 | \$0.017 |

## 14 Residential Wireline 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 for wireline service. The figures have not been adjusted to take into account the fact that call itemization is increasingly omitted from customer 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 14.1 shows the percentage of residential wireline long distance telephone usage that is intrastate, interstate and international. In 2008, 34% of residential toll phone calls were interstate as opposed to 47% of minutes. Table 14.2 shows the average number of toll minutes on residential phone bills that are intrastate, interstate and international from 1995-2008.

Table 14.3 shows the distribution of residential wireline long distance calls by call duration. The average interstate residential call lasts about nine minutes, although about 42% of interstate toll calls last one minute or less. Tables 14.4 and 14.5 show the duration and the average distance (sometimes called length of haul) of residential wireline intrastate and interstate long distance calls, respectively. The average distance of an interstate toll call in 2008 was 765 miles, as opposed to about 55 miles for an intrastate toll call.

Table 14.6 shows the percentage of residential wireline long distance minutes by day of week and time of day. Over the past three years, these data indicate that interLATA wireline traffic has been slowly moving to weekdays from nights and weekends.

**Table 14.1**  
**Distribution of Residential Wireline Toll Calls and Minutes**

| <b>Type</b>                    | <b>1995</b>      | <b>1996</b>      | <b>1997</b>      | <b>1998</b>      | <b>1999</b>      | <b>2000</b>      | <b>2001</b>      | <b>2002</b>      | <b>2003</b>      | <b>2004</b>      | <b>2005</b>      | <b>2006</b>      | <b>2007</b>      | <b>2008</b>      |
|--------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| <i><b>Calls</b></i>            |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| IntraLATA-Intrastate           | 41 %             | 40 %             | 38 %             | 38 %             | 39 %             | 39 %             | 42 %             | 44 %             | 45 %             | 44 %             | 44 %             | 45 %             | 44 %             | 44 %             |
| InterLATA-Intrastate           | 19               | 18               | 19               | 19               | 18               | 17               | 18               | 17               | 17               | 17               | 16               | 16               | 16               | 16               |
| IntraLATA-Interstate           | 1                | 1                | 1                | 1                | 1                | 1                | 1                | 1                | 1                | 1                | 1                | 1                | 1                | 1                |
| InterLATA-Interstate           | 37               | 35               | 37               | 36               | 37               | 36               | 36               | 34               | 33               | 34               | 35               | 32               | 33               | 33               |
| International                  | 1                | 1                | 1                | 1                | 1                | 1                | 1                | 1                | 2                | 2                | 2                | 2                | 2                | 2                |
| Others <sup>1</sup>            | 2                | 5                | 5                | 4                | 4                | 5                | 2                | 2                | 2                | 2                | 2                | 3                | 3                | 4                |
| <b>Total Calls in Sample</b>   | <b>197,787</b>   | <b>165,465</b>   | <b>483,685</b>   | <b>578,850</b>   | <b>474,408</b>   | <b>538,337</b>   | <b>456,328</b>   | <b>427,781</b>   | <b>340,763</b>   | <b>312,918</b>   | <b>265,194</b>   | <b>247,425</b>   | <b>208,877</b>   | <b>182,065</b>   |
| <i><b>Minutes</b></i>          |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| IntraLATA-Intrastate           | 28 %             | 29 %             | 27 %             | 27 %             | 28 %             | 29 %             | 30 %             | 32 %             | 35 %             | 32 %             | 32 %             | 34 %             | 33 %             | 33 %             |
| InterLATA-Intrastate           | 18               | 18               | 18               | 18               | 17               | 17               | 18               | 18               | 16               | 17               | 16               | 16               | 16               | 16               |
| IntraLATA-Interstate           | 1                | 1                | 1                | 1                | 1                | 1                | 1                | 1                | 1                | 1                | 1                | 1                | 1                | 1                |
| InterLATA-Interstate           | 50               | 47               | 49               | 49               | 49               | 47               | 48               | 46               | 44               | 46               | 46               | 45               | 46               | 46               |
| International                  | 2                | 1                | 1                | 1                | 2                | 2                | 2                | 2                | 2                | 3                | 3                | 3                | 3                | 3                |
| Others <sup>1</sup>            | 1                | 4                | 4                | 3                | 3                | 5                | 1                | 1                | 1                | 1                | 1                | 2                | 2                | 2                |
| <b>Total Minutes in Sample</b> | <b>1,493,674</b> | <b>1,210,675</b> | <b>3,673,315</b> | <b>4,330,888</b> | <b>3,544,905</b> | <b>4,030,643</b> | <b>3,319,982</b> | <b>2,992,644</b> | <b>2,308,266</b> | <b>2,088,773</b> | <b>1,766,565</b> | <b>1,614,546</b> | <b>1,376,557</b> | <b>1,194,486</b> |

Note: Includes itemized calls only. Figures may not add to totals due to rounding.

<sup>1</sup> Toll-free (800, 888, 877, 866) calls billed to residential customers, 900 calls and calls that cannot be classified.

Source: Calculated by Industry Analysis and Technology Division staff using survey data from TNS Telecom*ReQuest Market Monitor*™, *Bill Harvesting*®.

**Table 14.2**  
**Average Residential Wireline Monthly Toll Minutes**

| <b>Type</b>          | <b>1995</b> | <b>1996</b> | <b>1997</b> | <b>1998</b> | <b>1999</b> | <b>2000</b> | <b>2001</b> | <b>2002</b> | <b>2003</b> | <b>2004</b> | <b>2005</b> | <b>2006</b> | <b>2007</b> | <b>2008</b> |
|----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| IntraLATA-Intrastate | 40          | 41          | 41          | 40          | 36          | 33          | 32          | 28          | 25          | 18          | 17          | 16          | 14          | 12          |
| InterLATA-Intrastate | 26          | 26          | 27          | 26          | 23          | 19          | 19          | 16          | 12          | 10          | 8           | 8           | 7           | 6           |
| IntraLATA-Interstate | 1           | 1           | 1           | 1           | 1           | 1           | 1           | 1           | 1           | 1           | 0           | 1           | 0           | 0           |
| InterLATA-Interstate | 71          | 67          | 73          | 71          | 65          | 55          | 51          | 41          | 31          | 26          | 24          | 22          | 19          | 16          |
| International        | 3           | 1           | 2           | 2           | 2           | 2           | 2           | 2           | 2           | 2           | 2           | 2           | 1           | 1           |
| Others <sup>1</sup>  | 1           | 6           | 6           | 5           | 4           | 5           | 1           | 1           | 1           | 1           | 0           | 1           | 1           | 1           |
| <b>All Types</b>     | <b>143</b>  | <b>143</b>  | <b>149</b>  | <b>144</b>  | <b>131</b>  | <b>116</b>  | <b>105</b>  | <b>90</b>   | <b>71</b>   | <b>56</b>   | <b>51</b>   | <b>49</b>   | <b>42</b>   | <b>36</b>   |

Note: Includes itemized calls only. Figures may not add to totals due to rounding.

<sup>1</sup> Toll-free (800, 888, 877, 866) minutes billed to residential customers, 900 minutes and minutes for calls that cannot be classified.

Source: Calculated by Industry Analysis and Technology Division staff using survey data from TNS Telecom*ReQuest Market Monitor*™, *Bill Harvesting*®.

**Table 14.3**  
**Distribution of Residential Wireline Long Distance Call Durations:**  
**2008 <sup>1</sup>**

| <b>Duration of Call<br/>(Minutes)</b> | <b>Intrastate</b> | <b>Interstate</b> | <b>All Calls</b> |
|---------------------------------------|-------------------|-------------------|------------------|
| 1                                     | 49.2 %            | 42.3 %            | 46.6 %           |
| 2                                     | 14.2              | 11.0              | 13.0             |
| 3                                     | 7.4               | 5.8               | 6.8              |
| 4                                     | 4.7               | 4.1               | 4.5              |
| 5                                     | 3.4               | 3.1               | 3.3              |
| 6                                     | 2.6               | 2.6               | 2.6              |
| 7                                     | 1.9               | 2.3               | 2.1              |
| 8                                     | 1.6               | 2.0               | 1.8              |
| 9                                     | 1.4               | 1.7               | 1.5              |
| 10                                    | 1.3               | 1.6               | 1.4              |
| 11-15                                 | 4.0               | 6.1               | 4.8              |
| 16-20                                 | 2.4               | 4.2               | 3.1              |
| 21-25                                 | 1.7               | 3.2               | 2.2              |
| 26-30                                 | 1.1               | 2.3               | 1.6              |
| 31-45                                 | 1.7               | 3.9               | 2.6              |
| 46-60                                 | 0.7               | 1.9               | 1.1              |
| > 60                                  | 0.7               | 1.8               | 1.1              |
| Average Duration                      | 5.3               | 8.9               | 6.7              |
| Median Duration                       | 2.0               | 2.0               | 2.0              |
| Sample Size                           | 102,830           | 62,031            | 164,861          |

<sup>1</sup> The sample includes domestic, directly-dialed calls.

Source: Calculated by Industry Analysis and Technology Division staff using survey data from TNS Telecoms *ReQuest Market Monitor*<sup>TM</sup>, *Bill Harvesting*<sup>®</sup>.

**Table 14.4**  
**Duration and Distance of Intrastate Toll Calls <sup>1</sup>**

|      | Duration<br>(In Minutes) |        | Distance<br>(In Miles) |        |
|------|--------------------------|--------|------------------------|--------|
|      | Average                  | Median | Average                | Median |
| 1995 | 6.0                      | 2.0    | 53.0                   | 26.0   |
| 1996 | 6.0                      | 2.0    | 55.0                   | 28.0   |
| 1997 | 6.2                      | 2.0    | 56.0                   | 28.0   |
| 1998 | 6.0                      | 2.0    | 55.0                   | 29.0   |
| 1999 | 6.0                      | 2.0    | 54.0                   | 29.0   |
| 2000 | 6.1                      | 2.0    | 54.0                   | 28.0   |
| 2001 | 5.9                      | 2.0    | 53.0                   | 29.0   |
| 2002 | 5.6                      | 2.0    | 52.0                   | 28.0   |
| 2003 | 5.6                      | 2.0    | 51.0                   | 28.0   |
| 2004 | 5.3                      | 2.0    | 55.8                   | 29.5   |
| 2005 | 5.4                      | 2.0    | 54.6                   | 29.2   |
| 2006 | 5.2                      | 2.0    | 54.6                   | 30.6   |
| 2007 | 5.3                      | 2.0    | 54.2                   | 30.0   |
| 2008 | 5.3                      | 2.0    | 55.0                   | 31.8   |

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

Source: Calculated by Industry Analysis and Technology Division staff using survey data from TNS Telecoms *ReQuest Market Monitor*<sup>TM</sup>, *Bill Harvesting*<sup>®</sup>.

**Table 14.5**  
**Duration and Distance of Interstate Toll Calls <sup>1</sup>**

|      | Duration<br>(In Minutes) |        | Distance<br>(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    | 693                    | 501    |
| 2000 | 10.0                     | 4.0    | 706                    | 524    |
| 2001 | 9.7                      | 3.0    | 686                    | 501    |
| 2002 | 9.4                      | 3.0    | 692                    | 489    |
| 2003 | 8.9                      | 3.0    | 684                    | 481    |
| 2004 | 8.9                      | 2.0    | 721                    | 525    |
| 2005 | 8.8                      | 2.0    | 759                    | 568    |
| 2006 | 8.9                      | 2.0    | 751                    | 575    |
| 2007 | 9.0                      | 2.0    | 763                    | 594    |
| 2008 | 8.9                      | 2.0    | 765                    | 577    |

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

Source: Calculated by Industry Analysis and Technology Division staff using survey data from TNS Telecoms *ReQuest Market Monitor*<sup>TM</sup>, *Bill Harvesting*<sup>®</sup>.

**Table 14.6**  
**Distribution of Residential Wireline Long Distance Minutes**  
**By Day and Time**

**2008**

| <b>Day</b>   | <b>7:00 AM - 6:59 PM</b> | <b>7:00 PM - 6:59 AM</b> | <b>Total</b>   |
|--------------|--------------------------|--------------------------|----------------|
| Monday       | 9.9 %                    | 4.7 %                    | 14.6 %         |
| Tuesday      | 10.1                     | 4.7                      | 14.7           |
| Wednesday    | 9.5                      | 5.0                      | 14.5           |
| Thursday     | 9.4                      | 4.8                      | 14.2           |
| Friday       | 9.0                      | 4.0                      | 13.0           |
| Saturday     | 9.3                      | 3.8                      | 13.1           |
| Sunday       | 11.0                     | 5.0                      | 16.0           |
| <b>Total</b> | <b>68.1 %</b>            | <b>31.9 %</b>            | <b>100.0 %</b> |

Based on a sample of 88,682 directly-dialed, interLATA calls.

**2007**

| <b>Day</b>   | <b>7:00 AM - 6:59 PM</b> | <b>7:00 PM - 6:59 AM</b> | <b>Total</b>   |
|--------------|--------------------------|--------------------------|----------------|
| Monday       | 9.6 %                    | 5.2 %                    | 14.9 %         |
| Tuesday      | 9.2                      | 5.0                      | 14.2           |
| Wednesday    | 9.1                      | 4.9                      | 13.9           |
| Thursday     | 9.1                      | 4.8                      | 13.9           |
| Friday       | 9.2                      | 4.2                      | 13.3           |
| Saturday     | 9.3                      | 4.0                      | 13.3           |
| Sunday       | 11.3                     | 5.2                      | 16.6           |
| <b>Total</b> | <b>66.8 %</b>            | <b>33.2 %</b>            | <b>100.0 %</b> |

Based on a sample of 102,515 directly-dialed, interLATA calls.

**2006**

| <b>Day</b>   | <b>7:00 AM - 6:59 PM</b> | <b>7:00 PM - 6:59 AM</b> | <b>Total</b>   |
|--------------|--------------------------|--------------------------|----------------|
| Monday       | 9.8 %                    | 5.2 %                    | 15.0 %         |
| Tuesday      | 8.7                      | 5.0                      | 13.7           |
| Wednesday    | 8.4                      | 5.1                      | 13.5           |
| Thursday     | 8.7                      | 5.0                      | 13.7           |
| Friday       | 8.7                      | 4.5                      | 13.2           |
| Saturday     | 9.6                      | 3.7                      | 13.4           |
| Sunday       | 11.9                     | 5.6                      | 17.6           |
| <b>Total</b> | <b>65.9 %</b>            | <b>34.1 %</b>            | <b>100.0 %</b> |

Based on a sample of 118,243 directly-dialed, interLATA calls.

**Note:** Individual figures may not add to totals due to rounding.

Source: Calculated by Industry Analysis and Technology Division staff using survey data from TNS Telecoms ReQuest Market Monitor™, Bill Harvesting®.



## 15 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.<sup>1</sup> 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. The carriers also file quarterly data reported on Form 499Q.

Table 15.1 shows the major components of telecommunications revenues from 1999 to the present: carrier's carrier revenues and end-user revenues for local, wireless, and toll service. Chart 15.1 shows the trend of the end-user revenue percentages for local, wireless and toll services. Table 15.2 shows how revenues by type of service have changed over time. Table 15.3 shows the number of telecommunications service providers by principal type of business. The publication *Telecommunications Provider Locator* (January 2010 edition) lists carriers that filed a FCC Form 499-A worksheet in 2008. It also contains an address and contact telephone number for each carrier. Table 15.4 contains revenues for eleven years through 2008 by type of carrier. Additional revenue detail can be found in the latest *Telecommunications Industry Revenue* report (September 2010 edition).

State-level telephone revenues are estimated using data from various editions of *Telecommunications Industry Revenue*, *Statistics of Communications Common Carriers*, *Local Telephone Competition*, and access filings to the FCC.<sup>2</sup>

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<sup>1</sup> 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. Filers contribute to the universal service funding mechanism based on types of end-user revenues.

<sup>2</sup> See Industry Analysis and Technology Division, Wireline Competition Bureau, *Monitoring Report* (various issues), Industry Analysis Division, Common Carrier Bureau, *State-by-State Telephone Revenues and Universal Service Data* (various issues).

Table 15.5 provides estimates of telecommunications revenues by state for 1998 to 2007. Table 15.6 provides estimates of end-user and carrier's carrier revenues by state for 2007. Table 15.7 provides estimates of telecommunications revenues for incumbent local exchange carriers, competitive local exchange carriers, and mobile wireless carriers by state; as well as estimates for subscriber line charges, access, and toll services.

**Table 15.1**  
**Telecommunications Industry Revenues**<sup>1</sup>  
(Dollar Amounts Shown in Millions)

|  | 1999      | 2000      | 2001      | 2002      | 2003      | 2004      | 2005      | 2006      | 2007      | 2008      | Preliminary 5/<br>2009 |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------------------|
| <b>Carrier's Carrier Revenues</b> <sup>2</sup> |           |           |           |           |           |           |           |           |           |           |                        |
| Local Service <sup>3</sup>                     | \$33,156  | \$36,621  | \$40,108  | \$38,412  | \$37,742  | \$38,546  | \$39,213  | \$39,392  | \$38,383  | \$39,200  | \$41,868               |
| Wireless Service                               | 4,652     | 5,144     | 6,180     | 5,020     | 4,465     | 4,164     | 6,334     | 5,187     | 5,360     | 5,630     | 5,383                  |
| Toll Service                                   | 14,934    | 21,849    | 19,999    | 16,476    | 18,205    | 15,703    | 16,892    | 15,101    | 16,093    | 13,623    | 12,069                 |
| Intrastate                                     | 22,293    | 25,553    | 27,848    | 25,770    | 24,825    | 25,852    | 27,486    | 24,848    | 22,566    | 21,836    | 22,077                 |
| Interstate and International <sup>4</sup>      | 30,449    | 38,060    | 38,439    | 34,138    | 35,587    | 32,561    | 34,953    | 34,831    | 37,270    | 36,617    | 37,244                 |
| Total  | 52,742    | 63,613    | 66,287    | 59,907    | 60,412    | 58,413    | 62,439    | 59,679    | 59,836    | 58,452    | 59,320                 |
| <b>End User Revenues</b> <sup>2</sup>          |           |           |           |           |           |           |           |           |           |           |                        |
| Local Service <sup>3</sup>                     | 78,608    | 84,526    | 87,704    | 88,712    | 86,474    | 83,407    | 82,382    | 78,215    | 75,042    | 72,693    | 70,142                 |
| Wireless Service                               | 43,843    | 56,857    | 68,507    | 76,501    | 85,254    | 94,404    | 100,743   | 110,096   | 115,865   | 118,855   | 115,505                |
| Toll Service                                   | 93,311    | 87,767    | 79,302    | 67,222    | 58,983    | 55,511    | 52,358    | 49,278    | 48,709    | 47,365    | 39,259                 |
| Intrastate                                     | 134,919   | 147,465   | 155,347   | 154,815   | 150,889   | 153,265   | 154,310   | 157,653   | 158,380   | 157,737   | 150,316                |
| Interstate and International <sup>4</sup>      | 80,844    | 81,685    | 80,165    | 77,619    | 79,822    | 80,057    | 81,173    | 79,937    | 81,235    | 81,176    | 74,590                 |
| Total  | 215,763   | 229,149   | 235,513   | 232,434   | 230,711   | 233,322   | 235,482   | 237,589   | 239,615   | 238,913   | 224,906                |
| <b>Total Revenues</b>                          |           |           |           |           |           |           |           |           |           |           |                        |
| Local Service <sup>3</sup>                     | 111,764   | 121,147   | 127,812   | 127,123   | 124,216   | 121,953   | 121,595   | 117,607   | 113,425   | 111,893   | 112,010                |
| Wireless Service                               | 48,495    | 62,000    | 74,687    | 81,521    | 89,718    | 98,568    | 107,076   | 115,283   | 121,225   | 124,485   | 120,888                |
| Toll Service                                   | 108,246   | 109,615   | 99,301    | 83,697    | 77,188    | 71,214    | 69,250    | 64,379    | 64,802    | 60,988    | 51,328                 |
| Intrastate                                     | 157,212   | 173,018   | 183,195   | 180,585   | 175,714   | 179,117   | 181,796   | 182,501   | 180,946   | 179,573   | 172,393                |
| Interstate and International <sup>4</sup>      | 111,293   | 119,745   | 118,605   | 111,756   | 115,409   | 112,617   | 116,125   | 114,768   | 118,505   | 117,793   | 111,833                |
| Total  | \$268,505 | \$292,762 | \$301,800 | \$292,341 | \$291,123 | \$291,734 | \$297,921 | \$297,268 | \$299,451 | \$297,365 | \$284,226              |

Note: Detail may not add to totals due to rounding. Data for 1997 and 1998 are available in prior year reports.

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

<sup>2</sup> Carrier's carrier revenues are reported on the FCC 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.

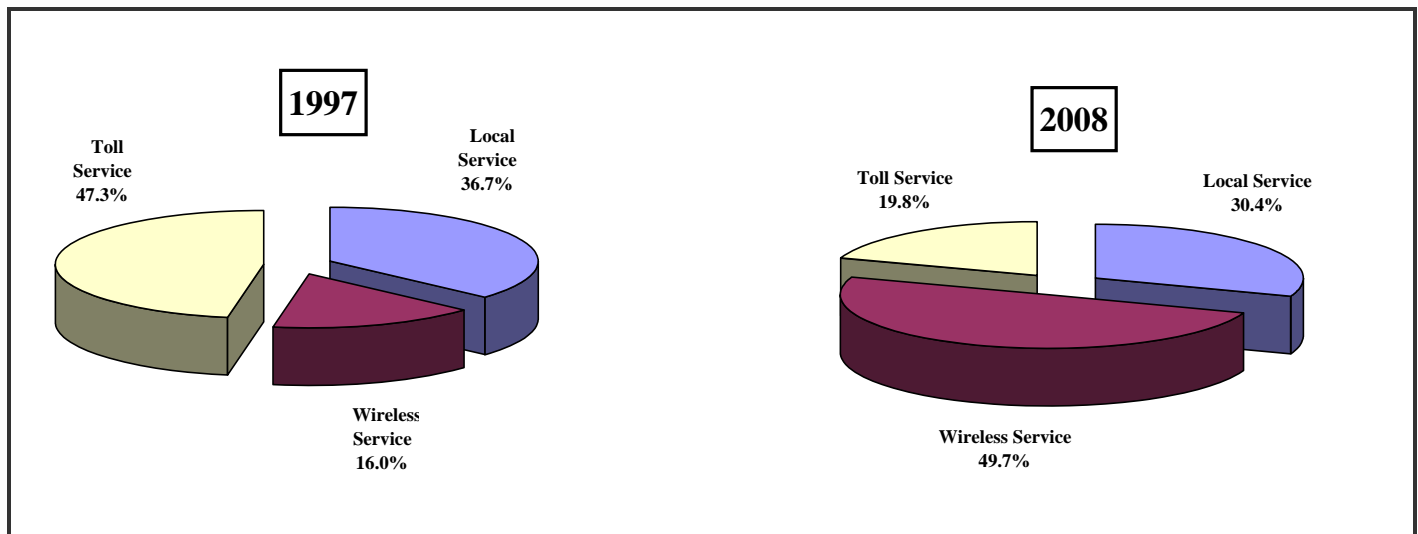
<sup>3</sup> Payphone revenues are included with local service revenues in this table.

<sup>4</sup> Revenues from calls that both originate and terminate in foreign points are reported as end-user revenues, and are included in this table through 2007, but are not included in the universal service contribution base, and are not included in the pr

<sup>5</sup> Preliminary 2009 data are based on FCC Form 499-Q quarterly filings. Companies that do not contribute to universal service are not required to make these filings. The quarterly filings include preliminary data for the just closed quarter and projections for the coming quarter, and therefore are not as accurate as the subsequent annual filings. Also, FCC Form 499-Q filers do not separate revenue by type of service. Therefore, revenue totals by service type for 2008 are based on type of filer rather than on data filed by service.

Source: Industry Analysis and Technology Division, Wireline Competition Bureau, *Telecommunications Industry Revenues*, except as noted.

**Chart 15.1**  
**End-User Telecommunications Revenues**



**Table 15.2**  
**Telecommunications Revenues Reported by Type of Service**  
**(Dollar Amounts Shown in Millions)**

| Telecommunications Revenues                               | Universal Service<br>& TRS Data | FCC Form 499-A<br>Data |           |           |           |           |           |           |           |           |           |
|---|---------------------------------|------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|   | 1998                            | 1999                   | 2000      | 2001      | 2002      | 2003      | 2004      | 2005      | 2006      | 2007      | 2008      |
| Local Exchange  | \$59,245                        | \$64,940               | \$69,947  | \$72,346  | \$71,320  | \$70,606  | \$68,238  | \$66,506  | \$63,264  | \$62,790  | \$60,871  |
| Pay Telephone 1/  | 2,536                           | 2,218                  | 1,932     | 1,585     | 1,192     | 1,063     | 1,002     | 924       | 659       | 470       | 379       |
| Local Private Line 2/                                     | 10,403                          | 12,914                 | 16,864    | 21,966    | 23,070    | 22,415    | 23,840    | 25,673    | 25,448    | 24,307    | 26,314    |
| Other Local   | 2,179                           | 2,501                  | 3,249     | 3,391     | 3,418     | 3,242     | 2,944     | 3,331     | 3,884     | 3,227     | 3,321     |
| Subscriber Line Charges 2/                                | 11,052                          | 10,826                 | 11,563    | 12,127    | 12,758    | 12,136    | 11,715    | 11,113    | 10,827    | 10,141    | 9,283     |
| Access 2/   | 18,449                          | 18,105                 | 17,017    | 15,096    | 13,955    | 12,972    | 12,352    | 11,822    | 11,392    | 10,543    | 9,776     |
| Universal Service Surcharges on<br>Local Service Bills 3/ | 103                             | 260                    | 575       | 1,301     | 1,410     | 1,783     | 1,862     | 2,227     | 2,133     | 1,947     | 1,948     |
| Additional Revenues from<br>TRS Worksheets                | 595                             |                        |           |           |           |           |           |           |           |           |           |
| Total Local Service Revenues                              | 104,563                         | 111,764                | 121,147   | 127,812   | 127,123   | 124,216   | 121,953   | 121,595   | 117,607   | 113,425   | 111,893   |
| Wireless Service  | 36,240                          | 48,117                 | 61,505    | 74,006    | 80,678    | 88,023    | 96,450    | 104,489   | 112,442   | 117,939   | 120,934   |
| Universal Service Surcharges on<br>Local Service Bills 3/ | 345                             | 379                    | 495       | 681       | 842       | 1,696     | 2,118     | 2,587     | 2,841     | 3,286     | 3,551     |
| Additional Revenues from<br>TRS Worksheets                | 189                             |                        |           |           |           |           |           |           |           |           |           |
| Total Wireless Service Revenues                           | 36,775                          | 48,495                 | 62,000    | 74,687    | 81,521    | 89,718    | 98,568    | 107,076   | 115,283   | 121,225   | 124,485   |
| Operator 1/   | 12,205                          | 10,049                 | 11,406    | 10,389    | 7,902     | 6,567     | 6,542     | 6,631     | 5,577     | 5,874     | 5,664     |
| Non-Operator Switched Toll                                | 74,168                          | 78,389                 | 75,183    | 65,325    | 54,475    | 50,178    | 46,387    | 44,876    | 41,570    | 42,518    | 38,959    |
| Long Distance Private Line                                | 11,952                          | 13,169                 | 16,189    | 16,402    | 15,108    | 15,316    | 13,906    | 13,264    | 12,739    | 12,080    | 11,683    |
| Other Long Distance                                       | 3,386                           | 3,656                  | 3,372     | 3,259     | 2,445     | 2,222     | 1,801     | 2,021     | 2,154     | 1,661     | 2,071     |
| Universal Service Surcharges on<br>Local Service Bills 3/ | 1,810                           | 2,983                  | 3,467     | 3,927     | 3,767     | 2,905     | 2,577     | 2,458     | 2,340     | 2,669     | 2,611     |
| Additional Revenues from<br>TRS Worksheets                | 1,532                           |                        |           |           |           |           |           |           |           |           |           |
| Total Toll Service Revenues                               | 105,055                         | 108,246                | 109,615   | 99,301    | 83,697    | 77,188    | 71,214    | 69,250    | 64,379    | 64,802    | 60,988    |
| Total Telecommunications Revenues                         | 246,392                         | 268,505                | 292,762   | 301,799   | 292,341   | 291,122   | 291,735   | 297,921   | 297,269   | 299,451   | 297,366   |
| Non-Telecommunications Revenues                           | 27,944                          | 33,144                 | 42,261    | 48,036    | 60,406    | 65,186    | 71,493    | 86,764    | 101,061   | 131,615   | 151,494   |
| Total Reported Revenues                                   | 272,019                         | 301,648                | 335,023   | 349,835   | 352,747   | 356,308   | 363,227   | 384,685   | 398,329   | 431,066   | 448,860   |
| Service Reported as:                                      |                                 |                        |           |           |           |           |           |           |           |           |           |
| Intrastate  | 142,108                         | 157,212                | 173,018   | 183,195   | 180,585   | 175,714   | 179,129   | 181,796   | 182,501   | 180,946   | 179,573   |
| Interstate and International                              | 104,284                         | 111,293                | 119,745   | 118,605   | 111,756   | 115,409   | 112,605   | 116,125   | 114,768   | 118,505   | 117,793   |
| Total Telecommunications Revenues                         | \$246,392                       | \$268,505              | \$292,762 | \$301,799 | \$292,341 | \$291,123 | \$291,734 | \$297,921 | \$297,268 | \$299,451 | \$297,365 |

Note: Detail may not add to totals due to rounding. Data for 1992 through 1997 are available in prior year reports.

- 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.
- 3/ 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 and Technology Division, Wireline Competition Bureau, *Telecommunications Industry Revenues*.

**Table 15.3**  
**Number of Interstate Telecommunications Providers**  
**By Principal Type of Business**

| Service Provider Category 1/ 2/   | 1998  | 1999  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Incumbent Local Exchange Carriers (ILECs)   | 1,348 | 1,318 | 1,335 | 1,335 | 1,310 | 1,303 | 1,304 | 1,303 | 1,311 | 1,304 | 1,297 |
| Competitive Access Providers (CAPs)<br>and Competitive Local Exchange<br>Carriers (CLECs)                     | 212   | 298   | 479   | 511   | 451   | 601   | 690   | 734   | 780   | 774   | 813   |
| Local Resellers   | 54    | 73    | 105   | 132   | 100   | 100   | 136   | 122   | 133   | 124   | 129   |
| Interconnected VoIP Providers   |       |       |       |       |       |       |       |       | 145   | 251   | 334   |
| Other Local Exchange Carriers   | 10    | 23    | 23    | 26    | 64    | 72    | 92    | 187   | 169   | 163   | 186   |
| Total: Competitors of ILECs   | 276   | 394   | 607   | 669   | 615   | 773   | 918   | 1,043 | 1,227 | 1,312 | 1,462 |
| Total: Fixed Local Service Providers 3/   | 1,624 | 1,712 | 1,942 | 2,004 | 1,925 | 2,076 | 2,222 | 2,346 | 2,538 | 2,616 | 2,759 |
| Payphone Providers  | 615   | 704   | 699   | 751   | 606   | 605   | 642   | 576   | 581   | 432   | 409   |
| Wireless Telephony Including Cellular,<br>Personal Communications Service<br>(PCS) and SMR Telephony Carriers | 808   | 784   | 783   | 670   | 422   | 413   | 396   | 402   | 426   | 428   | 412   |
| Paging & Messaging Service  | 303   | 391   | 425   | 425   | 346   | 347   | 360   | 300   | 304   | 238   | 229   |
| Specialized Mobile Radio (SMR)<br>Dispatch  | 119   | 199   | 191   | 182   | 138   | 155   | 172   | 155   | 165   | 153   | 162   |
| Wireless Data Service Providers and<br>Other Mobile Service Providers   | 28    | 45    | 31    | 29    | 21    | 24    | 35    | 48    | 60    | 55    | 67    |
| Total: Wireless Service Providers   | 1,258 | 1,419 | 1,430 | 1,306 | 927   | 939   | 963   | 905   | 955   | 874   | 870   |
| Interexchange Carriers (IXCs)   | 171   | 178   | 212   | 233   | 229   | 232   | 257   | 262   | 270   | 250   | 237   |
| Operator Service Providers (OSPs)   | 24    | 15    | 20    | 19    | 18    | 17    | 19    | 23    | 24    | 23    | 31    |
| Prepaid Calling Card Providers  | 20    | 18    | 23    | 27    | 27    | 50    | 67    | 69    | 85    | 93    | 121   |
| Satellite Service Carriers  | 13    | 17    | 25    | 34    | 33    | 40    | 40    | 40    | 39    | 41    | 45    |
| Toll Resellers  | 388   | 406   | 493   | 558   | 574   | 642   | 751   | 721   | 744   | 693   | 654   |
| VoIP Toll Providers   |       |       |       |       |       |       |       |       |       | 12    | 96    |
| Audio Bridge Service Providers  |       |       |       |       |       |       |       |       |       |       | 68    |
| Other Toll Carriers   | 31    | 17    | 35    | 69    | 51    | 45    | 70    | 63    | 76    | 80    | 64    |
| Total: Toll Service Providers   | 647   | 651   | 808   | 940   | 932   | 1,026 | 1,204 | 1,178 | 1,238 | 1,192 | 1,316 |
| All Filers  | 4,144 | 4,486 | 4,879 | 5,001 | 4,390 | 4,646 | 5,031 | 5,005 | 5,312 | 5,114 | 5,354 |

Note: Data for 1993 through 1997 are available in prior year reports.

- 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, Interconnected VoIP category was added in 2007 for filers reporting 2006 revenues. Starting with the filings that included 2003 revenues, filers were able to identify up to five service provider types. Starting with 2003 data, counts are based on the category selected as best describing the provider's operations.
- 2/ Counts are based on the numbers of filers actually reporting U.S. telecommunications revenues. Counts dropped in 2002 because many affiliated filers were permitted to make consolidated filings.
- 3/ The total number of local service providers shown in Table 8.9 differs from the total fixed local service providers shown in Table 15.3 because the number shown in Table 8.9 includes filers that self identify as mobile or toll providers, but that report some local exchange service revenues. The number of telecommunications providers shown in Table 15.3 also differs from the numbers shown in Table 5.3 because Table 5.3 includes all filers, including new filers that reported no revenues for the year shown. Private telecommunications providers are included with other local competitors in this table. Filers that identified themselves as interconnected VoIP but that primarily provide international termination service are reclassified as other toll carriers.

Source: Data filed on FCC Forms 431, 457, and 499-A worksheets. See also: Industry Analysis and Technology Division, Wireline Competition Bureau, *Telecommunications Industry Revenues* and *Telecommunications Provider Locator*, available at <http://www.fcc.gov/wcb/stats>.

**Table 15.4**  
**Gross Revenues Reported by Type of Carrier**  
**(Dollars Shown in Millions)**

| Service Provider Category 1/  | Universal Service & TRS Data | FCC Form 499 Data |           |           |           |           |           |           |           |           |           |
|---|------------------------------|-------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|   | 1998                         | 1999              | 2000      | 2001      | 2002      | 2003      | 2004      | 2005      | 2006      | 2007      | 2008      |
| Incumbent Local Exchange Carriers   | \$108,234                    | \$112,216         | \$116,158 | \$117,885 | \$114,990 | \$109,480 | \$105,496 | \$103,561 | \$99,997  | \$93,885  | \$89,732  |
| Competitive Access Providers (CAPs) and Competitive Local Exchange Carriers (CLECs)                     | 3,348                        | 5,652             | 9,814     | 12,998    | 13,043    | 15,509    | 15,112    | 16,930    | 17,276    | 17,476    | 20,980    |
| Interconnected VoIP   |                              |                   |           |           |           |           |           |           | 514       | 2,394     | 3,541     |
| Local Resellers   | 410                          | 511               | 879       | 1,393     | 1,538     | 721       | 1,215     | 630       | 460       | 594       | 540       |
| Other Local Exchange Carriers   | 36                           | 171               | 11        | 329       | 406       | 338       | 245       | 216       | 124       | 181       | 288       |
| Private Carriers  | 147                          | 87                | 39        | 15        | 281       | 267       | 532       | 770       | 1,080     | 1,031     | 1,051     |
| Shared-Tenant Service Providers   | 93                           | 87                | 202       | 46        | 42        | 22        | 22        | 22        | 19        | 14        | 39        |
| Total: Competitors of ILECs   | 4,034                        | 6,508             | 10,945    | 14,781    | 15,309    | 16,857    | 17,126    | 18,568    | 19,473    | 21,690    | 26,440    |
| Total: Fixed Local Service Providers  | 112,268                      | 118,725           | 127,103   | 132,666   | 130,300   | 126,337   | 122,622   | 122,128   | 119,470   | 115,575   | 116,172   |
| Total: Payphone Providers   | 1,101                        | 1,213             | 972       | 836       | 641       | 523       | 445       | 481       | 435       | 388       | 275       |
| Wireless Telephony Including Cellular, Personal Communications Service (PCS) and SMR Telephony Carriers | 33,139                       | 46,513            | 59,823    | 71,887    | 78,568    | 88,168    | 98,329    | 107,834   | 116,971   | 123,968   | 127,730   |
| Paging & Messaging Service  | 3,161                        | 3,232             | 3,102     | 2,197     | 1,473     | 1,007     | 872       | 579       | 555       | 607       | 426       |
| Specialized Mobile Radio (SMR)  |                              | 186               | 191       | 214       | 206       | 33        | 46        | 226       | 48        | 188       | 40        |
| Dispatch  |                              |                   |           |           |           |           |           |           |           |           |           |
| Wireless Data Service Providers and Other Mobile Service Providers                                      | 731                          | 221               | 164       | 110       | 220       | 135       | 218       | 169       | 178       | 180       | 119       |
| Total: Wireless Service Providers   | 37,032                       | 50,152            | 63,280    | 74,596    | 80,467    | 89,342    | 99,465    | 108,809   | 117,752   | 124,943   | 128,314   |
| Interexchange Carriers (IXCs)   | 83,443                       | 87,570            | 87,311    | 81,272    | 68,146    | 61,246    | 51,589    | 46,856    | 44,083    | 43,701    | 37,358    |
| Operator Service Providers (OSPs)   | 590                          | 337               | 635       | 611       | 554       | 567       | 523       | 548       | 631       | 595       | 1,063     |
| Prepaid Calling Card Providers  | 888                          | 866               | 727       | 133       | 460       | 812       | 1,635     | 1,828     | 1,713     | 2,195     | 1,999     |
| Satellite Service Carriers  | 475                          | 280               | 336       | 373       | 406       | 663       | 721       | 714       | 444       | 708       | 860       |
| Toll Resellers  | 9,885                        | 9,211             | 10,641    | 8,797     | 9,279     | 9,294     | 12,192    | 13,362    | 9,943     | 8,314     | 8,256     |
| Audio Bridge Service Providers  |                              |                   |           |           |           |           |           |           | 42        | 58        | 273       |
| Other Toll Carriers   | 710                          | 150               | 1,758     | 2,516     | 2,089     | 2,339     | 2,543     | 3,195     | 2,756     | 2,973     | 2,795     |
| Total: Toll Service Providers   | 95,992                       | 98,414            | 101,407   | 93,702    | 80,934    | 74,920    | 69,204    | 66,503    | 59,611    | 58,545    | 52,604    |
| Total Telecommunications Revenues   | \$246,392                    | \$268,505         | \$292,762 | \$301,799 | \$292,341 | \$291,123 | \$291,734 | \$297,921 | \$297,268 | \$299,451 | \$297,365 |

Note: Detail may not add to totals due to rounding. Data for 1992 through 1997 are available in prior year reports.

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 that worksheet did not contain a separate category for satellite service providers. For 2003 and 2004, some filers identified themselves as all distance carriers. These filers have been reclassified to be consistent with prior classifications.

Source: Industry Analysis and Technology Division, Wireline Competition Bureau, *Telecommunications Industry Revenues*.

**Table 15.5**  
**Total Telecommunications Revenues by State**  
**(Dollar Amounts Shown in Millions)**

|                          | 1998      | 1999      | 2000      | 2001      | 2002      | 2003      | 2004      | 2005      | 2006      | 2007      |
|--------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Alabama                  | \$3,394   | \$3,712   | \$4,008   | \$4,314   | \$4,052   | \$4,196   | \$4,318   | \$4,587   | \$4,580   | \$4,619   |
| Alaska                   | 590       | 664       | 717       | 770       | 778       | 816       | 823       | 831       | 834       | 835       |
| American Samoa           | NA        | NA        | NA        | 13        | 13        | 13        | 15        | 17        | 19        | 21        |
| Arizona                  | 3,958     | 4,359     | 4,972     | 5,205     | 5,045     | 4,898     | 4,974     | 5,127     | 5,367     | 5,685     |
| Arkansas                 | 2,005     | 2,303     | 2,315     | 2,593     | 2,486     | 2,470     | 2,592     | 2,709     | 2,734     | 2,771     |
| California               | 28,692    | 29,384    | 33,577    | 35,398    | 34,838    | 34,098    | 34,303    | 35,042    | 34,672    | 35,322    |
| Colorado                 | 4,260     | 4,826     | 5,290     | 5,515     | 5,308     | 5,013     | 4,984     | 5,013     | 5,071     | 5,067     |
| Connecticut              | 3,173     | 3,405     | 3,924     | 4,020     | 3,854     | 3,884     | 3,821     | 3,929     | 3,709     | 3,745     |
| Delaware                 | 685       | 788       | 875       | 883       | 877       | 874       | 946       | 1,014     | 923       | 971       |
| District of Columbia     | 1,085     | 1,581     | 1,648     | 1,383     | 1,343     | 1,337     | 1,296     | 1,397     | 1,340     | 1,380     |
| Florida                  | 15,042    | 17,223    | 18,308    | 18,849    | 18,223    | 18,613    | 20,003    | 19,918    | 19,355    | 18,969    |
| Georgia                  | 7,469     | 8,479     | 8,919     | 9,627     | 9,371     | 9,433     | 9,415     | 9,657     | 9,506     | 9,487     |
| Guam                     | 103       | 99        | 108       | 122       | 119       | 123       | 130       | 143       | 156       | 172       |
| Hawaii                   | 969       | 1,009     | 1,177     | 1,207     | 1,200     | 1,212     | 1,196     | 1,229     | 1,184     | 1,261     |
| Idaho                    | 1,010     | 1,092     | 1,210     | 1,245     | 1,244     | 1,237     | 1,223     | 1,300     | 1,322     | 1,390     |
| Illinois                 | 10,948    | 11,983    | 13,516    | 12,860    | 12,110    | 11,928    | 11,809    | 12,113    | 11,785    | 11,794    |
| Indiana                  | 4,810     | 5,099     | 5,552     | 5,524     | 5,385     | 5,292     | 5,298     | 5,389     | 5,446     | 5,524     |
| Iowa                     | 2,268     | 2,441     | 2,340     | 2,652     | 2,549     | 2,711     | 2,559     | 2,630     | 2,801     | 2,872     |
| Kansas                   | 2,304     | 2,588     | 2,571     | 2,656     | 2,479     | 2,473     | 2,436     | 2,488     | 2,602     | 2,631     |
| Kentucky                 | 3,060     | 3,426     | 3,573     | 3,665     | 3,301     | 3,307     | 3,634     | 3,856     | 3,842     | 3,894     |
| Louisiana                | 3,432     | 3,913     | 3,964     | 4,274     | 4,185     | 4,232     | 4,278     | 4,430     | 4,403     | 4,369     |
| Maine                    | 1,105     | 1,195     | 1,328     | 1,387     | 1,365     | 1,359     | 1,353     | 1,425     | 1,374     | 1,411     |
| Maryland                 | 4,911     | 5,176     | 5,783     | 6,202     | 6,033     | 6,073     | 6,163     | 6,441     | 6,245     | 6,266     |
| Massachusetts            | 6,338     | 6,561     | 7,428     | 7,367     | 7,121     | 6,983     | 6,897     | 6,962     | 7,112     | 6,963     |
| Michigan                 | 8,523     | 9,530     | 9,937     | 9,889     | 9,450     | 9,352     | 8,897     | 9,089     | 8,925     | 8,745     |
| Minnesota                | 4,115     | 4,617     | 4,877     | 4,934     | 4,772     | 4,682     | 4,578     | 4,629     | 4,711     | 4,722     |
| Mississippi              | 2,017     | 2,283     | 2,486     | 2,633     | 2,578     | 2,676     | 2,768     | 2,834     | 2,815     | 2,695     |
| Missouri                 | 4,613     | 5,442     | 5,688     | 6,067     | 5,436     | 5,676     | 5,522     | 5,750     | 5,808     | 5,925     |
| Montana                  | 780       | 897       | 937       | 903       | 907       | 911       | 897       | 912       | 921       | 957       |
| Nebraska                 | 1,587     | 1,737     | 1,760     | 1,865     | 1,796     | 1,799     | 1,744     | 1,749     | 1,746     | 1,745     |
| Nevada                   | 1,592     | 1,884     | 1,954     | 2,160     | 2,163     | 2,267     | 2,348     | 2,407     | 2,496     | 2,591     |
| New Hampshire            | 1,246     | 1,313     | 1,429     | 1,419     | 1,399     | 1,373     | 1,362     | 1,474     | 1,418     | 1,412     |
| New Jersey               | 9,366     | 9,558     | 10,670    | 10,689    | 10,251    | 10,054    | 10,258    | 10,493    | 9,554     | 9,535     |
| New Mexico               | 1,433     | 1,518     | 1,515     | 1,656     | 1,631     | 1,706     | 1,767     | 1,775     | 1,823     | 1,891     |
| New York                 | 17,935    | 19,700    | 20,903    | 21,771    | 21,148    | 20,660    | 19,593    | 19,724    | 20,431    | 20,465    |
| North Carolina           | 7,297     | 8,006     | 8,619     | 8,811     | 8,368     | 8,321     | 8,482     | 8,558     | 8,505     | 8,757     |
| North Dakota             | 599       | 660       | 731       | 699       | 678       | 641       | 630       | 645       | 654       | 642       |
| Northern Mariana Islands | 30        | 34        | 32        | 43        | 46        | 44        | 44        | 45        | 43        | 43        |
| Ohio                     | 9,396     | 9,952     | 10,902    | 10,708    | 10,351    | 10,419    | 10,489    | 10,736    | 10,632    | 10,789    |
| Oklahoma                 | 2,552     | 2,727     | 2,915     | 3,116     | 3,100     | 3,210     | 3,169     | 3,185     | 3,240     | 3,297     |
| Oregon                   | 2,905     | 3,123     | 3,159     | 3,480     | 3,381     | 3,337     | 3,356     | 3,292     | 3,366     | 3,456     |
| Pennsylvania             | 10,309    | 10,770    | 12,200    | 12,578    | 12,274    | 12,087    | 12,063    | 12,166    | 12,035    | 12,260    |
| Puerto Rico              | 1,467     | 2,051     | 1,971     | 2,598     | 2,168     | 2,456     | 2,354     | 2,537     | 2,698     | 2,538     |
| Rhode Island             | 859       | 946       | 1,012     | 989       | 978       | 965       | 980       | 963       | 1,012     | 1,047     |
| South Carolina           | 3,393     | 3,790     | 4,047     | 4,147     | 4,142     | 4,187     | 4,124     | 4,306     | 4,276     | 4,314     |
| South Dakota             | 635       | 716       | 763       | 712       | 690       | 668       | 667       | 712       | 743       | 757       |
| Tennessee                | 4,553     | 4,928     | 5,256     | 5,574     | 5,409     | 5,466     | 5,442     | 5,738     | 5,995     | 5,902     |
| Texas                    | 17,576    | 19,032    | 21,405    | 21,617    | 21,549    | 21,508    | 21,610    | 22,162    | 22,817    | 22,941    |
| Utah                     | 1,557     | 1,790     | 1,998     | 2,090     | 2,016     | 1,986     | 2,003     | 2,062     | 2,160     | 2,217     |
| Vermont                  | 602       | 684       | 717       | 659       | 640       | 629       | 590       | 663       | 670       | 691       |
| Virgin Islands           | 109       | 122       | 129       | 145       | 157       | 172       | 190       | 214       | 229       | 215       |
| Virginia                 | 6,576     | 7,020     | 8,013     | 8,506     | 8,174     | 8,107     | 8,074     | 8,134     | 7,931     | 8,324     |
| Washington               | 5,080     | 5,703     | 6,253     | 6,260     | 6,215     | 6,090     | 6,172     | 6,005     | 5,955     | 5,827     |
| West Virginia            | 1,383     | 1,437     | 1,625     | 1,735     | 1,671     | 1,674     | 1,707     | 1,732     | 1,728     | 1,794     |
| Wisconsin                | 4,234     | 4,719     | 5,195     | 5,027     | 4,976     | 4,859     | 4,821     | 5,000     | 4,974     | 4,949     |
| Wyoming                  | 462       | 513       | 563       | 587       | 552       | 567       | 567       | 584       | 576       | 594       |
| Total                    | \$246,392 | \$268,505 | \$292,762 | \$301,799 | \$292,341 | \$291,123 | \$291,734 | \$297,921 | \$297,268 | \$299,452 |

NA - Not Available.

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

Source: Industry Analysis and Technology Division, Wireline Competition Bureau, *Monitoring Report* (various issues) and Industry Analysis Division, Common Carrier Bureau, *State-by-State Telephone Revenue and Universal Service Data* (various issues).

**Table 15.6**  
**Telecommunications Revenues by State: 2007**  
**(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            | \$1,246    | \$2,503    | \$3,749   | \$522             | \$347      | \$869    | \$1,768                             | \$2,851    | \$4,619   | 1.54 %           |
| Alaska             | 264        | 394        | 657       | 121               | 56         | 177      | 385                                 | 450        | 835       | 0.28             |
| American Samoa     | 5          | 12         | 17        | 2                 | 2          | 4        | 7                                   | 14         | 21        | 0.01             |
| Arizona            | 1,646      | 2,891      | 4,537     | 766               | 381        | 1,148    | 2,412                               | 3,272      | 5,685     | 1.90             |
| Arkansas           | 742        | 1,462      | 2,204     | 362               | 205        | 567      | 1,104                               | 1,667      | 2,771     | 0.93             |
| California         | 9,050      | 19,189     | 28,239    | 4,145             | 2,937      | 7,083    | 13,195                              | 22,126     | 35,322    | 11.80            |
| Colorado           | 1,456      | 2,496      | 3,952     | 766               | 349        | 1,115    | 2,222                               | 2,845      | 5,067     | 1.69             |
| Connecticut        | 1,088      | 1,925      | 3,013     | 527               | 204        | 731      | 1,616                               | 2,129      | 3,745     | 1.25             |
| Delaware           | 298        | 473        | 771       | 147               | 53         | 200      | 446                                 | 526        | 971       | 0.32             |
| Dist. of Columbia  | 379        | 694        | 1,073     | 228               | 79         | 307      | 607                                 | 773        | 1,380     | 0.46             |
| Florida            | 5,386      | 9,991      | 15,376    | 2,219             | 1,373      | 3,592    | 7,605                               | 11,364     | 18,969    | 6.33             |
| Georgia            | 2,615      | 5,038      | 7,653     | 1,194             | 640        | 1,835    | 3,809                               | 5,678      | 9,487     | 3.17             |
| Guam               | 61         | 72         | 133       | 28                | 10         | 38       | 89                                  | 83         | 172       | 0.06             |
| Hawaii             | 368        | 644        | 1,011     | 158               | 92         | 250      | 525                                 | 736        | 1,261     | 0.42             |
| Idaho              | 411        | 668        | 1,079     | 214               | 97         | 311      | 625                                 | 765        | 1,390     | 0.46             |
| Illinois           | 3,289      | 6,327      | 9,616     | 1,376             | 801        | 2,177    | 4,665                               | 7,128      | 11,794    | 3.94             |
| Indiana            | 1,545      | 2,896      | 4,442     | 670               | 412        | 1,082    | 2,216                               | 3,308      | 5,524     | 1.84             |
| Iowa               | 824        | 1,391      | 2,216     | 396               | 260        | 657      | 1,221                               | 1,651      | 2,872     | 0.96             |
| Kansas             | 742        | 1,367      | 2,110     | 359               | 162        | 521      | 1,102                               | 1,529      | 2,631     | 0.88             |
| Kentucky           | 1,048      | 2,086      | 3,134     | 437               | 322        | 760      | 1,485                               | 2,409      | 3,894     | 1.30             |
| Louisiana          | 1,138      | 2,460      | 3,599     | 439               | 331        | 770      | 1,577                               | 2,791      | 4,369     | 1.46             |
| Maine              | 347        | 774        | 1,121     | 181               | 109        | 290      | 528                                 | 883        | 1,411     | 0.47             |
| Maryland           | 1,805      | 3,190      | 4,995     | 872               | 398        | 1,270    | 2,677                               | 3,589      | 6,266     | 2.09             |
| Massachusetts      | 1,828      | 3,771      | 5,600     | 897               | 466        | 1,364    | 2,726                               | 4,238      | 6,963     | 2.33             |
| Michigan           | 2,283      | 4,785      | 7,068     | 973               | 704        | 1,677    | 3,256                               | 5,489      | 8,745     | 2.92             |
| Minnesota          | 1,291      | 2,448      | 3,740     | 643               | 339        | 982      | 1,934                               | 2,788      | 4,722     | 1.58             |
| Mississippi        | 724        | 1,469      | 2,193     | 307               | 195        | 501      | 1,031                               | 1,663      | 2,695     | 0.90             |
| Missouri           | 1,590      | 3,025      | 4,615     | 743               | 567        | 1,310    | 2,332                               | 3,592      | 5,925     | 1.98             |
| Montana            | 278        | 461        | 739       | 135               | 83         | 218      | 413                                 | 544        | 957       | 0.32             |
| Nebraska           | 463        | 896        | 1,359     | 232               | 154        | 386      | 695                                 | 1,051      | 1,745     | 0.58             |
| Nevada             | 809        | 1,287      | 2,096     | 343               | 151        | 494      | 1,152                               | 1,438      | 2,591     | 0.87             |
| New Hampshire      | 399        | 717        | 1,117     | 193               | 102        | 295      | 593                                 | 819        | 1,412     | 0.47             |
| New Jersey         | 2,732      | 4,836      | 7,568     | 1,323             | 645        | 1,967    | 4,055                               | 5,481      | 9,535     | 3.18             |
| New Mexico         | 551        | 912        | 1,463     | 279               | 149        | 428      | 830                                 | 1,061      | 1,891     | 0.63             |
| New York           | 5,153      | 11,173     | 16,326    | 2,460             | 1,679      | 4,139    | 7,613                               | 12,852     | 20,465    | 6.83             |
| North Carolina     | 2,450      | 4,652      | 7,102     | 997               | 658        | 1,655    | 3,447                               | 5,309      | 8,757     | 2.92             |
| North Dakota       | 172        | 323        | 495       | 92                | 54         | 147      | 265                                 | 377        | 642       | 0.21             |
| N. Mariana Islands | 12         | 22         | 34        | 6                 | 3          | 9        | 18                                  | 25         | 43        | 0.01             |
| Ohio               | 2,835      | 5,808      | 8,643     | 1,250             | 896        | 2,146    | 4,085                               | 6,704      | 10,789    | 3.60             |
| Oklahoma           | 878        | 1,752      | 2,630     | 439               | 228        | 667      | 1,317                               | 1,980      | 3,297     | 1.10             |
| Oregon             | 981        | 1,746      | 2,728     | 476               | 252        | 728      | 1,457                               | 1,999      | 3,456     | 1.15             |
| Pennsylvania       | 3,359      | 6,330      | 9,689     | 1,604             | 967        | 2,571    | 4,963                               | 7,296      | 12,260    | 4.09             |
| Puerto Rico        | 731        | 1,383      | 2,113     | 287               | 138        | 425      | 1,018                               | 1,520      | 2,538     | 0.85             |
| Rhode Island       | 277        | 579        | 856       | 120               | 71         | 191      | 397                                 | 650        | 1,047     | 0.35             |
| South Carolina     | 1,196      | 2,289      | 3,484     | 495               | 335        | 830      | 1,690                               | 2,624      | 4,314     | 1.44             |
| South Dakota       | 229        | 360        | 588       | 104               | 65         | 169      | 333                                 | 424        | 757       | 0.25             |
| Tennessee          | 1,631      | 3,251      | 4,881     | 635               | 387        | 1,021    | 2,265                               | 3,637      | 5,902     | 1.97             |
| Texas              | 5,672      | 12,658     | 18,330    | 2,753             | 1,859      | 4,611    | 8,424                               | 14,517     | 22,941    | 7.66             |
| Utah               | 625        | 1,121      | 1,746     | 315               | 155        | 471      | 941                                 | 1,276      | 2,217     | 0.74             |
| Vermont            | 203        | 339        | 542       | 102               | 47         | 149      | 305                                 | 386        | 691       | 0.23             |
| Virgin Islands     | 88         | 76         | 164       | 40                | 11         | 51       | 129                                 | 87         | 215       | 0.07             |
| Virginia           | 2,353      | 4,208      | 6,561     | 1,173             | 590        | 1,763    | 3,526                               | 4,798      | 8,324     | 2.78             |
| Washington         | 1,644      | 3,005      | 4,649     | 755               | 423        | 1,178    | 2,399                               | 3,428      | 5,827     | 1.95             |
| West Virginia      | 525        | 881        | 1,406     | 251               | 137        | 388      | 776                                 | 1,018      | 1,794     | 0.60             |
| Wisconsin          | 1,344      | 2,593      | 3,937     | 619               | 392        | 1,012    | 1,963                               | 2,986      | 4,949     | 1.65             |
| Wyoming            | 176        | 281        | 456       | 96                | 41         | 137      | 272                                 | 322        | 594       | 0.20             |
| Total              | \$81,236   | \$158,380  | \$239,616 | \$37,270          | \$22,566   | \$59,836 | \$118,506                           | \$180,947  | \$299,452 | 100.00           |

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

Source: Industry Analysis and Technology Division, Wireline Competition Bureau, *Monitoring Report* (December 2009).



**Table 15.7**  
**Telecommunications Revenues by Type of Service: 2007**  
**(Dollar Amounts Shown in Millions)**

|                      | ILECs <sup>1</sup> | CLECs    | Mobile<br>Wireless | SLCs <sup>2</sup> | Access   | Toll     | Total     |
|----------------------|--------------------|----------|--------------------|-------------------|----------|----------|-----------|
| Alabama              | \$1,129            | \$225    | \$1,831            | \$174             | \$304    | \$955    | \$4,619   |
| Alaska               | NA                 | NA       | NA                 | NA                | NA       | NA       | 835       |
| American Samoa       | NA                 | NA       | NA                 | NA                | NA       | NA       | 21        |
| Arizona              | 880                | 788      | 2,355              | 187               | 506      | 968      | 5,685     |
| Arkansas             | 606                | 135      | 1,092              | 88                | 261      | 590      | 2,771     |
| California           | 6,696              | 2,189    | 15,340             | 1,068             | 3,307    | 6,721    | 35,322    |
| Colorado             | 1,077              | 321      | 1,908              | 205               | 557      | 999      | 5,067     |
| Connecticut          | 842                | 197      | 1,415              | 137               | 312      | 842      | 3,745     |
| Delaware             | 189                | 75       | 368                | 37                | 89       | 214      | 971       |
| District of Columbia | 364                | 104      | 491                | 35                | 148      | 238      | 1,380     |
| Florida              | 4,129              | 981      | 7,748              | 770               | 1,345    | 3,997    | 18,969    |
| Georgia              | 2,211              | 551      | 3,859              | 337               | 731      | 1,798    | 9,487     |
| Guam                 | NA                 | NA       | NA                 | NA                | NA       | NA       | 172       |
| Hawaii               | 249                | 66       | 542                | 57                | 114      | 234      | 1,261     |
| Idaho                | 296                | 59       | 517                | 57                | 158      | 303      | 1,390     |
| Illinois             | 2,318              | 717      | 5,053              | 385               | 851      | 2,470    | 11,794    |
| Indiana              | 1,192              | 221      | 2,259              | 233               | 460      | 1,159    | 5,524     |
| Iowa                 | 539                | 189      | 1,045              | 93                | 316      | 689      | 2,872     |
| Kansas               | 497                | 264      | 1,084              | 74                | 220      | 493      | 2,631     |
| Kentucky             | 858                | 248      | 1,575              | 144               | 295      | 774      | 3,894     |
| Louisiana            | 1,039              | 274      | 1,834              | 161               | 235      | 826      | 4,369     |
| Maine                | 341                | 102      | 448                | 48                | 114      | 358      | 1,411     |
| Maryland             | 1,254              | 398      | 2,447              | 222               | 559      | 1,386    | 6,266     |
| Massachusetts        | 1,372              | 654      | 2,686              | 235               | 564      | 1,452    | 6,963     |
| Michigan             | 1,671              | 697      | 3,724              | 294               | 715      | 1,644    | 8,745     |
| Minnesota            | 853                | 498      | 1,947              | 156               | 468      | 801      | 4,722     |
| Mississippi          | 688                | 94       | 1,051              | 96                | 162      | 602      | 2,695     |
| Missouri             | 1,247              | 330      | 2,275              | 206               | 629      | 1,238    | 5,925     |
| Montana              | 203                | 62       | 330                | 42                | 104      | 215      | 957       |
| Nebraska             | 320                | 195      | 673                | 47                | 187      | 324      | 1,745     |
| Nevada               | 452                | 269      | 1,063              | 71                | 172      | 564      | 2,591     |
| New Hampshire        | 249                | 129      | 494                | 49                | 125      | 365      | 1,412     |
| New Jersey           | 1,620              | 677      | 3,768              | 348               | 944      | 2,178    | 9,535     |
| New Mexico           | 394                | 58       | 719                | 92                | 229      | 400      | 1,891     |
| New York             | 3,801              | 2,166    | 8,076              | 600               | 1,741    | 4,081    | 20,465    |
| North Carolina       | 1,912              | 639      | 3,536              | 338               | 593      | 1,739    | 8,757     |
| North Dakota         | 118                | 53       | 250                | 20                | 78       | 122      | 642       |
| N. Mariana Islands   | NA                 | NA       | NA                 | NA                | NA       | NA       | 43        |
| Ohio                 | 2,241              | 807      | 4,430              | 362               | 911      | 2,037    | 10,789    |
| Oklahoma             | 705                | 317      | 1,306              | 103               | 295      | 571      | 3,297     |
| Oregon               | 653                | 246      | 1,413              | 129               | 353      | 662      | 3,456     |
| Pennsylvania         | 2,238              | 1,149    | 4,673              | 478               | 1,211    | 2,512    | 12,260    |
| Puerto Rico          | 546                | 98       | 1,180              | 81                | 142      | 492      | 2,538     |
| Rhode Island         | 146                | 220      | 421                | 26                | 61       | 173      | 1,047     |
| South Carolina       | 988                | 263      | 1,696              | 158               | 300      | 909      | 4,314     |
| South Dakota         | 107                | 88       | 289                | 22                | 79       | 172      | 757       |
| Tennessee            | 1,375              | 365      | 2,525              | 223               | 308      | 1,107    | 5,902     |
| Texas                | 5,290              | 1,404    | 9,544              | 686               | 2,078    | 3,939    | 22,941    |
| Utah                 | 360                | 183      | 952                | 76                | 244      | 401      | 2,217     |
| Vermont              | 172                | 36       | 190                | 29                | 58       | 206      | 691       |
| Virgin Islands       | NA                 | NA       | NA                 | NA                | NA       | NA       | 215       |
| Virginia             | 1,553              | 792      | 3,123              | 299               | 816      | 1,742    | 8,324     |
| Washington           | 997                | 362      | 2,557              | 213               | 568      | 1,130    | 5,827     |
| West Virginia        | 451                | 92       | 556                | 74                | 155      | 467      | 1,794     |
| Wisconsin            | 994                | 516      | 1,849              | 180               | 430      | 980      | 4,949     |
| Wyoming              | 124                | 35       | 208                | 24                | 71       | 132      | 594       |
| Total                | \$60,770           | \$21,690 | \$121,205          | \$10,323          | \$25,799 | \$59,659 | \$299,452 |

NA - Not Applicable.

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

<sup>1</sup> Excludes subscriber line charges.

<sup>2</sup> Includes ILECs' USF pass-thru charges.

<sup>3</sup> Totals in the first six columns include revenues for locations not estimated.

Source: Industry Analysis and Technology Division, Wireline Competition Bureau, *Monitoring Report* (December 2009).

## 16 Subscribership

Under contract with the FCC, the U.S. Census Bureau 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 large, and the questions are consistent. Thus, changes in the results can be compared over time with a great deal of confidence.

More than thirty-four 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, shown in Table 16.3, are subject to greater sampling errors than the national data shown in Table 16.1. These two tables are based on the Census Bureau's Current Population Survey. Additional information can be found in the *Telephone Penetration* and *Telephone Subscribership* reports available on the Internet on the Wireline Competition Bureau Statistical Reports web page at [www.fcc.gov/wcb/stats](http://www.fcc.gov/wcb/stats).

Historical estimates for the United States, using the decennial census population counts, are shown in Table 16.2. 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 16.2 are based on those responses. In the 2000 decennial census, the question was changed to "Is there telephone service available in this [housing unit] from which you can both make and receive calls?" The question was changed in 2000 to avoid the possible bias from having a phone but no service. With the telephone companies no longer owning the telephone instruments beginning in 1984, it is possible for someone to have a telephone but not have service. The question also allows for the possibility of the substitution of wireless service for wireline service. Beginning in 2001 the Census Bureau introduced the American Community Survey (ACS), which was designed to replace the long form of the decennial census, and Table 16.2 includes data from that survey as well. Table 16.2 also documents the per capita changes in wireline phone lines and wireless subscribers over time. The decennial census percentages in 1990 and 2000 and the ACS percentages for 2001 to 2008 reported in Table 16.2 are higher than the CPS percentage reported in Table 16.1. We believe that these differences are due to factors such as the slight differences in the questions and the contexts in which they are asked, as well as the fact that the CPS uses households as the basis of measurement, while the census and the ACS use occupied housing units instead.

Further information from the ACS is shown in Tables 16.4 and 16.5. Table 16.4 shows state data and Table 16.5 shows other characteristics including housing unit tenure, age of the householder, and race and ethnicity of the householder.

**Table 16.1**  
**Household Telephone Subscribership in the United States**

| Date          | Households<br>(millions) | Households<br>with<br>Telephones<br>(millions) | Percentage<br>with<br>Telephones | Households<br>without<br>Telephones<br>(millions) | Percentage<br>without<br>Telephones |
|---------------|--------------------------|--|----------------------------------|---|-------------------------------------|
| November 1983 | 85.8                     | 78.4   | 91.4%                            | 7.4   | 8.6%                                |
| March 1984    | 86.0                     | 78.9   | 91.8%                            | 7.1   | 8.2%                                |
| July 1984     | 86.6                     | 79.3   | 91.6%                            | 7.3   | 8.4%                                |
| November 1984 | 87.4                     | 79.9   | 91.4%                            | 7.5   | 8.6%                                |
| March 1985    | 87.4                     | 80.2   | 91.8%                            | 7.2   | 8.2%                                |
| July 1985     | 88.2                     | 81.0   | 91.8%                            | 7.2   | 8.2%                                |
| November 1985 | 88.8                     | 81.6   | 91.9%                            | 7.2   | 8.1%                                |
| March 1986    | 89.0                     | 82.1   | 92.2%                            | 6.9   | 7.8%                                |
| July 1986     | 89.5                     | 82.5   | 92.2%                            | 7.0   | 7.8%                                |
| November 1986 | 89.9                     | 83.1   | 92.4%                            | 6.8   | 7.6%                                |
| March 1987    | 90.2                     | 83.4   | 92.5%                            | 6.8   | 7.5%                                |
| July 1987     | 90.7                     | 83.7   | 92.3%                            | 7.0   | 7.7%                                |
| November 1987 | 91.3                     | 84.3   | 92.3%                            | 7.0   | 7.7%                                |
| March 1988    | 91.8                     | 85.3   | 92.9%                            | 6.5   | 7.1%                                |
| July 1988     | 92.4                     | 85.7   | 92.8%                            | 6.7   | 7.2%                                |
| November 1988 | 92.6                     | 85.7   | 92.5%                            | 6.9   | 7.5%                                |
| March 1989    | 93.6                     | 87.0   | 93.0%                            | 6.6   | 7.0%                                |
| July 1989     | 93.8                     | 87.5   | 93.3%                            | 6.3   | 6.7%                                |
| November 1989 | 93.9                     | 87.3   | 93.0%                            | 6.6   | 7.0%                                |
| March 1990    | 94.2                     | 87.9   | 93.3%                            | 6.3   | 6.7%                                |
| July 1990     | 94.8                     | 88.4   | 93.3%                            | 6.4   | 6.7%                                |
| November 1990 | 94.7                     | 88.4   | 93.3%                            | 6.3   | 6.7%                                |
| March 1991    | 95.3                     | 89.2   | 93.6%                            | 6.1   | 6.4%                                |
| July 1991     | 95.5                     | 89.1   | 93.3%                            | 6.4   | 6.7%                                |
| November 1991 | 95.7                     | 89.4   | 93.4%                            | 6.3   | 6.6%                                |
| March 1992    | 96.6                     | 90.7   | 93.9%                            | 5.9   | 6.1%                                |
| July 1992     | 96.6                     | 90.6   | 93.8%                            | 6.0   | 6.2%                                |
| November 1992 | 97.0                     | 91.0   | 93.8%                            | 6.0   | 6.2%                                |
| March 1993    | 97.3                     | 91.6   | 94.2%                            | 5.7   | 5.8%                                |
| July 1993     | 97.9                     | 92.2   | 94.2%                            | 5.7   | 5.8%                                |
| November 1993 | 98.8                     | 93.0   | 94.2%                            | 5.8   | 5.8%                                |
| March 1994    | 98.1                     | 92.1   | 93.9%                            | 6.0   | 6.1%                                |
| July 1994     | 98.6                     | 92.4   | 93.7%                            | 6.2   | 6.3%                                |
| November 1994 | 99.8                     | 93.7   | 93.8%                            | 6.2   | 6.2%                                |
| March 1995    | 99.9                     | 93.8   | 93.9%                            | 6.1   | 6.1%                                |
| July 1995     | 100.0                    | 94.0   | 94.0%                            | 6.0   | 6.0%                                |
| November 1995 | 100.4                    | 94.2   | 93.9%                            | 6.2   | 6.1%                                |
| March 1996    | 100.6                    | 94.4   | 93.8%                            | 6.2   | 6.2%                                |
| July 1996     | 101.2                    | 95.0   | 93.9%                            | 6.1   | 6.1%                                |
| November 1996 | 101.3                    | 95.1   | 93.9%                            | 6.2   | 6.1%                                |
| March 1997    | 102.0                    | 95.8   | 93.9%                            | 6.2   | 6.1%                                |
| July 1997     | 102.3                    | 96.1   | 93.9%                            | 6.2   | 6.1%                                |
| November 1997 | 102.8                    | 96.5   | 93.8%                            | 6.3   | 6.2%                                |
| March 1998    | 103.4                    | 97.4   | 94.1%                            | 6.1   | 5.9%                                |
| July 1998     | 103.4                    | 97.3   | 94.1%                            | 6.1   | 5.9%                                |
| November 1998 | 104.1                    | 98.0   | 94.2%                            | 6.1   | 5.8%                                |
| March 1999    | 104.8                    | 98.5   | 94.0%                            | 6.3   | 6.0%                                |
| July 1999     | 105.1                    | 99.2   | 94.4%                            | 5.9   | 5.6%                                |
| November 1999 | 105.4                    | 99.1   | 94.1%                            | 6.3   | 5.9%                                |
| March 2000    | 105.3                    | 99.6   | 94.6%                            | 5.7   | 5.4%                                |
| July 2000     | 105.8                    | 99.8   | 94.4%                            | 5.9   | 5.6%                                |
| November 2000 | 106.5                    | 100.2  | 94.1%                            | 6.3   | 5.9%                                |
| March 2001    | 107.0                    | 101.1  | 94.6%                            | 5.8   | 5.4%                                |
| July 2001     | 106.9                    | 101.7  | 95.1%                            | 5.2   | 4.9%                                |
| November 2001 | 107.7                    | 102.2  | 94.9%                            | 5.5   | 5.1%                                |
| March 2002    | 108.3                    | 103.4  | 95.5%                            | 4.8   | 4.5%                                |
| July 2002     | 108.5                    | 103.2  | 95.1%                            | 5.3   | 4.9%                                |
| November 2002 | 109.0                    | 104.0  | 95.3%                            | 5.1   | 4.7%                                |
| March 2003    | 112.1                    | 107.1  | 95.5%                            | 5.0   | 4.5%                                |
| July 2003     | 112.1                    | 106.8  | 95.2%                            | 5.3   | 4.8%                                |
| November 2003 | 113.1                    | 107.1  | 94.7%                            | 6.0   | 5.3%                                |
| March 2004    | 112.9                    | 106.4  | 94.2%                            | 6.5   | 5.8%                                |
| July 2004     | 113.5                    | 106.5  | 93.8%                            | 7.1   | 6.2%                                |
| November 2004 | 113.8                    | 106.4  | 93.5%                            | 7.4   | 6.5%                                |
| March 2005    | 114.5                    | 105.8  | 92.4%                            | 8.7   | 7.6%                                |
| July 2005     | 114.4                    | 107.5  | 94.0%                            | 6.8   | 6.0%                                |
| November 2005 | 115.2                    | 107.0  | 92.9%                            | 8.2   | 7.1%                                |
| March 2006    | 115.5                    | 107.2  | 92.8%                            | 8.4   | 7.2%                                |
| July 2006     | 116.2                    | 109.9  | 94.6%                            | 6.3   | 5.4%                                |
| November 2006 | 116.4                    | 108.8  | 93.4%                            | 7.6   | 6.6%                                |
| March 2007    | 117.1                    | 110.8  | 94.6%                            | 6.4   | 5.4%                                |
| July 2007     | 117.7                    | 111.7  | 95.0%                            | 5.9   | 5.0%                                |
| November 2007 | 118.2                    | 112.2  | 94.9%                            | 6.0   | 5.1%                                |
| March 2008    | 117.8                    | 112.2  | 95.2%                            | 5.6   | 4.8%                                |
| July 2008     | 118.0                    | 112.6  | 95.4%                            | 5.5   | 4.6%                                |
| November 2008 | 118.6                    | 112.7  | 95.0%                            | 5.9   | 5.0%                                |

Note: Details may not appear to add to totals due to rounding.

Source: Industry Analysis and Technology Division, Wireline Competition Bureau, *Telephone Subscribership in the United States* (June 2009). Based on data from the Census Bureau's Current Population Survey.

**Table 16.2**  
**Historical Telephone Penetration Estimates**

| <b>Year</b> | <b>Percentage of Housing Units with Telephones</b> | <b>Telephone Wire Lines per 100 Population</b> | <b>Wireless Subscribers per 100 Population</b> |
|-------------|--|--|--|
| 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   | 45.1   |  |
| 1990        | 94.8   | 54.7   | 1.8  |
| 2000        | 97.6   | 67.9   | 34.5   |
| 2001        | 96.9   | 67.4   | 41.5   |
| 2002        | 96.6   | 65.7   | 46.8   |
| 2003        | 96.2   | 63.8   | 51.0   |
| 2004        | 95.7   | 61.5   | 57.9   |
| 2005        | 94.8   | 60.1   | 65.8   |
| 2006        | 94.1   | 57.7   | 73.6   |
| 2007        | 94.6   | 54.2   | 80.8   |
| 2008        | 98.2   | 50.9   | 86.4   |

Sources: Percentage data for 1920 to 1970 from the U.S. Census Bureau, *Historical Statistics of the United States, Colonial Times to 1970*, Part 2, page 783. Percentage data for 1980 to 2000 from the decennial censuses. Percentage data for 2001 to 2007 from the Census Bureau's American Community Survey. Telephone 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, ILEC local loops are used; see Table 7.1. For 2000 to 2008, June ILEC and CLEC lines are used from Table 1 of Industry Analysis and Technology Division, Wireline Competition Bureau, *Local Telephone Competition: Status as of June 30, 2008* (July 2009). June wireless subscribers reported by CTIA are from Table 11.1. For 1920 to 2000, the population from the decennial census is used. For 2001 to 2008, Census Bureau population estimates for July 1 are used.

**Table 16.3**  
**Telephone Penetration by State**  
**(Annual Average Percentage of Households with Telephone Service)**

| State                | 1984   | 2008   | Change  |
|----------------------|--------|--------|---------|
| Alabama              | 88.4 % | 94.0 % | 5.6 % * |
| Alaska               | 86.5   | 96.4   | 9.8 *   |
| Arizona              | 86.9   | 94.6   | 7.6 *   |
| Arkansas             | 86.6   | 92.9   | 6.3 *   |
| California           | 92.5   | 96.5   | 4.0 *   |
| Colorado             | 93.2   | 98.0   | 4.8 *   |
| Connecticut          | 95.5   | 97.1   | 1.6     |
| Delaware             | 94.3   | 94.7   | 0.5     |
| District of Columbia | 94.9   | 92.0   | -2.9    |
| Florida              | 88.7   | 93.0   | 4.3 *   |
| Georgia              | 86.2   | 92.9   | 6.7 *   |
| Hawaii               | 93.5   | 96.5   | 2.9     |
| Idaho                | 90.7   | 96.0   | 5.3 *   |
| Illinois             | 94.2   | 94.1   | -0.1    |
| Indiana              | 91.6   | 92.1   | 0.5     |
| Iowa                 | 96.2   | 97.4   | 1.2     |
| Kansas               | 94.3   | 96.4   | 2.0     |
| Kentucky             | 88.1   | 94.1   | 5.9 *   |
| Louisiana            | 89.7   | 95.7   | 6.0 *   |
| Maine                | 93.4   | 97.8   | 4.4 *   |
| Maryland             | 95.7   | 94.7   | -1.0    |
| Massachusetts        | 95.9   | 96.4   | 0.6     |
| Michigan             | 92.8   | 96.0   | 3.1 *   |
| Minnesota            | 95.8   | 98.2   | 2.3     |
| Mississippi          | 82.4   | 92.7   | 10.3 *  |
| Missouri             | 91.5   | 96.8   | 5.3 *   |
| Montana              | 91.0   | 94.5   | 3.5 *   |
| Nebraska             | 95.7   | 94.7   | -1.0    |
| Nevada               | 90.4   | 94.0   | 3.7 *   |
| New Hampshire        | 94.3   | 97.7   | 3.3 *   |
| New Jersey           | 94.8   | 94.8   | 0.0     |
| New Mexico           | 82.0   | 92.6   | 10.6 *  |
| New York             | 91.8   | 94.4   | 2.6 *   |
| North Carolina       | 88.3   | 93.5   | 5.2 *   |
| North Dakota         | 94.6   | 98.3   | 3.7 *   |
| Ohio                 | 92.4   | 96.9   | 4.5 *   |
| Oklahoma             | 90.3   | 95.3   | 5.0 *   |
| Oregon               | 90.6   | 97.6   | 7.0 *   |
| Pennsylvania         | 94.9   | 97.9   | 3.0 *   |
| Rhode Island         | 93.6   | 96.4   | 2.8     |
| South Carolina       | 83.7   | 90.8   | 7.1 *   |
| South Dakota         | 93.2   | 96.8   | 3.6 *   |
| Tennessee            | 88.5   | 93.0   | 4.5 *   |
| Texas                | 88.4   | 94.3   | 5.9 *   |
| Utah                 | 92.5   | 96.9   | 4.3 *   |
| Vermont              | 92.3   | 97.0   | 4.8 *   |
| Virginia             | 93.1   | 95.7   | 2.6 *   |
| Washington           | 93.0   | 98.1   | 5.0 *   |
| West Virginia        | 87.7   | 94.5   | 6.8 *   |
| Wisconsin            | 95.2   | 97.2   | 2.0     |
| Wyoming              | 89.9   | 95.8   | 5.9 *   |
| United States        | 91.6 % | 95.2 % | 3.6 % * |

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

\* Increase is statistically significant at the 95% confidence level.

# Decrease is statistically significant at the 95% confidence level.

Source: Industry Analysis and Technology Division, Wireline Competition Bureau, *Telephone Subscribership in the United States* (June 2009). Based on data from the Census Bureau's Current Population Survey.

**Table 16.4**  
**Telephone Penetration by State**  
**(Percentage of Occupied Housing Units with Telephone Service)**

| State                | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   |
|----------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| Alabama              | 95.2 % | 95.3 % | 95.1 % | 94.5 % | 93.3 % | 92.6 % | 93.9 % | 98.0 % |
| Alaska               | 96.6   | 97.9   | 96.7   | 97.6   | 96.6   | 96.3   | 97.7   | 98.1   |
| Arizona              | 95.8   | 95.6   | 95.0   | 95.2   | 93.1   | 93.6   | 93.7   | 97.0   |
| Arkansas             | 94.7   | 94.3   | 92.5   | 91.0   | 90.9   | 90.3   | 91.3   | 97.6   |
| California           | 98.0   | 98.3   | 98.3   | 97.9   | 97.0   | 96.6   | 96.7   | 98.7   |
| Colorado             | 98.5   | 97.4   | 97.0   | 96.5   | 95.1   | 94.6   | 94.3   | 98.2   |
| Connecticut          | 98.8   | 98.7   | 98.2   | 98.3   | 97.3   | 96.5   | 96.8   | 99.1   |
| Delaware             | 98.2   | 98.2   | 97.7   | 97.9   | 97.5   | 97.0   | 95.8   | 98.7   |
| District of Columbia | 97.1   | 97.5   | 96.9   | 96.1   | 95.2   | 94.5   | 92.6   | 97.8   |
| Florida              | 97.0   | 96.6   | 96.3   | 95.5   | 94.0   | 92.4   | 93.4   | 97.9   |
| Georgia              | 95.6   | 95.5   | 95.0   | 94.1   | 92.9   | 90.9   | 92.7   | 97.1   |
| Hawaii               | 97.9   | 97.0   | 96.3   | 95.2   | 95.6   | 95.7   | 94.9   | 98.1   |
| Idaho                | 96.2   | 97.4   | 96.3   | 95.7   | 96.2   | 94.2   | 94.2   | 99.0   |
| Illinois             | 95.9   | 95.7   | 95.4   | 94.7   | 94.4   | 93.7   | 94.8   | 98.6   |
| Indiana              | 95.4   | 94.7   | 93.7   | 93.4   | 94.4   | 93.4   | 94.2   | 98.4   |
| Iowa                 | 97.6   | 97.4   | 96.6   | 95.6   | 96.0   | 94.9   | 95.3   | 98.9   |
| Kansas               | 96.9   | 96.3   | 95.8   | 95.7   | 93.6   | 92.7   | 93.8   | 98.9   |
| Kentucky             | 96.0   | 94.8   | 95.0   | 93.3   | 92.0   | 91.9   | 93.1   | 97.8   |
| Louisiana            | 95.3   | 95.4   | 94.7   | 92.9   | 92.9   | 91.6   | 92.5   | 97.3   |
| Maine                | 98.8   | 98.2   | 98.4   | 97.7   | 96.6   | 95.7   | 95.9   | 98.8   |
| Maryland             | 97.7   | 97.5   | 97.5   | 97.0   | 95.8   | 95.3   | 95.6   | 99.0   |
| Massachusetts        | 98.5   | 98.6   | 98.5   | 97.9   | 96.2   | 95.5   | 96.1   | 98.8   |
| Michigan             | 96.4   | 95.5   | 95.1   | 94.4   | 93.4   | 92.1   | 93.0   | 98.6   |
| Minnesota            | 98.7   | 98.2   | 98.5   | 97.4   | 96.7   | 95.8   | 95.4   | 99.2   |
| Mississippi          | 93.3   | 93.4   | 92.8   | 91.4   | 89.6   | 88.4   | 91.2   | 96.9   |
| Missouri             | 96.6   | 96.7   | 96.3   | 96.1   | 95.4   | 93.6   | 94.3   | 98.5   |
| Montana              | 97.1   | 96.9   | 96.5   | 95.1   | 95.0   | 93.6   | 93.7   | 97.5   |
| Nebraska             | 97.2   | 96.4   | 95.6   | 94.8   | 95.5   | 94.4   | 94.5   | 99.0   |
| Nevada               | 95.2   | 95.3   | 94.4   | 95.2   | 95.9   | 94.6   | 94.3   | 97.6   |
| New Hampshire        | 98.7   | 98.5   | 98.1   | 98.2   | 96.9   | 97.0   | 97.5   | 98.6   |
| New Jersey           | 98.0   | 97.7   | 97.6   | 96.9   | 95.8   | 95.3   | 95.1   | 97.9   |
| New Mexico           | 92.9   | 90.7   | 93.0   | 94.4   | 92.5   | 91.7   | 92.4   | 95.7   |
| New York             | 97.2   | 96.9   | 96.8   | 96.5   | 95.5   | 94.8   | 95.0   | 97.9   |
| North Carolina       | 96.5   | 95.6   | 94.1   | 94.5   | 93.8   | 93.2   | 93.4   | 98.1   |
| North Dakota         | 97.8   | 97.3   | 96.8   | 95.9   | 94.7   | 94.7   | 94.8   | 99.2   |
| Ohio                 | 97.7   | 96.7   | 97.1   | 96.2   | 95.4   | 94.2   | 94.6   | 98.1   |
| Oklahoma             | 95.7   | 93.9   | 94.7   | 93.7   | 93.1   | 92.9   | 93.2   | 98.0   |
| Oregon               | 98.0   | 97.1   | 96.9   | 96.0   | 95.3   | 95.2   | 94.9   | 98.7   |
| Pennsylvania         | 97.8   | 98.0   | 97.5   | 97.2   | 96.5   | 95.9   | 95.9   | 98.8   |
| Rhode Island         | 98.3   | 97.8   | 97.7   | 96.8   | 96.4   | 95.6   | 96.0   | 97.8   |
| South Carolina       | 96.0   | 94.7   | 94.7   | 93.6   | 92.3   | 92.0   | 93.2   | 97.2   |
| South Dakota         | 97.6   | 96.8   | 96.1   | 95.8   | 95.3   | 96.0   | 95.3   | 98.6   |
| Tennessee            | 96.8   | 96.3   | 95.1   | 95.2   | 92.9   | 92.8   | 93.7   | 98.1   |
| Texas                | 95.9   | 95.4   | 94.3   | 93.7   | 92.9   | 92.6   | 93.5   | 98.0   |
| Utah                 | 97.4   | 97.7   | 97.5   | 97.4   | 96.5   | 96.2   | 96.0   | 99.3   |
| Vermont              | 98.1   | 98.1   | 97.7   | 97.6   | 97.9   | 97.2   | 96.9   | 98.8   |
| Virginia             | 97.3   | 97.0   | 97.0   | 95.8   | 95.6   | 95.2   | 95.2   | 98.3   |
| Washington           | 97.5   | 97.8   | 97.0   | 96.5   | 96.5   | 96.2   | 96.3   | 99.0   |
| West Virginia        | 95.1   | 95.9   | 94.8   | 94.0   | 94.5   | 93.8   | 93.6   | 96.9   |
| Wisconsin            | 97.9   | 97.5   | 96.3   | 95.5   | 96.4   | 95.6   | 96.1   | 99.0   |
| Wyoming              | 95.1   | 94.9   | 94.5   | 94.4   | 94.9   | 93.4   | 95.0   | 98.7   |
| United States        | 96.9 % | 96.6 % | 96.2 % | 95.7 % | 94.8 % | 94.1 % | 94.6 % | 98.2 % |
| Puerto Rico          | NA     | NA     | NA     | NA     | 73.8 % | 73.6 % | 80.6 % | 91.9 % |

Source: Census Bureau, American Community Survey and Puerto Rico Community Survey.

**Table 16.5**  
**Telephone Penetration by Selected Characteristics**  
**(Percentage of Occupied Housing Units with Telephone Service)**

| Characteristic                      | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   |
|-------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| Housing Unit Status                 |        |        |        |        |        |        |        |        |
| Owner Occupied                      | 98.8 % | 98.7 % | 98.5 % | 98.3 % | 97.7 % | 97.1 % | 97.1 % | 99.3 % |
| Renter Occupied                     | 93.4   | 92.6   | 91.6   | 90.4   | 89.0   | 87.9   | 89.5   | 96.2   |
| Age of Householder                  |        |        |        |        |        |        |        |        |
| 15 - 34                             | 94.5   | 93.6   | 92.0   | 90.2   | 88.0   | 86.3   | 87.8   | 93.4   |
| 35 - 64                             | 97.3   | 97.2   | 97.1   | 96.7   | 96.1   | 95.4   | 95.6   | 98.4   |
| 65 +                                | 98.7   | 98.6   | 98.7   | 98.7   | 98.6   | 98.5   | 98.5   | 99.2   |
| Race of Householder                 |        |        |        |        |        |        |        |        |
| White                               | 97.6   | 97.3   | 96.9   | 96.3   | 95.6   | NA     | NA     | NA     |
| Black or African American           | 93.6   | 93.0   | 93.0   | 92.3   | 91.9   | NA     | NA     | NA     |
| American Indian or Alaska Native    | 89.1   | 89.5   | 87.8   | 89.6   | 86.8   | NA     | NA     | NA     |
| Asian                               | 98.4   | 98.0   | 97.5   | 96.9   | 95.5   | NA     | NA     | NA     |
| Native Hawaiian or Pacific Islander | 95.9   | 95.5   | 91.4   | 92.2   | 93.1   | NA     | NA     | NA     |
| Other                               | 94.6   | 95.1   | 93.9   | 93.3   | 91.0   | NA     | NA     | NA     |
| Two or More Races                   | 95.1   | 92.7   | 95.6   | 92.8   | 92.7   | NA     | NA     | NA     |
| Ethnicity of Householder            |        |        |        |        |        |        |        |        |
| Hispanic or Latino                  | 94.2   | 93.9   | 93.4   | 92.6   | 91.6   | NA     | NA     | NA     |
| United States                       | 96.9 % | 96.6 % | 96.2 % | 95.7 % | 94.8 % | 94.1 % | 94.6 % | 98.2 % |

NA - Not available

Source: Census Bureau, American Community Survey.

## 17 Technology and Infrastructure

Price-cap regulated carriers, including 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 17.1 and 17.3 are from the BOCs' ARMIS 43-07 reports<sup>1</sup>, and the data contained in Table 17.2 are from the ARMIS 43-05 report. The individual carrier's data can be obtained from the ARMIS web page at [www.fcc.gov/wcb/eafs](http://www.fcc.gov/wcb/eafs). Selected holding company statistics from the ARMIS 43-07, through 2007, can be found in Section 10 of our *Monitoring Report* on the web page [www.fcc.gov/wcb/iatd/monitor](http://www.fcc.gov/wcb/iatd/monitor). Also, information about broadband deployment is contained in Chapter 2, *Advanced Telecommunications*.

### 1. Central Office Technology

Table 17.1 shows the number of BOC switches and tracks the deployment of certain key switching and signaling technologies, described below, in BOC central offices. (Information about broadband deployment is contained in Chapter 2, *Advanced Telecommunications*.) Telephone companies replaced most of their older electromechanical switches with stored program control switches (SPCSs) beginning in the early 1980s. Stored program control makes it possible to change the operational and service features of a switch by changing the program stored in switch memory and executed by switch processors. SPCSs can use either analog or digital switching technology. As shown in Table 17.1 virtually all switches in BOC networks now use digital stored program control technology, and more than 98 percent of BOC access lines terminate on digital switches.

In the late 1980s, telephone companies began to convert switching offices from in-band signaling to Signaling System 7 (SS7). SS7 permits calls to be set up more efficiently, and also allows certain new services to be deployed. It may be implemented on both analog and digital stored program control switches. Data in Table 17.1 shows that SS7 has now been deployed almost everywhere in BOC networks.

Telephone companies began introducing integrated services digital network (ISDN) capabilities on their digital switches shortly after introducing Signaling System 7. One of the attractions of ISDN is that ordinary local telephone lines (copper loops) can be used to transport data between computers at speeds higher than possible using a modem. In recent years, however, ISDN has taken a back seat to central office broadband technologies, such as Digital Subscriber Line (DSL) and Fiber to the Home (FTTH), when used for this purpose.

Table 17.2 provides some additional categorization of switches. It shows line

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<sup>1</sup> In 2008, the Commission granted significant forbearance from carriers' obligations to file ARMIS reports. (See 23 FCC Rcd 13647) As such, 2007 was the last year the Commission received data contained in Tables 17.1 and 17.3.



counts of switches from 1996 to 2007 for the following categories: fewer than 1,000 lines; 1,000 - 4,999 lines; 5,000 - 9,999 lines; 10,000 - 19,999 lines; and 20,000 lines or more. The table also breaks out switches based on their being in a Metropolitan Statistical Area (MSA) or not (non-MSA). Note that while Table 17.1 provides switch counts for BOCs only, Table 17.2 provides this information for all price-cap carriers.

## **2. Transmission Technology**

Each telephone company has a network of transmission paths interconnecting switching offices and also connecting customers to their serving local central offices. Today, wireline transmission is typically provided on fiber or copper cable, with other technologies being used only infrequently. As indicated in Table 17.3, from 1991 to 2007, the proportion of fiber cable sheath kilometers<sup>2</sup> in Bell Operating Company networks increased from 5% to over 15% of total cable sheath kilometers.

The number of working channels provides a rough approximation of the number of transmission paths that are in service between customers and the telephone company offices serving those customers. This includes both switched access lines and the local portion of special access and private lines. Table 17.3 shows that the number of working channels provided partly or totally on fiber in BOC networks increased from about 4% of total working channels in 1991 to over 20% in 2007.

## **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.

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 were served by equal access switches. 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 receive equal access, there still are some central offices where equal access is not yet available. Table 17.4 shows the number of central office wire centers in each state that had been converted to equal access as of August 1, 2009. 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

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<sup>2</sup> Cable sheath kilometers is a measure of the length of cable used to provide telecommunications services. A sheath contains individual copper or fiber pairs used to transmit voice or data. Fiber cable sheaths typically contain 40 to 50 fiber strands while copper cable sheaths contain as many as several hundred copper pairs.

to equal access even in states where equal access is reported to be available to all customers.

#### **4. Rural Network Capabilities**

The National Exchange Carrier Association periodically conducts a survey of over 1,000 small, mostly rural telephone companies.<sup>3</sup> The most recent survey focuses on the small companies' efforts to bring advanced services to their customers. Table 17.5 shows selected network capabilities by state of the 1,101 companies that responded to the 2009 survey and a summary of the results of the 2008 survey. In addition to the number of switches and access lines, the table shows the percentage of companies providing equal access, SS7 and DSL; percentage providing Ethernet, ATM and SONET-based services to customers; percentage having those technologies in their networks; the number of ADSL access lines; and the percentage that provide other broadband services.

#### **5. Telecommunications Patents**

One 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 17.1 shows the number of patents granted for telecommunications from 1992 to 2007. The information presented profiles U.S. patent activity in the general field of telecommunications. It includes all U.S. patent documents, except reissued patents, granted between January 1992 and December 31, 2007 in the following classes:

Class 370, *Multiplex Communications*

Class 375, *Pulse or Digital Communications*

Class 379, *Telephonic Communications*

Class 455, *Telecommunications*

#### **6. Capital Expenditures**

The FCC does not systematically collect information on capital expenditures from most carriers. Table 17.6 provides annual estimates of expenditures for structures and equipment for telecommunications carriers, taken from a U.S. Census Bureau survey.<sup>4</sup> Chart 17.2 combines this expenditure data with FCC collected revenue data. It shows that for each dollar of revenue collected from end users in 2007, wireless carriers invested 19 cents in structures and equipment whereas wireline, resellers, satellite & other carriers invested 28 cents. Overall, capital expenditures were 25 cents for each dollar of end-user revenues.

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<sup>3</sup> National Exchange Carrier Association, *Trends 2009, A report on rural telecom technology*, p.18

<sup>4</sup> U.S. Census Bureau, *Annual Capital Expenditures*, (Issued January 22, 2009) Table 4a; <http://www.census.gov/csd/ace/xls/2007/Full%20Report.htm> (last visited January 12, 2010)

**Table 17.1**  
**Central Office Switches and Access Lines by Technology**  
**(Bell Operating Companies)**

| <b>Year End</b>  | <b>Total Switches</b> | <b>Signaling System 7 Switches</b> |              | <b>ISDN Switches</b> |         | <b>Digital Stored Program Controlled Switches</b> |         |
|--|-----------------------|------------------------------------|--------------|----------------------|---------|---|---------|
| 1990   | 9,872                 | 2,428                              | 24.59 %      | 600                  | 6.08 %  | 5,816   | 58.91 % |
| 1991   | 9,951                 | 3,670                              | 36.88        | 920                  | 9.25    | 6,636   | 66.69   |
| 1992   | 10,069                | 5,392                              | 53.55        | 1,219                | 12.11   | 7,530   | 74.78   |
| 1993   | 10,089                | 6,688                              | 66.29        | 1,874                | 18.57   | 8,239   | 81.66   |
| 1994   | 10,023                | 8,334                              | 83.15        | 2,400                | 23.94   | 8,795   | 87.75   |
| 1995   | 10,051                | 8,977                              | 89.31        | 2,868                | 28.53   | 9,015   | 89.69   |
| 1996   | 9,966                 | 9,286                              | 93.18        | 3,329                | 33.40   | 9,247   | 92.79   |
| 1997   | 9,965                 | 9,688                              | 97.22        | 3,902                | 39.16   | 9,417   | 94.50   |
| 1998   | 9,788                 | 9,643                              | 98.52        | 4,146                | 42.36   | 9,357   | 95.60   |
| 1999 <sup>1</sup>  | 9,968                 | 9,844                              | 98.76        | 4,424                | 44.38   | 9,648   | 96.79   |
| 2000 <sup>2</sup>  | 15,092                | 14,822                             | 98.31        | 5,414                | 35.87   | 14,889  | 98.65   |
| 2001   | 15,109                | 14,954                             | 99.07        | 5,465                | 36.17   | 14,970  | 99.08   |
| 2002   | 14,353 <sup>3</sup>   | 14,258                             | 99.35        | 5,664                | 39.46   | 14,245 <sup>3</sup>                               | 99.25   |
| 2003   | 14,376                | 14,342                             | 99.59        | 5,651                | 39.46   | 14,292  | 99.42   |
| 2004   | 14,399                | 14,366                             | 99.77        | 5,787                | 40.19   | 14,326  | 99.49   |
| 2005   | 12,321                | 12,292                             | 99.76        | 5,730                | 46.21   | 12,256  | 99.47   |
| 2006   | 12,315                | 12,286                             | 99.76        | 5,914                | 48.02   | 12,251  | 99.48   |
| 2007 <sup>5</sup>  | 12,347                | 12,323                             | 99.81        | 5,930                | 48.03   | 12,283  | 99.48   |
| <b>Access Lines Served by Type of Office</b><br><b>(Thousands)</b> |                       |                                    |              |                      |         |   |         |
| <b>Year End</b>  | <b>All Switches</b>   | <b>Signaling System 7 Switches</b> |              | <b>ISDN Switches</b> |         | <b>Digital Stored Program Controlled Switches</b> |         |
| 1990   | 105,641               | 40,026                             | 37.89 %      | 13,970               | 13.22 % | 45,452  | 43.02 % |
| 1991   | 107,388               | 57,321                             | 53.38        | 20,567               | 19.15   | 52,061  | 48.48   |
| 1992   | 109,997               | 76,480                             | 69.53        | 28,375               | 25.80   | 60,324  | 54.84   |
| 1993   | 113,368               | 92,493                             | 81.59        | 39,875               | 35.17   | 71,192  | 62.80   |
| 1994   | 117,345               | 109,465                            | 93.28        | 56,546               | 48.19   | 84,040  | 71.62   |
| 1995   | 122,266               | 116,568                            | 95.34        | 71,274               | 58.29   | 93,172  | 76.20   |
| 1996   | 125,844               | 122,343                            | 97.22        | 85,434               | 67.89   | 101,283   | 80.48   |
| 1997   | 131,722               | 130,778                            | 99.28        | 95,956               | 72.85   | 110,503   | 83.89   |
| 1998   | 136,426               | 136,246                            | 99.87        | 106,834              | 78.31   | 119,738   | 87.77   |
| 1999 <sup>1</sup>  | 141,763               | 141,685                            | 99.94        | 113,999              | 80.42   | 129,838   | 91.59   |
| 2000 <sup>2</sup>  | 160,557               | 160,303                            | 99.84        | 132,844              | 82.74   | 153,240   | 95.44   |
| 2001   | 155,543               | 155,363                            | 99.88        | 129,075              | 82.98   | 150,732   | 96.91   |
| 2002   | 148,292 <sup>3</sup>  | <sup>4</sup>                       | <sup>4</sup> | 124,451              | 83.92   | 145,009 <sup>3</sup>                              | 97.79   |
| 2003   | 142,698               | <sup>4</sup>                       | <sup>4</sup> | 119,422              | 83.68   | 140,262   | 98.30   |
| 2004   | 136,057               | <sup>4</sup>                       | <sup>4</sup> | 115,561              | 84.94   | 134,076   | 98.54   |
| 2005   | 127,026               | <sup>4</sup>                       | <sup>4</sup> | 107,535              | 84.36   | 125,460   | 98.77   |
| 2006   | 118,316               | <sup>4</sup>                       | <sup>4</sup> | 100,084              | 84.56   | 116,817   | 98.73   |
| 2007 <sup>5</sup>  | 109,448               | <sup>4</sup>                       | <sup>4</sup> | 92,284               | 84.32   | 108,058   | 98.73   |

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

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

<sup>3</sup> The decrease in the number of switches and their associated lines from 2001 to 2002 is partially due to the sale of a number of study areas by Verizon.

<sup>4</sup> Starting with 2002 data, the Commission eliminated the requirement that the Bell operating companies file electromechanical switch data and data for lines served by SS7 switches. See *2000 Biennial Regulatory Review – Comprehensive Review of the Accounting Requirements and ARMIS Reporting Requirements for Incumbent Local Exchange Carriers: Phase 2*, et al., CC Docket Nos. 00-199, 99-301, 97-212, 80-286, Report and Order in CC Docket Nos. 00-199, 97-212, and 80-286, Further Notice of Proposed Rulemaking in CC Docket Nos. 00-199, 99-301, and 80-286, 16 FCC Rcd 19911, 19770-72, paras. 161-165

<sup>5</sup> Starting in 2008, the Commission eliminated the requirement for Bell Operating Companies to file ARMIS 43-07 data. See 23 FCC Rcd 13647.

Source: ARMIS 43-07

**Table 17.2<sup>1</sup>**  
**Switches by Metropolitan Statistical Area (MSA) and Non-MSA**  
**And Switches by Line Counts**

| <b>Year</b>       | <b>Total Switches<br/>MSA</b> | <b>Total Switches<br/>Non-MSA</b> | <b>Total Switches<br/>MSA and<br/>Non-MSA</b> | <b>Switches with<br/>Under 1,000<br/>Lines</b> | <b>Switches with<br/>1,000 - 4,999<br/>Lines</b> | <b>Switches with<br/>5,000 - 9,999<br/>Lines</b> | <b>Switches with<br/>10,000 - 19,999<br/>Lines</b> | <b>Switches with<br/>20,000 or More<br/>Lines</b> |
|-------------------|-------------------------------|-----------------------------------|---|--|--|--|--|---|
| 1996              | 8,711                         | 7,426                             | 16,137  | 4,594  | 5,758  | 1,770  | 1,431  | 2,584   |
| 1997              | 9,138                         | 7,199                             | 16,337  | 4,476  | 5,843  | 1,786  | 1,518  | 2,714   |
| 1998              | 9,011                         | 7,492                             | 16,503  | 4,374  | 6,027  | 1,821  | 1,527  | 2,754   |
| 1999              | 9,165                         | 7,452                             | 16,617  | 4,319  | 5,898  | 1,915  | 1,613  | 2,873   |
| 2000              | 9,058                         | 6,340                             | 15,398  | 3,472  | 5,538  | 1,869  | 1,632  | 2,888   |
| 2001              | 8,996                         | 6,377                             | 15,373  | 3,402  | 5,481  | 1,873  | 1,678  | 2,938   |
| 2002              | 9,098                         | 6,336                             | 15,434  | 3,638  | 5,627  | 1,852  | 1,627  | 2,772   |
| 2003              | 9,170                         | 6,541                             | 15,711  | 3,747  | 5,725  | 1,887  | 1,685  | 2,667   |
| 2004              | 9,289                         | 6,737                             | 16,026  | 4,160  | 5,833  | 1,868  | 1,681  | 2,485   |
| 2005 <sup>2</sup> | 9,064                         | 5,602                             | 14,666  | 3,380  | 5,310  | 1,886  | 1,719  | 2,371   |
| 2006              | 9,079                         | 5,578                             | 14,657  | 3,502  | 5,343  | 1,914  | 1,748  | 2,150   |
| 2007              | 9,004                         | 5,735                             | 14,739  | 3,669  | 5,441  | 1,900  | 1,782  | 1,947   |
| 2008              | 9,004                         | 5,307                             | 14,311  | 3,857  | 5,178  | 1,860  | 1,775  | 1,641   |
| 2009              | 8,993                         | 5,306                             | 14,299  | 4,062  | 5,205  | 1,838  | 1,781  | 1,413   |

<sup>1</sup> The number of switches in Table 17.2 differs from Tables 17.1. Table 17.1 is derived from the ARMIS 43-07, which was filed by the regional Bell operating companies through 2007. Table 17.2 is derived from the ARMIS 43-05, which is filed by incumbent local exchange carriers subject to price-cap regulation.

<sup>2</sup> The decline in switches between 2004 and 2005 is primarily due to Verizon GTE reporting substantially fewer switches in 2005 than in 2004. Verizon attributes its 2005 reduction in local switches to Verizon GTE's change in data sources from financial to operations databases, which the company expects will provide more timely information.

**Table 17.3**  
**Local Transmission Technology**  
**(Bell Operating Companies)**  
**Cable Sheath Kilometers**

| Year End          | Total     | Copper    |        | Fiber   |       | Other  |       |
|-------------------|-----------|-----------|--------|---------|-------|--------|-------|
| 1991              | 4,163,640 | 3,955,622 | 95.0 % | 196,791 | 4.7 % | 11,228 | 0.3 % |
| 1992              | 4,214,804 | 3,965,406 | 94.1   | 238,406 | 5.7   | 10,994 | 0.3   |
| 1993              | 4,264,569 | 3,976,100 | 93.2   | 280,017 | 6.6   | 8,450  | 0.2   |
| 1994              | 4,256,253 | 3,934,243 | 92.4   | 314,660 | 7.4   | 7,350  | 0.2   |
| 1995              | 4,319,068 | 3,960,343 | 91.7   | 351,907 | 8.1   | 6,819  | 0.2   |
| 1996              | 4,339,067 | 3,947,238 | 91.0   | 386,011 | 8.9   | 5,819  | 0.1   |
| 1997              | 4,396,205 | 3,974,204 | 90.4   | 416,105 | 9.5   | 5,896  | 0.1   |
| 1998              | 4,473,351 | 4,009,772 | 89.6   | 449,554 | 10.0  | 14,026 | 0.3   |
| 1999 <sup>1</sup> | 4,608,808 | 4,103,657 | 89.0   | 491,478 | 10.7  | 13,672 | 0.3   |
| 2000 <sup>2</sup> | 5,761,869 | 5,132,364 | 89.1   | 613,646 | 10.7  | 15,860 | 0.3   |
| 2001              | 5,848,516 | 5,166,537 | 88.3   | 665,805 | 11.4  | 16,174 | 0.3   |
| 2002              | 5,791,105 | 5,086,669 | 87.8   | 692,031 | 11.9  | 12,406 | 0.2   |
| 2003              | 5,851,790 | 5,118,314 | 87.5   | 720,877 | 12.3  | 12,600 | 0.2   |
| 2004              | 5,940,199 | 5,166,481 | 87.0   | 763,132 | 12.8  | 12,587 | 0.2   |
| 2005              | 5,987,524 | 5,166,382 | 86.3   | 810,556 | 13.5  | 10,585 | 0.2   |
| 2006              | 6,079,810 | 5,184,980 | 85.3   | 894,319 | 14.7  | 10,511 | 0.2   |
| 2007              | 6,201,565 | 5,218,430 | 84.1   | 972,713 | 15.7  | 10,422 | 0.2   |

**Working Telecommunications Channels<sup>1</sup>**  
**(Thousands)**

| Year End          | Total   | Copper  |        | Fiber  |       | Other |       |
|-------------------|---------|---------|--------|--------|-------|-------|-------|
| 1991              | 118,654 | 114,047 | 96.1 % | 4,605  | 3.9 % | 2.3   | 0.0 % |
| 1992              | 120,848 | 114,609 | 94.8   | 6,238  | 5.2   | 1.0   | 0.0   |
| 1993              | 124,191 | 115,496 | 93.0   | 8,694  | 7.0   | 1.4   | 0.0   |
| 1994              | 130,192 | 118,437 | 91.0   | 11,755 | 9.0   | 0.3   | 0.0   |
| 1995              | 136,231 | 122,975 | 90.3   | 13,255 | 9.7   | 0.3   | 0.0   |
| 1996              | 142,824 | 125,595 | 87.9   | 17,228 | 12.1  | 1.0   | 0.0   |
| 1997              | 149,429 | 128,436 | 86.0   | 20,992 | 14.0  | 0.3   | 0.0   |
| 1998              | 172,916 | 134,629 | 77.9   | 38,286 | 22.1  | 0.3   | 0.0   |
| 1999 <sup>2</sup> | 186,387 | 138,691 | 74.4   | 47,696 | 25.6  | 0.0   | 0.0   |
| 2000 <sup>3</sup> | 218,928 | 157,840 | 72.1   | 61,086 | 27.9  | 1.9   | 0.0   |
| 2001              | 228,705 | 152,441 | 66.7   | 76,263 | 33.3  | 1.5   | 0.0   |
| 2002 <sup>4</sup> | 169,157 | 137,228 | 81.1   | 31,927 | 18.9  | 1.4   | 0.0   |
| 2003              | 155,978 | 127,261 | 81.6   | 28,716 | 18.4  | 0.5   | 0.0   |
| 2004              | 148,278 | 117,673 | 79.4   | 30,605 | 20.6  | 0.1   | 0.0   |
| 2005              | 137,254 | 100,017 | 72.9   | 27,237 | 19.8  | 0.1   | 0.0   |
| 2006              | 125,767 | 100,254 | 79.7   | 25,513 | 20.3  | 0.1   | 0.0   |
| 2007 <sup>5</sup> | 116,333 | 92,432  | 79.5   | 23,902 | 20.5  | 0.1   | 0.0   |

Source: Industry Analysis and Technology Division, Wireline Competition Division, Statistics of Communications Common Carriers, with updates and revisions contained in the ARMIS database (ARMIS 43-07 Report) for the most recent five years through 2007. Totals may be understated because certain data pertaining to the carriers included in this table are not available.

<sup>1</sup> Working Channels are reported in 4 kHz bandwidth (single-voice channel) equivalents.

<sup>2</sup> Southern New England Telephone Company merged with SBC Communications October 26, 1998. Their data are included in this table starting with 1999.

<sup>3</sup> Large increase in 2000 is due to the merger of Bell Atlantic and GTE.

<sup>4</sup> The large decrease from 2001 to 2002 is due in part to a number of Verizon companies refiling in order to remove interexchange carrier, point-of-presence, and co-location circuit counts to comply with ARMIS definitions.

<sup>5</sup> In 2008, the Commission granted forbearance relief from filing this data.

**Table 17.4**  
**Central Offices Converted to Equal Access 1/**  
**(As of February 1, 2010)**

|                      | Bell Company<br>Central Offices |                         |                   | Other ILEC<br>Central Offices |                         |                   | CLEC<br>Central Offices |                         |                   | All<br>Central Offices |                   |
|----------------------|---------------------------------|-------------------------|-------------------|-------------------------------|-------------------------|-------------------|-------------------------|-------------------------|-------------------|------------------------|-------------------|
|                      | Equal<br>Access                 | Non-<br>Equal<br>Access | % Equal<br>Access | Equal<br>Access               | Non-<br>Equal<br>Access | % Equal<br>Access | Equal<br>Access         | Non-<br>Equal<br>Access | % Equal<br>Access | Total<br>Offices       | % Equal<br>Access |
| Alabama              | 146                             | 0                       | 100.0 %           | 210                           | 0                       | 100.0 %           | 45                      | 0                       | 100.0 %           | 401                    | 100.0 %           |
| Alaska               | 0                               | 0                       | NA                | 114                           | 141                     | 44.7              | 0                       | 0                       | NA                | 255                    | 44.7              |
| American Samoa       | 0                               | 0                       | NA                | 4                             | 0                       | 100.0             | 0                       | 0                       | NA                | 4                      | 100.0             |
| Arizona              | 145                             | 0                       | 100.0             | 100                           | 2                       | 98.0              | 37                      | 0                       | 100.0             | 284                    | 99.3              |
| Arkansas             | 138                             | 0                       | 100.0             | 276                           | 2                       | 99.3              | 33                      | 2                       | 94.3              | 451                    | 99.1              |
| California           | 908                             | 2                       | 99.8              | 84                            | 1                       | 98.8              | 178                     | 2                       | 98.9              | 1,175                  | 99.6              |
| Colorado             | 165                             | 1                       | 99.4              | 99                            | 1                       | 99.0              | 34                      | 0                       | 100.0             | 300                    | 99.3              |
| Connecticut          | 128                             | 0                       | 100.0             | 0                             | 0                       | NA                | 17                      | 0                       | 100.0             | 145                    | 100.0             |
| Delaware             | 33                              | 0                       | 100.0             | 0                             | 0                       | NA                | 5                       | 0                       | 100.0             | 38                     | 100.0             |
| District of Columbia | 18                              | 0                       | 100.0             | 0                             | 0                       | NA                | 23                      | 0                       | 100.0             | 41                     | 100.0             |
| Florida              | 292                             | 0                       | 100.0             | 177                           | 0                       | 100.0             | 219                     | 0                       | 100.0             | 688                    | 100.0             |
| Georgia              | 182                             | 0                       | 100.0             | 233                           | 1                       | 99.6              | 84                      | 0                       | 100.0             | 500                    | 99.8              |
| Guam                 | 0                               | 0                       | NA                | 3                             | 0                       | 100.0             | 0                       | 0                       | NA                | 3                      | 100.0             |
| Hawaii               | 0                               | 0                       | NA                | 93                            | 0                       | 100.0             | 8                       | 0                       | 100.0             | 101                    | 100.0             |
| Idaho                | 97                              | 0                       | 100.0             | 77                            | 0                       | 100.0             | 13                      | 0                       | 100.0             | 187                    | 100.0             |
| Illinois             | 696                             | 4                       | 99.4              | 325                           | 7                       | 97.9              | 73                      | 1                       | 98.6              | 1,106                  | 98.9              |
| Indiana              | 384                             | 3                       | 99.2              | 179                           | 0                       | 100.0             | 55                      | 1                       | 98.2              | 622                    | 99.4              |
| Iowa                 | 135                             | 0                       | 100.0             | 650                           | 0                       | 100.0             | 58                      | 0                       | 100.0             | 843                    | 100.0             |
| Kansas               | 171                             | 2                       | 98.8              | 215                           | 4                       | 98.2              | 32                      | 1                       | 97.0              | 425                    | 98.4              |
| Kentucky             | 178                             | 0                       | 100.0             | 405                           | 0                       | 100.0             | 31                      | 0                       | 100.0             | 614                    | 100.0             |
| Louisiana            | 223                             | 0                       | 100.0             | 89                            | 0                       | 100.0             | 40                      | 0                       | 100.0             | 352                    | 100.0             |
| Maine                | 143                             | 1                       | 99.3              | 104                           | 8                       | 92.9              | 3                       | 0                       | 100.0             | 259                    | 96.5              |
| Maryland             | 214                             | 0                       | 100.0             | 1                             | 0                       | 100.0             | 24                      | 0                       | 100.0             | 239                    | 100.0             |
| Massachusetts        | 274                             | 1                       | 99.6              | 3                             | 0                       | 100.0             | 33                      | 0                       | 100.0             | 311                    | 99.7              |
| Michigan             | 542                             | 7                       | 98.7              | 165                           | 0                       | 100.0             | 73                      | 0                       | 100.0             | 787                    | 99.1              |
| Minnesota            | 155                             | 0                       | 100.0             | 564                           | 0                       | 100.0             | 114                     | 0                       | 100.0             | 833                    | 100.0             |
| Mississippi          | 205                             | 0                       | 100.0             | 70                            | 0                       | 100.0             | 22                      | 0                       | 100.0             | 297                    | 100.0             |
| Missouri             | 215                             | 0                       | 100.0             | 445                           | 20                      | 95.7              | 65                      | 0                       | 100.0             | 745                    | 97.3              |
| Montana              | 75                              | 0                       | 100.0             | 195                           | 1                       | 99.5              | 22                      | 0                       | 100.0             | 293                    | 99.7              |
| Nebraska             | 69                              | 0                       | 100.0             | 387                           | 0                       | 100.0             | 23                      | 0                       | 100.0             | 479                    | 100.0             |
| Nevada               | 55                              | 0                       | 100.0             | 61                            | 3                       | 95.3              | 15                      | 0                       | 100.0             | 134                    | 97.8              |
| New Hampshire        | 125                             | 1                       | 99.2              | 32                            | 0                       | 100.0             | 7                       | 0                       | 100.0             | 165                    | 99.4              |
| New Jersey           | 209                             | 0                       | 100.0             | 28                            | 0                       | 100.0             | 49                      | 0                       | 100.0             | 286                    | 100.0             |
| New Mexico           | 65                              | 0                       | 100.0             | 105                           | 1                       | 99.1              | 12                      | 0                       | 100.0             | 183                    | 99.5              |
| New York             | 526                             | 2                       | 99.6              | 306                           | 2                       | 99.4              | 107                     | 0                       | 100.0             | 943                    | 99.6              |
| North Carolina       | 184                             | 0                       | 100.0             | 565                           | 1                       | 99.8              | 108                     | 0                       | 100.0             | 858                    | 99.9              |
| North Dakota         | 27                              | 0                       | 100.0             | 274                           | 19                      | 93.5              | 16                      | 0                       | 100.0             | 336                    | 94.3              |
| Ohio                 | 489                             | 19                      | 96.3              | 341                           | 4                       | 98.8              | 104                     | 1                       | 99.0              | 958                    | 97.5              |
| Oklahoma             | 207                             | 1                       | 99.5              | 303                           | 1                       | 99.7              | 28                      | 0                       | 100.0             | 540                    | 99.6              |
| Oregon               | 135                             | 0                       | 100.0             | 153                           | 0                       | 100.0             | 31                      | 0                       | 100.0             | 319                    | 100.0             |
| Pennsylvania         | 506                             | 0                       | 100.0             | 429                           | 29                      | 93.7              | 82                      | 0                       | 100.0             | 1,046                  | 97.2              |
| Puerto Rico          | 0                               | 0                       | NA                | 86                            | 0                       | 100.0             | 3                       | 0                       | 100.0             | 89                     | 100.0             |
| Rhode Island         | 30                              | 0                       | 100.0             | 0                             | 0                       | NA                | 7                       | 0                       | 100.0             | 37                     | 100.0             |
| South Carolina       | 158                             | 0                       | 100.0             | 263                           | 0                       | 100.0             | 53                      | 0                       | 100.0             | 474                    | 100.0             |
| South Dakota         | 42                              | 0                       | 100.0             | 201                           | 6                       | 97.1              | 10                      | 0                       | 100.0             | 259                    | 97.7              |
| Tennessee            | 196                             | 0                       | 100.0             | 602                           | 0                       | 100.0             | 57                      | 1                       | 98.3              | 856                    | 99.9              |
| Texas                | 797                             | 2                       | 99.7              | 695                           | 1                       | 99.9              | 225                     | 5                       | 97.8              | 1,725                  | 99.5              |
| Utah                 | 63                              | 0                       | 100.0             | 93                            | 4                       | 95.9              | 12                      | 0                       | 100.0             | 172                    | 97.7              |
| Vermont              | 90                              | 2                       | 97.8              | 38                            | 0                       | 100.0             | 4                       | 0                       | 100.0             | 134                    | 98.5              |
| Virgin Islands       | 0                               | 0                       | NA                | 5                             | 0                       | 100.0             | 0                       | 0                       | NA                | 5                      | 100.0             |
| Virginia             | 328                             | 1                       | 99.7              | 270                           | 7                       | 97.5              | 67                      | 0                       | 100.0             | 673                    | 98.8              |
| Washington           | 219                             | 0                       | 100.0             | 141                           | 2                       | 98.6              | 41                      | 0                       | 100.0             | 403                    | 99.5              |
| West Virginia        | 145                             | 0                       | 100.0             | 86                            | 6                       | 93.5              | 7                       | 0                       | 100.0             | 244                    | 97.5              |
| Wisconsin            | 225                             | 4                       | 98.3              | 375                           | 0                       | 100.0             | 58                      | 0                       | 100.0             | 662                    | 99.4              |
| Wyoming              | 26                              | 0                       | 100.0             | 36                            | 13                      | 73.5              | 3                       | 0                       | 100.0             | 78                     | 83.3              |
| Total United States  | 10,778                          | 53                      | 99.5 %            | 10,755                        | 287                     | 97.4 %            | 2,470                   | 14                      | 99.4 %            | 24,357                 | 98.5 %            |

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.

**Table 17.5**  
**Broadband Capabilities of NECA's 2009 Rural Incumbent LEC Survey Results**

| State or Jurisdiction | Companies | Switches | Access Lines | Provide Equal Access | Provide S7 | Provide DSL Service | DSL Access Lines | Provide ATM Service | Deploy ATM in Network | Provide Ethernet Service <sup>1</sup> | Deploy Ethernet in Network | Provide SONET Service <sup>1</sup> | Deploy SONET in Network | Provide Other Broadband <sup>2</sup> |
|-----------------------|-----------|----------|--------------|----------------------|------------|---------------------|------------------|---------------------|-----------------------|---------------------------------------|----------------------------|------------------------------------|-------------------------|--------------------------------------|
| Alabama               | 21        | 80       | 102,381      | 100 %                | 100 %      | 100 %               | 26,319           | 19 %                | 29 %                  | 29 %                                  | 62 %                       | 0 %                                | 62 %                    | 100 %                                |
| Alaska                | 19        | 89       | 111,310      | 79                   | 84         | 74                  | 36,836           | 21                  | 37                    | 37                                    | 68                         | 21                                 | 32                      | 68                                   |
| American Samoa        | 1         | 4        | 10,297       | 100                  | 100        | 100                 | *                | *                   | *                     | *                                     | *                          | *                                  | *                       | *                                    |
| Arizona               | 12        | 44       | 37,291       | 100                  | 100        | 100                 | 8,621            | 25                  | 75                    | 33                                    | 75                         | 17                                 | 92                      | 75                                   |
| Arkansas              | 19        | 115      | 73,661       | 100                  | 100        | 95                  | 25,568           | 11                  | 58                    | 21                                    | 63                         | 16                                 | 68                      | 63                                   |
| California            | 13        | 19       | 67,026       | 100                  | 100        | 100                 | 27,011           | 31                  | 85                    | 85                                    | 85                         | 8                                  | 85                      | 62                                   |
| Colorado              | 24        | 37       | 34,453       | 98                   | 96         | 88                  | 9,545            | 13                  | 58                    | 17                                    | 63                         | 8                                  | 42                      | 75                                   |
| Florida               | 6         | 12       | 65,667       | 100                  | 100        | 100                 | 18,351           | 17                  | 83                    | 67                                    | 83                         | 17                                 | 100                     | 100                                  |
| Georgia               | 26        | 60       | 179,277      | 97                   | 100        | 100                 | 55,199           | 8                   | 65                    | 27                                    | 65                         | 0                                  | 81                      | 100                                  |
| Guam                  | 1         | 3        | 52,884       | 100                  | 100        | 100                 | *                | *                   | *                     | *                                     | *                          | *                                  | *                       | *                                    |
| Hawaii                | 1         | 9        | 1,889        | 100                  | 100        | 100                 | *                | *                   | *                     | *                                     | *                          | *                                  | *                       | *                                    |
| Idaho                 | 13        | 50       | 32,103       | 100                  | 100        | 100                 | 12,729           | 31                  | 92                    | 38                                    | 100                        | 15                                 | 92                      | 85                                   |
| Illinois              | 38        | 119      | 56,681       | 97                   | 92         | 97                  | 18,941           | 13                  | 39                    | 6                                     | 55                         | 0                                  | 42                      | 63                                   |
| Indiana               | 33        | 74       | 101,206      | 100                  | 100        | 100                 | 39,733           | 27                  | 70                    | 33                                    | 76                         | 0                                  | 70                      | 94                                   |
| Iowa                  | 144       | 314      | 187,534      | 100                  | 100        | 97                  | 69,170           | 1                   | 37                    | 9                                     | 72                         | 1                                  | 56                      | 64                                   |
| Kansas                | 34        | 114      | 113,342      | 100                  | 100        | 97                  | 48,547           | 18                  | 53                    | 38                                    | 76                         | 12                                 | 79                      | 97                                   |
| Kentucky              | 12        | 279      | 119,366      | 100                  | 100        | 100                 | 37,702           | 42                  | 75                    | 50                                    | 83                         | 0                                  | 92                      | 100                                  |
| Louisiana             | 9         | 62       | 35,589       | 100                  | 100        | 89                  | 12,475           | 0                   | 56                    | 56                                    | 44                         | 0                                  | 67                      | 89                                   |
| Maine                 | 19        | 116      | 114,329      | 100                  | 100        | 100                 | 33,924           | 26                  | 84                    | 42                                    | 63                         | 26                                 | 89                      | 47                                   |
| Maryland              | 1         | 1        | 6,350        | 100                  | 100        | 100                 | *                | *                   | *                     | *                                     | *                          | *                                  | *                       | *                                    |
| Massachusetts         | 2         | 2        | 3,473        | 100                  | 100        | 100                 | 774              | 0                   | 50                    | 50                                    | 50                         | 0                                  | 0                       | 50                                   |
| Michigan              | 31        | 99       | 77,893       | 100                  | 100        | 97                  | 24,785           | 16                  | 58                    | 39                                    | 81                         | 3                                  | 58                      | 77                                   |
| Minnesota             | 80        | 298      | 287,831      | 100                  | 98         | 94                  | 83,341           | 18                  | 60                    | 14                                    | 74                         | 9                                  | 61                      | 61                                   |
| Mississippi           | 16        | 48       | 47,962       | 100                  | 100        | 100                 | 14,302           | 44                  | 63                    | 19                                    | 81                         | 0                                  | 56                      | 81                                   |
| Missouri              | 36        | 155      | 106,615      | 100                  | 100        | 100                 | 38,956           | 8                   | 58                    | 31                                    | 67                         | 0                                  | 69                      | 75                                   |
| Montana               | 14        | 187      | 90,171       | 100                  | 100        | 100                 | 31,883           | 21                  | 79                    | 7                                     | 86                         | 29                                 | 93                      | 86                                   |
| Nebraska              | 35        | 140      | 62,963       | 100                  | 100        | 97                  | 24,997           | 0                   | 57                    | 9                                     | 63                         | 9                                  | 69                      | 86                                   |
| Nevada                | 8         | 29       | 30,358       | 100                  | 100        | 100                 | 12,806           | 38                  | 88                    | 13                                    | 100                        | 25                                 | 88                      | 50                                   |
| New Hampshire         | 9         | 32       | 48,369       | 100                  | 100        | 100                 | 13,759           | 44                  | 78                    | 67                                    | 67                         | 0                                  | 78                      | 89                                   |
| New Jersey            | 1         | 2        | 6,738        | 100                  | 100        | 100                 | *                | *                   | *                     | *                                     | *                          | *                                  | *                       | *                                    |
| New Mexico            | 12        | 74       | 36,469       | 100                  | 100        | 100                 | 9,976            | 8                   | 58                    | 25                                    | 67                         | 8                                  | 75                      | 92                                   |
| New York              | 31        | 85       | 137,731      | 100                  | 97         | 100                 | 41,439           | 19                  | 71                    | 29                                    | 84                         | 0                                  | 81                      | 94                                   |
| North Carolina        | 14        | 140      | 181,470      | 100                  | 100        | 100                 | 38,790           | 57                  | 100                   | 64                                    | 100                        | 21                                 | 100                     | 93                                   |
| North Dakota          | 20        | 260      | 135,253      | 100                  | 100        | 100                 | 52,685           | 40                  | 90                    | 50                                    | 85                         | 25                                 | 95                      | 100                                  |
| Ohio                  | 33        | 25       | 62,668       | 100                  | 88         | 94                  | 15,066           | 9                   | 64                    | 18                                    | 73                         | 0                                  | 64                      | 64                                   |
| Oklahoma              | 34        | 264      | 158,232      | 100                  | 100        | 94                  | 63,432           | 24                  | 59                    | 24                                    | 74                         | 6                                  | 79                      | 82                                   |
| Oregon                | 27        | 58       | 69,290       | 100                  | 100        | 93                  | 27,905           | 11                  | 70                    | 33                                    | 81                         | 0                                  | 63                      | 85                                   |
| Pennsylvania          | 23        | 729      | 471,377      | 100                  | 100        | 96                  | 91,863           | 17                  | 70                    | 17                                    | 83                         | 17                                 | 83                      | 78                                   |
| South Carolina        | 12        | 186      | 93,847       | 100                  | 100        | 100                 | 31,466           | 50                  | 92                    | 33                                    | 75                         | 17                                 | 75                      | 75                                   |
| South Dakota          | 28        | 180      | 115,836      | 100                  | 93         | 93                  | 40,745           | 11                  | 64                    | 11                                    | 71                         | 18                                 | 93                      | 79                                   |
| Tennessee             | 16        | 531      | 212,478      | 100                  | 100        | 100                 | 72,138           | 50                  | 81                    | 50                                    | 94                         | 0                                  | 75                      | 88                                   |
| Texas                 | 43        | 352      | 218,809      | 100                  | 100        | 100                 | 69,857           | 21                  | 65                    | 21                                    | 65                         | 12                                 | 77                      | 86                                   |
| Utah                  | 11        | 70       | 66,550       | 100                  | 100        | 100                 | 27,074           | 9                   | 64                    | 55                                    | 91                         | 9                                  | 55                      | 91                                   |
| Vermont               | 9         | 39       | 59,697       | 100                  | 100        | 100                 | 25,152           | 44                  | 89                    | 44                                    | 44                         | 33                                 | 67                      | 100                                  |
| Virginia              | 15        | 181      | 75,125       | 100                  | 100        | 93                  | 26,504           | 20                  | 67                    | 33                                    | 80                         | 7                                  | 60                      | 93                                   |
| Washington            | 20        | 54       | 72,621       | 100                  | 100        | 90                  | 26,619           | 25                  | 55                    | 35                                    | 70                         | 5                                  | 40                      | 70                                   |
| West Virginia         | 6         | 6        | 16,048       | 100                  | 100        | 100                 | 5,203            | 0                   | 0                     | 17                                    | 67                         | 33                                 | 67                      | 83                                   |
| Wisconsin             | 64        | 204      | 290,103      | 100                  | 100        | 100                 | 64,021           | 23                  | 73                    | 39                                    | 89                         | 3                                  | 78                      | 88                                   |
| Wyoming               | 5         | 23       | 22,410       | 100                  | 100        | 100                 | 8,904            | 40                  | 60                    | 20                                    | 80                         | 40                                 | 80                      | 80                                   |
| Totals                | 1,101     | 6,054    | 4,761,023    | 99 %                 | 99 %       | 97 %                | 1,477,876        | 18 %                | 61 %                  | 27 %                                  | 74 %                       | 7 %                                | 69 %                    | 78 %                                 |
| 2008 Totals           | 1,119     | 6,324    | 5,519,917    | 99 %                 | 98 %       | 97 %                | 1,317,208        | 27 %                | 75 %                  | 17 %                                  | 60 %                       | 6 %                                | 71 %                    | 74 %                                 |

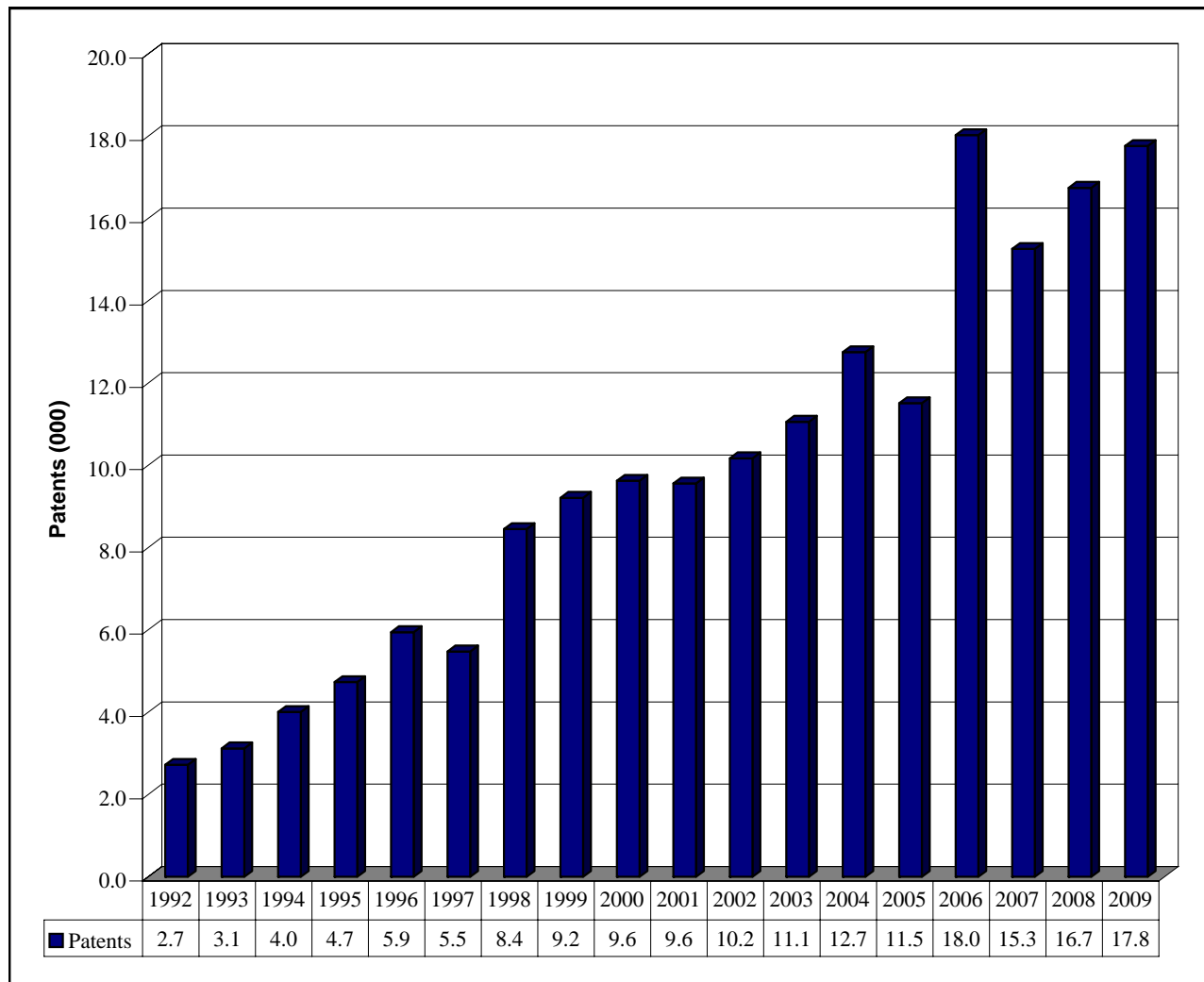
<sup>1</sup> TS pooling companies offering ATM, Ethernet and SONET services to their customers and are listed in NECA's Tariff F.C.C. Wire Center Tariff # 4.

<sup>2</sup> Includes fiber such as FTTP, FTTH, FTTC or Hybrid-Fiber-Coax; wireless broadband using fixed, licensed unlicensed, WiFi or WiMAX; cable or satellite.

\* Individual data withheld to maintain company confidentiality. All data included in totals.

Source: National Exchange Carrier Association "Trends 2009, A report on rural telecom technology".

**Chart 17.1**  
**Telecommunications Patents**  
**(In Thousands)**



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

Source: U.S. Patent and Trademark Office, *Patent Counts by Class by Year, January 1977 - December 2009*, 'Telecommunications Classes 370, 375, 379 and 455 (April 2010), available at <http://www.uspto.gov/web/offices/ac/ido/oeip/taf/cbcby.htm#PartA1-2>.



**Table 17.6**  
**Capital Expenditures for Structures and Equipment**<sup>1</sup>  
(Expenditure Amounts Shown in Millions)

| Industry <sup>2</sup>                                      | 1998      | 1999                    | 2000       | 2001      | 2002       | 2003                   | 2004         | 2005                   | 2006          | 2007          | 2008          |
|--|-----------|-------------------------|------------|-----------|------------|------------------------|--------------|------------------------|---------------|---------------|---------------|
| Wireline Telecommunications Carriers                       |           |                         |            |           |            |                        |              |                        |               |               |               |
| Expenditures for Structures                                |           |                         |            |           |            |                        |              |                        |               |               |               |
| New  | \$10,652  | <sup>3</sup>            | \$18,021   | \$14,482  | \$7,820    | \$9,825                | <sup>3</sup> | \$7,921                | \$10,142      | \$9,318       | <sup>3</sup>  |
| Used   | <u>12</u> | <sup>3</sup> <u>205</u> | <u>18</u>  | <u>1</u>  | <u>52</u>  | <sup>3</sup> <u>11</u> | <u>18</u>    | <u>7</u>               | <u>325</u>    | <u>8,956</u>  | <sup>3</sup>  |
| Total  | 10,664    | 17,309                  | 18,226     | 14,500    | 7,821      | 9,877                  | 8,118        | 7,933                  | 10,160        | 9,325         | 8,956         |
| Expenditures for Equipment                                 |           |                         |            |           |            |                        |              |                        |               |               |               |
| New  | 39,828    | <sup>3</sup>            | 55,902     | 57,436    | 26,986     | 16,918                 | <sup>3</sup> | 19,172                 | 21,924        | 25,737        | <sup>3</sup>  |
| Used   | <u>78</u> | <sup>3</sup> <u>77</u>  | <u>38</u>  | <u>12</u> | <u>41</u>  | <sup>3</sup> <u>31</u> | <u>57</u>    | <u>144</u>             | <u>24,369</u> | <u>25,882</u> | <sup>3</sup>  |
| Total  | 39,905    | 42,442                  | 55,980     | 57,474    | 26,998     | 16,959                 | 15,922       | 19,203                 | 21,981        | 25,882        | 24,369        |
| Total Expenditures for Structures and Equipment            | \$50,570  | \$59,752                | \$74,206   | \$71,974  | \$34,819   | \$26,836               | \$24,040     | \$27,136               | \$32,141      | \$35,207      | \$33,325      |
| Wireless Telecommunications Carriers (Except Satellite)    |           |                         |            |           |            |                        |              |                        |               |               |               |
| Expenditures for Structures                                |           |                         |            |           |            |                        |              |                        |               |               |               |
| New  | \$2,387   | \$5,026                 | \$7,674    | \$11,313  | \$8,245    | \$11,512               | \$11,685     | <sup>3</sup>           | 12,604        | <sup>3</sup>  | 8,070         |
| Used   | <u>*</u>  | <u>3</u>                | <u>58</u>  | <u>8</u>  | <u>7</u>   | <u>2</u>               | <u>31</u>    | <sup>3</sup> <u>45</u> | <u>3</u>      | <u>25</u>     | <sup>3</sup>  |
| Total  | 2,387     | 5,030                   | 7,732      | 11,321    | 8,252      | 11,514                 | 11,716       | 16,456                 | 12,648        | 7,253         | 8,094         |
| Expenditures for Equipment                                 |           |                         |            |           |            |                        |              |                        |               |               |               |
| New  | 5,841     | 9,350                   | 17,589     | 12,695    | 12,210     | 9,459                  | 12,278       | <sup>3</sup>           | 15,290        | <sup>3</sup>  | 17,457        |
| Used   | <u>6</u>  | <u>43</u>               | <u>161</u> | <u>13</u> | <u>29</u>  | <u>16</u>              | <u>4</u>     | <sup>3</sup> <u>31</u> | <u>3</u>      | <u>4</u>      | <sup>3</sup>  |
| Total  | 5,841     | 9,393                   | 17,750     | 12,708    | 12,238     | 9,475                  | 12,282       | 10,882                 | 15,321        | 14,971        | 17,462        |
| Total Expenditures for Structures and Equipment            | \$8,228   | \$14,422                | \$25,482   | \$24,028  | \$20,490   | \$20,989               | \$23,998     | \$27,337               | \$27,969      | \$22,225      | \$25,556      |
| Resellers, Satellite and Other Telecommunications Carriers |           |                         |            |           |            |                        |              |                        |               |               |               |
| Expenditures for Structures                                |           |                         |            |           |            |                        |              |                        |               |               |               |
| New  | \$2,089   | \$1,410                 | \$1,951    | \$2,233   | \$1,556    | \$3,499                | \$397        | \$449                  | \$259         | \$279         | \$598         |
| Used   | <u>*</u>  | <u>4</u>                | <u>3</u>   | <u>5</u>  | <u>3</u>   | <u>133</u>             | <u>6</u>     | <u>1</u>               | <u>259</u>    | <u>280</u>    | <u>616</u>    |
| Total  | 2,089     | 1,414                   | 1,954      | 2,238     | 1,560      | 3,632                  | 403          | 450                    | 259           | 280           | 616           |
| Expenditures for Equipment                                 |           |                         |            |           |            |                        |              |                        |               |               |               |
| New  | 4,188     | 8,795                   | 11,495     | 7,288     | 4,119      | 809                    | 3,095        | 3,180                  | 2,726         | 3,038         | 2,766         |
| Used   | <u>4</u>  | <u>49</u>               | <u>164</u> | <u>78</u> | <u>12</u>  | <u>96</u>              | <u>22</u>    | <u>27</u>              | <u>18</u>     | <u>59</u>     | <u>14</u>     |
| Total  | 4,192     | 8,845                   | 11,659     | 7,367     | 4,131      | 905                    | 3,117        | 3,207                  | 2,744         | 3,097         | 2,780         |
| Total Expenditures for Structures and Equipment            | \$6,281   | \$10,259                | \$13,613   | \$9,605   | \$5,691    | \$4,537                | \$3,520      | \$3,657                | \$3,003       | \$3,377       | \$3,396       |
| Total Telephone and Other Communications Services          |           |                         |            |           |            |                        |              |                        |               |               |               |
| Expenditures for Structures                                |           |                         |            |           |            |                        |              |                        |               |               |               |
| New  | 15,128    | <sup>3</sup>            | \$27,646   | \$28,028  | \$17,621   | \$24,836               | <sup>3</sup> | \$8,373                | \$23,005      | \$9,600       | \$8,671       |
| Used   | <u>12</u> | <sup>3</sup> <u>266</u> | <u>31</u>  | <u>11</u> | <u>187</u> | <sup>3</sup> <u>15</u> | <u>63</u>    | <u>11</u>              | <u>46</u>     | <u>9,605</u>  | <u>9,605</u>  |
| Total  | 15,140    | 23,753                  | 27,912     | 28,059    | 17,633     | 25,023                 | 18,237       | 8,382                  | 23,068        | 9,605         | 9,605         |
| Expenditures for Equipment                                 |           |                         |            |           |            |                        |              |                        |               |               |               |
| New  | 49,857    | <sup>3</sup>            | 84,986     | 77,419    | 43,315     | 27,186                 | <sup>3</sup> | 22,355                 | 39,940        | 28,778        | 20,226        |
| Used   | <u>88</u> | <sup>3</sup> <u>402</u> | <u>129</u> | <u>53</u> | <u>153</u> | <sup>3</sup> <u>61</u> | <u>106</u>   | <u>206</u>             | <u>21</u>     | <u>28,978</u> | <u>28,978</u> |
| Total  | 49,938    | 60,680                  | 85,389     | 77,549    | 43,367     | 27,339                 | 31,321       | 22,410                 | 40,046        | 28,978        | 28,978        |
| Total Expenditures for Structures and Equipment            | \$65,079  | \$84,433                | \$113,301  | \$105,607 | \$61,000   | \$52,362               | \$51,558     | \$58,130               | \$63,113      | \$60,809      | \$62,277      |

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

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

<sup>1</sup> Capital expenditures include capitalized computer software, capitalized interest during construction and expenditures for land development and improvement. They exclude equipment acquired under operating leases, good will, and expenditures for subsidiaries and branches located outside the United States.

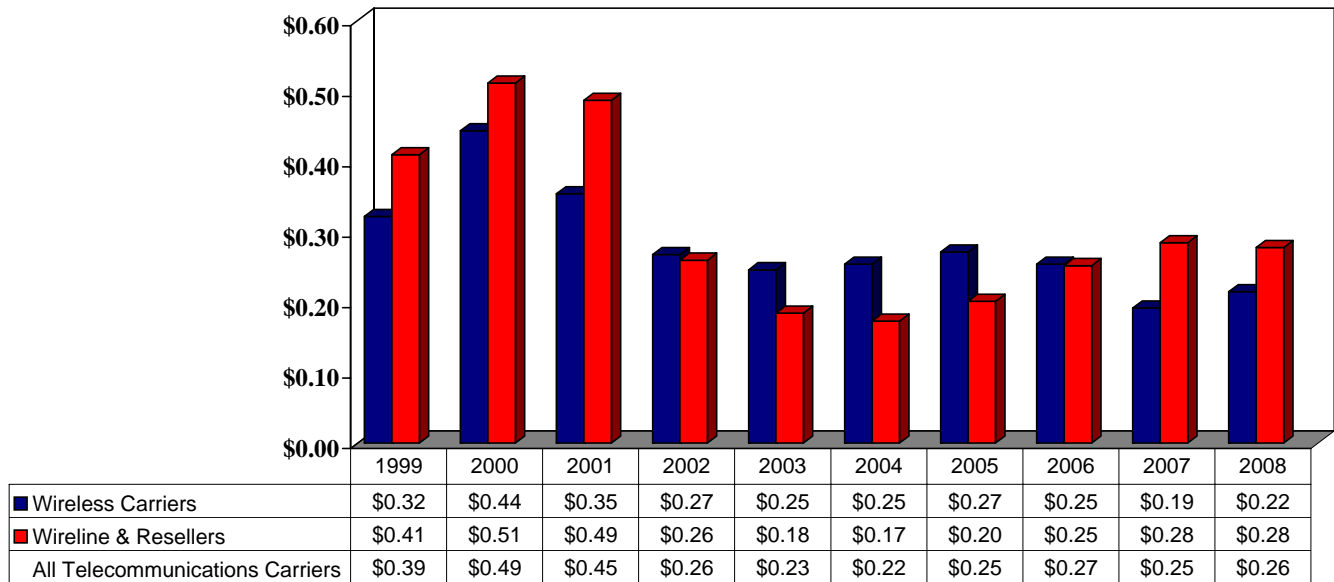
<sup>2</sup> Starting in 1998 data are based on the North American Industry Classification System (NAICS). NAICS Codes are 51331 for Wireline, 51332 for Wireless and 51333, 51334 and 51339 for others. For 2004 - 2008 they are 5171, 5172, and 5173, 5174, and 5179, respectively.

<sup>3</sup> Data withheld by the Census Bureau to maintain firm confidentiality.

Source: U.S. Census Bureau, *Annual Capital Expenditures*, (Issued June 23, 2010) Table 4a

See: <http://www.census.gov/econ/aces/xls/2008/Full%20Report.htm> (last visited September 20, 2010).

**Chart 17.2**  
**Capital Expenditures for Structures and Equipment by Carriers**  
**Per Dollar of End-User Telecommunications Revenues <sup>1</sup>**



<sup>1</sup> Capital expenditures per dollar of end-user telecommunications revenues are derived by dividing expenditures figures in Table 17.6 by end-user revenues data in Table 6 of the Revenue Report.

Source: U.S. Census Bureau, *Annual Capital Expenditures* ; Industry Analysis and Technology Division, Wireline Competition Bureau, *Telecommunications Industry Revenues* (September 2010).

## 18 Telephone Numbers

When the North American Numbering Plan was established in 1947, only 78 area codes were assigned to carriers in the United States. Only 36 new codes were added through 1989. But the rate of activation increased dramatically. In the 1990s, 109 new area codes were activated in the United States. Because the remaining supply of unassigned area codes is diminishing, and because a premature exhaust of area codes imposes significant costs on consumers, the Commission has taken a number of steps to ensure that the limited numbering resources are used efficiently. Among other things, the Commission requires carriers to submit data on numbering resource utilization and forecasts twice a year. The information is submitted using FCC Form 502, which is known as the Numbering Resource Utilization/Forecast (NRUF) form. Carriers controlling numbering resources for the purpose of providing services to their customers are required to file their NRUF forms with the North American Numbering Plan Administrator (NANPA) by February 1 and August 1 of each year.

Table 18.1 shows the percentage of numbers that have been assigned to carriers and that the carriers have then assigned to end users over time. The utilization rate for incumbent local exchange carriers (LECs) is slowly declining and cellular/PCS and competitive LEC (CLEC) utilization rates are generally increasing. The utilization rate for paging continues to drop because the paging market is shrinking.

Table 18.2 shows the total quantity of telephone numbers reported by the carriers and the number of 10,000 blocks (or NXXs) that were reported. It also shows the quantity of telephone numbers that carriers reported for each of the following six categories of telephone numbers: assigned, intermediate, reserved, aging, administrative, and available.<sup>1</sup>

Table 18.3 shows utilization statistics on a state-by-state basis. As might be expected, states that are relatively rural and have low population densities have a lower percentage of numbers that have been assigned to end-user customers than in more urban, populous states. Carriers report only those numbers that have been assigned to them, so the quantity of available numbers does not include any of the NXXs that had not yet been assigned to a carrier.

Table 18.4 lists in-service area codes along with the state and month the code was activated. Table 18.5 shows area code assignment information from 1947 to 2009.

AT&T introduced toll-free service in 1967. The Commission changed procedures for routing toll-free calls on May 1, 1993 to make toll-free numbers "portable." This change enabled customers to switch service providers yet still retain their toll-free numbers. Between 1993 and 2000, the quantity of assigned toll-free numbers grew rapidly: growing from 3.9 million in 1993 to 24.2 million in 2000. New toll-free calling codes were opened to meet the demand. In March 1996, calling code 888 was placed into service. The third

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<sup>1</sup> For definitions on these categories, see *Numbering Resource Utilization in the United States*, available at <http://www.fcc.gov/wcb/iatd/number.html>.

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 growth of toll-free telephone numbers for the four toll-free codes (800, 888, 877, and 866) is shown in Table 18.6 and Chart 18.1. Tables 18.7 through 18.10 show the growth of each individual toll-free code: 800, 888, 877, and 866, respectively. In the event that another toll-free code is needed, the 855 code would be opened. Database Service Management, Inc./Team DSMI, a subsidiary of Telcordia Technologies, Inc., maintains the Toll-Free Service Management System for the United States and Canada.

Dialing patterns differ from state to state. For instance, in some states, callers making local calls within an area code are required to dial only 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 patterns 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](http://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 18.11 shows the dialing patterns for all four types of calls. The last column of Table 18.11 indicates whether all toll calls in that state require callers to dial a “1” before the telephone number.

**Table 18.1**  
**Telephone Number Utilization over Time**

|      |          | ILEC  | Cellular/PCS | CLEC  | Paging | Overall |
|------|----------|-------|--------------|-------|--------|---------|
| 2000 | December | 52.1% | 46.2%        | 9.8%  | 26.3%  | 40.1%   |
| 2001 | June     | 52.1% | 45.3%        | 10.9% | 24.8%  | 39.6%   |
|      | December | 52.5% | 47.2%        | 11.4% | 20.2%  | 39.7%   |
| 2002 | June     | 52.2% | 47.5%        | 10.4% | 17.6%  | 39.2%   |
|      | December | 52.2% | 47.8%        | 10.6% | 17.0%  | 39.2%   |
| 2003 | June     | 53.2% | 49.0%        | 10.7% | 14.3%  | 39.9%   |
|      | December | 52.6% | 50.6%        | 10.6% | 13.0%  | 39.5%   |
| 2004 | June     | 54.5% | 53.9%        | 14.8% | 10.9%  | 42.3%   |
|      | December | 53.5% | 54.6%        | 16.4% | 10.3%  | 42.2%   |
| 2005 | June     | 52.8% | 56.9%        | 18.1% | 9.9%   | 43.0%   |
|      | December | 52.4% | 59.1%        | 19.7% | 8.6%   | 43.4%   |
| 2006 | June     | 50.2% | 60.4%        | 20.5% | 8.1%   | 43.3%   |
|      | December | 49.3% | 63.3%        | 21.5% | 8.0%   | 44.2%   |
| 2007 | June     | 50.8% | 64.8%        | 25.4% | 7.5%   | 46.7%   |
|      | December | 50.7% | 65.0%        | 26.9% | 7.1%   | 47.1%   |
| 2008 | June     | 50.3% | 65.3%        | 30.4% | 6.6%   | 48.1%   |
|      | December | 49.6% | 65.6%        | 31.1% | 6.7%   | 47.9%   |
| 2009 | June     | 48.8% | 66.1%        | 34.3% | 6.1%   | 48.5%   |

**Table 18.2**  
**Telephone Number Utilization by Carrier Type as of June 30, 2009**

| Carrier Type           | Assigned                         | Intermediate | Reserved | Aging  | Admin  | Available <sup>1</sup> | Total     | Unique NXXs          |
|------------------------|----------------------------------|--------------|----------|--------|--------|------------------------|-----------|----------------------|
|                        | (Thousands of telephone numbers) |              |          |        |        |                        |           |                      |
| Incumbent LEC          | 282,648                          | 14,405       | 4,150    | 14,382 | 12,943 | 251,007                | 579,534   | 66,642               |
| Cellular/PCS           | 280,156                          | 1,671        | 1,490    | 16,100 | 4,314  | 120,453                | 424,183   | 56,008               |
| CLEC                   | 105,711                          | 3,453        | 3,287    | 7,073  | 1,441  | 186,994                | 307,959   | 49,739               |
| Paging                 | 4,689                            | 644          | 649      | 587    | 221    | 70,609                 | 77,400    | 5,834                |
| All Reporting Carriers | 673,203                          | 20,173       | 9,576    | 38,142 | 18,919 | 629,063                | 1,389,076 | 140,260 <sup>2</sup> |
| Incumbent LEC          | 48.8%                            | 2.5%         | 0.7%     | 2.5%   | 2.2%   | 43.3%                  | 100.0%    |                      |
| Cellular/PCS           | 66.1%                            | 0.4%         | 0.4%     | 3.8%   | 1.0%   | 28.4%                  | 100.0%    |                      |
| CLEC                   | 34.3%                            | 1.1%         | 1.1%     | 2.3%   | 0.5%   | 60.7%                  | 100.0%    |                      |
| Paging                 | 6.1%                             | 0.8%         | 0.8%     | 0.8%   | 0.3%   | 91.2%                  | 100.0%    |                      |
| All Reporting Carriers | 48.5%                            | 1.5%         | 0.7%     | 2.8%   | 1.4%   | 45.3%                  | 100.0%    |                      |

Source: *Numbering Resource Utilization in the United States*.

<sup>1</sup> Includes only telephone numbers in NXXs assigned to carriers and are therefore available for assignment to customers.

Does not include any numbers in NXXs that have not yet been assigned to carriers.

<sup>2</sup> Unduplicated total.

Note: Figures may not add due to rounding. Where an Regional Bell Operating Company (RBOC) has acquired a carrier with Competitive Local Exchange Carrier (CLEC) services in the RBOC's operating region, the numbering resources of the acquired CLEC that are in the RBOC's operating region are counted as incumbent LEC resources. Where the acquired CLEC provides services outside of the acquirer's operating region, the numbering resources are treated as CLEC resources.

**Table 18.3**  
**Telephone Number Utilization by State as of June 30, 2009**

| State/jurisdiction    | Assigned       |             | Intermediate  |            | Reserved     |            | Aging         |            | Administrative |            | Available <sup>1</sup> |             | Total<br>000s    |
|-----------------------|----------------|-------------|---------------|------------|--------------|------------|---------------|------------|----------------|------------|------------------------|-------------|------------------|
|                       | 000s           | %           | 000s          | %          | 000s         | %          | 000s          | %          | 000s           | %          | 000s                   | %           |                  |
| Alabama               | 9,744          | 43.5        | 658           | 2.9        | 165          | 0.7        | 627           | 2.8        | 398            | 1.8        | 10,833                 | 48.3        | 22,425           |
| Alaska                | 1,544          | 28.2        | 39            | 0.7        | 120          | 2.2        | 96            | 1.7        | 36             | 0.7        | 3,646                  | 66.5        | 5,481            |
| American Samoa        | 26             | 87.9        | 0             | 0.0        | 1            | 2.6        | 0             | 0.0        | 1              | 3.0        | 2                      | 6.5         | 30               |
| Arizona               | 13,419         | 63.0        | 89            | 0.4        | 163          | 0.8        | 743           | 3.5        | 238            | 1.1        | 6,650                  | 31.2        | 21,303           |
| Arkansas              | 5,118          | 35.4        | 421           | 2.9        | 50           | 0.3        | 285           | 2.0        | 166            | 1.1        | 8,412                  | 58.2        | 14,453           |
| California            | 82,747         | 53.1        | 1,794         | 1.2        | 723          | 0.5        | 4,463         | 2.9        | 3,071          | 2.0        | 63,042                 | 40.5        | 155,841          |
| Colorado              | 12,325         | 58.5        | 56            | 0.3        | 124          | 0.6        | 611           | 2.9        | 372            | 1.8        | 7,581                  | 36.0        | 21,069           |
| Connecticut           | 7,926          | 52.5        | 284           | 1.9        | 91           | 0.6        | 352           | 2.3        | 200            | 1.3        | 6,251                  | 41.4        | 15,104           |
| Delaware              | 2,670          | 56.8        | 13            | 0.3        | 42           | 0.9        | 147           | 3.1        | 29             | 0.6        | 1,799                  | 38.3        | 4,700            |
| District of Columbia  | 4,341          | 73.3        | 2             | 0.0        | 73           | 1.2        | 220           | 3.7        | 39             | 0.7        | 1,245                  | 21.0        | 5,919            |
| Florida               | 39,672         | 54.9        | 2,305         | 3.2        | 521          | 0.7        | 3,159         | 4.4        | 1,330          | 1.8        | 25,220                 | 34.9        | 72,206           |
| Georgia               | 19,513         | 48.6        | 1,840         | 4.6        | 279          | 0.7        | 1,489         | 3.7        | 729            | 1.8        | 16,279                 | 40.6        | 40,128           |
| Guam                  | 219            | 32.7        | 0             | 0.0        | 0            | 0.0        | 13            | 1.9        | 3              | 0.5        | 434                    | 64.8        | 670              |
| Hawaii                | 2,849          | 55.9        | 12            | 0.2        | 20           | 0.4        | 152           | 3.0        | 189            | 3.7        | 1,874                  | 36.8        | 5,098            |
| Idaho                 | 2,945          | 44.2        | 104           | 1.6        | 53           | 0.8        | 170           | 2.6        | 187            | 2.8        | 3,202                  | 48.1        | 6,661            |
| Illinois              | 29,378         | 46.4        | 511           | 0.8        | 540          | 0.9        | 1,416         | 2.2        | 623            | 1.0        | 30,854                 | 48.7        | 63,322           |
| Indiana               | 11,689         | 42.3        | 372           | 1.3        | 150          | 0.5        | 564           | 2.0        | 336            | 1.2        | 14,517                 | 52.5        | 27,629           |
| Iowa                  | 7,109          | 35.3        | 377           | 1.9        | 204          | 1.0        | 295           | 1.5        | 166            | 0.8        | 11,999                 | 59.5        | 20,151           |
| Kansas                | 5,500          | 32.2        | 491           | 2.9        | 113          | 0.7        | 272           | 1.6        | 178            | 1.0        | 10,535                 | 61.7        | 17,088           |
| Kentucky              | 8,275          | 37.9        | 556           | 2.5        | 134          | 0.6        | 422           | 1.9        | 288            | 1.3        | 12,169                 | 55.7        | 21,844           |
| Louisiana             | 9,118          | 42.5        | 617           | 2.9        | 92           | 0.4        | 683           | 3.2        | 373            | 1.7        | 10,591                 | 49.3        | 21,474           |
| Maine                 | 2,632          | 41.6        | 21            | 0.3        | 135          | 2.1        | 90            | 1.4        | 124            | 2.0        | 3,331                  | 52.6        | 6,332            |
| Maryland              | 14,958         | 57.4        | 27            | 0.1        | 183          | 0.7        | 824           | 3.2        | 171            | 0.7        | 9,879                  | 37.9        | 26,042           |
| Massachusetts         | 20,333         | 53.4        | 30            | 0.1        | 518          | 1.4        | 1,033         | 2.7        | 285            | 0.7        | 15,904                 | 41.7        | 38,102           |
| Michigan              | 20,856         | 40.2        | 441           | 0.9        | 194          | 0.4        | 1,068         | 2.1        | 456            | 0.9        | 28,859                 | 55.6        | 51,874           |
| Minnesota             | 12,048         | 42.6        | 156           | 0.6        | 231          | 0.8        | 519           | 1.8        | 461            | 1.6        | 14,834                 | 52.5        | 28,249           |
| Mississippi           | 5,063          | 31.1        | 288           | 1.8        | 84           | 0.5        | 368           | 2.3        | 387            | 2.4        | 10,071                 | 61.9        | 16,261           |
| Missouri              | 11,644         | 39.3        | 553           | 1.9        | 150          | 0.5        | 613           | 2.1        | 299            | 1.0        | 16,378                 | 55.3        | 29,637           |
| Montana               | 1,679          | 26.3        | 15            | 0.2        | 42           | 0.7        | 107           | 1.7        | 44             | 0.7        | 4,507                  | 70.5        | 6,394            |
| Nebraska              | 3,634          | 34.6        | 95            | 0.9        | 34           | 0.3        | 175           | 1.7        | 94             | 0.9        | 6,460                  | 61.6        | 10,492           |
| Nevada                | 5,746          | 61.3        | 70            | 0.7        | 48           | 0.5        | 428           | 4.6        | 111            | 1.2        | 2,975                  | 31.7        | 9,378            |
| New Hampshire         | 3,368          | 47.2        | 9             | 0.1        | 153          | 2.1        | 126           | 1.8        | 59             | 0.8        | 3,414                  | 47.9        | 7,129            |
| New Jersey            | 21,858         | 53.7        | 116           | 0.3        | 260          | 0.6        | 1,237         | 3.0        | 315            | 0.8        | 16,885                 | 41.5        | 40,671           |
| New Mexico            | 3,760          | 50.5        | 59            | 0.8        | 40           | 0.5        | 214           | 2.9        | 98             | 1.3        | 3,278                  | 44.0        | 7,449            |
| New York              | 45,981         | 58.7        | 436           | 0.6        | 787          | 1.0        | 2,604         | 3.3        | 660            | 0.8        | 27,847                 | 35.6        | 78,316           |
| North Carolina        | 17,410         | 48.7        | 1,076         | 3.0        | 193          | 0.5        | 1,241         | 3.5        | 541            | 1.5        | 15,313                 | 42.8        | 35,774           |
| North Dakota          | 1,197          | 20.4        | 27            | 0.5        | 8            | 0.1        | 58            | 1.0        | 58             | 1.0        | 4,518                  | 77.0        | 5,865            |
| Northern Marianas Is. | 54             | 54.5        | 0             | 0.0        | 11           | 10.7       | 4             | 4.4        | 0              | 0.0        | 30                     | 30.4        | 100              |
| Ohio                  | 23,540         | 45.8        | 960           | 1.9        | 147          | 0.3        | 1,138         | 2.2        | 560            | 1.1        | 24,999                 | 48.7        | 51,343           |
| Oklahoma              | 6,572          | 34.1        | 526           | 2.7        | 49           | 0.3        | 438           | 2.3        | 215            | 1.1        | 11,483                 | 59.5        | 19,283           |
| Oregon                | 7,746          | 50.7        | 64            | 0.4        | 122          | 0.8        | 405           | 2.7        | 222            | 1.5        | 6,706                  | 43.9        | 15,266           |
| Pennsylvania          | 28,414         | 49.2        | 168           | 0.3        | 691          | 1.2        | 1,575         | 2.7        | 430            | 0.7        | 26,521                 | 45.9        | 57,799           |
| Puerto Rico           | 3,671          | 61.2        | 0             | 0.0        | 40           | 0.7        | 169           | 2.8        | 79             | 1.3        | 2,041                  | 34.0        | 5,999            |
| Rhode Island          | 3,101          | 59.7        | 3             | 0.1        | 55           | 1.1        | 117           | 2.2        | 27             | 0.5        | 1,895                  | 36.5        | 5,198            |
| South Carolina        | 8,725          | 48.0        | 687           | 3.8        | 109          | 0.6        | 636           | 3.5        | 334            | 1.8        | 7,699                  | 42.3        | 18,189           |
| South Dakota          | 1,405          | 23.8        | 24            | 0.4        | 10           | 0.2        | 88            | 1.5        | 78             | 1.3        | 4,296                  | 72.8        | 5,901            |
| Tennessee             | 12,973         | 49.6        | 843           | 3.2        | 186          | 0.7        | 829           | 3.2        | 340            | 1.3        | 10,990                 | 42.0        | 26,161           |
| Texas                 | 50,850         | 46.0        | 2,502         | 2.3        | 631          | 0.6        | 3,056         | 2.8        | 2,154          | 1.9        | 51,446                 | 46.5        | 110,640          |
| Utah                  | 6,258          | 56.6        | 65            | 0.6        | 61           | 0.6        | 266           | 2.4        | 158            | 1.4        | 4,254                  | 38.5        | 11,062           |
| Vermont               | 2,374          | 45.2        | 4             | 0.1        | 84           | 1.6        | 49            | 0.9        | 59             | 1.1        | 2,682                  | 51.1        | 5,253            |
| Virgin Islands        | 170            | 47.3        | 15            | 4.2        | 31           | 8.6        | 46            | 12.7       | 2              | 0.5        | 96                     | 26.7        | 360              |
| Virginia              | 18,724         | 59.6        | 36            | 0.1        | 259          | 0.8        | 1,061         | 3.4        | 285            | 0.9        | 11,056                 | 35.2        | 31,420           |
| Washington            | 15,836         | 57.6        | 67            | 0.2        | 132          | 0.5        | 753           | 2.7        | 464            | 1.7        | 10,264                 | 37.3        | 27,515           |
| West Virginia         | 2,742          | 41.4        | 49            | 0.7        | 71           | 1.1        | 110           | 1.7        | 66             | 1.0        | 3,586                  | 54.1        | 6,625            |
| Wisconsin             | 10,683         | 39.8        | 190           | 0.7        | 158          | 0.6        | 434           | 1.6        | 284            | 1.1        | 15,115                 | 56.3        | 26,864           |
| Wyoming               | 1,072          | 30.3        | 7             | 0.2        | 11           | 0.3        | 85            | 2.4        | 45             | 1.3        | 2,318                  | 65.5        | 3,538            |
| <b>Totals</b>         | <b>673,204</b> | <b>48.5</b> | <b>20,173</b> | <b>1.5</b> | <b>9,576</b> | <b>0.7</b> | <b>38,142</b> | <b>2.7</b> | <b>18,919</b>  | <b>1.4</b> | <b>629,064</b>         | <b>45.3</b> | <b>1,389,078</b> |

Source: Numbering Resource Utilization in the United States.

<sup>1</sup> Includes only telephone numbers in NXXs assigned to carriers and are therefore available for assignment to customers.  
Does not include any numbers in NXXs that have not yet been assigned to carriers.

Note: Figures may not add due to rounding.

**Table 18.4**  
**Area Codes by State**

| Area Code | State/Jurisdiction   | Area Code Opened | Area Code | State/ Jurisdiction | Area Code Opened | Area Code | State/ Jurisdiction   | Area Code Opened | Area Code | State/ Jurisdiction | Area Code Opened |
|-----------|----------------------|------------------|-----------|---------------------|------------------|-----------|-----------------------|------------------|-----------|---------------------|------------------|
| 205       | Alabama              | Jan-47           | 404       | Georgia             | Jan-47           | 218       | Minnesota             | Jan-47           | 215       | Pennsylvania        | Jan-47           |
| 251       | Alabama              | Jun-01           | 678       | Georgia             | Jan-98           | 320       | Minnesota             | Mar-96           | 267       | Pennsylvania        | Jul-99           |
| 256       | Alabama              | Mar-98           | 706       | Georgia             | May-92           | 507       | Minnesota             | Jan-54           | 412       | Pennsylvania        | Jan-47           |
| 334       | Alabama              | Jan-95           | 770       | Georgia             | Aug-95           | 612       | Minnesota             | Jan-47           | 484       | Pennsylvania        | Jun-99           |
| 938       | Alabama              | Jul-10           | 912       | Georgia             | Jan-54           | 651       | Minnesota             | Jul-98           | 570       | Pennsylvania        | Dec-98           |
| 907       | Alaska               | Jan-57           | 671       | Guam                | Jul-97           | 228       | Mississippi           | Sep-97           | 610       | Pennsylvania        | Jan-94           |
| 684       | American Somoa       | Oct-04           | 808       | Hawaii              | Jan-57           | 601       | Mississippi           | Jan-47           | 717       | Pennsylvania        | Jan-47           |
| 480       | Arizona              | Mar-99           | 208       | Idaho               | Jan-47           | 662       | Mississippi           | Apr-99           | 724       | Pennsylvania        | Feb-98           |
| 520       | Arizona              | Mar-95           | 217       | Illinois            | Jan-47           | 769       | Mississippi           | Mar-05           | 814       | Pennsylvania        | Jan-47           |
| 602       | Arizona              | Jan-47           | 224       | Illinois            | Jan-02           | 314       | Missouri              | Jan-47           | 787       | Puerto Rico         | Mar-96           |
| 623       | Arizona              | Mar-99           | 309       | Illinois            | Jan-57           | 417       | Missouri              | Jan-50           | 939       | Puerto Rico         | Sep-01           |
| 928       | Arizona              | Jun-01           | 312       | Illinois            | Jan-47           | 573       | Missouri              | Jan-96           | 401       | Rhode Island        | Jan-47           |
| 479       | Arkansas             | Jan-02           | 331       | Illinois            | Oct-07           | 636       | Missouri              | May-99           | 803       | South Carolina      | Jan-47           |
| 501       | Arkansas             | Jan-47           | 618       | Illinois            | Jan-47           | 660       | Missouri              | Oct-97           | 843       | South Carolina      | Mar-98           |
| 870       | Arkansas             | Apr-97           | 630       | Illinois            | Aug-96           | 816       | Missouri              | Jan-47           | 864       | South Carolina      | Dec-95           |
| 209       | California           | Jan-58           | 708       | Illinois            | Nov-89           | 406       | Montana               | Jan-47           | 605       | South Dakota        | Jan-47           |
| 213       | California           | Jan-47           | 773       | Illinois            | Oct-96           | 308       | Nebraska              | Jan-55           | 423       | Tennessee           | Sep-95           |
| 310       | California           | Nov-91           | 779       | Illinois            | Mar-07           | 402       | Nebraska              | Jan-47           | 615       | Tennessee           | Jan-54           |
| 323       | California           | Jun-98           | 815       | Illinois            | Jan-47           | 531       | Nebraska              | Mar-11           | 731       | Tennessee           | Feb-01           |
| 408       | California           | Jan-59           | 847       | Illinois            | Jan-96           | 702       | Nevada                | Jan-47           | 865       | Tennessee           | Nov-99           |
| 415       | California           | Jan-47           | 872       | Illinois            | Nov-09           | 775       | Nevada                | Dec-98           | 901       | Tennessee           | Jan-47           |
| 424       | California           | Aug-06           | 219       | Indiana             | Jan-47           | 603       | New Hampshire         | Jan-47           | 931       | Tennessee           | Sep-97           |
| 442       | California           | Nov-09           | 260       | Indiana             | Jan-02           | 201       | New Jersey            | Jan-47           | 210       | Texas               | Nov-92           |
| 510       | California           | Sep-91           | 317       | Indiana             | Jan-47           | 551       | New Jersey            | Dec-01           | 214       | Texas               | Jan-47           |
| 530       | California           | Nov-97           | 574       | Indiana             | Jan-02           | 609       | New Jersey            | Jan-57           | 254       | Texas               | May-97           |
| 559       | California           | Nov-98           | 765       | Indiana             | Feb-97           | 732       | New Jersey            | Jun-97           | 281       | Texas               | Nov-96           |
| 562       | California           | Jan-97           | 812       | Indiana             | Jan-47           | 848       | New Jersey            | Dec-01           | 325       | Texas               | Apr-03           |
| 619       | California           | Jan-82           | 319       | Iowa                | Jan-47           | 856       | New Jersey            | Jun-99           | 361       | Texas               | Feb-99           |
| 626       | California           | Jun-97           | 515       | Iowa                | Jan-47           | 862       | New Jersey            | Dec-01           | 409       | Texas               | Nov-82           |
| 650       | California           | Aug-97           | 563       | Iowa                | Mar-01           | 908       | New Jersey            | Nov-90           | 430       | Texas               | Feb-03           |
| 657       | California           | Sep-08           | 641       | Iowa                | Jul-00           | 973       | New Jersey            | Jun-97           | 432       | Texas               | Apr-03           |
| 661       | California           | Feb-99           | 712       | Iowa                | Jan-47           | 505       | New Mexico            | Jan-47           | 469       | Texas               | Jul-99           |
| 707       | California           | Jan-59           | 316       | Kansas              | Jan-47           | 575       | New Mexico            | Oct-07           | 512       | Texas               | Jan-47           |
| 714       | California           | Jan-51           | 620       | Kansas              | Feb-01           | 212       | New York              | Jan-47           | 682       | Texas               | Oct-00           |
| 747       | California           | May-09           | 785       | Kansas              | Jul-97           | 315       | New York              | Jan-47           | 713       | Texas               | Jan-47           |
| 760       | California           | Mar-97           | 913       | Kansas              | Jan-47           | 347       | New York              | Oct-99           | 806       | Texas               | Jan-57           |
| 805       | California           | Jan-57           | 270       | Kentucky            | Apr-99           | 516       | New York              | Jan-51           | 817       | Texas               | Jan-53           |
| 818       | California           | Jan-84           | 364       | Kentucky            | Oct-11           | 518       | New York              | Jan-47           | 830       | Texas               | Jul-97           |
| 831       | California           | Jul-98           | 502       | Kentucky            | Jan-47           | 585       | New York              | Nov-01           | 832       | Texas               | Jan-99           |
| 858       | California           | Jun-99           | 606       | Kentucky            | Jan-55           | 607       | New York              | Jan-54           | 903       | Texas               | Nov-90           |
| 909       | California           | Nov-92           | 859       | Kentucky            | Apr-00           | 631       | New York              | Nov-99           | 915       | Texas               | Jan-47           |
| 916       | California           | Jan-47           | 225       | Louisiana           | Aug-98           | 646       | New York              | Jul-99           | 936       | Texas               | Feb-00           |
| 925       | California           | Mar-98           | 318       | Louisiana           | Jan-57           | 716       | New York              | Jan-47           | 940       | Texas               | May-97           |
| 949       | California           | Apr-98           | 337       | Louisiana           | Oct-99           | 718       | New York              | Sep-84           | 956       | Texas               | Jul-97           |
| 951       | California           | Jul-04           | 504       | Louisiana           | Jan-47           | 845       | New York              | Jun-00           | 972       | Texas               | Sep-96           |
| 303       | Colorado             | Jan-47           | 985       | Louisiana           | Feb-01           | 914       | New York              | Jan-47           | 979       | Texas               | Feb-00           |
| 719       | Colorado             | Mar-88           | 207       | Maine               | Jan-47           | 917       | New York              | Jan-92           | 385       | Utah                | Mar-09           |
| 720       | Colorado             | Jun-98           | 240       | Maryland            | Jun-97           | 252       | North Carolina        | Mar-98           | 435       | Utah                | Sep-97           |
| 970       | Colorado             | Apr-95           | 301       | Maryland            | Jan-47           | 336       | North Carolina        | Dec-97           | 801       | Utah                | Jan-47           |
| 203       | Connecticut          | Jan-47           | 410       | Maryland            | Oct-91           | 704       | North Carolina        | Jan-47           | 802       | Vermont             | Jan-47           |
| 475       | Connecticut          | Dec-09           | 443       | Maryland            | Jun-97           | 828       | North Carolina        | Mar-98           | 340       | Virgin Islands      | Jun-97           |
| 860       | Connecticut          | Aug-95           | 339       | Massachusetts       | May-01           | 910       | North Carolina        | Nov-93           | 276       | Virginia            | Sep-01           |
| 302       | Delaware             | Jan-47           | 351       | Massachusetts       | May-01           | 919       | North Carolina        | Jan-54           | 434       | Virginia            | Jun-01           |
| 202       | District of Columbia | Jan-47           | 413       | Massachusetts       | Jan-47           | 980       | North Carolina        | Apr-01           | 540       | Virginia            | Jul-95           |
| 239       | Florida              | Mar-02           | 508       | Massachusetts       | Jul-88           | 701       | North Dakota          | Jan-47           | 571       | Virginia            | Mar-00           |
| 305       | Florida              | Jan-47           | 617       | Massachusetts       | Jan-47           | 670       | Northern Marianas Is. | Jul-97           | 703       | Virginia            | Jan-47           |
| 321       | Florida              | Nov-99           | 774       | Massachusetts       | May-01           | 216       | Ohio                  | Jan-47           | 757       | Virginia            | Jul-96           |
| 352       | Florida              | Dec-95           | 781       | Massachusetts       | Sep-97           | 234       | Ohio                  | Oct-00           | 804       | Virginia            | Jun-73           |
| 386       | Florida              | Feb-01           | 857       | Massachusetts       | May-01           | 330       | Ohio                  | Mar-96           | 206       | Washington          | Jan-47           |
| 407       | Florida              | Apr-88           | 978       | Massachusetts       | Sep-97           | 419       | Ohio                  | Jan-47           | 253       | Washington          | Apr-97           |
| 561       | Florida              | May-96           | 231       | Michigan            | Jun-99           | 440       | Ohio                  | Aug-97           | 360       | Washington          | Jan-95           |
| 727       | Florida              | Jul-98           | 248       | Michigan            | May-97           | 513       | Ohio                  | Jan-47           | 425       | Washington          | Apr-97           |
| 754       | Florida              | Aug-01           | 269       | Michigan            | Jul-02           | 567       | Ohio                  | Jan-02           | 509       | Washington          | Jan-57           |
| 772       | Florida              | Feb-02           | 313       | Michigan            | Jan-47           | 614       | Ohio                  | Jan-47           | 304       | West Virginia       | Jan-47           |
| 786       | Florida              | Mar-98           | 517       | Michigan            | Jan-47           | 740       | Ohio                  | Dec-97           | 681       | West Virginia       | Mar-09           |
| 813       | Florida              | Jan-53           | 586       | Michigan            | Sep-01           | 937       | Ohio                  | Sep-96           | 262       | Wisconsin           | Sep-99           |
| 850       | Florida              | Jun-97           | 616       | Michigan            | Jan-47           | 405       | Oklahoma              | Jan-47           | 274       | Wisconsin           | Mar-12           |
| 863       | Florida              | Sep-99           | 734       | Michigan            | Dec-97           | 580       | Oklahoma              | Nov-97           | 414       | Wisconsin           | Jan-47           |
| 904       | Florida              | Jul-65           | 810       | Michigan            | Dec-93           | 918       | Oklahoma              | Jan-53           | 534       | Wisconsin           | Aug-10           |
| 941       | Florida              | May-95           | 906       | Michigan            | Mar-61           | 458       | Oregon                | Feb-10           | 608       | Wisconsin           | Jan-55           |
| 954       | Florida              | Sep-95           | 947       | Michigan            | Sep-02           | 503       | Oregon                | Jan-47           | 715       | Wisconsin           | Jan-47           |
| 229       | Georgia              | Aug-00           | 989       | Michigan            | Apr-01           | 541       | Oregon                | Nov-95           | 920       | Wisconsin           | Jul-97           |
| 478       | Georgia              | Aug-00           | 763       | Minnesota           | Feb-00           | 971       | Oregon                | Oct-00           | 307       | Wyoming             | Jan-47           |
| 762       | Georgia              | May-06           | 952       | Minnesota           | Feb-00           | 878       | Pennsylvania          | Aug-01           |           |                     |                  |

Source: North American Numbering Plan Administrator. Note: Implementation dates after 2009 are scheduled dates.

**Table 18.5**  
**Area Code Assignments (since 1999)**

| Location             | Implementation Date <sup>1</sup> | Previous Code | Added Code       |
|----------------------|----------------------------------|---------------|------------------|
| Texas (Houston)      | Jan-99                           | 713           | 832              |
| California           | Feb-99                           | 805           | 661              |
| Texas                | Feb-99                           | 512           | 361              |
| Arizona              | Mar-99                           | 602           | 480              |
| Arizona              | Mar-99                           | 602           | 623              |
| Kentucky             | Apr-99                           | 502           | 270              |
| Mississippi          | Apr-99                           | 601           | 662              |
| Alberta              | May-99                           | 403           | 780              |
| Missouri             | May-99                           | 314           | 636              |
| Michigan             | Jun-99                           | 616           | 231              |
| Pennsylvania         | Jun-99                           | 610           | 484              |
| California           | Jun-99                           | 619           | 858              |
| New Jersey           | Jun-99                           | 609           | 856              |
| New York (Manhattan) | Jul-99                           | 212           | 646              |
| Pennsylvania         | Jul-99                           | 215           | 267              |
| Texas (Dallas)       | Jul-99                           | 214           | 469              |
| Florida              | Sep-99                           | 941           | 863              |
| Wisconsin            | Sep-99                           | 414           | 262              |
| New York             | Oct-99                           | 718           | 347              |
| Louisiana            | Oct-99                           | 318           | 337              |
| Florida              | Nov-99                           | 407           | 321              |
| New York             | Nov-99                           | 516           | 631              |
| Tennessee            | Nov-99                           | 423           | 865              |
| Texas                | Feb-00                           | 409           | 936              |
| Texas                | Feb-00                           | 409           | 979              |
| Minnesota            | Feb-00                           | 612           | 763              |
| Minnesota            | Feb-00                           | 612           | 952              |
| Virginia             | Mar-00                           | 703           | 571              |
| Kentucky             | Apr-00                           | 606           | 859              |
| New York             | Jun-00                           | 914           | 845              |
| Iowa                 | Jul-00                           | 515           | 641              |
| Georgia              | Aug-00                           | 912           | 229              |
| Georgia              | Aug-00                           | 912           | 478              |
| Oregon               | Oct-00                           | 503           | 971              |
| Texas                | Oct-00                           | 817           | 682              |
| Ohio                 | Oct-00                           | 330           | 234              |
| Kansas               | Feb-01                           | 316           | 620              |
| Louisiana            | Feb-01                           | 504           | 985              |
| Tennessee            | Feb-01                           | 901           | 731              |
| Florida              | Feb-01                           | 904           | 386              |
| Ontario              | Mar-01                           | 416           | 647              |
| Iowa                 | Mar-01                           | 319           | 563              |
| North Carolina       | Apr-01                           | 704           | 980              |
| Michigan             | Apr-01                           | 517           | 989              |
| Massachusetts        | May-01                           | 508           | 774              |
| Massachusetts        | May-01                           | 617           | 857              |
| Massachusetts        | May-01                           | 781           | 339              |
| Massachusetts        | May-01                           | 978           | 351              |
| Pennsylvania         | May-01                           | 484           | 835 <sup>2</sup> |
| Pennsylvania         | May-01                           | 267           | 445 <sup>3</sup> |
| Virginia             | Jun-01                           | 804           | 434              |
| Ontario              | Jun-01                           | 905           | 289              |
| Alabama              | Jun-01                           | 334           | 251              |
| Arizona              | Jun-01                           | 520           | 928              |
| Florida              | Aug-01                           | 954           | 754              |



**Table 18.5**  
**Area Code Assignments (since 1999)**

| Location           | Implementation Date <sup>1</sup> | Previous Code | Added Code |
|--------------------|----------------------------------|---------------|------------|
| Pennsylvania       | Aug-01                           | 412           | 878        |
| Virginia           | Sep-01                           | 540           | 276        |
| Puerto Rico        | Sep-01                           | 787           | 939        |
| Michigan           | Sep-01                           | 810           | 586        |
| British Columbia   | Nov-01                           | 604           | 778        |
| New York           | Nov-01                           | 716           | 585        |
| New Jersey         | Dec-01                           | 201           | 551        |
| New Jersey         | Dec-01                           | 732           | 848        |
| New Jersey         | Dec-01                           | 973           | 862        |
| Ohio               | Jan-02                           | 419           | 567        |
| Illinois           | Jan-02                           | 847           | 224        |
| Indiana            | Jan-02                           | 219           | 260        |
| Indiana            | Jan-02                           | 219           | 574        |
| Arkansas           | Jan-02                           | 501           | 479        |
| Florida            | Feb-02                           | 561           | 772        |
| Florida            | Mar-02                           | 941           | 239        |
| Michigan           | Jul-02                           | 616           | 269        |
| Michigan           | Sep-02                           | 248           | 947        |
| Texas              | Feb-03                           | 903           | 430        |
| Texas              | Apr-03                           | 915           | 325        |
| Texas              | Apr-03                           | 915           | 432        |
| California         | Jul-04                           | 909           | 951        |
| Mississippi        | Mar-05                           | 601           | 769        |
| Dominican Republic | Aug-05                           | 809           | 829        |
| Georgia            | May-06                           | 706           | 762        |
| California         | Aug-06                           | 310           | 424        |
| Ontario            | Oct-06                           | 519           | 226        |
| Quebec             | Nov-06                           | 514           | 438        |
| Illinois           | Mar-07                           | 815           | 779        |
| Illinois           | Oct-07                           | 630           | 331        |
| New Mexico         | Oct-07                           | 505           | 575        |
| California         | Sep-08                           | 714           | 657        |
| Kentucky           | Jan-09                           | 270           | 364        |
| Utah               | Mar-09                           | 801           | 385        |
| California         | May-09                           | 818           | 747        |
| Illinois           | Nov-09                           | 312           | 872        |
| California         | Nov-09                           | 760           | 442        |
| Connecticut        | Dec-09                           | 203           | 475        |
| Oregon             | Feb-10                           | 541           | 458        |
| Alabama            | Jul-10                           | 256           | 938        |
| Wisconsin          | Aug-10                           | 715           | 534        |
| Nebraska           | Mar-11                           | 402           | 531        |
| Kentucky           | Oct-11                           | 270           | 364        |
| Wisconsin          | Mar-12                           | 920           | 274        |

Note: For years 1984 - 1998, see Industry Analysis and Technology Division, Wireline Competition Bureau, *Trends in Telephone Service* (August 2003).

<sup>1</sup> Implementation dates after 2009 are scheduled dates.

<sup>2</sup> The NANPA was able to reclaim area code 835. See Planning Letter 344.

<sup>3</sup> The NANPA was able to reclaim area code 445. See Planning Letter 332.

Source: North American Numbering Plan Administrator (NANPA), which can be accessed at [www.nanpa.com](http://www.nanpa.com). Planning letters can be found at [www.nanpa.com/planning\\_letters/index.html](http://www.nanpa.com/planning_letters/index.html).

**Table 18.6**  
**Telephone Numbers Assigned for Toll-Free Service (800, 888, 877, 866)<sup>1</sup>**

| Year              | Month     | Working Numbers | Miscellaneous Numbers <sup>2</sup> | Total Numbers | Spare 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              | December  | 22,496,215      | 1,051,232                          | 23,547,447    | 8,102,553                     |
| 2003              | December  | 21,108,662      | 941,520                            | 22,050,182    | 9,599,818                     |
| 2004              | December  | 22,159,440      | 1,145,661                          | 23,305,101    | 8,344,899                     |
| 2005              | December  | 22,474,643      | 957,835                            | 23,432,478    | 8,217,522                     |
| 2006              | December  | 22,709,753      | 756,808                            | 23,466,561    | 8,183,439                     |
| 2007 <sup>3</sup> | December  | 23,902,113      | 585,864                            | 24,487,982    | 7,322,018                     |
| 2008              | December  | 24,556,244      | 773,164                            | 25,329,408    | 6,480,592                     |
| 2009              | September | 25,534,225      | 504,064                            | 26,038,289    | 5,771,711                     |

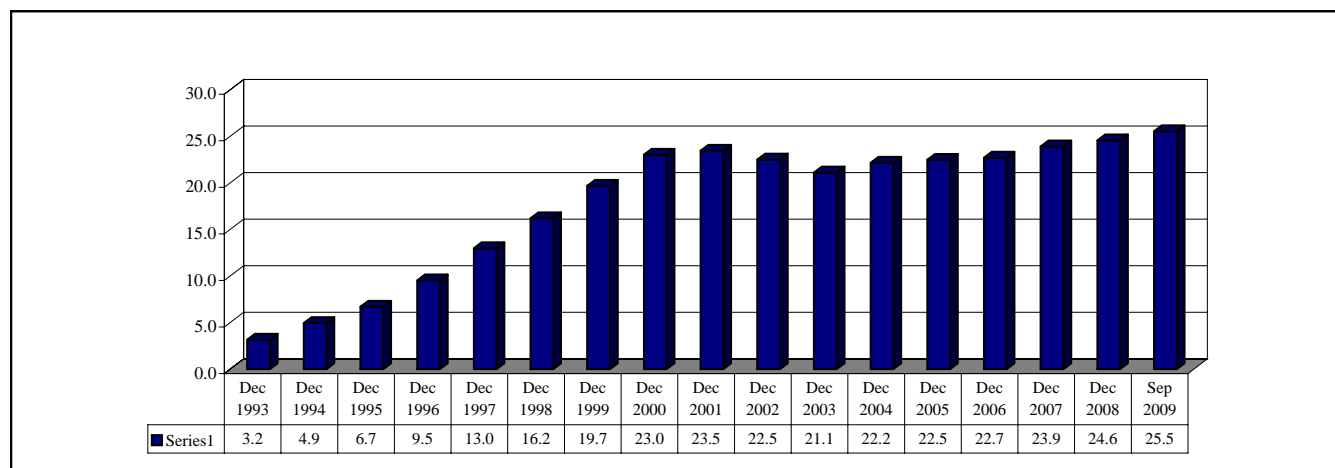
Note: For individual month assignments through June 2003, see Industry Analysis and Technology Division, Wireline Competition Bureau, *Trends in Telephone Service* (August 2003).

<sup>1</sup> Toll-free (800) service was initially offered by AT&T in 1967. On May 1, 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 demand for 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 July 2000.

<sup>2</sup> 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.

<sup>3</sup> SMS800 freed up all unused numbers contained in certain blocks of numbers that were reserved for the provision of certain mobile radio telecommunications (pager) services within a specified geographic area. These numbers were in NPA 800 and had NXXs in the range of NX2 where 'N' = 2 through 9 and 'X' = 0 for 1 and the numbers ended in a state code.  
<http://www.sms800.com/PublicContent.aspx?Text=2008&URL=Shared+Documents%2fPublic%2fNews%2f2008&Site=Public>, visited January 15, 2010.

**Chart 18.1 Working Toll-Free Numbers (Numbers in Millions)**



**Table 18.7**  
**Telephone Numbers Assigned for 800 Toll-Free Service<sup>1</sup>**

| Year | Month     | Working<br>Toll-Free<br>Numbers | Miscellaneous<br>Toll-Free<br>Numbers <sup>2</sup> | Total<br>Toll-Free<br>Numbers<br>Assigned | Spare Toll-Free<br>Numbers<br>Still<br>Available |
|------|-----------|---------------------------------|--|---|--|
| 1998 | June      | 7,480,468                       | 227,041  | 7,707,509                                 | 2,491  |
|      | September | 7,489,271                       | 219,080  | 7,708,351                                 | 1,649  |
|      | December  | 7,487,529                       | 215,267  | 7,702,796                                 | 7,204  |
| 1999 | March     | 7,498,527                       | 204,515  | 7,703,042                                 | 6,958  |
|      | June      | 7,502,118                       | 207,061  | 7,709,179                                 | 821  |
|      | September | 7,523,302                       | 185,363  | 7,708,665                                 | 1,335  |
|      | December  | 7,505,737                       | 202,416  | 7,708,153                                 | 1,847  |
| 2000 | March     | 7,516,391                       | 193,246  | 7,709,637                                 | 363  |
|      | June      | 7,570,082                       | 139,444  | 7,709,526                                 | 474  |
|      | September | 7,572,091                       | 137,705  | 7,709,796                                 | 204  |
|      | December  | 7,566,810                       | 132,887  | 7,699,697                                 | 10,303   |
| 2001 | March     | 7,434,621                       | 264,967  | 7,699,588                                 | 10,412   |
|      | June      | 7,357,279                       | 242,106  | 7,599,385                                 | 110,615  |
|      | September | 7,383,111                       | 164,881  | 7,547,992                                 | 162,008  |
|      | December  | 7,370,055                       | 184,689  | 7,554,744                                 | 155,256  |
| 2002 | March     | 7,181,636                       | 400,955  | 7,582,591                                 | 127,409  |
|      | June      | 7,234,847                       | 282,005  | 7,516,852                                 | 193,148  |
|      | September | 7,200,821                       | 177,723  | 7,378,544                                 | 331,456  |
|      | December  | 7,210,159                       | 203,268  | 7,413,427                                 | 296,573  |
| 2003 | March     | 7,182,120                       | 224,536  | 7,406,656                                 | 303,344  |
|      | June      | 7,171,068                       | 234,576  | 7,405,644                                 | 304,356  |
|      | September | 7,031,806                       | 222,846  | 7,254,652                                 | 455,348  |
|      | December  | 7,089,752                       | 260,807  | 7,350,559                                 | 359,441  |
| 2004 | March     | 7,187,381                       | 234,719  | 7,422,100                                 | 287,900  |
|      | June      | 7,181,216                       | 187,107  | 7,368,323                                 | 341,677  |
|      | September | 7,262,915                       | 197,252  | 7,460,167                                 | 249,833  |
|      | December  | 7,332,085                       | 208,368  | 7,540,453                                 | 169,547  |
| 2005 | March     | 7,267,936                       | 234,679  | 7,502,615                                 | 207,385  |
|      | June      | 7,163,402                       | 425,206  | 7,588,608                                 | 121,392  |
|      | September | 7,160,678                       | 495,326  | 7,656,004                                 | 53,996   |
|      | December  | 7,317,165                       | 277,052  | 7,594,217                                 | 115,783  |
| 2006 | March     | 7,416,046                       | 197,083  | 7,613,129                                 | 96,871   |
|      | June      | 7,330,416                       | 317,525  | 7,647,941                                 | 62,059   |
|      | September | 7,419,137                       | 279,471  | 7,698,608                                 | 11,392   |
|      | December  | 7,445,535                       | 207,672  | 7,653,207                                 | 56,793   |
| 2007 | March     | 7,559,307                       | 140,686  | 7,699,993                                 | 10,007   |
|      | June      | 7,546,532                       | 153,063  | 7,699,595                                 | 10,405   |
|      | September | 7,597,883                       | 102,117  | 7,700,000                                 | 10,000   |
|      | December  | 7,736,774 <sup>3</sup>          | 123,226  | 7,860,000                                 | 10,000 <sup>3</sup>                              |
| 2008 | March     | 7,731,284 <sup>3</sup>          | 128,716  | 7,860,000                                 | 10,000 <sup>3</sup>                              |
|      | June      | 7,686,736                       | 173,264  | 7,860,000                                 | 10,000 <sup>3</sup>                              |
|      | September | 7,755,279                       | 104,721  | 7,860,000                                 | 10,000 <sup>3</sup>                              |
|      | December  | 7,731,430                       | 128,570  | 7,860,000                                 | 10,000 <sup>3</sup>                              |
| 2009 | March     | 7,752,946                       | 107,054  | 7,860,000                                 | 10,000 <sup>3</sup>                              |
|      | June      | 7,775,315                       | 84,685   | 7,860,000                                 | 10,000 <sup>3</sup>                              |
|      | September | 7,780,198                       | 79,802   | 7,860,000                                 | 10,000 <sup>3</sup>                              |

<sup>1</sup> For data before 1998, see the August 2008 edition of *Trends in Telephone Service*.

<sup>2</sup> See Notes to Table 18.6.

<sup>3</sup> See Notes to Table 18.6.

**Table 18.8**  
**Telephone Numbers Assigned for 888 Toll-Free Service<sup>1</sup>**

| Year | Month     | Working<br>Toll-Free<br>Numbers | Miscellaneous<br>Toll-Free<br>Numbers <sup>2</sup> | Total<br>Toll-Free<br>Numbers<br>Assigned | Spare Toll-Free<br>Numbers<br>Still<br>Available |
|------|-----------|---------------------------------|--|---|--|
| 1998 | June      | 6,591,764                       | 665,496  | 7,257,260                                 | 722,740  |
|      | September | 6,898,718                       | 612,254  | 7,510,972                                 | 469,028  |
|      | December  | 7,146,159                       | 515,009  | 7,661,168                                 | 318,832  |
| 1999 | March     | 7,278,531                       | 495,904  | 7,774,435                                 | 205,565  |
|      | June      | 7,428,424                       | 231,697  | 7,660,121                                 | 319,879  |
|      | September | 7,601,867                       | 211,318  | 7,813,185                                 | 166,815  |
|      | December  | 7,643,158                       | 324,405  | 7,967,563                                 | 12,437   |
| 2000 | March     | 7,685,423                       | 230,035  | 7,915,458                                 | 64,542   |
|      | June      | 7,789,986                       | 140,658  | 7,930,644                                 | 49,356   |
|      | September | 7,806,252                       | 173,588  | 7,979,840                                 | 160  |
|      | December  | 7,789,188                       | 177,328  | 7,966,516                                 | 13,484   |
| 2001 | March     | 7,616,189                       | 355,451  | 7,971,640                                 | 8,360  |
|      | June      | 7,548,761                       | 270,198  | 7,818,959                                 | 161,041  |
|      | September | 7,508,100                       | 203,518  | 7,711,618                                 | 268,382  |
|      | December  | 7,452,071                       | 190,727  | 7,642,798                                 | 337,202  |
| 2002 | March     | 6,964,624                       | 577,910  | 7,542,534                                 | 437,466  |
|      | June      | 6,629,862                       | 354,771  | 6,984,633                                 | 995,367  |
|      | September | 6,682,043                       | 92,050   | 6,774,093                                 | 1,205,907  |
|      | December  | 6,610,191                       | 154,015  | 6,764,206                                 | 1,215,794  |
| 2003 | March     | 6,408,723                       | 324,558  | 6,733,281                                 | 1,246,719  |
|      | June      | 6,228,846                       | 251,701  | 6,480,547                                 | 1,499,453  |
|      | September | 5,818,266                       | 216,862  | 6,035,128                                 | 1,944,872  |
|      | December  | 5,711,949                       | 250,662  | 5,962,611                                 | 2,017,389  |
| 2004 | March     | 5,680,105                       | 133,824  | 5,813,929                                 | 2,166,071  |
|      | June      | 5,640,743                       | 128,141  | 5,768,884                                 | 2,211,116  |
|      | September | 5,716,957                       | 210,068  | 5,927,025                                 | 2,052,975  |
|      | December  | 5,563,469                       | 384,320  | 5,947,789                                 | 2,032,211  |
| 2005 | March     | 5,465,594                       | 159,097  | 5,624,691                                 | 2,355,309  |
|      | June      | 5,306,927                       | 296,729  | 5,603,656                                 | 2,376,344  |
|      | September | 5,314,969                       | 221,122  | 5,536,091                                 | 2,443,909  |
|      | December  | 5,265,331                       | 196,817  | 5,462,148                                 | 2,517,852  |
| 2006 | March     | 5,049,966                       | 321,175  | 5,371,141                                 | 2,608,859  |
|      | June      | 4,930,939                       | 387,726  | 5,318,665                                 | 2,661,335  |
|      | September | 4,923,018                       | 282,840  | 5,205,858                                 | 2,774,142  |
|      | December  | 4,894,774                       | 154,764  | 5,049,538                                 | 2,930,462  |
| 2007 | March     | 4,865,839                       | 172,035  | 5,037,874                                 | 2,942,126  |
|      | June      | 4,892,896                       | 211,491  | 5,104,387                                 | 2,875,613  |
|      | September | 5,014,039                       | 143,278  | 5,157,317                                 | 2,822,683  |
|      | December  | 5,075,256                       | 134,928  | 5,210,184                                 | 2,769,816  |
| 2008 | March     | 5,131,254                       | 300,830  | 5,432,084                                 | 2,547,916  |
|      | June      | 5,153,074                       | 328,514  | 5,481,588                                 | 2,498,412  |
|      | September | 5,212,933                       | 131,617  | 5,344,550                                 | 2,635,450  |
|      | December  | 5,204,756                       | 195,377  | 5,400,133                                 | 2,579,867  |
| 2009 | March     | 5,221,440                       | 186,536  | 5,407,976                                 | 2,572,024  |
|      | June      | 5,306,134                       | 123,891  | 5,430,025                                 | 2,549,975  |
|      | September | 5,468,278                       | 120,409  | 5,588,687                                 | 2,391,313  |

<sup>1</sup> For data before 1998, see the August 2008 edition of *Trends in Telephone Service*.

<sup>2</sup> See Notes to Table 18.6.

**Table 18.9**  
**Telephone Numbers Assigned for 877 Toll-Free Service<sup>1</sup>**

| Year | Month     | Working<br>Toll-Free<br>Numbers | Miscellaneous<br>Toll-Free<br>Numbers <sup>2</sup> | Total<br>Toll-Free<br>Numbers<br>Assigned | Spare Toll-Free<br>Numbers<br>Still<br>Available |
|------|-----------|---------------------------------|--|---|--|
| 1998 | June      | 552,037                         | 209,967  | 762,004                                   | 7,217,996  |
|      | September | 1,072,046                       | 206,714  | 1,278,760                                 | 6,701,240  |
|      | December  | 1,567,195                       | 235,190  | 1,802,385                                 | 6,177,615  |
| 1999 | March     | 2,141,228                       | 329,044  | 2,470,272                                 | 5,509,728  |
|      | June      | 2,899,466                       | 410,026  | 3,309,492                                 | 4,670,508  |
|      | September | 3,755,361                       | 436,433  | 4,191,794                                 | 3,788,206  |
|      | December  | 4,528,106                       | 575,143  | 5,103,249                                 | 2,876,751  |
| 2000 | March     | 5,436,297                       | 598,702  | 6,034,999                                 | 1,945,001  |
|      | June      | 6,317,507                       | 402,858  | 6,720,365                                 | 1,259,635  |
|      | September | 6,539,180                       | 496,015  | 7,035,195                                 | 944,805  |
|      | December  | 6,391,285                       | 719,333  | 7,110,618                                 | 869,382  |
| 2001 | March     | 6,289,079                       | 469,980  | 6,759,059                                 | 1,220,941  |
|      | June      | 6,094,898                       | 715,097  | 6,809,995                                 | 1,170,005  |
|      | September | 6,163,297                       | 489,084  | 6,652,381                                 | 1,327,619  |
|      | December  | 6,214,863                       | 345,468  | 6,560,331                                 | 1,419,669  |
| 2002 | March     | 6,174,529                       | 340,472  | 6,515,001                                 | 1,464,999  |
|      | June      | 6,016,107                       | 267,320  | 6,283,427                                 | 1,696,573  |
|      | September | 5,656,158                       | 275,722  | 5,931,880                                 | 2,048,120  |
|      | December  | 5,448,276                       | 421,984  | 5,870,260                                 | 2,109,740  |
| 2003 | March     | 5,132,413                       | 579,240  | 5,711,653                                 | 2,268,347  |
|      | June      | 4,791,792                       | 376,236  | 5,168,028                                 | 2,811,972  |
|      | September | 4,617,147                       | 170,787  | 4,787,934                                 | 3,192,066  |
|      | December  | 4,536,366                       | 191,410  | 4,727,776                                 | 3,252,224  |
| 2004 | March     | 4,528,716                       | 163,856  | 4,692,572                                 | 3,287,428  |
|      | June      | 4,550,870                       | 146,826  | 4,697,696                                 | 3,282,304  |
|      | September | 4,537,840                       | 214,197  | 4,752,037                                 | 3,227,963  |
|      | December  | 4,551,486                       | 254,082  | 4,805,568                                 | 3,174,432  |
| 2005 | March     | 4,590,227                       | 139,089  | 4,729,316                                 | 3,250,684  |
|      | June      | 4,498,452                       | 232,477  | 4,730,929                                 | 3,249,071  |
|      | September | 4,476,657                       | 193,315  | 4,669,972                                 | 3,310,028  |
|      | December  | 4,424,365                       | 212,543  | 4,636,908                                 | 3,343,092  |
| 2006 | March     | 4,387,383                       | 178,974  | 4,566,357                                 | 3,413,643  |
|      | June      | 4,227,659                       | 203,501  | 4,431,160                                 | 3,548,840  |
|      | September | 4,216,739                       | 221,090  | 4,437,829                                 | 3,542,171  |
|      | December  | 4,158,082                       | 191,476  | 4,349,558                                 | 3,630,442  |
| 2007 | March     | 4,160,134                       | 126,236  | 4,286,370                                 | 3,693,630  |
|      | June      | 4,176,830                       | 168,005  | 4,344,835                                 | 3,635,165  |
|      | September | 4,186,296                       | 140,506  | 4,326,802                                 | 3,653,198  |
|      | December  | 4,236,995                       | 151,687  | 4,388,682                                 | 3,591,318  |
| 2008 | March     | 4,243,519                       | 150,600  | 4,394,119                                 | 3,585,881  |
|      | June      | 4,312,293                       | 204,414  | 4,516,707                                 | 3,463,293  |
|      | September | 4,105,708                       | 266,286  | 4,371,994                                 | 3,608,006  |
|      | December  | 4,126,424                       | 187,099  | 4,313,523                                 | 3,666,477  |
| 2009 | March     | 4,159,486                       | 144,758  | 4,304,244                                 | 3,675,756  |
|      | June      | 4,390,811                       | 169,577  | 4,560,388                                 | 3,419,612  |
|      | September | 4,583,580                       | 138,286  | 4,721,866                                 | 3,258,134  |

<sup>1</sup> For data before 1998, see the August 2008 edition of *Trends in Telephone Service*.

<sup>2</sup> See Notes to Table 18.6.

**Table 18.10**  
**Telephone Numbers Assigned for 866 Toll-Free Service**

| Year | Month     | Working<br>Toll-Free<br>Numbers | Miscellaneous<br>Toll-Free<br>Numbers <sup>2</sup> | Total<br>Toll-Free<br>Numbers<br>Assigned | Spare Toll-Free<br>Numbers<br>Still<br>Available |
|------|-----------|---------------------------------|--|---|--|
| 2000 | September | 672,250                         | 155,646  | 827,896                                   | 7,152,104  |
|      | December  | 1,274,732                       | 148,548  | 1,423,280                                 | 6,556,720  |
| 2001 | March     | 1,652,602                       | 361,888  | 2,014,490                                 | 5,965,510  |
|      | June      | 1,944,520                       | 362,880  | 2,307,400                                 | 5,672,600  |
|      | September | 2,256,792                       | 308,801  | 2,565,593                                 | 5,414,407  |
|      | December  | 2,416,040                       | 307,089  | 2,723,129                                 | 5,256,871  |
| 2002 | March     | 2,640,414                       | 321,530  | 2,961,944                                 | 5,018,056  |
|      | June      | 2,864,605                       | 219,232  | 3,083,837                                 | 4,896,163  |
|      | September | 2,977,379                       | 244,297  | 3,221,676                                 | 4,758,324  |
|      | December  | 3,227,589                       | 271,965  | 3,499,554                                 | 4,480,446  |
| 2003 | March     | 3,461,686                       | 299,700  | 3,761,386                                 | 4,218,614  |
|      | June      | 3,486,674                       | 420,477  | 3,907,151                                 | 4,072,849  |
|      | September | 3,609,244                       | 265,446  | 3,874,690                                 | 4,105,310  |
|      | December  | 3,770,595                       | 238,641  | 4,009,236                                 | 3,970,764  |
| 2004 | March     | 3,966,922                       | 231,683  | 4,198,605                                 | 3,781,395  |
|      | June      | 4,281,378                       | 263,560  | 4,544,938                                 | 3,435,062  |
|      | September | 4,476,150                       | 281,577  | 4,757,727                                 | 3,222,273  |
|      | December  | 4,712,400                       | 298,891  | 5,011,291                                 | 2,968,709  |
| 2005 | March     | 5,015,324                       | 267,412  | 5,282,736                                 | 2,697,264  |
|      | June      | 5,047,314                       | 487,471  | 5,534,785                                 | 2,445,215  |
|      | September | 5,259,730                       | 352,226  | 5,611,956                                 | 2,368,044  |
|      | December  | 5,467,782                       | 271,423  | 5,739,205                                 | 2,240,795  |
| 2006 | March     | 5,613,475                       | 211,021  | 5,824,496                                 | 2,155,504  |
|      | June      | 5,803,923                       | 205,051  | 6,008,974                                 | 1,971,026  |
|      | September | 6,078,119                       | 160,737  | 6,238,856                                 | 1,741,144  |
|      | December  | 6,201,362                       | 212,896  | 6,414,258                                 | 1,565,742  |
| 2007 | March     | 6,355,241                       | 207,073  | 6,562,314                                 | 1,417,686  |
|      | June      | 6,555,756                       | 240,460  | 6,796,216                                 | 1,183,784  |
|      | September | 6,685,581                       | 219,067  | 6,904,648                                 | 1,075,352  |
|      | December  | 6,853,093                       | 176,023  | 7,029,116                                 | 950,884  |
| 2008 | March     | 7,001,587                       | 191,687  | 7,193,274                                 | 786,726  |
|      | June      | 7,192,852                       | 225,175  | 7,418,027                                 | 561,973  |
|      | September | 7,304,334                       | 284,988  | 7,589,322                                 | 390,678  |
|      | December  | 7,493,634                       | 262,118  | 7,755,752                                 | 244,248  |
| 2009 | March     | 7,752,906                       | 193,240  | 7,946,146                                 | 33,854   |
|      | June      | 7,766,358                       | 185,149  | 7,951,507                                 | 28,493   |
|      | September | 7,702,169                       | 165,567  | 7,867,736                                 | 112,264  |

<sup>2</sup> See Notes to Table 18.6.

**Table 18.11**  
**Number of Digits Necessary to Dial Local and Toll Calls from Wireline Phones**  
**(As of November 2009)**

| State                | Local Calls              |                       | Toll Calls               |                       | Toll Calls<br>Require<br>Dialing 1 + |
|----------------------|--------------------------|-----------------------|--------------------------|-----------------------|--------------------------------------|
|                      | Within Same<br>Area Code | Between<br>Area Codes | Within Same<br>Area Code | Between<br>Area Codes |                                      |
| Alabama              | 7 <sup>1</sup>           | 10 <sup>2</sup>       | 1 + 10                   | 1 + 10                | Yes                                  |
| Alaska               | 7                        | 1 + 10                | 1 + 10                   | 1 + 10                | Yes                                  |
| Arizona              | 7                        | 10                    | 1 + 10                   | 1 + 10                | Yes                                  |
| Arkansas             | 7                        | 10                    | 1 + 10                   | 1 + 10                | Yes                                  |
| California           | 7 <sup>3</sup>           | 1 + 10                | 7 <sup>3</sup>           | 1 + 10                | No                                   |
| Colorado             | 7 <sup>4</sup>           | 10                    | 1 + 10                   | 1 + 10                | Yes                                  |
| Connecticut          | 7 <sup>5</sup>           | 10                    | 1 + 10                   | 1 + 10                | Yes                                  |
| Delaware             | 7                        | 10                    | 1 + 10                   | 1 + 10                | Yes                                  |
| District of Columbia | 7                        | 10                    | NA                       | 1 + 10                | Yes                                  |
| Florida              | 7 <sup>6</sup>           | 10                    | 1 + 10                   | 1 + 10                | Yes                                  |
| Georgia              | 7 <sup>7</sup>           | 10                    | 1 + 10                   | 1 + 10                | Yes                                  |
| Hawaii               | 7                        | NA                    | 1 + 10                   | 1 + 10                | Yes                                  |
| Idaho                | 7                        | 7                     | 1 + 10                   | 1 + 10                | Yes                                  |
| Illinois             | 7 <sup>8</sup>           | 1 + 10                | 1 + 10                   | 1 + 10                | Yes                                  |
| Indiana              | 7                        | 10                    | 1 + 10                   | 1 + 10                | Yes                                  |
| Iowa                 | 7                        | 10                    | 1 + 10                   | 1 + 10                | Yes                                  |
| Kansas               | 7                        | 10                    | 1 + 10                   | 1 + 10                | Yes                                  |
| Kentucky             | 7                        | 10 <sup>9</sup>       | 1 + 10                   | 1 + 10                | Yes                                  |
| Louisiana            | 7                        | 10                    | 1 + 10                   | 1 + 10                | Yes                                  |
| Maine                | 7                        | 1 + 10                | 7                        | 1 + 10                | No                                   |
| Maryland             | 10                       | 10                    | 1 + 10                   | 1 + 10                | Yes                                  |
| Massachusetts        | 10 <sup>10</sup>         | 10                    | 1 + 10                   | 1 + 10                | Yes                                  |
| Michigan             | 7 <sup>11</sup>          | 10                    | 1 + 10                   | 1 + 10                | Yes                                  |
| Minnesota            | 7                        | 10 <sup>12</sup>      | 1 + 10                   | 1 + 10                | Yes                                  |
| Mississippi          | 7 <sup>13</sup>          | 10                    | 1 + 10                   | 1 + 10                | Yes                                  |
| Missouri             | 7 <sup>14</sup>          | 10                    | 1 + 10                   | 1 + 10                | Yes                                  |
| Montana              | 7                        | 7                     | 1 + 10                   | 1 + 10                | Yes                                  |
| Nebraska             | 7 <sup>15</sup>          | 7 <sup>15</sup>       | 1 + 10                   | 1 + 10                | Yes                                  |
| Nevada               | 7                        | 10                    | 1 + 10                   | 1 + 10                | Yes                                  |
| New Hampshire        | 7                        | 1 + 10                | 7                        | 1 + 10                | No                                   |
| New Jersey           | 10 <sup>16</sup>         | 1 + 10                | 10 <sup>16</sup>         | 1 + 10                | No                                   |
| New Mexico           | 7                        | 10                    | 1 + 10                   | 1 + 10                | Yes                                  |
| New York             | 7 <sup>17</sup>          | 1 + 10                | 7 <sup>17</sup>          | 1 + 10                | No                                   |
| North Carolina       | 7 <sup>18</sup>          | 10                    | 1 + 10                   | 1 + 10                | Yes                                  |
| North Dakota         | 7                        | 7                     | 1 + 10                   | 1 + 10                | Yes                                  |
| Ohio                 | 7 <sup>19</sup>          | 10                    | 1 + 10                   | 1 + 10                | Yes                                  |
| Oklahoma             | 7                        | 7                     | 1 + 10                   | 1 + 10                | Yes                                  |
| Oregon               | 10 <sup>20</sup>         | 10                    | 1 + 10                   | 1 + 10                | Yes                                  |
| Pennsylvania         | 10 <sup>21</sup>         | 1 + 10 <sup>22</sup>  | 10 <sup>21</sup>         | 1 + 10 <sup>22</sup>  | No                                   |
| Rhode Island         | 7                        | 1 + 10                | 7                        | 1 + 10                | No                                   |
| South Carolina       | 7                        | 10                    | 1 + 10                   | 1 + 10                | Yes                                  |
| South Dakota         | 7                        | 7                     | 1 + 10                   | 1 + 10                | Yes                                  |
| Tennessee            | 7                        | 10 <sup>23</sup>      | 1 + 10                   | 1 + 10                | Yes                                  |
| Texas                | 7 <sup>24</sup>          | 10                    | 1 + 10                   | 1 + 10                | Yes                                  |
| Utah                 | 10 <sup>25</sup>         | 10 <sup>25</sup>      | 1 + 10                   | 1 + 10                | Yes                                  |
| Vermont              | 7                        | 1 + 10                | 1 + 10                   | 1 + 10                | Yes                                  |
| Virginia             | 7 <sup>26</sup>          | 10                    | 1 + 10                   | 1 + 10                | Yes                                  |
| Washington           | 7 <sup>27</sup>          | 10                    | 1 + 10                   | 1 + 10                | Yes                                  |
| West Virginia        | 10                       | 10                    | 1 + 10                   | 1 + 10                | Yes                                  |
| Wisconsin            | 7 <sup>28</sup>          | 1 + 10                | 1 + 10                   | 1 + 10                | Yes                                  |
| Wyoming              | 7                        | 7                     | 1 + 10                   | 1 + 10                | Yes                                  |

NA - Not Applicable.

Source: NPA database. The database is available at [www.nanpa.com/area\\_codes/index.html](http://www.nanpa.com/area_codes/index.html).

## Notes to Table 18.11

- <sup>1</sup> In area code 659 and 938, 10-digit dialing is used.
- <sup>2</sup> In area code 659 and 907, 1+10-digit dialing is used.
- <sup>3</sup> In area codes 310, 442, 424, 657, 714, 747, 760 and 818, 1+10-digit dialing is used.
- <sup>4</sup> In area codes 303 and 720, 10-digit dialing is used.
- <sup>5</sup> In area codes 475 and 959, 10-digit dialing is used.
- <sup>6</sup> In area codes 305, 321, 407, 689, 754, 786, and 954, 10-digit dialing is used.
- <sup>7</sup> In area codes 404, 470, 678, 762, 706 and 770, 10-digit dialing is used.
- <sup>8</sup> In area codes 224, 331, 464, 447, 630, 779, 815, 847 and 872, 1+ 10-digit dialing is used.  
In addition, in area code 770, 10-digit dialing is used.
- <sup>9</sup> In area codes 270, 364 and 502, 7-digit dialing is used.
- <sup>10</sup> In area code 413, 7-digit dialing is used.
- <sup>11</sup> In area codes 248, 679 and 947, 10-digit dialing is used.
- <sup>12</sup> In area codes 218, 320, and 507, 7-digit dialing is used.
- <sup>13</sup> In area codes 601 and 769, 10-digit dialing is used.
- <sup>14</sup> In area codes 557 and 975, 10-digit dialing is used.
- <sup>15</sup> In area codes 531, 10-digit dialing is used.
- <sup>16</sup> In area codes 609, 856, and 908, 7-digit dialing is used.
- <sup>17</sup> In area codes 212, 347, 646, 718, and 917, 1+10 digit dialing is used.
- <sup>18</sup> In area codes 704, 980 and 984, 10-digit dialing is used.
- <sup>19</sup> In area codes 234, 283, 330, 380, 419, and 567, 10-digit dialing is used.
- <sup>20</sup> In area code 541, 7-digit dialing is used.
- <sup>21</sup> In area codes 570, 717, and 814, 7-digit dialing is used.
- <sup>22</sup> In some area codes, local calls to some other area codes may be dialed using 10 digits.
- <sup>23</sup> In area codes 615 and 931, 7-digit dialing is used.
- <sup>24</sup> In area codes 214, 281, 430, 469, 682, 713, 817, 832, 903, and 972, 10-digit dialing is used.
- <sup>25</sup> In area code 435, 7-digit dialing is used.
- <sup>26</sup> In area codes 571 and 703, 10-digit dialing is used.
- <sup>27</sup> In area code 564, 10-digit dialing is used.
- <sup>28</sup> In area code 274 and 534, 10-digit dialing is used.



# 19 Universal Service

## 1. Overview

There are four universal service support mechanisms: 1) High Cost, 2) Low Income, including Lifeline and Link-Up, 3) Schools and Libraries, and 4) Rural Health Care.<sup>1</sup> High Cost support enables carriers with above-average costs to recover some of these costs from the support mechanisms, allowing these carriers to lower their end-user rates and/or to receive less money from state universal service support mechanisms.

The Lifeline program promotes increased telephone subscribership by providing low-income households with discounts on the monthly cost of telephone service. The Link-Up America program promotes telephone subscribership by helping low-income households pay the initial costs of commencing telephone service.

Schools and Libraries support enables eligible schools and libraries to obtain eligible services, including telecommunications services, at discounted rates. Rural Health Care support allows rural health care providers to purchase telecommunications services at comparable urban rates.

Table 19.1 shows universal service support disbursements for 2007 and 2008.<sup>2</sup> Chart 19.1 shows this information graphically for 2008. Table 19.2 and Chart 19.2 show the type of service providers that received universal service support in 2008.

## 2. High Cost

The High Cost support mechanisms include embedded high-cost loop support (HCLS),<sup>3</sup> safety net additive support (SNAS), safety valve support (SVS), local switching support (LSS), forward-looking high-cost model support (HCMS), interstate access support (IAS) for price-cap carriers, and interstate common line support (ICLS) for rate-of-return carriers.<sup>4</sup>

HCLS provides assistance to companies with above average non-traffic-sensitive local loop costs – terminology that refers to the costs of providing loops connecting customers and

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<sup>1</sup> Additional information on universal service mechanisms is available in the *Universal Service Monitoring Report* (December 2009). See <http://www.fcc.gov/wcb/iatd/monitor.html>.

<sup>2</sup> The figures used in this table are for the calendar year and include disbursements that were paid out in 2007 and 2008.

<sup>3</sup> 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 C.F.R. § 36.601.

<sup>4</sup> Prior to July 1, 2004, rate-of-return carriers were eligible to receive long-term support (LTS). Since that date, LTS was merged into ICLS.

their serving telephone company central office. In addition, SNAS provides assistance to companies that have large increases in telecommunications plant in service. SVS provides additional assistance to rural carriers that make substantial investment after acquiring exchanges.

LSS provides assistance to LECs with study areas of 50,000 or fewer access lines to help defray their higher per-line switching costs. HCMS provides assistance for non-rural carriers based on their forward-looking costs of providing supported services as determined by the Commission's cost model. The IAS mechanism provides support to price-cap carriers to replace the implicit support previously collected through interstate access charges. The ICLS mechanism converts support implicit in the access rate structure of rate-of-return carriers to explicit and portable support. ICLS recovers any shortfall between the allowed common line revenues of rate of return carriers and their subscriber line charge revenues. As noted above, LTS was merged into ICLS as of July 1, 2004.

Table 19.3 shows HCLS, LTS, LSS, HCMS, IAS, ICLS, SNAS, and SVS payments from 1986 to 2008. Table 19.4 shows payments by state for 2007 and 2008.

Table 19.5 shows high-cost support payments to incumbent LECs and competitive eligible telecommunications carriers (CETCs) from 1996 to 2008. Chart 19.4 shows the percent of high-cost support received by CETCs. Table 19.6 shows high-cost support payments by state for 2008 to ILECs and CETCs and also to rural and non-rural carriers.

### **3. Low-Income Support: Lifeline and Link-Up**

The Lifeline program promotes increased telephone subscribership by providing low-income households with discounts on the monthly cost of telephone service. The Link-Up America program increases telephone subscribership by helping low-income households pay the initial costs of commencing telephone service.

The Lifeline program was created in 1984, and the Link-Up program was created in 1987. For both of these programs, the rules were later modified to make the distribution of low-income support competitively and technologically neutral by allowing all eligible telecommunications carriers, including wireless carriers, to receive support for providing Lifeline and Link-Up service. In June 2000, the Commission further expanded the Lifeline and Link-Up programs to address the needs of households on tribal lands.<sup>5</sup>

Eligibility requirements for Lifeline and Link-Up vary from state to state. In a state that has its own Lifeline program, the state may create its own eligibility requirements for the federal Lifeline program. Those 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. In those states that do not have their own Lifeline program, known as federal default states, Lifeline eligibility requirements are set by the FCC. In federal default states, households must certify that they participate in at least one of the following seven federal programs: Medicaid, food stamps, Supplemental Security Income (SSI), federal public housing assistance, the Low-Income Home

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<sup>5</sup> *Federal-State Joint Board on Universal Service; Promoting Deployment and Subscribership in Unserved and Underserved Areas, Including Tribal and Insular Areas*, Twelfth Report and Order, and Further Notice of Proposed Rulemaking, CC Docket No. 96-45, FCC 00-208, 15 FCC Rcd 12,208 (2000).

Energy Assistance Program (LIHEAP), the National School Lunch Program's free lunch program, or Temporary Assistance to Needy Families. By June 2005, consumers may also be able to qualify if their income is at or below 135% of the federal poverty guidelines.

Eligible consumers living on tribal lands can receive federal Lifeline support if they (a) meet their state's Lifeline eligibility requirements; (b) certify that they are enrolled in one of the seven federal programs listed above; or (c) 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), or Head Start (meeting the income-qualifying standard).

Under the Commission's rules, there are four tiers of federal Lifeline support.<sup>6</sup> The first tier represents a monthly waiver of the federal subscriber line charge, which ranges between \$3.50 and \$6.50, varying by state and the carrier providing service. Second-tier support is an additional \$1.75 per-month reduction in the basic local rate. All Lifeline subscribers receive at least the first two tiers of federal support. The third tier of federal support is based on the amount of additional support mandated by the relevant state or otherwise provided by carriers. Federal support is available to match one-half of the tier-three support provided, up to a maximum of \$1.75 in federal support. Eligible subscribers living on tribal lands also qualify to receive a fourth tier of Lifeline support. Tier-four support provides up to an additional \$25 per month although all subscribers on tribal lands must pay at least \$1 per month.

The Commission's Link-Up program provides qualified low-income individuals with a federally financed 50% discount on initial connection charges up to \$30. Link-Up beneficiaries 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 subscribers living on tribal lands may receive an additional discount of up to \$70 to cover 100% of the charges between \$60 and \$130.

Table 19.7 shows the minimum, maximum and average monthly Lifeline support as of March 31, 2008, by state. The table contains 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 19.8 contains historical Lifeline subscriber and Link-Up beneficiary data for 1987 through 2008. Table 19.9 present tribal and non-tribal lifeline subscriber and Link-Up beneficiary data by state for 2007 and 2008.

Table 19.10 and Chart 19.5 contain annual historical low-income support payments for the years 1988 through 2008. Table 19.11 shows low-income support payments by state or jurisdiction for 2007 and 2008. Table 19.12 shows low-income support payments to ILECs and CETCs from 1996 through 2008. Chart 19.6 shows the percent of low-income support received by CETCs.

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<sup>6</sup> In addition, the Lifeline program compensates eligible telecommunication carriers for toll limitation service (TLS).

#### **4. Schools and Libraries**

The schools and libraries support mechanism also known as the “E Rate” enables schools and libraries to obtain eligible services at discounted rates. 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 where the library is located. In addition, schools and libraries located in rural areas receive an additional discount.

Table 19.13 shows funding commitments and disbursements to schools and libraries by funding year since 1998. The commitments and disbursements are shown by the type of service funded (internal connections, Internet access, and telecommunications). Chart 19.7 graphically shows the total schools and libraries mechanism’s funding commitments and disbursements. Table 19.14 shows, on a state-by-state basis, funding commitments to schools and libraries for the July 1, 2006 through June 30, 2007 Funding Year.

#### **5. Rural Health Care**

The Rural Health Care support mechanism enables health care providers in rural areas to pay no more than their urban counterparts for similar telecommunications services necessary for the provision of health care. Eligible rural health care providers can also receive a 25% discount off the monthly cost of Internet access reasonably related to the health care needs of the facility. Additionally, rural health care providers in *entirely rural* states are eligible to receive a 50% discount off the monthly cost of advanced telecommunications and information services reasonably related to the health care needs of the facility. Further, mobile rural health care providers utilizing satellite service can receive support for the difference between the rate for the satellite service and the rate for an urban wireline service with a similar bandwidth.

Table 19.15 and Chart 19.8 show rural health care fund disbursements by service speed since 1998. Table 19.16 shows rural health care fund disbursements by service speed and on a state-by-state basis for the funding period July 1, 2006 through June 30, 2007.

#### **6. Contributions to the Universal Service Fund**

Carriers contribute to universal service support mechanisms based on interstate and international end-user revenues. Since November 1999, all contributions to the USF are based on interstate end-user revenues. Table 19.17 shows interstate and intrastate contribution rates since the first quarter of 1998. Table 19.18 shows changes in the shares of contributions over time by type of service provider. Shares have changed because of differential pricing, growth trends, mergers, the removal of aDSL from the contribution base and wireless carriers now reporting greater shares of interstate revenue.

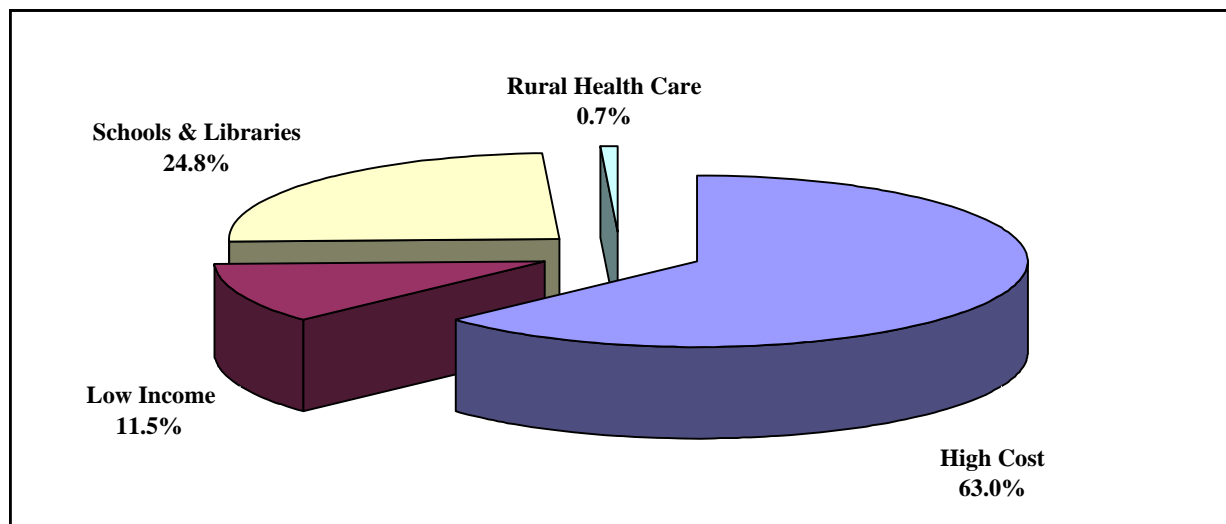
**Table 19.1**  
**Universal Service Support Mechanisms: 2007 & 2008**  
**(Dollars in Millions)**

| Mechanism                            | 2007           |                  | 2008           |                  |
|--------------------------------------|----------------|------------------|----------------|------------------|
|                                      | Disbursements  | Percent of Total | Disbursements  | Percent of Total |
| <b>High-Cost Support</b>             | <b>\$4,287</b> | <b>61.6 %</b>    | <b>\$4,478</b> | <b>63.0 %</b>    |
| High-Cost Loop Support               | 1,402          | 20.2             | 1,457          | 20.5             |
| Safety Net Additive Support          | 38             | 0.6              | 48             | 0.7              |
| Safety-Valve                         | 3              | 0.0              | 2              | 0.0              |
| High-Cost Model Support              | 346            | 5.0              | 351            | 4.9              |
| Long Term Support                    | 0              | 0.0              | 0              | 0.0              |
| Interstate Common Line Support       | 1,392          | 20.0             | 1,621          | 22.8             |
| Interstate Access Support            | 645            | 9.3              | 585            | 8.2              |
| Local Switching Support              | 460            | 6.6              | 416            | 5.9              |
| <b>Low-Income Support</b>            | <b>823</b>     | <b>11.8</b>      | <b>819</b>     | <b>11.5</b>      |
| <b>School and Libraries</b>          | <b>1,808</b>   | <b>26.0</b>      | <b>1,760</b>   | <b>24.8</b>      |
| <b>Rural Health Care</b>             | <b>37</b>      | <b>0.5</b>       | <b>49</b>      | <b>0.7</b>       |
| <b>All Universal Service Support</b> | <b>\$6,955</b> | <b>100.0 %</b>   | <b>\$7,106</b> | <b>100.0 %</b>   |

Notes: Figures may not add due to rounding. The figures used in this table are for the calendar year and include disbursements that were committed over several years but paid out in the respective calendar year (2007 or 2008). In Sections 4 and 5, figures for the Schools and Libraries program and the Rural Health Care program are reported based on fiscal year rather than calendar year.

Source: Universal Service Administration Company (USAC).

**Chart 19.1**  
**Distribution of Universal Service Payments: 2008**



**Table 19.2**  
**Universal Service Support Received by Service Provider Type: 2008**  
**(Dollars in Thousands)**

|  | High-Cost          | Low Income       | Rural Health<br>Care | Schools and<br>Libraries <sup>6</sup> | Total              | Percent of<br>Total |
|--|--------------------|------------------|----------------------|---------------------------------------|--------------------|---------------------|
| Incumbent Local Exchange Carriers                | \$3,093,299        | \$676,021        | \$7,266              | \$662,445                             | \$4,439,031        | 62.4 %              |
| Non-Traditional Providers <sup>1</sup>           | \$0                | \$0              | \$1,416              | \$301,003                             | 302,419            | 4.3                 |
| Wireless Providers <sup>2</sup>                  | \$1,361,321        | \$143,274        | \$2,629              | \$146,312                             | 1,653,537          | 23.2                |
| Competitive Local Exchange Carriers <sup>3</sup> | \$23,166           | \$0              | \$5,129              | \$424,397                             | 452,692            | 6.4                 |
| Internet Service Providers                       | \$0                | \$0              | \$541                | \$107,240                             | 107,781            | 1.5                 |
| Long Distance Providers <sup>4</sup>             | \$0                | \$0              | \$29,972             | \$91,802                              | 121,774            | 1.7                 |
| Other Providers <sup>5</sup>                     | \$0                | \$0              | \$2,505              | \$35,264                              | 37,769             | 0.5                 |
| <b>Total</b>                                     | <b>\$4,477,786</b> | <b>\$819,295</b> | <b>\$49,458</b>      | <b>\$1,768,464</b>                    | <b>\$7,115,002</b> | <b>100.0 %</b>      |

<sup>1</sup> Non-traditional providers provide eligible software, hardware, and network devices.

<sup>2</sup> Wireless providers include cellular, PCS, SMR, wireless data and other mobile providers. All CETC disbursement from Low-Income are assigned to wireless providers.

<sup>3</sup> Competitive local exchange carriers include competitive access providers, local resale, other local and shared tenant service providers. All CETC disbursement from Low-Income are assigned to wireless providers.

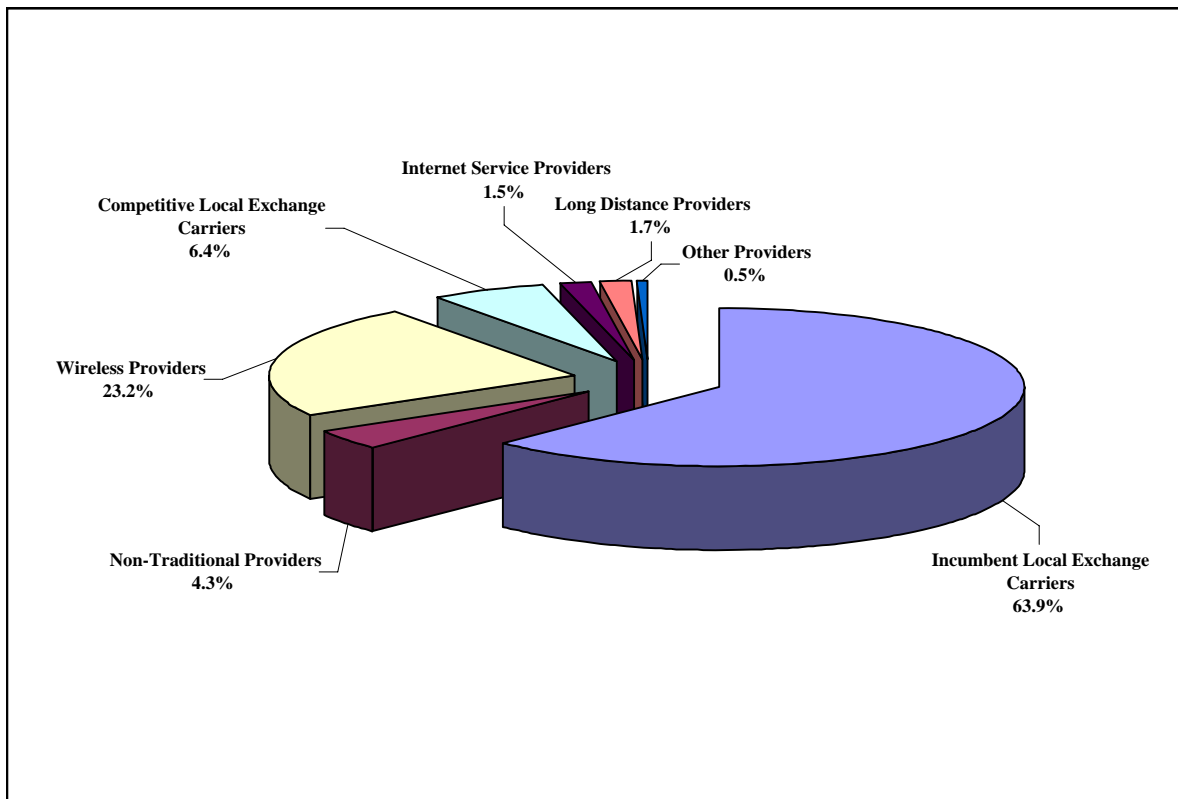
<sup>4</sup> Long distance providers include interexchange, operator service, toll resale, pre-paid card and other toll providers.

<sup>5</sup> Other providers' services include paging and messaging, payphone service provider, A38private service and satellite service.

<sup>6</sup> Schools and Libraries figure in Table 19.1 and 19.2 are slightly different. The figure in 19.1 is net authorizations (net of returned funds) and the figure in 19.2 is gross disbursements.

Source: Compiled from data provided to the FCC by Universal Service Administrative Company (USAC).

**Chart 19.2**  
**Universal Service Support Received by Service Provider Type: 2008**



**Table 19.3**  
**High-Cost Support Fund Payment History**  
(In Millions of Dollars)

| Year | High-Cost Loop Support | Safety Net Additive Support | Safety Valve Support | High-Cost Model Support | Long-Term Support* | Interstate Common Line Support | Interstate Access Support | Local Switching Support | Total Support |
|------|------------------------|-----------------------------|----------------------|-------------------------|--------------------|--------------------------------|---------------------------|-------------------------|---------------|
| 1986 | \$56                   | -                           | -                    | -                       | -                  | -                              | -                         | -                       | \$56          |
| 1987 | 126                    | -                           | -                    | -                       | -                  | -                              | -                         | -                       | 126           |
| 1988 | 183                    | -                           | -                    | -                       | -                  | -                              | -                         | -                       | 183           |
| 1989 | 265                    | -                           | -                    | -                       | \$219              | -                              | -                         | -                       | 483           |
| 1990 | 339                    | -                           | -                    | -                       | 263                | -                              | -                         | -                       | 602           |
| 1991 | 485                    | -                           | -                    | -                       | 272                | -                              | -                         | -                       | 757           |
| 1992 | 609                    | -                           | -                    | -                       | 306                | -                              | -                         | -                       | 915           |
| 1993 | 705                    | -                           | -                    | -                       | 323                | -                              | -                         | -                       | 1,028         |
| 1994 | 725                    | -                           | -                    | -                       | 347                | -                              | -                         | -                       | 1,072         |
| 1995 | 750                    | -                           | -                    | -                       | 382                | -                              | -                         | -                       | 1,132         |
| 1996 | 763                    | -                           | -                    | -                       | 426                | -                              | -                         | -                       | 1,188         |
| 1997 | 794                    | -                           | -                    | -                       | 470                | -                              | -                         | -                       | 1,263         |
| 1998 | 827                    | -                           | -                    | -                       | 473                | -                              | -                         | \$390                   | 1,690         |
| 1999 | 864                    | -                           | -                    | -                       | 473                | -                              | -                         | 380                     | 1,718         |
| 2000 | 874                    | -                           | -                    | \$219                   | 478                | -                              | \$279                     | 385                     | 2,235         |
| 2001 | 927                    | -                           | -                    | 206                     | 492                | -                              | 577                       | 390                     | 2,592         |
| 2002 | 1,045                  | -                           | -                    | 233                     | 493                | \$173                          | 615                       | 376                     | 2,935         |
| 2003 | 1,085                  | \$9                         | \$0                  | 234                     | 504                | 415                            | 622                       | 396                     | 3,265         |
| 2004 | 1,137                  | 12                          | 0                    | 273                     | 275                | 716                            | 642                       | 414                     | 3,468         |
| 2005 | 1,219                  | 15                          | 4                    | 292                     | 0                  | 1,149                          | 691                       | 426                     | 3,796         |
| 2006 | 1,309                  | 29                          | 1                    | 358                     | 4                  | 1,299                          | 681                       | 428                     | 4,110         |
| 2007 | 1,402                  | 38                          | 3                    | 346                     | 0                  | 1,419                          | 645                       | 435                     | 4,290         |
| 2008 | 1,457                  | 48                          | 2                    | 351                     | 0                  | 1,621                          | 585                       | 416                     | 4,478         |

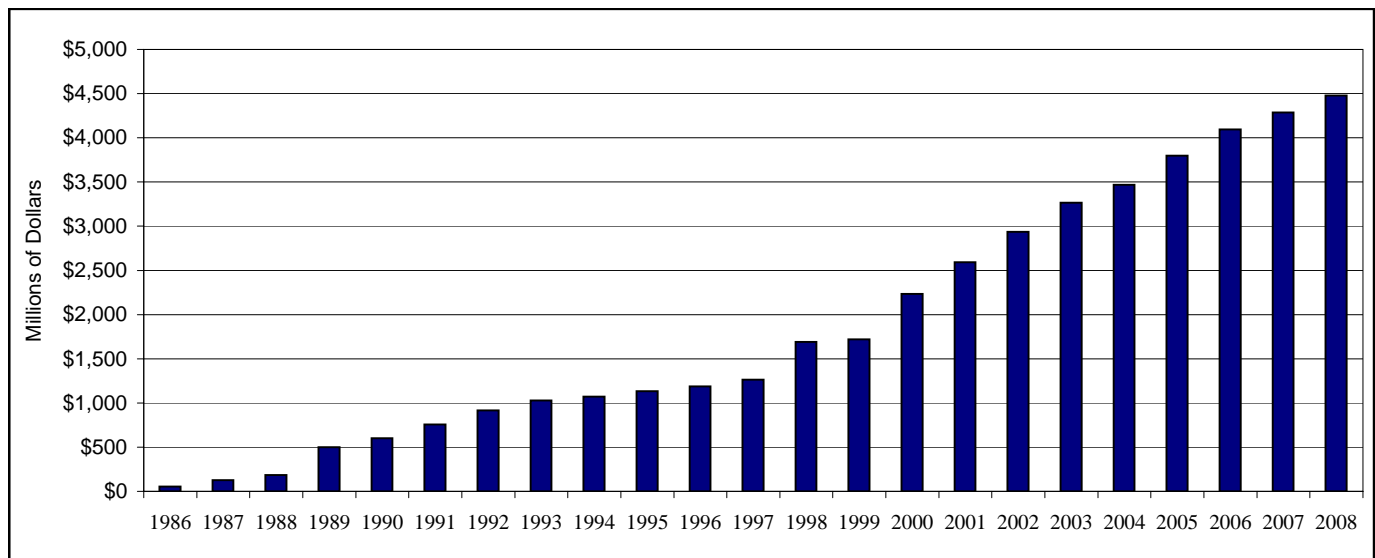
Note: Detail may not appear to add to totals due to rounding.

- Support mechanism did not exist in that year.

\* Long-Term Support was merged into Interstate Common Line Support in July 2004. Values in subsequent years are adjustments to payments made in previous years.

Sources: National Exchange Carrier Association (1986-1997),  
Universal Service Administrative Company (1998-2008).

**Chart 19.3**  
**Total High-Cost Support Fund Payments**



**Table 19.4**  
**High-Cost Support Payments by State: 2007**  
(In Thousands of Dollars)

|                          | High-Cost<br>Loop Support | Safety Net<br>Additive<br>Support | Safety Valve<br>Support | High-Cost<br>Model<br>Support | Long-Term<br>Loop Support | Interstate<br>Common Line<br>Support | Interstate<br>Access<br>Support | Local<br>Switching<br>Support | Total Support |
|--------------------------|---------------------------|-----------------------------------|-------------------------|-------------------------------|---------------------------|--------------------------------------|---------------------------------|-------------------------------|---------------|
| Alabama                  | \$19,813                  | \$444                             | \$0                     | \$44,671                      | \$0                       | \$20,475                             | \$20,269                        | \$5,997                       | \$111,668     |
| Alaska                   | 69,647                    | 821                               | 0                       | 0                             | 0                         | 73,029                               | 0                               | 16,627                        | 160,123       |
| American Samoa           | -2                        | 0                                 | 0                       | 0                             | 0                         | 2,196                                | 0                               | 961                           | 3,155         |
| Arizona                  | 28,894                    | 366                               | 0                       | 0                             | 0                         | 12,734                               | 19,899                          | 10,466                        | 72,358        |
| Arkansas                 | 67,830                    | 447                               | 0                       | 0                             | 0                         | 48,783                               | 165                             | 8,648                         | 125,874       |
| California               | 34,513                    | 264                               | 0                       | 0                             | 0                         | 22,590                               | 40,628                          | 4,930                         | 102,924       |
| Colorado                 | 36,580                    | 128                               | 0                       | 0                             | 1                         | 21,354                               | 18,641                          | 4,768                         | 81,471        |
| Connecticut              | 0                         | 0                                 | 0                       | 0                             | 0                         | 0                                    | 531                             | 0                             | 531           |
| Delaware                 | 0                         | 0                                 | 0                       | 0                             | 0                         | 0                                    | 245                             | 0                             | 245           |
| District of Columbia     | 0                         | 0                                 | 0                       | 0                             | 0                         | 0                                    | 0                               | 0                             | 0             |
| Florida                  | 10,719                    | 0                                 | 0                       | 0                             | 0                         | 11,035                               | 59,948                          | 3,822                         | 85,525        |
| Georgia                  | 35,824                    | 895                               | 0                       | 0                             | 0                         | 43,559                               | 23,574                          | 12,265                        | 116,117       |
| Guam                     | 1,440                     | 0                                 | 0                       | 0                             | 0                         | 10,854                               | 0                               | 0                             | 12,294        |
| Hawaii                   | 30,201                    | 0                                 | 0                       | 0                             | 0                         | 17,840                               | 2,561                           | 2,294                         | 52,896        |
| Idaho                    | 21,210                    | 675                               | 0                       | 0                             | 0                         | 10,802                               | 15,467                          | 7,000                         | 55,154        |
| Illinois                 | 15,429                    | 703                               | 0                       | 0                             | 0                         | 25,106                               | 10,999                          | 10,277                        | 62,515        |
| Indiana                  | 17,983                    | 761                               | 0                       | 0                             | 0                         | 20,543                               | 22,851                          | 9,381                         | 71,520        |
| Iowa                     | 36,210                    | 4,109                             | 15                      | 0                             | 0                         | 45,064                               | 8,077                           | 27,955                        | 121,429       |
| Kansas                   | 126,593                   | 3,338                             | 0                       | 0                             | 0                         | 61,945                               | 6,111                           | 16,945                        | 214,932       |
| Kentucky                 | 29,938                    | 632                               | 0                       | 16,827                        | 0                         | 26,659                               | 17,392                          | 6,102                         | 97,550        |
| Louisiana                | 97,899                    | 1,200                             | 0                       | 0                             | 0                         | 40,559                               | 13,412                          | 6,958                         | 160,028       |
| Maine                    | 8,287                     | 109                               | 0                       | 2,117                         | 0                         | 14,420                               | 95                              | 8,606                         | 33,634        |
| Maryland                 | 252                       | 91                                | 0                       | 0                             | 0                         | 890                                  | 2,492                           | 637                           | 4,362         |
| Massachusetts            | -1                        | 13                                | 0                       | 0                             | 0                         | 234                                  | 1,660                           | 553                           | 2,460         |
| Michigan                 | 29,077                    | 178                               | 0                       | 0                             | 0                         | 23,581                               | 674                             | 11,345                        | 64,855        |
| Minnesota                | 49,390                    | 3,346                             | 23                      | 0                             | 0                         | 52,099                               | 3,897                           | 21,362                        | 130,116       |
| Mississippi              | 34,538                    | 633                               | 0                       | 197,320                       | 0                         | 18,441                               | 24,210                          | 5,086                         | 280,229       |
| Missouri                 | 46,400                    | 1,391                             | 0                       | 0                             | 0                         | 33,734                               | 9,462                           | 7,126                         | 98,112        |
| Montana                  | 26,247                    | 214                               | 0                       | 20,580                        | 0                         | 22,231                               | 864                             | 7,108                         | 77,243        |
| Nebraska                 | 33,029                    | 1,107                             | 0                       | 11,094                        | 0                         | 31,422                               | 9,268                           | 19,286                        | 105,206       |
| Nevada                   | 6,306                     | 277                               | 0                       | 0                             | 0                         | 5,711                                | 10,376                          | 6,372                         | 29,042        |
| New Hampshire            | 275                       | 32                                | 0                       | 0                             | 0                         | 2,738                                | 1,835                           | 3,751                         | 8,631         |
| New Jersey               | 0                         | 0                                 | 0                       | 0                             | 0                         | 237                                  | 270                             | 629                           | 1,136         |
| New Mexico               | 29,496                    | 184                               | 0                       | 0                             | 0                         | 18,540                               | 10,642                          | 10,585                        | 69,448        |
| New York                 | 6,415                     | 1,104                             | 0                       | 0                             | 0                         | 12,174                               | 18,234                          | 13,868                        | 51,795        |
| North Carolina           | 12,529                    | 0                                 | 0                       | 0                             | 0                         | 35,814                               | 29,047                          | 6,043                         | 83,433        |
| North Dakota             | 27,579                    | 1,684                             | 95                      | 0                             | 0                         | 36,519                               | 962                             | 16,006                        | 82,845        |
| Northern Mariana Islands | 0                         | 0                                 | 0                       | 0                             | 0                         | 0                                    | 444                             | 1,082                         | 1,526         |
| Ohio                     | 9,664                     | 1,624                             | 0                       | 0                             | 0                         | 12,662                               | 12,450                          | 4,187                         | 40,587        |
| Oklahoma                 | 61,814                    | 1,822                             | 0                       | 0                             | 0                         | 47,207                               | 2,361                           | 17,060                        | 130,265       |
| Oregon                   | 28,239                    | 417                               | 0                       | 0                             | 0                         | 22,323                               | 20,134                          | 8,986                         | 80,098        |
| Pennsylvania             | 2,004                     | 69                                | 0                       | 0                             | 0                         | 30,702                               | 21,718                          | 5,031                         | 59,524        |
| Puerto Rico              | 0                         | 0                                 | 0                       | 0                             | 0                         | 160,755                              | 0                               | 0                             | 160,755       |
| Rhode Island             | 0                         | 0                                 | 0                       | 0                             | 0                         | 0                                    | 31                              | 0                             | 31            |
| South Carolina           | 23,041                    | 1,751                             | 0                       | 0                             | 0                         | 39,685                               | 11,175                          | 5,161                         | 80,813        |
| South Dakota             | 40,116                    | 2,430                             | 116                     | 2,445                         | 0                         | 34,498                               | 31                              | 14,796                        | 94,432        |
| Tennessee                | 12,294                    | 504                               | 0                       | 0                             | 0                         | 23,145                               | 9,793                           | 6,396                         | 52,131        |
| Texas                    | 114,466                   | 805                               | 0                       | 0                             | 0                         | 67,840                               | 44,274                          | 19,058                        | 246,443       |
| Utah                     | 6,298                     | 111                               | 159                     | 0                             | 0                         | 8,748                                | 2,535                           | 4,632                         | 22,482        |
| Vermont                  | 6,950                     | 451                               | 0                       | 9,881                         | 0                         | 7,427                                | 2,400                           | 3,943                         | 31,053        |
| Virgin Islands           | 11,136                    | 0                                 | 0                       | 0                             | 0                         | 12,127                               | 0                               | 0                             | 23,263        |
| Virginia                 | 3,584                     | 324                               | 0                       | 0                             | 0                         | 8,099                                | 61,719                          | 5,360                         | 79,087        |
| Washington               | 30,202                    | 51                                | 0                       | 0                             | 0                         | 31,880                               | 25,637                          | 7,377                         | 95,147        |
| West Virginia            | 9,863                     | 121                               | 0                       | 27,594                        | 0                         | 2,662                                | 19,473                          | 3,565                         | 63,279        |
| Wisconsin                | 36,896                    | 2,519                             | 2,562                   | 0                             | 0                         | 72,218                               | 256                             | 27,241                        | 141,691       |
| Wyoming                  | 15,373                    | 318                               | 0                       | 13,734                        | 0                         | 13,542                               | 5,802                           | 7,457                         | 56,225        |
| Total                    | \$1,402,482               | \$38,462                          | \$2,968                 | \$346,264                     | \$1                       | \$1,419,433                          | \$644,991                       | \$435,088                     | \$4,289,688   |

Note : The reason some values are negative is that support amounts include prior period adjustments.

Source: The data are derived from individual company payments reported on the USAC web site.



**Table 19.4 - Continued**  
**High-Cost Support Payments by State: 2008**  
(In Thousands of Dollars)

|                          | High-Cost<br>Loop Support | Safety Net<br>Additive<br>Support | Safety Valve<br>Support | High-Cost<br>Model<br>Support | Long-Term<br>Loop Support | Interstate<br>Common Line<br>Support | Interstate<br>Access<br>Support | Local<br>Switching<br>Support | Total Support |
|--------------------------|---------------------------|-----------------------------------|-------------------------|-------------------------------|---------------------------|--------------------------------------|---------------------------------|-------------------------------|---------------|
| Alabama                  | \$19,809                  | \$185                             | \$0                     | \$43,355                      | \$0                       | \$19,646                             | \$19,093                        | \$5,715                       | \$107,802     |
| Alaska                   | 70,769                    | 634                               | 0                       | 0                             | 0                         | 75,219                               | 0                               | 15,561                        | 162,184       |
| American Samoa           | 0                         | 0                                 | 0                       | 0                             | 0                         | 2,450                                | 0                               | 1,536                         | 3,986         |
| Arizona                  | 29,070                    | 511                               | 0                       | 0                             | 0                         | 13,100                               | 17,893                          | 9,282                         | 69,856        |
| Arkansas                 | 80,985                    | 369                               | 0                       | 0                             | 0                         | 60,956                               | 137                             | 11,072                        | 153,518       |
| California               | 35,386                    | 344                               | 0                       | 0                             | 0                         | 23,991                               | 40,543                          | 4,673                         | 104,936       |
| Colorado                 | 35,109                    | 154                               | 0                       | 0                             | 0                         | 23,022                               | 17,669                          | 4,752                         | 80,706        |
| Connecticut              | 0                         | 0                                 | 0                       | 0                             | 0                         | -185                                 | 477                             | -112                          | 180           |
| Delaware                 | 0                         | 0                                 | 0                       | 0                             | 0                         | 0                                    | 213                             | 0                             | 213           |
| District of Columbia     | 0                         | 0                                 | 0                       | 0                             | 0                         | 0                                    | 0                               | 0                             | 0             |
| Florida                  | 10,182                    | 0                                 | 0                       | 0                             | 0                         | 9,847                                | 53,554                          | 3,710                         | 77,293        |
| Georgia                  | 36,629                    | 1,191                             | 0                       | 0                             | 0                         | 59,457                               | 22,865                          | 14,022                        | 134,164       |
| Guam                     | 1,471                     | 0                                 | 0                       | 0                             | 0                         | 14,758                               | 0                               | 0                             | 16,229        |
| Hawaii                   | 37,545                    | 0                                 | 0                       | 0                             | 0                         | 20,022                               | 2,081                           | 2,211                         | 61,859        |
| Idaho                    | 20,780                    | 422                               | 0                       | 0                             | 0                         | 11,933                               | 14,397                          | 6,365                         | 53,898        |
| Illinois                 | 20,130                    | 617                               | 0                       | 0                             | 0                         | 27,869                               | 11,077                          | 11,322                        | 71,016        |
| Indiana                  | 19,135                    | 895                               | 0                       | 0                             | 0                         | 25,292                               | 19,455                          | 9,218                         | 73,994        |
| Iowa                     | 38,367                    | 3,352                             | 9                       | 0                             | 0                         | 55,293                               | 11,697                          | 24,424                        | 133,141       |
| Kansas                   | 128,865                   | 2,681                             | 550                     | 0                             | 0                         | 68,210                               | 6,450                           | 14,499                        | 221,255       |
| Kentucky                 | 36,123                    | 1,492                             | 0                       | 16,146                        | 0                         | 28,516                               | 15,903                          | 5,908                         | 104,088       |
| Louisiana                | 95,217                    | 1,940                             | 0                       | 0                             | 0                         | 43,526                               | 13,680                          | 5,972                         | 160,335       |
| Maine                    | 6,822                     | 472                               | 0                       | 2,185                         | 0                         | 15,409                               | 54                              | 7,508                         | 32,450        |
| Maryland                 | 242                       | 0                                 | 0                       | 0                             | 0                         | 885                                  | 2,346                           | 599                           | 4,072         |
| Massachusetts            | 11                        | 42                                | 0                       | 0                             | 0                         | 174                                  | 1,502                           | 635                           | 2,365         |
| Michigan                 | 26,842                    | 178                               | 0                       | 0                             | 0                         | 25,597                               | 720                             | 10,660                        | 63,996        |
| Minnesota                | 47,964                    | 2,627                             | 14                      | 0                             | 0                         | 60,625                               | 3,821                           | 18,913                        | 133,964       |
| Mississippi              | 34,813                    | 991                               | 0                       | 203,920                       | 0                         | 21,148                               | 23,319                          | 4,935                         | 289,126       |
| Missouri                 | 53,128                    | 1,547                             | 0                       | 0                             | 0                         | 38,960                               | 9,850                           | 7,046                         | 110,530       |
| Montana                  | 27,942                    | 213                               | 0                       | 18,993                        | 0                         | 24,325                               | 827                             | 7,017                         | 79,317        |
| Nebraska                 | 36,373                    | 753                               | 0                       | 10,997                        | 0                         | 35,624                               | 8,631                           | 21,311                        | 113,689       |
| Nevada                   | 5,079                     | 0                                 | 0                       | 0                             | 0                         | 6,686                                | 10,088                          | 5,970                         | 27,823        |
| New Hampshire            | 228                       | 33                                | 0                       | 0                             | 0                         | 3,543                                | 848                             | 4,011                         | 8,662         |
| New Jersey               | 0                         | 0                                 | 0                       | 0                             | 0                         | 333                                  | 253                             | 432                           | 1,018         |
| New Mexico               | 28,578                    | 192                               | 0                       | 0                             | 0                         | 16,905                               | 12,335                          | 7,214                         | 65,224        |
| New York                 | 5,461                     | 2,023                             | 0                       | 0                             | 0                         | 12,836                               | 13,820                          | 13,514                        | 47,654        |
| North Carolina           | 12,359                    | 0                                 | 0                       | 0                             | 0                         | 34,770                               | 26,389                          | 4,751                         | 78,269        |
| North Dakota             | 30,686                    | 5,349                             | 74                      | 0                             | 0                         | 40,760                               | 822                             | 15,814                        | 93,505        |
| Northern Mariana Islands | 0                         | 0                                 | 0                       | 0                             | 0                         | 0                                    | 248                             | 473                           | 722           |
| Ohio                     | 8,201                     | 641                               | 0                       | 0                             | 0                         | 16,124                               | 11,112                          | 3,896                         | 39,973        |
| Oklahoma                 | 67,559                    | 6,368                             | 0                       | 0                             | 0                         | 52,750                               | 1,945                           | 16,314                        | 144,936       |
| Oregon                   | 29,811                    | 524                               | 0                       | 0                             | 0                         | 25,393                               | 18,288                          | 9,940                         | 83,955        |
| Pennsylvania             | 1,826                     | 44                                | 0                       | 0                             | 0                         | 28,216                               | 20,158                          | 4,092                         | 54,335        |
| Puerto Rico              | 0                         | 0                                 | 0                       | 0                             | 0                         | 215,609                              | 0                               | 0                             | 215,609       |
| Rhode Island             | 0                         | 0                                 | 0                       | 0                             | 0                         | 0                                    | 31                              | 0                             | 31            |
| South Carolina           | 30,392                    | 1,408                             | 0                       | 0                             | 0                         | 45,187                               | 10,077                          | 5,408                         | 92,472        |
| South Dakota             | 42,607                    | 2,288                             | 104                     | 2,381                         | 0                         | 35,343                               | 111                             | 12,413                        | 95,246        |
| Tennessee                | 13,383                    | 2,136                             | 0                       | 0                             | 0                         | 24,825                               | 9,353                           | 6,124                         | 55,821        |
| Texas                    | 116,007                   | 675                               | 0                       | 0                             | 0                         | 77,760                               | 46,041                          | 19,200                        | 259,685       |
| Utah                     | 5,186                     | 41                                | 81                      | 0                             | 0                         | 8,997                                | 2,358                           | 3,785                         | 20,447        |
| Vermont                  | 5,581                     | 460                               | 0                       | 9,606                         | 0                         | 8,530                                | 1,357                           | 3,550                         | 29,084        |
| Virgin Islands           | 8,994                     | 0                                 | 0                       | 0                             | 0                         | 12,135                               | 0                               | 0                             | 21,129        |
| Virginia                 | 3,024                     | 259                               | 0                       | 0                             | 0                         | 9,277                                | 56,999                          | 5,029                         | 74,587        |
| Washington               | 31,373                    | 95                                | 0                       | 0                             | 0                         | 39,257                               | -1,811                          | 8,128                         | 77,042        |
| West Virginia            | 8,650                     | 81                                | 0                       | 29,961                        | 0                         | 3,304                                | 19,997                          | 3,331                         | 65,325        |
| Wisconsin                | 34,873                    | 3,115                             | 1,011                   | 0                             | 0                         | 81,715                               | 181                             | 25,463                        | 146,357       |
| Wyoming                  | 17,001                    | 186                               | 0                       | 13,026                        | 148                       | 14,671                               | 5,363                           | 8,319                         | 58,714        |
| Total                    | \$1,456,567               | \$47,528                          | \$1,842                 | \$350,571                     | \$148                     | \$1,620,591                          | \$584,614                       | \$415,924                     | \$4,477,786   |

Note : The reason some values are negative is that support amounts include prior period adjustments.

Source: The data are derived from individual company payments reported on the USAC web site.

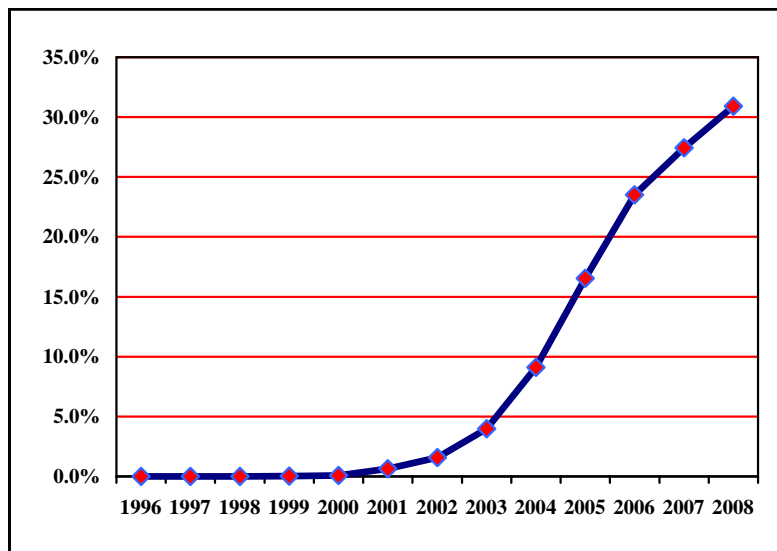
**Table 19.5**  
**High-Cost Support Received by Incumbent LECs and CETCs**  
**(In Millions of Dollars)**

|      | <b>ILECs</b> | <b>CETCs</b> | <b>Total</b> | <b>Percent CETCs</b> |
|------|--------------|--------------|--------------|----------------------|
| 1996 | \$1,188      | \$0          | \$1,188      | 0.0 %                |
| 1997 | 1,263        | 0            | 1,263        | 0.0                  |
| 1998 | 1,690        | 0            | 1,690        | 0.0                  |
| 1999 | 1,717        | 1            | 1,718        | 0.0                  |
| 2000 | 2,233        | 1            | 2,235        | 0.1                  |
| 2001 | 2,575        | 17           | 2,592        | 0.7                  |
| 2002 | 2,889        | 46           | 2,935        | 1.6                  |
| 2003 | 3,136        | 130          | 3,265        | 4.0                  |
| 2004 | 3,153        | 316          | 3,468        | 9.1                  |
| 2005 | 3,169        | 628          | 3,796        | 16.5                 |
| 2006 | 3,143        | 967          | 4,110        | 23.5                 |
| 2007 | 3,112        | 1,177        | 4,290        | 27.4                 |
| 2008 | 3,093        | 1,384        | 4,478        | 30.9                 |

Notes: ILECs is an abbreviation for incumbent local exchange carriers. CETCs is an abbreviation for competitive eligible telecommunications carriers. CETCs include both wireless and wireline carriers.

Sources: National Exchange Carrier Association (1996-1997).  
Universal Service Administrative Company (1998-2008).

**Chart 19.4**  
**Percent of High-Cost Support Received by CETCs**



**Table 19.6**  
**High-Cost Support by Type of Carriers: 2008**  
(In Thousands of Dollars)

|                          | ILECs <sup>1</sup> | CETCs <sup>2</sup> | Percent<br>CETCs <sup>2</sup> | Rural<br>Carriers | Non-Rural<br>Carriers | Percent Non-<br>Rural<br>Carriers | Total       |
|--------------------------|--------------------|--------------------|-------------------------------|-------------------|-----------------------|-----------------------------------|-------------|
| Alabama                  | \$89,052           | \$18,750           | 17.4 %                        | \$43,321          | \$64,481              | 59.8 %                            | \$107,802   |
| Alaska                   | 87,645             | 74,539             | 46.0                          | 119,195           | 42,989                | 26.5                              | 162,184     |
| American Samoa           | 673                | 3,313              | 83.1                          | 1,858             | 2,128                 | 53.4                              | 3,986       |
| Arizona                  | 57,388             | 12,468             | 17.8                          | 54,032            | 15,824                | 22.7                              | 69,856      |
| Arkansas                 | 91,833             | 61,686             | 40.2                          | 129,824           | 23,694                | 15.4                              | 153,518     |
| California               | 104,652            | 284                | 0.3                           | 65,873            | 39,064                | 37.2                              | 104,936     |
| Colorado                 | 70,409             | 10,297             | 12.8                          | 59,421            | 21,285                | 26.4                              | 80,706      |
| Connecticut              | 180                | 0                  | 0.0                           | -298              | 477                   | 266.5                             | 180         |
| Delaware                 | 213                | 0                  | 0.0                           | 0                 | 213                   | 100.0                             | 213         |
| District of Columbia     | 0                  | 0                  | NA                            | 0                 | 0                     | NA                                | 0           |
| Florida                  | 62,842             | 14,451             | 18.7                          | 38,501            | 38,792                | 50.2                              | 77,293      |
| Georgia                  | 110,709            | 23,455             | 17.5                          | 102,209           | 31,954                | 23.8                              | 134,164     |
| Guam                     | 7,121              | 9,108              | 56.1                          | 7,870             | 8,359                 | 51.5                              | 16,229      |
| Hawaii                   | 28,207             | 33,653             | 54.4                          | 48,383            | 13,476                | 21.8                              | 61,859      |
| Idaho                    | 46,202             | 7,697              | 14.3                          | 51,185            | 2,714                 | 5.0                               | 53,898      |
| Illinois                 | 58,367             | 12,649             | 17.8                          | 57,449            | 13,567                | 19.1                              | 71,016      |
| Indiana                  | 66,440             | 7,553              | 10.2                          | 54,636            | 19,358                | 26.2                              | 73,994      |
| Iowa                     | 68,151             | 64,990             | 48.8                          | 99,597            | 33,544                | 25.2                              | 133,141     |
| Kansas                   | 135,791            | 85,463             | 38.6                          | 193,818           | 27,437                | 12.4                              | 221,255     |
| Kentucky                 | 75,277             | 28,812             | 27.7                          | 64,302            | 39,786                | 38.2                              | 104,088     |
| Louisiana                | 94,023             | 66,312             | 41.4                          | 129,232           | 31,103                | 19.4                              | 160,335     |
| Maine                    | 21,209             | 11,241             | 34.6                          | 24,927            | 7,523                 | 23.2                              | 32,450      |
| Maryland                 | 4,072              | 0                  | 0.0                           | 1,726             | 2,346                 | 57.6                              | 4,072       |
| Massachusetts            | 2,365              | 0                  | 0.0                           | 863               | 1,502                 | 63.5                              | 2,365       |
| Michigan                 | 41,667             | 22,330             | 34.9                          | 54,271            | 9,725                 | 15.2                              | 63,996      |
| Minnesota                | 83,982             | 49,982             | 37.3                          | 110,440           | 23,524                | 17.6                              | 133,964     |
| Mississippi              | 127,609            | 161,517            | 55.9                          | 52,753            | 236,373               | 81.8                              | 289,126     |
| Missouri                 | 92,141             | 18,390             | 16.6                          | 99,512            | 11,019                | 10.0                              | 110,530     |
| Montana                  | 66,366             | 12,951             | 16.3                          | 56,751            | 22,566                | 28.5                              | 79,317      |
| Nebraska                 | 54,168             | 59,520             | 52.4                          | 76,634            | 37,055                | 32.6                              | 113,689     |
| Nevada                   | 20,979             | 6,844              | 24.6                          | 18,279            | 9,544                 | 34.3                              | 27,823      |
| New Hampshire            | 8,380              | 281                | 3.2                           | 7,749             | 913                   | 10.5                              | 8,662       |
| New Jersey               | 1,018              | 0                  | 0.0                           | 1,018             | 0                     | 0.0                               | 1,018       |
| New Mexico               | 49,996             | 15,228             | 23.3                          | 53,560            | 11,664                | 17.9                              | 65,224      |
| New York                 | 44,719             | 2,936              | 6.2                           | 38,960            | 8,694                 | 18.2                              | 47,654      |
| North Carolina           | 68,314             | 9,954              | 12.7                          | 53,917            | 24,352                | 31.1                              | 78,269      |
| North Dakota             | 47,036             | 46,469             | 49.7                          | 72,337            | 21,168                | 22.6                              | 93,505      |
| Northern Mariana Islands | 276                | 446                | 61.8                          | 552               | 170                   | 23.5                              | 722         |
| Ohio                     | 39,973             | 0                  | 0.0                           | 33,869            | 6,104                 | 15.3                              | 39,973      |
| Oklahoma                 | 112,897            | 32,039             | 22.1                          | 131,259           | 13,677                | 9.4                               | 144,936     |
| Oregon                   | 59,804             | 24,151             | 28.8                          | 60,533            | 23,422                | 27.9                              | 83,955      |
| Pennsylvania             | 52,805             | 1,531              | 2.8                           | 41,703            | 12,632                | 23.2                              | 54,335      |
| Puerto Rico              | 59,557             | 156,051            | 72.4                          | 0                 | 215,609               | 100.0                             | 215,609     |
| Rhode Island             | 31                 | 0                  | 0.0                           | 0                 | 31                    | 100.0                             | 31          |
| South Carolina           | 85,924             | 6,549              | 7.1                           | 81,005            | 11,467                | 12.4                              | 92,472      |
| South Dakota             | 58,389             | 36,857             | 38.7                          | 78,923            | 16,323                | 17.1                              | 95,246      |
| Tennessee                | 54,716             | 1,105              | 2.0                           | 48,275            | 7,546                 | 13.5                              | 55,821      |
| Texas                    | 223,234            | 36,451             | 14.0                          | 217,771           | 41,913                | 16.1                              | 259,685     |
| Utah                     | 20,083             | 364                | 1.8                           | 19,075            | 1,372                 | 6.7                               | 20,447      |
| Vermont                  | 22,713             | 6,372              | 21.9                          | 16,349            | 12,736                | 43.8                              | 29,084      |
| Virgin Islands           | 19,737             | 1,392              | 6.6                           | 19,945            | 1,184                 | 5.6                               | 21,129      |
| Virginia                 | 59,484             | 15,103             | 20.2                          | 26,715            | 47,872                | 64.2                              | 74,587      |
| Washington               | 64,379             | 12,663             | 16.4                          | 65,661            | 11,381                | 14.8                              | 77,042      |
| West Virginia            | 48,114             | 17,210             | 26.3                          | 21,995            | 43,329                | 66.3                              | 65,325      |
| Wisconsin                | 82,563             | 63,794             | 43.6                          | 108,342           | 38,015                | 26.0                              | 146,357     |
| Wyoming                  | 39,426             | 19,288             | 32.9                          | 36,352            | 22,362                | 38.1                              | 58,714      |
| Total                    | \$3,093,299        | \$1,384,487        | 30.9 %                        | \$3,052,428       | \$1,425,357           | 31.8                              | \$4,477,786 |

Figures may not add up due to rounding.

NA - Not Applicable

<sup>1</sup> ILECs is an abbreviation for incumbent local exchange carriers.

<sup>2</sup> CETCs is an abbreviation for competitive eligible telecommunications carriers. CETCs include both wireline and wireless carriers.

Source: Universal Service Administrative Company.

**Table 19.7**  
**Lifeline Monthly Support by State or Jurisdiction**  
**(As of March 31, 2008)**

|                      | Basic Federal Support <sup>1</sup> |        |        | Additional State Support <sup>2</sup> |        |        | Federal Match |        |        | Total Federal Support |         |        | Total Federal and State Support <sup>2</sup> |         |         |
|----------------------|------------------------------------|--------|--------|---------------------------------------|--------|--------|---------------|--------|--------|-----------------------|---------|--------|--|---------|---------|
|                      | Min.                               | Max.   | Avg.   | Min.                                  | Max.   | Avg.   | Min.          | Max.   | Avg.   | Min.                  | Max.    | Avg.   | Min.   | Max.    | Avg.    |
| Alabama              | \$8.25                             | \$8.25 | \$8.25 | \$1.18                                | \$3.50 | \$3.39 | \$0.59        | \$1.75 | \$1.70 | \$8.84                | \$10.00 | \$9.95 | \$10.02                                      | \$13.50 | \$13.34 |
| Alaska               | 8.25                               | 8.25   | 8.25   | 3.50                                  | 3.50   | 3.50   | 1.75          | 1.75   | 1.75   | 10.00                 | 10.00   | 10.00  | 13.50  | 13.50   | 13.50   |
| American Samoa       | 8.25                               | 8.25   | 8.25   | 0.00                                  | 0.00   | 0.00   | 0.00          | 0.00   | 0.00   | 8.25                  | 8.25    | 8.25   | 8.25   | 8.25    | 8.25    |
| Arizona              | 8.05                               | 8.25   | 8.20   | 0.00                                  | 3.50   | 2.56   | 0.00          | 1.75   | 1.28   | 8.05                  | 10.00   | 9.48   | 8.05   | 13.50   | 12.04   |
| Arkansas             | 5.25                               | 8.25   | 7.45   | 0.00                                  | 3.50   | 1.69   | 0.00          | 1.75   | 0.84   | 5.25                  | 10.00   | 8.29   | 5.25   | 13.50   | 9.98    |
| California           | 3.98                               | 8.25   | 6.62   | 2.00                                  | 3.50   | 2.56   | 1.00          | 1.75   | 1.28   | 4.98                  | 10.00   | 7.90   | 6.98   | 13.50   | 10.45   |
| Colorado             | 8.25                               | 8.25   | 8.25   | 0.00                                  | 3.50   | 3.48   | 0.00          | 1.75   | 1.74   | 8.25                  | 10.00   | 9.99   | 8.25   | 13.50   | 13.46   |
| Connecticut          | 7.49                               | 7.49   | 7.49   | 1.18                                  | 1.18   | 1.18   | 0.59          | 0.59   | 0.59   | 8.08                  | 8.08    | 8.08   | 9.26   | 9.26    | 9.26    |
| Delaware             | 8.20                               | 8.20   | 8.20   | 0.00                                  | 0.00   | 0.00   | 0.00          | 0.00   | 0.00   | 8.20                  | 8.20    | 8.20   | 8.20   | 8.20    | 8.20    |
| District of Columbia | 5.61                               | 5.61   | 5.61   | 3.50                                  | 3.50   | 3.50   | 1.75          | 1.75   | 1.75   | 7.36                  | 7.36    | 7.36   | 10.86  | 10.86   | 10.86   |
| Florida              | 8.06                               | 8.25   | 8.25   | 0.00                                  | 3.50   | 3.50   | 0.00          | 1.75   | 1.75   | 8.06                  | 10.00   | 9.99   | 8.06   | 13.50   | 13.49   |
| Georgia              | 6.50                               | 8.25   | 8.25   | 0.00                                  | 3.50   | 3.36   | 0.00          | 1.75   | 1.68   | 6.50                  | 10.00   | 9.93   | 6.50   | 13.50   | 13.30   |
| Guam                 | 8.25                               | 8.25   | 8.25   | 3.50                                  | 3.50   | 3.50   | 1.75          | 1.75   | 1.75   | 10.00                 | 10.00   | 10.00  | 13.50  | 13.50   | 13.50   |
| Hawaii               | 8.25                               | 8.25   | 8.25   | 0.00                                  | 0.00   | 0.00   | 0.00          | 0.00   | 0.00   | 8.25                  | 8.25    | 8.25   | 8.25   | 8.25    | 8.25    |
| Idaho                | 6.50                               | 8.25   | 8.17   | 0.00                                  | 3.50   | 3.44   | 0.00          | 1.75   | 1.72   | 6.50                  | 10.00   | 9.89   | 6.50   | 13.50   | 13.34   |
| Illinois             | 6.24                               | 8.25   | 6.57   | 0.00                                  | 2.50   | 0.11   | 0.00          | 1.25   | 0.05   | 6.24                  | 9.50    | 6.62   | 6.24   | 12.00   | 6.73    |
| Indiana              | 5.25                               | 8.25   | 7.52   | 0.00                                  | 0.00   | 0.00   | 0.00          | 0.00   | 0.00   | 5.25                  | 8.25    | 7.52   | 5.25   | 8.25    | 7.52    |
| Iowa                 | 6.55                               | 8.25   | 7.11   | 0.00                                  | 3.50   | 0.32   | 0.00          | 1.75   | 0.16   | 6.55                  | 10.00   | 7.27   | 6.55   | 13.50   | 7.58    |
| Kansas               | 6.50                               | 8.25   | 7.31   | 0.00                                  | 3.50   | 3.44   | 0.00          | 1.75   | 1.72   | 6.50                  | 10.00   | 9.03   | 6.50   | 13.50   | 12.47   |
| Kentucky             | 7.00                               | 8.25   | 8.17   | 0.00                                  | 3.50   | 2.80   | 0.00          | 1.75   | 1.40   | 7.00                  | 10.00   | 9.57   | 7.00   | 13.50   | 12.37   |
| Louisiana            | 8.25                               | 8.25   | 8.25   | 0.00                                  | 3.50   | 0.41   | 0.00          | 1.75   | 0.21   | 8.25                  | 10.00   | 8.46   | 8.25   | 13.50   | 8.87    |
| Maine                | 8.15                               | 8.25   | 8.17   | 0.00                                  | 3.50   | 3.47   | 0.00          | 1.75   | 1.73   | 8.15                  | 10.00   | 9.91   | 8.15   | 13.50   | 13.37   |
| Maryland             | 7.43                               | 8.25   | 7.43   | 0.84                                  | 3.42   | 3.42   | 0.42          | 1.71   | 1.71   | 7.85                  | 9.96    | 9.14   | 8.69   | 13.38   | 12.56   |
| Massachusetts        | 8.15                               | 8.25   | 8.15   | 3.50                                  | 3.50   | 3.50   | 1.75          | 1.75   | 1.75   | 9.90                  | 10.00   | 9.90   | 13.40  | 13.50   | 13.40   |
| Michigan             | 7.10                               | 8.25   | 7.26   | 0.52                                  | 3.50   | 2.21   | 0.26          | 1.75   | 1.11   | 7.36                  | 10.00   | 8.37   | 7.88   | 13.50   | 10.58   |
| Minnesota            | 6.50                               | 8.25   | 7.16   | 0.00                                  | 3.50   | 1.84   | 0.00          | 1.75   | 0.92   | 6.50                  | 10.00   | 8.08   | 6.50   | 13.50   | 9.92    |
| Mississippi          | 8.25                               | 8.25   | 8.25   | 0.00                                  | 3.50   | 3.36   | 0.00          | 1.75   | 1.68   | 8.25                  | 10.00   | 9.93   | 8.25   | 13.50   | 13.29   |
| Missouri             | 6.50                               | 8.25   | 7.34   | 0.00                                  | 3.50   | 3.45   | 0.00          | 1.75   | 1.72   | 6.50                  | 10.00   | 9.06   | 6.50   | 13.50   | 12.51   |
| Montana              | 8.25                               | 8.25   | 8.25   | 0.00                                  | 3.50   | 2.85   | 0.00          | 1.75   | 1.43   | 8.25                  | 10.00   | 9.68   | 8.25   | 13.50   | 12.53   |
| Nebraska             | 6.06                               | 8.25   | 7.03   | 0.00                                  | 3.50   | 3.39   | 0.00          | 1.75   | 1.70   | 6.06                  | 10.00   | 8.72   | 6.06   | 13.50   | 12.12   |
| Nevada               | 5.53                               | 8.25   | 6.30   | 0.00                                  | 3.50   | 1.86   | 0.00          | 1.75   | 0.93   | 5.53                  | 10.00   | 7.23   | 5.53   | 13.50   | 9.09    |
| New Hampshire        | 8.14                               | 8.25   | 8.16   | 0.00                                  | 0.00   | 0.00   | 0.00          | 0.00   | 0.00   | 8.14                  | 8.25    | 8.16   | 8.14   | 8.25    | 8.16    |
| New Jersey           | 7.07                               | 8.25   | 8.03   | 0.00                                  | 3.50   | 3.48   | 0.00          | 1.75   | 1.74   | 7.07                  | 10.00   | 9.77   | 7.07   | 13.50   | 13.25   |
| New Mexico           | 8.25                               | 8.25   | 8.25   | 0.00                                  | 3.50   | 3.08   | 0.00          | 1.75   | 1.54   | 8.25                  | 10.00   | 9.79   | 8.25   | 13.50   | 12.87   |
| New York             | 5.93                               | 8.25   | 8.03   | 0.00                                  | 3.50   | 3.11   | 0.00          | 1.75   | 1.56   | 5.93                  | 10.00   | 9.59   | 5.93   | 13.50   | 12.70   |
| North Carolina       | 7.43                               | 8.25   | 7.89   | 3.50                                  | 3.50   | 3.49   | 1.75          | 1.75   | 1.75   | 9.18                  | 10.00   | 9.63   | 12.68  | 13.50   | 13.13   |
| North Dakota         | 8.25                               | 8.25   | 8.25   | 0.00                                  | 3.50   | 1.78   | 0.00          | 1.75   | 0.89   | 8.25                  | 10.00   | 9.14   | 8.25   | 13.50   | 10.92   |
| N. Marianna Islands  | 8.25                               | 8.25   | 8.25   | 0.00                                  | 0.00   | 0.00   | 0.00          | 0.00   | 0.00   | 8.25                  | 8.25    | 8.25   | 8.25   | 8.25    | 8.25    |
| Ohio                 | 7.00                               | 8.25   | 7.30   | 0.00                                  | 3.50   | 3.49   | 0.00          | 1.75   | 1.75   | 7.00                  | 10.00   | 9.05   | 7.00   | 13.50   | 12.54   |
| Oklahoma             | 7.00                               | 8.25   | 7.44   | 0.00                                  | 3.50   | 1.08   | 0.00          | 1.75   | 0.54   | 7.00                  | 10.00   | 7.98   | 7.00   | 13.50   | 9.07    |
| Oregon               | 8.13                               | 8.25   | 8.25   | 0.00                                  | 3.50   | 3.47   | 0.00          | 1.75   | 1.74   | 8.13                  | 10.00   | 9.99   | 8.13   | 13.50   | 13.46   |
| Pennsylvania         | 5.25                               | 8.25   | 7.74   | 0.00                                  | 2.50   | 0.98   | 0.00          | 1.25   | 0.49   | 5.25                  | 9.50    | 8.23   | 5.25   | 12.00   | 9.20    |
| Puerto Rico          | 8.25                               | 8.25   | 8.25   | 3.50                                  | 3.50   | 3.50   | 1.75          | 1.75   | 1.75   | 10.00                 | 10.00   | 10.00  | 13.50  | 13.50   | 13.50   |
| Rhode Island         | 8.15                               | 8.15   | 8.15   | 3.50                                  | 3.50   | 3.50   | 1.75          | 1.75   | 1.75   | 9.90                  | 9.90    | 9.90   | 13.40  | 13.40   | 13.40   |
| South Carolina       | 7.38                               | 8.25   | 8.24   | 3.50                                  | 3.50   | 3.50   | 1.75          | 1.75   | 1.75   | 9.13                  | 10.00   | 9.99   | 12.63  | 13.50   | 13.49   |
| South Dakota         | 7.89                               | 8.25   | 8.19   | 0.00                                  | 3.50   | 0.31   | 0.00          | 1.75   | 0.15   | 7.89                  | 10.00   | 8.34   | 7.89   | 13.50   | 8.65    |
| Tennessee            | 6.85                               | 8.25   | 8.15   | 0.00                                  | 3.50   | 3.19   | 0.00          | 1.75   | 1.59   | 6.85                  | 10.00   | 9.75   | 6.85   | 13.50   | 12.94   |
| Texas                | 5.36                               | 8.25   | 7.28   | 0.00                                  | 3.50   | 3.35   | 0.00          | 1.75   | 1.67   | 5.36                  | 10.00   | 8.95   | 5.36   | 13.50   | 12.30   |
| Utah                 | 8.09                               | 8.25   | 8.15   | 3.50                                  | 3.50   | 3.50   | 1.75          | 1.75   | 1.75   | 9.84                  | 10.00   | 9.90   | 13.34  | 13.50   | 13.40   |
| Vermont              | 8.15                               | 8.25   | 8.17   | 3.50                                  | 3.50   | 3.50   | 1.75          | 1.75   | 1.75   | 9.90                  | 10.00   | 9.92   | 13.40  | 13.50   | 13.42   |
| Virgin Islands       | 8.25                               | 8.25   | 8.25   | 3.50                                  | 3.50   | 3.50   | 1.75          | 1.75   | 1.75   | 10.00                 | 10.00   | 10.00  | 13.50  | 13.50   | 13.50   |
| Virginia             | 6.68                               | 8.25   | 7.48   | 0.00                                  | 3.50   | 3.23   | 0.00          | 1.75   | 1.61   | 6.68                  | 10.00   | 9.10   | 6.68   | 13.50   | 12.32   |
| Washington           | 6.97                               | 8.25   | 7.84   | 0.00                                  | 3.50   | 2.29   | 0.00          | 1.75   | 1.15   | 6.97                  | 10.00   | 8.99   | 6.97   | 13.50   | 11.28   |
| West Virginia        | 6.50                               | 8.25   | 8.25   | 0.00                                  | 3.50   | 2.75   | 0.00          | 1.75   | 1.37   | 6.50                  | 10.00   | 9.62   | 6.50   | 13.50   | 12.37   |
| Wisconsin            | 6.81                               | 8.25   | 7.33   | 0.00                                  | 3.50   | 1.21   | 0.00          | 1.75   | 0.61   | 6.81                  | 10.00   | 7.94   | 6.81   | 13.50   | 9.15    |
| Wyoming              | 8.25                               | 8.25   | 8.25   | 0.00                                  | 3.50   | 3.45   | 0.00          | 1.75   | 1.73   | 8.25                  | 10.00   | 9.98   | 8.25   | 13.50   | 13.43   |
| Nationwide           | \$3.98                             | \$8.25 | \$7.30 | \$0.00                                | \$3.50 | \$2.69 | \$0.00        | \$1.75 | \$1.34 | \$3.98                | \$10.00 | \$8.64 | \$3.98                                       | \$13.50 | \$11.33 |

Notes: This table reflects only non-tribal support. All averages are weighted averages.

<sup>1</sup> Basic federal support includes both Tier 1 and Tier 2 support. See text for definitions.

<sup>2</sup> Includes only state support that is matched by federal support.

Source: Universal Service Administrative Company.

**Table 19.8**  
**Lifeline Subscribers and Link-Up Beneficiaries**

| <b>Year</b>       | <b>Lifeline</b>   |               |              | <b>Link-Up</b>    |               |              |
|-------------------|-------------------|---------------|--------------|-------------------|---------------|--------------|
|                   | <b>Non-Tribal</b> | <b>Tribal</b> | <b>Total</b> | <b>Non-Tribal</b> | <b>Tribal</b> | <b>Total</b> |
| 1987              |                   |               | 1,063,443    |                   |               | 7,953        |
| 1988              |                   |               | 1,828,862    |                   |               | 105,758      |
| 1989              |                   |               | 2,115,288    |                   |               | 206,656      |
| 1990              |                   |               | 2,466,513    |                   |               | 513,155      |
| 1991              |                   |               | 2,984,290    |                   |               | 639,645      |
| 1992              |                   |               | 3,440,216    |                   |               | 743,285      |
| 1993              |                   |               | 3,971,937    |                   |               | 737,362      |
| 1994              |                   |               | 4,423,119    |                   |               | 837,964      |
| 1995              |                   |               | 4,914,056    |                   |               | 823,679      |
| 1996              |                   |               | 5,233,425    |                   |               | 808,354      |
| 1997 <sup>1</sup> |                   |               | 5,110,537    |                   |               | NA           |
| 1998              |                   |               | 5,380,726    |                   |               | 2,195,417    |
| 1999              |                   |               | 5,640,094    |                   |               | 1,834,766    |
| 2000              | 5,871,619         | 18,692        | 5,890,311    | 1,689,867         | 2,038         | 1,691,905    |
| 2001              | 6,144,089         | 56,820        | 6,200,909    | 1,670,260         | 23,355        | 1,693,615    |
| 2002              | 6,518,367         | 112,191       | 6,630,558    | 1,656,768         | 29,901        | 1,686,669    |
| 2003              | 6,490,614         | 147,203       | 6,637,817    | 1,653,301         | 22,289        | 1,675,590    |
| 2004              | 6,792,695         | 176,390       | 6,969,085    | 1,669,888         | 41,034        | 1,710,922    |
| 2005              | 6,883,048         | 236,458       | 7,119,506    | 1,653,101         | 86,857        | 1,739,958    |
| 2006              | 6,648,267         | 289,249       | 6,937,516    | 1,560,348         | 99,179        | 1,659,527    |
| 2007              | 6,617,969         | 329,386       | 6,947,355    | 1,385,440         | 110,495       | 1,495,935    |
| 2008 <sup>2</sup> | 6,500,374         | 353,274       | 6,853,648    | 1,505,833         | 116,905       | 1,622,738    |

NA - Not Available.

<sup>1</sup> Subscriber data were not collected in 1997. Lifeline subscribership data were estimated by USAC.

<sup>2</sup> The reported subscribers and beneficiaries represent USAC data for the time period January 2008 through December 2008, which include true-ups for Lifeline subscribers and Link-Up beneficiaries through March 2009.

Source: Universal Service Administrative Company.

**Table 19.9**  
**Lifeline Subscribers and Link-Up Beneficiaries by State or Jurisdiction: 2007**

|                          | Lifeline   |         |           | Link-Up    |         |           |
|--------------------------|------------|---------|-----------|------------|---------|-----------|
|                          | Non-Tribal | Tribal  | Total     | Non-Tribal | Tribal  | Total     |
| Alabama                  | 45,714     | 15      | 45,729    | 34,849     | 0       | 34,849    |
| Alaska                   | 0          | 48,848  | 48,848    | 23         | 13,182  | 13,205    |
| American Samoa           | 592        | 0       | 592       | 15         | 0       | 15        |
| Arizona                  | 31,143     | 48,955  | 80,098    | 3,547      | 8,955   | 12,502    |
| Arkansas                 | 28,476     | 4       | 28,480    | 5,435      | 0       | 5,435     |
| California               | 2,778,807  | 465     | 2,779,272 | 590,563    | 1       | 590,564   |
| Colorado                 | 27,307     | 9       | 27,316    | 1,500      | 1       | 1,501     |
| Connecticut              | 47,294     | 0       | 47,294    | 2,399      | 0       | 2,399     |
| Delaware                 | 2,280      | 0       | 2,280     | 279        | 0       | 279       |
| District of Columbia     | 7,763      | 0       | 7,763     | 790        | 0       | 790       |
| Florida                  | 165,272    | 1       | 165,273   | 36,490     | 0       | 36,490    |
| Georgia                  | 76,610     | 0       | 76,610    | 17,815     | 0       | 17,815    |
| Guam                     | 2,259      | 0       | 2,259     | 1,100      | 0       | 1,100     |
| Hawaii                   | 4,914      | 0       | 4,914     | 206        | 0       | 206       |
| Idaho                    | 30,228     | 499     | 30,727    | 1,473      | 4       | 1,477     |
| Illinois                 | 110,330    | 0       | 110,330   | 54,105     | 0       | 54,105    |
| Indiana                  | 57,675     | 0       | 57,675    | 18,399     | 0       | 18,399    |
| Iowa                     | 65,499     | 1       | 65,500    | 5,017      | 0       | 5,017     |
| Kansas                   | 26,960     | 43      | 27,003    | 3,479      | 0       | 3,479     |
| Kentucky                 | 70,922     | 0       | 70,922    | 12,598     | 0       | 12,598    |
| Louisiana                | 29,447     | 0       | 29,447    | 24,425     | 0       | 24,425    |
| Maine                    | 66,072     | 652     | 66,724    | 14,147     | 37      | 14,184    |
| Maryland                 | 5,133      | 0       | 5,133     | 1,627      | 0       | 1,627     |
| Massachusetts            | 100,664    | 2       | 100,666   | 1,547      | 0       | 1,547     |
| Michigan                 | 132,351    | 303     | 132,654   | 47,895     | 27      | 47,922    |
| Minnesota                | 71,718     | 1,620   | 73,338    | 6,359      | 375     | 6,734     |
| Mississippi              | 40,306     | 19      | 40,325    | 19,191     | 0       | 19,191    |
| Missouri                 | 65,781     | 35      | 65,816    | 7,651      | 2       | 7,653     |
| Montana                  | 10,069     | 8,272   | 18,341    | 622        | 1,933   | 2,555     |
| Nebraska                 | 21,894     | 503     | 22,397    | 2,009      | 30      | 2,039     |
| Nevada                   | 34,611     | 215     | 34,826    | 4,840      | 17      | 4,857     |
| New Hampshire            | 5,876      | 0       | 5,876     | 222        | 0       | 222       |
| New Jersey               | 113,502    | 0       | 113,502   | 6,821      | 0       | 6,821     |
| New Mexico               | 55,562     | 21,319  | 76,881    | 3,411      | 4,438   | 7,849     |
| New York                 | 323,603    | 16      | 323,619   | 1,856      | 0       | 1,856     |
| North Carolina           | 120,363    | 8       | 120,371   | 5,673      | 0       | 5,673     |
| North Dakota             | 16,169     | 6,751   | 22,920    | 2,212      | 1,775   | 3,987     |
| Northern Mariana Islands | 1,017      | 0       | 1,017     | 1,076      | 0       | 1,076     |
| Ohio                     | 287,047    | 0       | 287,047   | 55,511     | 0       | 55,511    |
| Oklahoma                 | 6,339      | 160,750 | 167,089   | 5,093      | 69,216  | 74,309    |
| Oregon                   | 46,367     | 269     | 46,636    | 7,611      | 11      | 7,622     |
| Pennsylvania             | 152,658    | 0       | 152,658   | 43,620     | 0       | 43,620    |
| Puerto Rico              | 136,395    | 0       | 136,395   | 26,106     | 0       | 26,106    |
| Rhode Island             | 33,391     | 0       | 33,391    | 2,304      | 0       | 2,304     |
| South Carolina           | 29,953     | 8       | 29,961    | 8,611      | 0       | 8,611     |
| South Dakota             | 11,367     | 14,768  | 26,135    | 1,096      | 3,369   | 4,465     |
| Tennessee                | 67,050     | 0       | 67,050    | 40,626     | 0       | 40,626    |
| Texas                    | 776,244    | 815     | 777,059   | 171,619    | 77      | 171,696   |
| Utah                     | 29,663     | 629     | 30,292    | 1,323      | 384     | 1,707     |
| Vermont                  | 25,506     | 0       | 25,506    | 1,413      | 0       | 1,413     |
| Virgin Islands           | 520        | 0       | 520       | 2          | 0       | 2         |
| Virginia                 | 19,956     | 0       | 19,956    | 3,778      | 0       | 3,778     |
| Washington               | 101,317    | 12,609  | 113,926   | 31,487     | 6,240   | 37,727    |
| West Virginia            | 6,143      | 0       | 6,143     | 1,005      | 0       | 1,005     |
| Wisconsin                | 88,207     | 671     | 88,878    | 42,129     | 411     | 42,540    |
| Wyoming                  | 5,663      | 312     | 5,975     | 440        | 10      | 450       |
| Industry Totals          | 6,617,969  | 329,386 | 6,947,355 | 1,385,440  | 110,495 | 1,495,935 |

The reported subscribers and beneficiaries represent USAC data for the time period January 2007 through December 2007, which include true-ups for Lifeline subscribers and Link-Up beneficiaries through March 2008.

Source: Universal Service Administrative Company.

**Table 19.9 - Continued**  
**Lifeline Subscribers and Link-Up Beneficiaries by State or Jurisdiction: 2008**

|                          | Lifeline   |         |           | Link-Up    |         |           |
|--------------------------|------------|---------|-----------|------------|---------|-----------|
|                          | Non-Tribal | Tribal  | Total     | Non-Tribal | Tribal  | Total     |
| Alabama                  | 76,594     | 17      | 76,611    | 61,547     | 0       | 61,547    |
| Alaska                   | 0          | 56,522  | 56,522    | 0          | 10,277  | 10,277    |
| American Samoa           | 627        | 0       | 627       | 23         | 0       | 23        |
| Arizona                  | 28,918     | 48,356  | 77,274    | 4,331      | 8,579   | 12,910    |
| Arkansas                 | 29,715     | 4       | 29,719    | 7,997      | 0       | 7,997     |
| California               | 2,309,971  | 467     | 2,310,438 | 545,078    | 1       | 545,079   |
| Colorado                 | 25,963     | 9       | 25,972    | 2,404      | 1       | 2,405     |
| Connecticut              | 43,823     | 0       | 43,823    | 2,209      | 0       | 2,209     |
| Delaware                 | 1,984      | 0       | 1,984     | 185        | 0       | 185       |
| District of Columbia     | 7,237      | 0       | 7,237     | 612        | 0       | 612       |
| Florida                  | 281,422    | 1       | 281,423   | 33,815     | 0       | 33,815    |
| Georgia                  | 100,202    | 0       | 100,202   | 54,903     | 0       | 54,903    |
| Guam                     | 2,401      | 0       | 2,401     | 953        | 0       | 953       |
| Hawaii                   | 4,390      | 0       | 4,390     | 175        | 0       | 175       |
| Idaho                    | 27,750     | 533     | 28,283    | 2,358      | 28      | 2,386     |
| Illinois                 | 108,635    | 0       | 108,635   | 45,136     | 0       | 45,136    |
| Indiana                  | 55,307     | 0       | 55,307    | 15,550     | 0       | 15,550    |
| Iowa                     | 58,639     | 2       | 58,641    | 5,688      | 0       | 5,688     |
| Kansas                   | 26,715     | 46      | 26,761    | 3,531      | 0       | 3,531     |
| Kentucky                 | 64,913     | 0       | 64,913    | 19,017     | 0       | 19,017    |
| Louisiana                | 39,051     | 0       | 39,051    | 26,580     | 0       | 26,580    |
| Maine                    | 63,776     | 758     | 64,534    | 14,148     | 48      | 14,196    |
| Maryland                 | 5,821      | 0       | 5,821     | 2,117      | 0       | 2,117     |
| Massachusetts            | 91,464     | 2       | 91,466    | 536        | 0       | 536       |
| Michigan                 | 116,409    | 301     | 116,710   | 32,120     | 30      | 32,150    |
| Minnesota                | 72,861     | 2,495   | 75,356    | 9,900      | 208     | 10,108    |
| Mississippi              | 58,327     | 19      | 58,346    | 45,597     | 0       | 45,597    |
| Missouri                 | 70,939     | 44      | 70,983    | 9,145      | 1       | 9,146     |
| Montana                  | 9,303      | 7,958   | 17,261    | 1,071      | 1,663   | 2,734     |
| Nebraska                 | 20,001     | 533     | 20,534    | 2,092      | 8       | 2,100     |
| Nevada                   | 30,109     | 238     | 30,347    | 4,417      | 58      | 4,475     |
| New Hampshire            | 5,439      | 0       | 5,439     | 67         | 0       | 67        |
| New Jersey               | 108,648    | 0       | 108,648   | 5,726      | 0       | 5,726     |
| New Mexico               | 53,654     | 22,956  | 76,610    | 5,460      | 3,825   | 9,285     |
| New York                 | 309,760    | 15      | 309,775   | 2,062      | 0       | 2,062     |
| North Carolina           | 127,373    | 6       | 127,379   | 20,395     | 0       | 20,395    |
| North Dakota             | 15,392     | 5,372   | 20,764    | 1,643      | 514     | 2,157     |
| Northern Mariana Islands | 1,277      | 0       | 1,277     | 800        | 0       | 800       |
| Ohio                     | 279,260    | 0       | 279,260   | 49,409     | 0       | 49,409    |
| Oklahoma                 | 7,798      | 178,741 | 186,539   | 2,143      | 86,166  | 88,309    |
| Oregon                   | 45,326     | 267     | 45,593    | 8,005      | 20      | 8,025     |
| Pennsylvania             | 144,490    | 0       | 144,490   | 36,627     | 0       | 36,627    |
| Puerto Rico              | 187,864    | 0       | 187,864   | 32,289     | 0       | 32,289    |
| Rhode Island             | 30,748     | 0       | 30,748    | 2,172      | 0       | 2,172     |
| South Carolina           | 46,780     | 33      | 46,813    | 37,000     | 0       | 37,000    |
| South Dakota             | 10,685     | 9,135   | 19,820    | 1,347      | 576     | 1,923     |
| Tennessee                | 98,696     | 0       | 98,696    | 43,165     | 0       | 43,165    |
| Texas                    | 908,295    | 957     | 909,252   | 239,783    | 251     | 240,034   |
| Utah                     | 29,139     | 843     | 29,982    | 2,990      | 217     | 3,207     |
| Vermont                  | 25,816     | 0       | 25,816    | 1,102      | 0       | 1,102     |
| Virgin Islands           | 534        | 0       | 534       | 9          | 0       | 9         |
| Virginia                 | 43,242     | 0       | 43,242    | 3,798      | 0       | 3,798     |
| Washington               | 92,619     | 15,636  | 108,255   | 27,784     | 4,069   | 31,853    |
| West Virginia            | 6,012      | 0       | 6,012     | 686        | 0       | 686       |
| Wisconsin                | 83,032     | 716     | 83,748    | 27,741     | 349     | 28,090    |
| Wyoming                  | 5,228      | 292     | 5,520     | 395        | 16      | 411       |
| Industry Totals          | 6,500,374  | 353,274 | 6,853,648 | 1,505,833  | 116,905 | 1,622,738 |

The reported subscribers and beneficiaries represent USAC data for the time period January 2008 through December 2008, which include true-ups for Lifeline subscribers and Link-Up beneficiaries through March 2009.

Source: Universal Service Administrative Company.

**Table 19.10**  
**Low-Income Support Payments**  
**(In Thousands of Dollars)**

| Year              | Lifeline   |        |                  |                   |          | Link Up    |        |         | Total    |
|-------------------|------------|--------|------------------|-------------------|----------|------------|--------|---------|----------|
|                   | Non-Tribal | Tribal | TLS <sup>1</sup> | PICC <sup>2</sup> | Total    | Non-Tribal | Tribal | Total   |          |
| 1988              | \$31,952   | \$0    | \$0              | \$0               | \$31,952 | \$1,991    | \$0    | \$1,991 | \$33,943 |
| 1989              | 50,878     | 0      | 0                | 0                 | 50,878   | 4,480      | 0      | 4,480   | 55,358   |
| 1990              | 62,464     | 0      | 0                | 0                 | 62,464   | 11,351     | 0      | 11,351  | 73,815   |
| 1991              | 79,104     | 0      | 0                | 0                 | 79,104   | 13,705     | 0      | 13,705  | 92,809   |
| 1992              | 93,766     | 0      | 0                | 0                 | 93,766   | 15,342     | 0      | 15,342  | 109,108  |
| 1993              | 109,083    | 0      | 0                | 0                 | 109,083  | 17,019     | 0      | 17,019  | 126,102  |
| 1994              | 123,284    | 0      | 0                | 0                 | 123,284  | 18,573     | 0      | 18,573  | 141,857  |
| 1995              | 137,277    | 0      | 0                | 0                 | 137,277  | 18,392     | 0      | 18,392  | 155,670  |
| 1996              | 148,186    | 0      | 0                | 0                 | 148,186  | 18,247     | 0      | 18,247  | 166,433  |
| 1997              | 147,579    | 0      | 0                | 0                 | 147,579  | 13,711     | 0      | 13,711  | 161,290  |
| 1998 <sup>1</sup> | 416,504    | 0      | 2,700            | 2,802             | 422,006  | 42,463     | 0      | 42,463  | 464,469  |
| 1999              | 438,576    | 0      | 3,136            | 4,450             | 446,162  | 33,991     | 0      | 33,991  | 480,153  |
| 2000              | 482,045    | 508    | 2,854            | 3,168             | 488,575  | 30,371     | 62     | 30,433  | 519,007  |
| 2001              | 548,419    | 6,960  | 3,195            | 0                 | 558,574  | 30,314     | 475    | 30,788  | 589,362  |
| 2002              | 623,350    | 17,955 | 3,779            | 0                 | 645,083  | 30,323     | 700    | 31,022  | 676,106  |
| 2003              | 657,095    | 24,167 | 4,425            | 0                 | 685,687  | 30,170     | 515    | 30,686  | 716,373  |
| 2004              | 695,188    | 30,502 | 5,111            | 0                 | 730,800  | 30,898     | 1,230  | 32,129  | 762,929  |
| 2005              | 716,175    | 45,096 | 6,215            | 0                 | 767,486  | 31,715     | 2,788  | 34,503  | 801,989  |
| 2006              | 704,045    | 61,673 | 8,885            | 0                 | 774,602  | 29,832     | 2,903  | 32,735  | 807,337  |
| 2007              | 710,270    | 73,284 | 8,514            | 0                 | 792,069  | 27,816     | 3,620  | 31,436  | 823,505  |
| 2008              | 695,001    | 81,114 | 8,629            | 0                 | 784,745  | 30,665     | 6,620  | 37,284  | 822,029  |

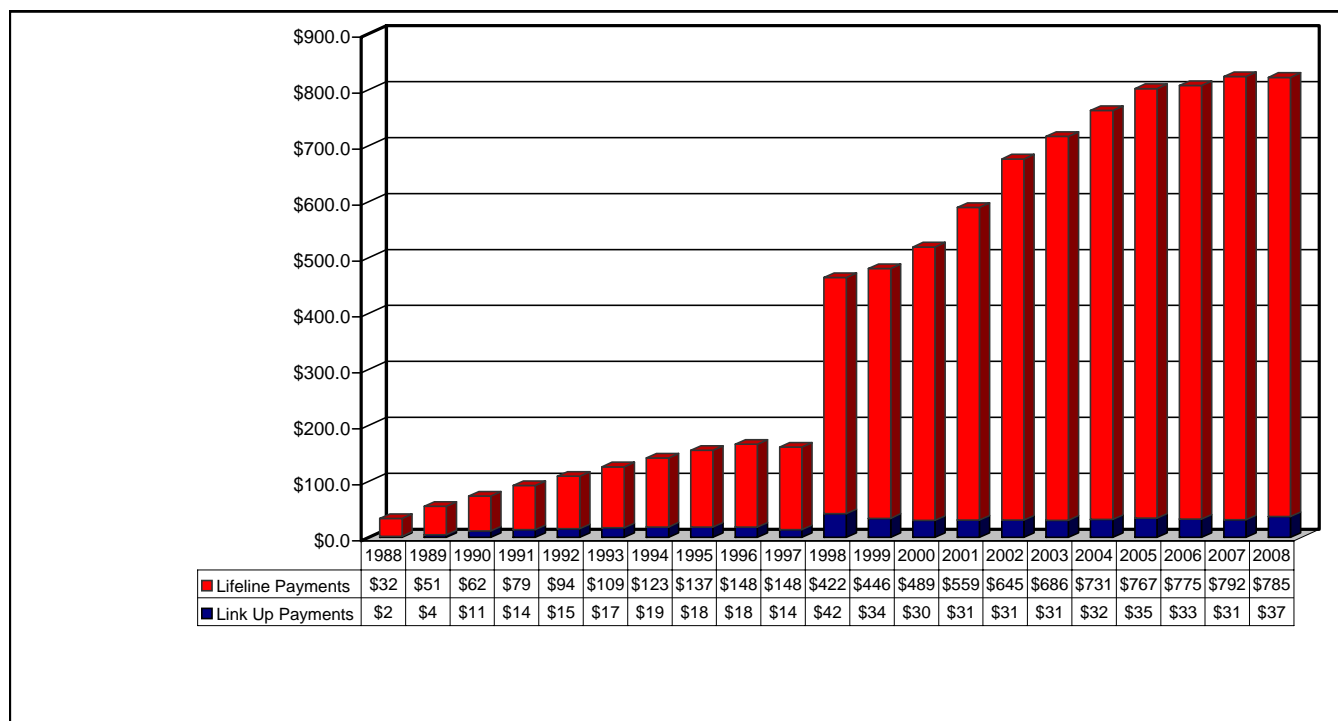
Note: Support payments reported in this table include all low income support disbursed based on commitments for a given year, including all true-ups through September 2009. Support payments reported for 2007 and 2008 in Tables 19.1, 19.2, and 19.12 report disbursements for 2007 and 2008, regardless of the year of the commitments.

<sup>1</sup> TLS is an abbreviation for toll limitation service.

<sup>2</sup> Carriers no longer charge residential Presubscribed Interexchange Access Charges (PICCs) as of July 1, 2000.

Source: Universal Service Administrative Company (USAC).

**Chart 19.5**  
**Lifeline and Link-Up Support Payments**  
**(Dollar Amounts in Millions)**





**Table 19.11**  
**Low-Income Support Payments by State or Jurisdiction: 2007**  
(In Thousands of Dollars)

|                          | Lifeline   |          |         |           | Link-Up    |         |          | Total     |
|--------------------------|------------|----------|---------|-----------|------------|---------|----------|-----------|
|                          | Non-Tribal | Tribal   | TLS     | Total     | Non-Tribal | Tribal  | Total    |           |
| Alabama                  | \$5,337    | \$1      | \$215   | \$5,553   | \$896      | \$0     | \$896    | \$6,449   |
| Alaska                   | 6,117      | 11,052   | 82      | 17,251    | 1          | 242     | 243      | 17,494    |
| American Samoa           | 59         | 0        | 0       | 59        | 0          | 0       | 0        | 59        |
| Arizona                  | 9,124      | 12,862   | 62      | 22,047    | 67         | 177     | 245      | 22,292    |
| Arkansas                 | 2,824      | 0        | 5       | 2,830     | 116        | 0       | 116      | 2,946     |
| California               | 256,525    | 30       | 3,932   | 260,487   | 10,921     | 0       | 10,921   | 271,408   |
| Colorado                 | 3,275      | 1        | 7       | 3,283     | 25         | 0       | 25       | 3,308     |
| Connecticut              | 4,573      | 0        | 1       | 4,574     | 72         | 0       | 72       | 4,646     |
| Delaware                 | 224        | 0        | 0       | 224       | 5          | 0       | 5        | 229       |
| District of Columbia     | 685        | 0        | 0       | 685       | 8          | 0       | 8        | 693       |
| Florida                  | 18,965     | 0        | 77      | 19,041    | 706        | 0       | 706      | 19,747    |
| Georgia                  | 9,017      | 0        | 23      | 9,040     | 388        | 0       | 388      | 9,428     |
| Guam                     | 280        | 0        | 0       | 280       | 19         | 0       | 19       | 300       |
| Hawaii                   | 574        | 0        | 1       | 574       | 5          | 0       | 5        | 579       |
| Idaho                    | 3,657      | 113      | 11      | 3,781     | 22         | 0       | 22       | 3,803     |
| Illinois                 | 8,764      | 0        | 257     | 9,021     | 1,316      | 0       | 1,316    | 10,337    |
| Indiana                  | 5,215      | 0        | 50      | 5,265     | 441        | 0       | 441      | 5,706     |
| Iowa                     | 5,743      | 0        | 186     | 5,930     | 94         | 0       | 94       | 6,023     |
| Kansas                   | 2,907      | 4        | 56      | 2,968     | 63         | 0       | 63       | 3,030     |
| Kentucky                 | 7,894      | 0        | 98      | 7,992     | 239        | 0       | 239      | 8,231     |
| Louisiana                | 2,966      | 0        | 127     | 3,093     | 595        | 0       | 595      | 3,688     |
| Maine                    | 7,931      | 104      | 8       | 8,042     | 310        | 1       | 310      | 8,353     |
| Maryland                 | 564        | 0        | 0       | 564       | 39         | 0       | 39       | 603       |
| Massachusetts            | 11,950     | 0        | 1       | 11,951    | 10         | 0       | 10       | 11,962    |
| Michigan                 | 13,215     | 52       | 722     | 13,989    | 1,195      | 0       | 1,195    | 15,184    |
| Minnesota                | 7,078      | 261      | 184     | 7,522     | 84         | 7       | 91       | 7,613     |
| Mississippi              | 4,743      | 6        | 9       | 4,758     | 397        | 0       | 397      | 5,154     |
| Missouri                 | 7,180      | 1        | 135     | 7,316     | 138        | 0       | 138      | 7,454     |
| Montana                  | 2,154      | 2,125    | 13      | 4,292     | 9          | 31      | 40       | 4,331     |
| Nebraska                 | 2,369      | 89       | 14      | 2,472     | 32         | 0       | 33       | 2,505     |
| Nevada                   | 2,997      | 16       | 8       | 3,021     | 91         | 0       | 91       | 3,112     |
| New Hampshire            | 576        | 0        | 0       | 576       | 4          | 0       | 4        | 580       |
| New Jersey               | 13,295     | 0        | 2       | 13,298    | 144        | 0       | 144      | 13,442    |
| New Mexico               | 9,083      | 5,576    | 64      | 14,722    | 56         | 86      | 141      | 14,864    |
| New York                 | 37,527     | 2        | 10      | 37,538    | 37         | 0       | 37       | 37,575    |
| North Carolina           | 13,841     | 1        | 31      | 13,873    | 119        | 0       | 119      | 13,992    |
| North Dakota             | 2,500      | 1,413    | 19      | 3,932     | 35         | 66      | 101      | 4,032     |
| Northern Mariana Islands | 101        | 0        | 0       | 101       | 11         | 0       | 11       | 111       |
| Ohio                     | 31,322     | 0        | 175     | 31,497    | 976        | 0       | 976      | 32,473    |
| Oklahoma                 | 16,377     | 32,117   | 547     | 49,041    | 120        | 2,651   | 2,771    | 51,812    |
| Oregon                   | 5,598      | 42       | 12      | 5,652     | 73         | 0       | 73       | 5,725     |
| Pennsylvania             | 15,121     | 0        | 2       | 15,123    | 868        | 0       | 868      | 15,991    |
| Puerto Rico              | 16,334     | 0        | 0       | 16,334    | 554        | 0       | 554      | 16,888    |
| Rhode Island             | 3,964      | 0        | 1       | 3,965     | 8          | 0       | 8        | 3,973     |
| South Carolina           | 3,513      | 1        | 13      | 3,528     | 170        | 0       | 170      | 3,697     |
| South Dakota             | 2,493      | 3,406    | 49      | 5,947     | 15         | 158     | 173      | 6,120     |
| Tennessee                | 7,740      | 0        | 196     | 7,936     | 944        | 0       | 944      | 8,880     |
| Texas                    | 85,378     | 28       | 697     | 86,104    | 3,626      | 1       | 3,627    | 89,731    |
| Utah                     | 3,593      | 119      | 23      | 3,736     | 18         | 8       | 26       | 3,761     |
| Vermont                  | 3,054      | 0        | 3       | 3,056     | 20         | 0       | 20       | 3,076     |
| Virgin Islands           | 73         | 0        | 0       | 73        | 0          | 0       | 0        | 73        |
| Virginia                 | 2,182      | 0        | 0       | 2,183     | 71         | 0       | 71       | 2,254     |
| Washington               | 11,809     | 3,614    | 27      | 15,451    | 486        | 185     | 671      | 16,122    |
| West Virginia            | 708        | 0        | 1       | 709       | 19         | 0       | 19       | 728       |
| Wisconsin                | 8,468      | 172      | 301     | 8,941     | 1,128      | 5       | 1,133    | 10,074    |
| Wyoming                  | 717        | 74       | 58      | 849       | 10         | 0       | 10       | 859       |
| Industry Totals          | \$710,270  | \$73,284 | \$8,514 | \$792,069 | \$27,816   | \$3,620 | \$31,436 | \$823,505 |

Note: Support payments reported in this table include all low income support disbursed based on commitments for 2007, including all true-ups through September 2009. Support payments reported for 2007 in Tables 19.1, 19.2, and 19.12 report disbursements for 2007, regardless of the year of the commitments.

Source: Universal Service Administrative Company.

**Table 19.11 - Continued**  
**Low-Income Support Payments by State or Jurisdiction: 2008**  
(In Thousands of Dollars)

|                          | Lifeline   |          |         |           | Link-Up    |         |          | Total     |
|--------------------------|------------|----------|---------|-----------|------------|---------|----------|-----------|
|                          | Non-Tribal | Tribal   | TLS     | Total     | Non-Tribal | Tribal  | Total    |           |
| Alabama                  | \$8,335    | \$2      | \$526   | \$8,862   | \$1,614    | \$0     | \$1,614  | \$10,476  |
| Alaska                   | 7,033      | 13,381   | 75      | 20,489    | 0          | 190     | 190      | 20,679    |
| American Samoa           | 62         | 0        | 0       | 62        | 1          | 0       | 1        | 63        |
| Arizona                  | 8,764      | 12,694   | 56      | 21,514    | 76         | 171     | 247      | 21,761    |
| Arkansas                 | 3,010      | 0        | 5       | 3,016     | 175        | 0       | 175      | 3,191     |
| California               | 210,841    | 30       | 3,919   | 214,790   | 9,879      | 0       | 9,879    | 224,670   |
| Colorado                 | 3,138      | 1        | 6       | 3,146     | 43         | 0       | 43       | 3,189     |
| Connecticut              | 4,235      | 0        | 1       | 4,236     | 62         | 0       | 62       | 4,298     |
| Delaware                 | 195        | 0        | 0       | 195       | 3          | 0       | 3        | 199       |
| District of Columbia     | 639        | 0        | 0       | 639       | 6          | 0       | 6        | 646       |
| Florida                  | 25,547     | 0        | 130     | 25,676    | 843        | 0       | 843      | 26,520    |
| Georgia                  | 11,757     | 0        | 34      | 11,790    | 1,242      | 0       | 1,242    | 13,032    |
| Guam                     | 295        | 0        | 0       | 295       | 17         | 0       | 17       | 312       |
| Hawaii                   | 472        | 0        | 0       | 473       | 4          | 0       | 4        | 477       |
| Idaho                    | 3,372      | 124      | 9       | 3,505     | 35         | 0       | 36       | 3,541     |
| Illinois                 | 8,485      | 0        | 145     | 8,630     | 1,143      | 0       | 1,143    | 9,772     |
| Indiana                  | 4,992      | 0        | 50      | 5,041     | 370        | 0       | 370      | 5,411     |
| Iowa                     | 5,030      | 0        | 67      | 5,098     | 100        | 0       | 100      | 5,198     |
| Kansas                   | 2,885      | 4        | 59      | 2,948     | 64         | 0       | 64       | 3,013     |
| Kentucky                 | 7,371      | 0        | 90      | 7,460     | 399        | 0       | 399      | 7,859     |
| Louisiana                | 3,768      | 0        | 47      | 3,816     | 600        | 0       | 600      | 4,415     |
| Maine                    | 7,619      | 135      | 7       | 7,762     | 301        | 0       | 302      | 8,063     |
| Maryland                 | 626        | 0        | 0       | 626       | 51         | 0       | 51       | 677       |
| Massachusetts            | 10,888     | 0        | 1       | 10,889    | 4          | 0       | 4        | 10,893    |
| Michigan                 | 11,514     | 51       | 260     | 11,825    | 789        | 0       | 790      | 12,615    |
| Minnesota                | 7,121      | 524      | 85      | 7,730     | 121        | 4       | 125      | 7,854     |
| Mississippi              | 6,855      | 6        | 13      | 6,873     | 999        | 0       | 999      | 7,873     |
| Missouri                 | 7,732      | 1        | 128     | 7,861     | 164        | 0       | 164      | 8,025     |
| Montana                  | 1,995      | 2,091    | 11      | 4,097     | 15         | 27      | 42       | 4,138     |
| Nebraska                 | 2,202      | 95       | 15      | 2,311     | 34         | 2       | 36       | 2,347     |
| Nevada                   | 2,635      | 18       | 8       | 2,661     | 84         | 1       | 85       | 2,746     |
| New Hampshire            | 528        | 0        | 0       | 528       | 1          | 0       | 1        | 529       |
| New Jersey               | 12,746     | 0        | 2       | 12,748    | 121        | 0       | 121      | 12,869    |
| New Mexico               | 8,979      | 5,909    | 48      | 14,937    | 93         | 74      | 167      | 15,104    |
| New York                 | 35,756     | 2        | 9       | 35,766    | 27         | 0       | 27       | 35,793    |
| North Carolina           | 14,536     | 1        | 113     | 14,649    | 489        | 0       | 489      | 15,139    |
| North Dakota             | 2,276      | 1,154    | 10      | 3,440     | 26         | 21      | 47       | 3,487     |
| Northern Mariana Islands | 126        | 0        | 0       | 126       | 13         | 0       | 13       | 139       |
| Ohio                     | 30,369     | 0        | 239     | 30,608    | 846        | 0       | 846      | 31,454    |
| Oklahoma                 | 18,133     | 37,634   | 1,339   | 57,105    | 50         | 5,963   | 6,013    | 63,118    |
| Oregon                   | 5,490      | 41       | 11      | 5,543     | 78         | 0       | 78       | 5,620     |
| Pennsylvania             | 14,257     | 0        | 2       | 14,259    | 730        | 0       | 730      | 14,989    |
| Puerto Rico              | 22,555     | 0        | 0       | 22,555    | 883        | 0       | 883      | 23,439    |
| Rhode Island             | 3,660      | 0        | 1       | 3,661     | 6          | 0       | 6        | 3,667     |
| South Carolina           | 5,132      | 5        | 140     | 5,276     | 868        | 0       | 868      | 6,145     |
| South Dakota             | 1,962      | 2,197    | 21      | 4,180     | 19         | 32      | 51       | 4,231     |
| Tennessee                | 9,948      | 0        | 77      | 10,025    | 886        | 0       | 886      | 10,911    |
| Texas                    | 98,803     | 32       | 663     | 99,498    | 4,991      | 5       | 4,996    | 104,494   |
| Utah                     | 3,558      | 191      | 20      | 3,768     | 38         | 4       | 42       | 3,810     |
| Vermont                  | 3,075      | 0        | 2       | 3,077     | 16         | 0       | 16       | 3,092     |
| Virgin Islands           | 72         | 0        | 0       | 72        | 0          | 0       | 0        | 73        |
| Virginia                 | 2,836      | 0        | 0       | 2,837     | 70         | 0       | 70       | 2,906     |
| Washington               | 11,530     | 4,529    | 26      | 16,085    | 416        | 121     | 536      | 16,622    |
| West Virginia            | 636        | 0        | 1       | 636       | 13         | 0       | 13       | 650       |
| Wisconsin                | 8,000      | 188      | 138     | 8,325     | 737        | 4       | 741      | 9,067     |
| Wyoming                  | 627        | 74       | 21      | 722       | 8          | 0       | 8        | 730       |
| Industry Totals          | \$695,001  | \$81,114 | \$8,629 | \$784,745 | \$30,665   | \$6,620 | \$37,284 | \$822,029 |

Note: Support payments reported in this table include all low income support disbursed based on commitments for 2008, including all true-ups through September 2009. Support payments reported for 2008 in Tables 19.1, 19.2, and 19.12 report disbursements for 2008, regardless of the year of the commitments.

Source: Universal Service Administrative Company.

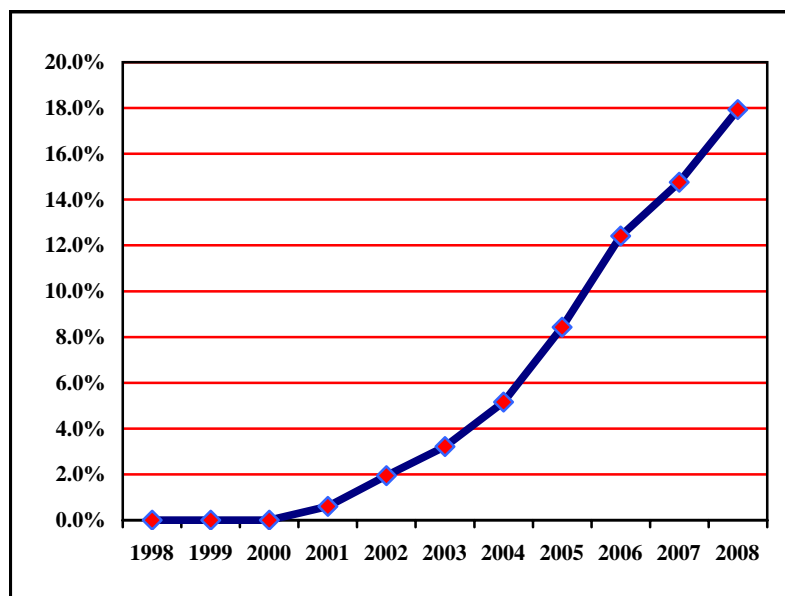
**Table 19.12**  
**Low-Income Support Received by ILECs and CETCs**  
**(In Millions of Dollars)**

|      | <b>ILECs</b> | <b>CETCs</b> | <b>Total</b> | <b>Percent CETCs</b> |
|------|--------------|--------------|--------------|----------------------|
| 1996 | \$166        | \$0          | \$166        | 0.0 %                |
| 1997 | 161          | 0            | 161          | 0.0                  |
| 1998 | 464          | 0            | 464          | 0.0                  |
| 1999 | 480          | 0            | 480          | 0.0                  |
| 2000 | 519          | 0            | 519          | 0.0                  |
| 2001 | 586          | 4            | 589          | 0.6                  |
| 2002 | 663          | 13           | 676          | 1.9                  |
| 2003 | 693          | 23           | 716          | 3.2                  |
| 2004 | 724          | 39           | 763          | 5.2                  |
| 2005 | 734          | 68           | 802          | 8.4                  |
| 2006 | 707          | 100          | 807          | 12.4                 |
| 2007 | 702          | 122          | 824          | 14.8                 |
| 2008 | 675          | 147          | 822          | 17.9                 |

Notes: ILECs is an abbreviation for incumbent local exchange carriers. CETCs is an abbreviation for competitive eligible telecommunications carriers. CETCs include both wireless and wireline carriers. In 2006, CETCs include temporary ETCs. Most companies that received Hurricane Katrina support were designated as temporary ETCs specifically for the purpose of serving consumers affected by Hurricane Katrina.

Source: Universal Service Administrative Company.

**Chart 19.6**  
**Percent of Low-Income Support Received by CETCs**



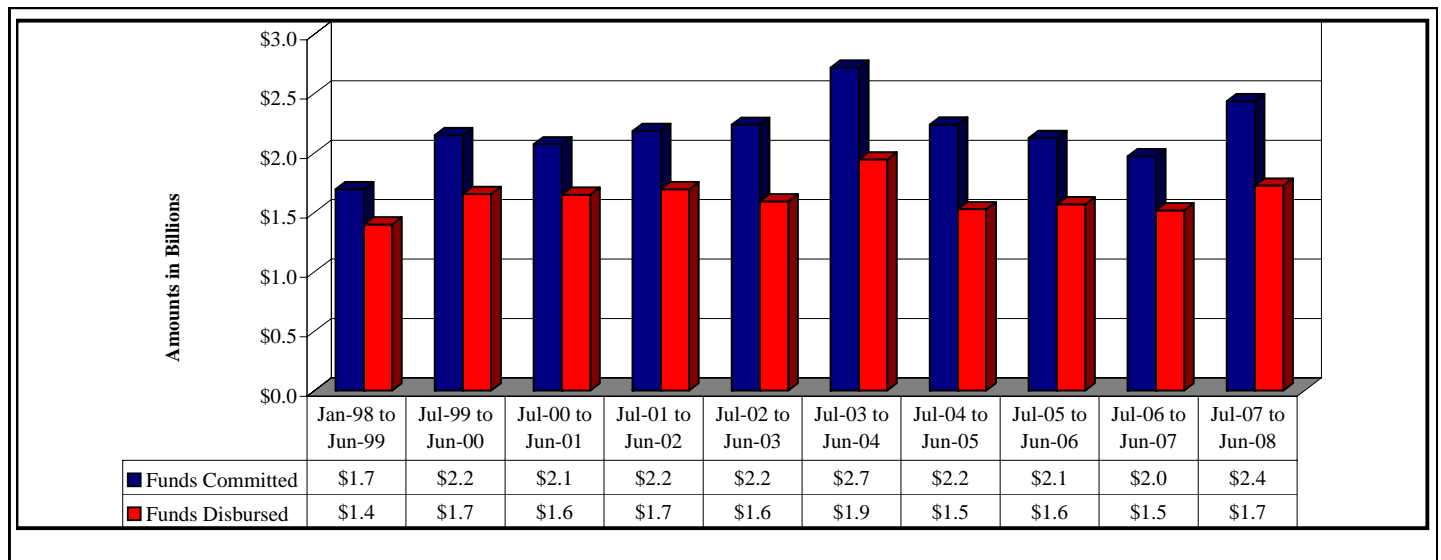
**Table 19.13**  
**Schools and Libraries Funding by Type of Service**  
**Funds Committed and Disbursed Through June 30, 2009<sup>1</sup>**  
**(In Thousands of Dollars)**

| Funding Period   | Internal Connections |                 | Internet Access |                 | Telecommunications |                 | Totals          |                 |
|------------------|----------------------|-----------------|-----------------|-----------------|--------------------|-----------------|-----------------|-----------------|
|                  | Funds Committed      | Funds Disbursed | Funds Committed | Funds Disbursed | Funds Committed    | Funds Disbursed | Funds Committed | Funds Disbursed |
| Jan-98 to Jun-99 | \$886,046            | \$797,353       | \$134,153       | \$94,913        | \$675,892          | \$507,646       | \$1,696,090     | \$1,399,911     |
| Jul-99 to Jun-00 | 1,367,140            | 1,105,726       | 149,569         | 95,499          | 634,062            | 452,988         | 2,150,772       | 1,654,213       |
| Jul-00 to Jun-01 | 1,134,712            | 1,034,493       | 219,279         | 133,473         | 719,847            | 481,216         | 2,073,838       | 1,649,181       |
| Jul-01 to Jun-02 | 1,184,027            | 1,007,328       | 224,896         | 149,424         | 775,455            | 539,621         | 2,184,379       | 1,696,372       |
| Jul-02 to Jun-03 | 1,127,917            | 809,579         | 250,484         | 170,991         | 859,565            | 613,128         | 2,237,966       | 1,593,697       |
| Jul-03 to Jun-04 | 1,534,433            | 1,083,746       | 276,239         | 203,843         | 908,026            | 659,186         | 2,718,698       | 1,946,775       |
| Jul-04 to Jun-05 | 1,045,758            | 646,110         | 245,763         | 192,793         | 946,845            | 688,071         | 2,238,365       | 1,526,974       |
| Jul-05 to Jun-06 | 882,381              | 596,181         | 264,102         | 213,045         | 979,104            | 759,945         | 2,125,587       | 1,569,172       |
| Jul-06 to Jun-07 | 613,080              | 445,085         | 290,475         | 233,545         | 1,068,856          | 838,369         | 1,972,411       | 1,517,000       |
| Jul-07 to Jun-08 | 959,354              | 576,126         | 309,146         | 251,868         | 1,167,534          | 898,175         | 2,436,034       | 1,726,169       |
| Jul-08 to Jun-09 | 733,030              | 244,620         | 331,840         | 201,096         | 1,269,955          | 622,629         | 2,334,826       | 1,068,346       |

<sup>1</sup> Because of the appeals process, funding commitments and disbursements can be made after the program years' end.

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

**Chart 19.7**  
**Total Schools and Libraries Funds Committed and Disbursed**



**Table 19.14**  
**Schools and Libraries Funding by State and by Type of Service**  
**Funding Period: July 1, 2007 Through June 30, 2008**  
**Activity Through June 30, 2009<sup>1</sup> (In Thousands of Dollars)**

| State/Territory          | Internal Connections |                 | Internet Access |                 | Telecom. and Dedicated |                 | Totals          |                 |
|--------------------------|----------------------|-----------------|-----------------|-----------------|------------------------|-----------------|-----------------|-----------------|
|                          | Funds Committed      | Funds Disbursed | Funds Committed | Funds Disbursed | Funds Committed        | Funds Disbursed | Funds Committed | Funds Disbursed |
| Alabama                  | \$7,681              | \$7,394         | \$15,455        | \$13,232        | \$18,590               | \$15,693        | \$41,725        | \$36,318        |
| Alaska                   | 1,370                | 602             | 9,869           | 9,275           | 10,642                 | 9,753           | 21,882          | 19,630          |
| American Samoa           | 30                   | 30              | 650             | 650             | 97                     | 20              | 777             | 700             |
| Arizona                  | 28,970               | 23,182          | 6,989           | 4,667           | 21,708                 | 15,380          | 57,667          | 43,229          |
| Arkansas                 | 5,625                | 4,320           | 1,189           | 782             | 20,736                 | 13,469          | 27,550          | 18,571          |
| California               | 252,009              | 110,582         | 20,853          | 15,487          | 161,421                | 113,197         | 434,283         | 239,265         |
| Colorado                 | 2,151                | 2,043           | 2,852           | 2,335           | 13,987                 | 11,714          | 18,990          | 16,092          |
| Connecticut              | 9,098                | 6,882           | 2,020           | 1,334           | 17,761                 | 15,209          | 28,879          | 23,426          |
| Delaware                 | 0                    | 0               | 11              | 9               | 1,792                  | 1,740           | 1,803           | 1,749           |
| District of Columbia     | 3,439                | 1,738           | 291             | 96              | 9,144                  | 5,135           | 12,874          | 6,968           |
| Florida                  | 29,470               | 24,857          | 16,930          | 14,397          | 51,934                 | 44,060          | 98,334          | 83,314          |
| Georgia                  | 28,058               | 23,264          | 9,027           | 7,704           | 39,991                 | 34,305          | 77,077          | 65,273          |
| Guam                     | 0                    | 0               | 2               | 0               | 15                     | 8               | 17              | 8               |
| Hawaii                   | 59                   | 8               | 773             | 594             | 2,544                  | 1,499           | 3,376           | 2,101           |
| Idaho                    | 745                  | 576             | 2,214           | 1,719           | 2,780                  | 2,256           | 5,738           | 4,552           |
| Illinois                 | 55,053               | 37,719          | 9,163           | 6,211           | 42,011                 | 32,053          | 106,227         | 75,983          |
| Indiana                  | 6,053                | 1,756           | 14,104          | 11,203          | 16,456                 | 14,172          | 36,613          | 27,132          |
| Iowa                     | 200                  | 28              | 2,344           | 1,990           | 9,330                  | 7,767           | 11,874          | 9,785           |
| Kansas                   | 2,911                | 2,865           | 4,400           | 3,721           | 11,873                 | 9,954           | 19,184          | 16,540          |
| Kentucky                 | 5,958                | 5,163           | 1,470           | 855             | 24,656                 | 20,429          | 32,084          | 26,447          |
| Louisiana                | 17,294               | 11,210          | 7,117           | 6,327           | 21,888                 | 17,942          | 46,299          | 35,479          |
| Maine                    | 532                  | 338             | 998             | 949             | 6,629                  | 5,536           | 8,159           | 6,823           |
| Maryland                 | 5,093                | 789             | 1,530           | 1,170           | 13,091                 | 10,190          | 19,714          | 12,149          |
| Massachusetts            | 8,301                | 7,454           | 6,717           | 5,529           | 13,820                 | 11,035          | 28,838          | 24,019          |
| Michigan                 | 14,608               | 5,936           | 8,064           | 6,762           | 37,058                 | 29,317          | 59,731          | 42,014          |
| Minnesota                | 7,098                | 5,980           | 5,439           | 4,421           | 14,129                 | 12,300          | 26,666          | 22,700          |
| Mississippi              | 9,439                | 7,885           | 1,409           | 539             | 22,544                 | 16,214          | 33,392          | 24,638          |
| Missouri                 | 3,642                | 3,118           | 3,132           | 2,229           | 18,464                 | 13,263          | 25,238          | 18,610          |
| Montana                  | 484                  | 471             | 999             | 874             | 2,580                  | 2,160           | 4,063           | 3,505           |
| Nebraska                 | 83                   | 47              | 1,129           | 959             | 8,429                  | 7,292           | 9,641           | 8,298           |
| Nevada                   | 4,855                | 366             | 525             | 492             | 3,416                  | 2,963           | 8,795           | 3,820           |
| New Hampshire            | 31                   | 14              | 804             | 630             | 1,596                  | 1,177           | 2,431           | 1,821           |
| New Jersey               | 13,138               | 10,499          | 6,113           | 4,355           | 31,092                 | 24,060          | 50,343          | 38,914          |
| New Mexico               | 26,881               | 20,838          | 3,682           | 2,516           | 8,233                  | 6,123           | 38,795          | 29,477          |
| New York                 | 170,636              | 102,352         | 14,223          | 11,698          | 122,471                | 81,358          | 307,330         | 195,408         |
| North Carolina           | 20,597               | 14,613          | 12,866          | 11,515          | 32,074                 | 26,742          | 65,537          | 52,869          |
| North Dakota             | 505                  | 471             | 166             | 159             | 3,482                  | 3,237           | 4,153           | 3,867           |
| Northern Mariana Islands | 162                  | 162             | 511             | 465             | 369                    | 324             | 1,042           | 952             |
| Ohio                     | 27,381               | 15,088          | 16,086          | 15,030          | 41,612                 | 33,097          | 85,079          | 63,214          |
| Oklahoma                 | 18,043               | 14,956          | 9,636           | 7,702           | 20,896                 | 16,123          | 48,575          | 38,782          |
| Oregon                   | 1,503                | 1,246           | 4,385           | 3,189           | 8,744                  | 6,697           | 14,632          | 11,132          |
| Pennsylvania             | 8,123                | 6,208           | 10,884          | 9,214           | 43,413                 | 35,899          | 62,420          | 51,322          |
| Puerto Rico              | 1,217                | 888             | 2,714           | 2,006           | 5,185                  | 391             | 9,116           | 3,285           |
| Rhode Island             | 1,423                | 1,076           | 1,045           | 988             | 3,434                  | 3,052           | 5,902           | 5,116           |
| South Carolina           | 11,497               | 7,048           | 4,275           | 4,016           | 21,240                 | 19,361          | 37,011          | 30,425          |
| South Dakota             | 1,687                | 1,167           | 559             | 515             | 4,308                  | 3,066           | 6,554           | 4,747           |
| Tennessee                | 4,552                | 3,543           | 27,344          | 21,378          | 15,286                 | 14,193          | 47,182          | 39,114          |
| Texas                    | 126,108              | 66,196          | 18,219          | 15,079          | 75,292                 | 59,234          | 219,618         | 140,509         |
| Utah                     | 2,288                | 2,031           | 1,243           | 677             | 15,131                 | 11,712          | 18,661          | 14,420          |
| Vermont                  | 4                    | 0               | 692             | 537             | 1,217                  | 943             | 1,913           | 1,479           |
| Virgin Islands           | 2,085                | 2,032           | 2,706           | 2,600           | 657                    | 597             | 5,448           | 5,229           |
| Virginia                 | 1,156                | 933             | 6,597           | 5,879           | 22,657                 | 20,323          | 30,410          | 27,135          |
| Washington               | 8,702                | 7,475           | 2,744           | 1,847           | 17,958                 | 14,618          | 29,404          | 23,940          |
| West Virginia            | 158                  | 56              | 1,274           | 1,141           | 9,080                  | 7,619           | 10,512          | 8,817           |
| Wisconsin                | 1,077                | 568             | 2,515           | 2,045           | 18,453                 | 9,508           | 22,045          | 12,121          |
| Wyoming                  | 91                   | 62              | 200             | 175             | 4,138                  | 2,699           | 4,428           | 2,936           |
| Totals                   | \$959,354            | \$576,126       | \$309,146       | \$251,868       | \$1,167,534            | \$898,175       | \$2,436,034     | \$1,726,169     |

<sup>1</sup> Because of the appeals process, funding commitments have been made after the program year ended on June 30, 2008.

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

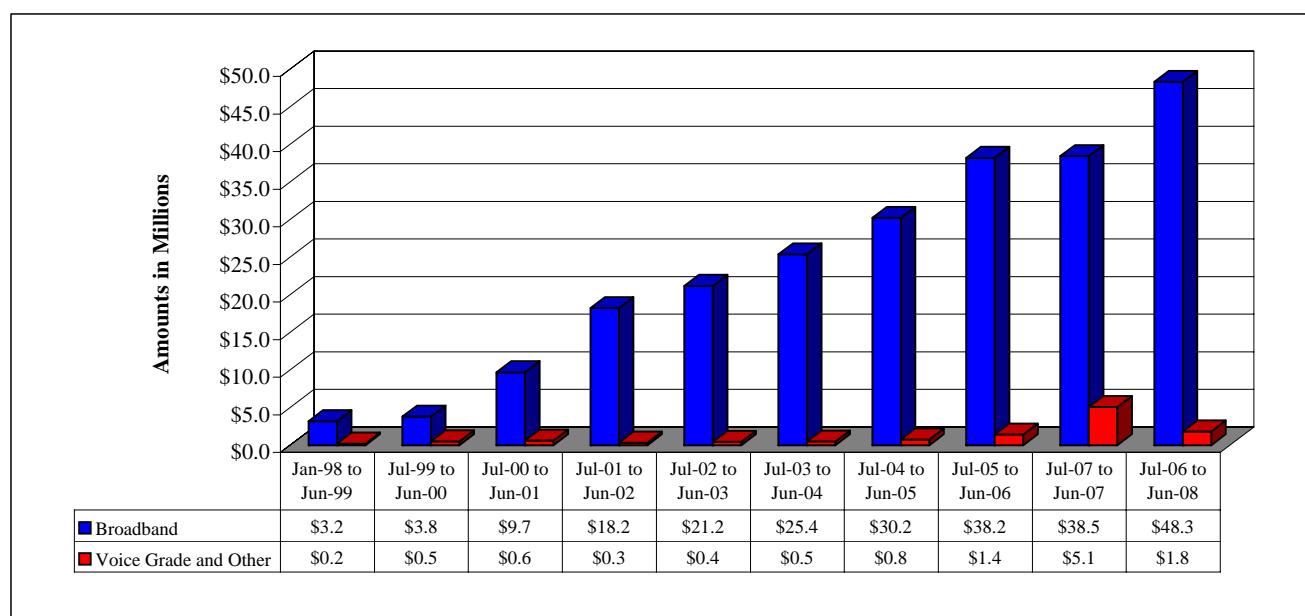
**Table 19.15**  
**Rural Health Care Fund Disbursements by Service Speed**  
**Activity Through June 30, 2009<sup>1</sup>**

| Funding Year     | Voice Grade | Broadband      |                  | Other Service or Speed Unknown | Total       |
|------------------|-------------|----------------|------------------|--------------------------------|-------------|
|                  | 56K to 199K | 200K to 1.49Mb | 1.5Mb and faster |                                |             |
| Jan-98 to Jun-99 | \$202,778   | \$880,375      | \$2,292,252      | \$0                            | \$3,375,405 |
| Jul-99 to Jun-00 | 452,992     | 1,073,816      | 2,719,619        | 58,132                         | 4,304,559   |
| Jul-00 to Jun-01 | 613,595     | 3,802,601      | 5,897,976        | 0                              | 10,314,172  |
| Jul-01 to Jun-02 | 319,539     | 13,256,841     | 4,978,963        | 0                              | 18,555,343  |
| Jul-02 to Jun-03 | 428,506     | 14,222,035     | 6,969,587        | 0                              | 21,620,128  |
| Jul-03 to Jun-04 | 477,657     | 15,917,701     | 9,469,267        | 7,559                          | 25,872,184  |
| Jul-04 to Jun-05 | 611,101     | 17,511,205     | 12,733,212       | 141,133                        | 30,996,651  |
| Jul-05 to Jun-06 | 899,135     | 23,270,642     | 14,956,523       | 520,114                        | 39,646,414  |
| Jul-06 to Jun-07 | 1,006,698   | 21,707,378     | 16,746,517       | 4,066,979                      | 43,527,572  |
| Jul-07 to Jun-08 | 1,231,390   | 25,740,082     | 22,590,045       | 596,518                        | 50,158,034  |
| Jul-08 to Jun-09 | 426,472     | 11,626,702     | 10,597,776       | 0                              | 22,650,950  |

<sup>1</sup> Because of the appeals process, funding commitments and disbursements may be made after the program year ended.

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

**Chart 19.8**  
**Rural Health Care Fund Disbursements by Service Speed**



**Table 19.16**  
**Rural Health Care Fund Disbursements by Service Speed and by State**  
**Funding Period: July 1, 2007 Through June 30, 2008**  
**Activity Through June 30, 2009<sup>1</sup>**

| State                    | Voice Grade <sup>2</sup> | Broadband <sup>2</sup>   |                        | Other Service<br>or Speed<br>Unknown <sup>2</sup> | Total        |
|--------------------------|--------------------------|--------------------------|------------------------|---|--------------|
|                          | 56 kbps to<br>199 kbps   | 200 kbps to<br>1.49 Mbps | 1.5 Mbps<br>and Faster |   |              |
| Alabama                  | \$23,283                 | \$89,678                 | \$38,287               | \$0   | \$151,248    |
| Alaska                   | 0                        | 21,717,566               | 7,054,650              | 0   | 28,772,216   |
| American Samoa           | 0                        | 108,400                  | 0                      | 0   | 108,400      |
| Arizona                  | 1,723                    | 52,126                   | 1,157,221              | 0   | 1,211,070    |
| Arkansas                 | 0                        | 84,876                   | 99,424                 | 0   | 184,300      |
| California               | 5,350                    | 66,820                   | 409,198                | 19,200  | 500,567      |
| Colorado                 | 2,919                    | 2,365                    | 85,854                 | 0   | 91,139       |
| Connecticut              | 0                        | 0                        | 0                      | 0   | 0            |
| Delaware                 | 0                        | 413                      | 0                      | 0   | 413          |
| District of Columbia     | 0                        | 0                        | 0                      | 0   | 0            |
| Florida                  | 0                        | 17,680                   | 383,254                | 0   | 400,933      |
| Georgia                  | 103,770                  | 103,194                  | 913,966                | 243,275   | 1,364,205    |
| Guam                     | 0                        | 0                        | 6,860                  | 0   | 6,860        |
| Hawaii                   | 0                        | 6,208                    | 177,676                | 0   | 183,884      |
| Idaho                    | 0                        | 34,994                   | 192,809                | 0   | 227,804      |
| Illinois                 | 10,468                   | 92,698                   | 581,305                | 0   | 684,471      |
| Indiana                  | 17,860                   | 85,533                   | 394,878                | 0   | 498,271      |
| Iowa                     | 81,580                   | 43,411                   | 335,235                | 0   | 460,226      |
| Kansas                   | 6,120                    | 40,983                   | 154,211                | 0   | 201,314      |
| Kentucky                 | 32,150                   | 205,258                  | 272,690                | 0   | 510,098      |
| Louisiana                | 0                        | 16,867                   | 31,326                 | 0   | 48,193       |
| Maine                    | 361                      | 36,849                   | 2,103                  | 0   | 39,314       |
| Maryland                 | 0                        | 0                        | 0                      | 0   | 0            |
| Massachusetts            | 0                        | 2,953                    | 125,577                | 0   | 128,530      |
| Michigan                 | 14,051                   | 63,111                   | 726,338                | 0   | 803,500      |
| Minnesota                | 3,616                    | 207,643                  | 1,856,593              | 25,444  | 2,093,296    |
| Mississippi              | 23,847                   | 22,323                   | 105,109                | 0   | 151,279      |
| Missouri                 | 2,300                    | 37,511                   | 287,616                | 0   | 327,428      |
| Montana                  | 0                        | 41,073                   | 560,785                | 7,828   | 609,686      |
| Nebraska                 | 0                        | 37,966                   | 1,431,609              | 0   | 1,469,575    |
| Nevada                   | 0                        | 0                        | 6,784                  | 0   | 6,784        |
| New Hampshire            | 0                        | 0                        | 0                      | 0   | 0            |
| New Jersey               | 0                        | 0                        | 0                      | 0   | 0            |
| New Mexico               | 0                        | 209,476                  | 93,468                 | 0   | 302,944      |
| New York                 | 144                      | 6,283                    | 32,187                 | 0   | 38,614       |
| North Carolina           | 8,190                    | 25,158                   | 167,627                | 0   | 200,974      |
| North Dakota             | 8,130                    | 233,223                  | 216,021                | 0   | 457,375      |
| Northern Mariana Islands | 0                        | 0                        | 0                      | 0   | 0            |
| Ohio                     | 14,572                   | 89,194                   | 35,831                 | 74,380  | 213,978      |
| Oklahoma                 | 0                        | 248,758                  | 2,500                  | 0   | 251,258      |
| Oregon                   | 0                        | 61,293                   | 59,367                 | 46,440  | 167,100      |
| Pennsylvania             | 7,821                    | 13,843                   | 75,435                 | 0   | 97,100       |
| Puerto Rico              | 0                        | 0                        | 0                      | 0   | 0            |
| Rhode Island             | 0                        | 0                        | 0                      | 0   | 0            |
| South Carolina           | 0                        | 27,960                   | 1,859                  | 0   | 29,819       |
| South Dakota             | 1,920                    | 60,083                   | 1,045,367              | 0   | 1,107,370    |
| Tennessee                | 0                        | 13,050                   | 346,220                | 0   | 359,271      |
| Texas                    | 37,017                   | 123,299                  | 71,578                 | 14,819  | 246,713      |
| Utah                     | 311                      | 19,011                   | 394,391                | 0   | 413,713      |
| Vermont                  | 0                        | 25,720                   | 69,679                 | 42,371  | 137,770      |
| Virgin Islands           | 0                        | 51,318                   | 0                      | 0   | 51,318       |
| Virginia                 | 0                        | 90,760                   | 366,521                | 122,760   | 580,040      |
| Washington               | 0                        | 7,903                    | 32,096                 | 0   | 39,999       |
| West Virginia            | 20,815                   | 68,676                   | 95,005                 | 0   | 184,496      |
| Wisconsin                | 803,071                  | 1,146,112                | 1,968,402              | 0   | 3,917,585    |
| Wyoming                  | 0                        | 464                      | 125,133                | 0   | 125,596      |
| Totals                   | \$1,231,390              | \$25,740,082             | \$22,590,045           | \$596,518   | \$50,158,034 |

<sup>1</sup> Because of the appeals process, funding commitments have been made after the program year ended on June 30, 2008.

<sup>2</sup> USAC data contain a short description of the services the health care providers receive. These service descriptions are rolled up into the categories above. Some inferences were made when service speed was not clearly indicated. For example, frame relay was assumed to be broadband in the range of 200 kbps to 1.5 Mbps, even though some frame relay service speeds may be faster.

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

**Table 19.17**  
**Universal Service Fund Contribution Factors for End-User Revenues**

| Year | Quarter                                   | Interstate | Intrastate |
|------|---|------------|------------|
| 1998 | First Quarter                             | 3.19 %     | 0.72 %     |
|      | Second Quarter                            | 3.14       | 0.76       |
|      | Third Quarter                             | 3.14       | 0.75       |
|      | Fourth Quarter                            | 3.18       | 0.75       |
| 1999 | First Quarter                             | 3.18       | 0.58       |
|      | Second Quarter                            | 3.05       | 0.57       |
|      | Third Quarter                             | 2.94       | 0.99       |
|      | Fourth Quarter (Oct.) <sup>2</sup>        | 2.887      | 1.10       |
|      | Fourth Quarter (Nov. & Dec.) <sup>2</sup> | 5.8995     |            |
| 2000 | First Quarter                             | 5.8770     |            |
|      | Second Quarter                            | 5.7101     |            |
|      | Third Quarter                             | 5.5360     |            |
|      | Fourth Quarter                            | 5.6688     |            |
| 2001 | First Quarter                             | 6.6827     |            |
|      | Second Quarter                            | 6.8823     |            |
|      | Third Quarter                             | 6.8941     |            |
|      | Fourth Quarter                            | 6.9187     |            |
| 2002 | First Quarter                             | 6.8086     |            |
|      | Second Quarter                            | 7.2805     |            |
|      | Third Quarter <sup>3</sup>                | 7.2805     |            |
|      | Fourth Quarter                            | 7.2805     |            |
| 2003 | First Quarter                             | 7.2805     |            |
|      | Second Quarter <sup>4</sup>               | 9.1        |            |
|      | Third Quarter                             | 9.5        |            |
|      | Fourth Quarter                            | 9.2        |            |
| 2004 | First Quarter                             | 8.7        |            |
|      | Second Quarter                            | 8.7        |            |
|      | Third Quarter                             | 8.9        |            |
|      | Fourth Quarter                            | 8.9        |            |
| 2005 | First Quarter                             | 10.7       |            |
|      | Second Quarter                            | 11.1       |            |
|      | Third Quarter                             | 10.2       |            |
|      | Fourth Quarter                            | 10.2       |            |
| 2006 | First Quarter                             | 10.2       |            |
|      | Second Quarter                            | 10.9       |            |
|      | Third Quarter                             | 10.5       |            |
|      | Fourth Quarter                            | 9.1        |            |
| 2007 | First Quarter                             | 9.7        |            |
|      | Second Quarter                            | 11.7       |            |
|      | Third Quarter                             | 11.3       |            |
|      | Fourth Quarter                            | 11.0       |            |
| 2008 | First Quarter                             | 10.2       |            |
|      | Second Quarter                            | 11.3       |            |
|      | Third Quarter                             | 11.4       |            |
|      | Fourth Quarter                            | 11.4       |            |
| 2009 | First Quarter                             | 9.5        |            |
|      | Second Quarter                            | 11.3       |            |
|      | Third Quarter                             | 12.9       |            |
|      | Fourth Quarter                            | 12.3       |            |
| 2010 | First Quarter                             | 14.1       |            |
|      | Second Quarter                            | 15.3       |            |
|      | Third Quarter                             | 13.6       |            |
|      | Fourth Quarter                            | 12.9       |            |

<sup>1</sup> Initially, contributions for the schools and libraries and rural health care support mechanisms were based on interstate, international, and intrastate end-user telecommunications revenues, while contributions for high-cost and low-income support mechanisms were based on interstate and international end-user telecommunications revenues. See *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Report and Order, 12 FCC Rcd 8776, 9200-05 (1997). Following a decision by the United States Court of Appeals for the Fifth Circuit, the Commission established a single contribution base for all universal service support mechanisms based on interstate and international revenues. See *Federal-State Joint Board on Universal Service, Access Charge Reform*, Sixteenth Order on Reconsideration and Eighth Report and Order in CC Docket No. 96-45 and Sixth Report and Order in CC Docket No. 96-262, 15 FCC Rcd 1679, 1685-86, para. 15 (1999) (*Eighth Report and Order*).

<sup>2</sup> Consistent with the Eighth Report and Order, the Wireline Competition Bureau (formerly Common Carrier Bureau) issued a single universal service contribution factor for November and December 1999. Effective November 1, 1999, this single contribution factor superseded the fourth quarter 1999 contribution factors previously announced by the Bureau on September 10, 1999. See Proposed Fourth Quarter 1999 Universal Service Contribution Factors, CC Docket No. 96-45, Public Notice, DA 99-2109 (Com. Car. Bur., rel. Oct. 8, 1999); See Proposed Fourth Quarter 1999 Universal Service Contribution Factors, CC Docket No. 96-45, Public Notice, DA 99-1857 (Com. Car. Bur., rel. Sept. 10, 1999).

<sup>3</sup> In the Schools First Report and Order, the Commission concluded that unused funds from the schools and libraries support mechanism would be applied to stabilize the collection requirement for universal service for the third and fourth quarters of 2002, and the first quarter of 2003, as necessary. (See *Schools and Libraries Universal Service Support Mechanism*, CC Docket No. 2-6, First Report and Order, 17 FCC Rcd 11521 (2002)).

<sup>4</sup> Beginning with the second quarter of 2003, carriers contribute based on projected, collected, end-user interstate and international telecommunications revenues. Previously, carriers contributed based on historical, gross-billed revenues. The Commission also released an Order and Second Order on Reconsideration, which, inter alia, directed the Wireline Competition Bureau to announce the universal service contribution factor as a percentage rounded up to the nearest tenth of one percent. (See *Federal Joint Board on Universal Service, 1998 Biennial Regulatory Review - Streamlined Contributor Reporting Requirements Associated with Administration of Telecommunications Relay Service, North American Numbering Plan, Local Number Portability, and Universal Service Support Mechanisms, Telecommunications Services for Individuals with Hearing and Speech Disabilities, and the Americans with Disabilities Act of 1990, Administration of the North American Numbering Plan and North American Numbering Plan Cost Recovery Contribution Factor and Fund Size, Number Resource Optimization, Telephone Number Portability, Truth-in-Billing and Billing Format*, Order and Second Order on Reconsideration, CC Docket Nos. 96-45, 98-171, 90-571, 92-237, 99-200, 95-116, 98-170, FCC 03-58 (rel. March 14, 2003), at para. 22.)

Source: Quarterly Public Notices on universal service contribution factors are in CC Docket 96-45. See <http://www.fcc.gov/omd/contribution-factor.html>.



**Table 19.18**  
**Share of Universal Service Contributions**  
**By Principal Type of Contributor Using Traditional Carrier Categories** <sup>1 2</sup>

| Service Provider Category  |         |         |         |         |         |         |            |            |            |            | Preliminary 1/<br>Q3 |            |
|--|---------|---------|---------|---------|---------|---------|------------|------------|------------|------------|----------------------|------------|
|  | 1998    | 1999    | 2000    | 2001    | 2002    | 2003    | 2004       | 2005       | 2006       | 2007       | 2008                 | 2009       |
| Fixed Local Service Providers  |         |         |         |         |         |         |            |            |            |            |                      |            |
| Regional Bell Operating Companies (RBOCs) Including Local Affiliates   | 14.4 %  | 14.4 %  | 16.4 %  | 18.4 %  | 20.2 %  | 20.3 %  | 20.4 %     | 20.4 %     | 18.6 %     | 14.5 %     | 13.6 %               | 12.9 %     |
| Other Incumbent Local Exchange Carriers (LECs) Including Local Affiliates  | 1.4     | 1.5     | 1.7     | 2.1     | 2.9     | 3.3     | 4.1        | 4.2        | 4.2        | 3.7        | 3.7                  | 3.5        |
| Competitive Local Exchange Carriers (CLECs) Local Resellers, Payphone Providers and Other Local Carriers, Excluding LEC Affiliates | 1.4     | 2.7     | 2.3     | 2.8     | 3.4     | 3.6     | 3.8        | 4.4        | 5.3        | 6.4        | 7.8                  | 9.3        |
| Total: Fixed Local Service Providers   | 17.2    | 18.6    | 20.4    | 23.2    | 26.5    | 27.2    | 28.2       | 29.0       | 28.1       | 24.6       | 25.1                 | 25.7       |
| Wireless Service Providers   |         |         |         |         |         |         |            |            |            |            |                      |            |
| Wireless Affiliates of RBOCs   |         |         |         |         |         |         | 16.4       | 16.9       | 20.3       | 21.7       | 22.6                 | 28.2       |
| Wireless Affiliates of Other Incumbent LECs  |         |         |         |         |         |         | 2.1        | 2.0        | 0.4        | 0.5        | 0.4                  | 0.3        |
| Wireless Telephony, Paging, SMR and Other Wireless Providers, Excluding LEC Affiliates   |         |         |         |         |         |         | 10.4       | 11.6       | 15.3       | 18.3       | 18.9                 | 14.6       |
| Total Wireless Service Providers   | 5.1     | 6.6     | 9.4     | 12.1    | 17.4    | 25.3    | 28.9       | 30.6       | 36         | 40.4       | 41.9                 | 43.1       |
| Toll Service Providers   |         |         |         |         |         |         |            |            |            |            |                      |            |
| Toll Affiliates of RBOCs   | 2       | 2       | 2       | 3       | 4       | 5       | 7.2        | 8.6        | 29.1       | 27.4       | 25.5                 | 23.4       |
| Toll Affiliates of Other Incumbent LECs  |         |         |         |         |         |         | 0.5        | 0.6        | 1.1        | 1.3        | 1.3                  | 1.3        |
| IXCs, Toll Resellers, Prepaid Calling Card, Satellite Service, and Other Toll providers, Excluding LEC Affiliates                  |         |         |         |         |         |         | 35.1       | 31.2       | 5.8        | 6.4        | 6.1                  | 6.4        |
| Total Toll Service Providers   | 77.7    | 74.8    | 70.2    | 64.7    | 56.1    | 47.5    | 42.8       | 40.4       | 35.9       | 35.0       | 32.9                 | 31.2       |
| RBOCs and Affiliates   |         |         |         |         |         |         | 43.9       | 46.0       | 68.0       | 63.6       | 61.7                 | 64.6       |
| Other Incumbant LECs and Affiliates  |         |         |         |         |         |         | <u>6.7</u> | <u>6.8</u> | <u>5.6</u> | <u>5.4</u> | <u>5.4</u>           | <u>5.1</u> |
| All Other Service Providers  |         |         |         |         |         |         | 49.4       | 47.3       | 26.4       | 31.0       | 32.9                 | 30.3       |
| Total All Filers   | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 %    | 100.0 %    | 100.0 %    | 100.0 %    | 100.0 %              | 100.0 %    |

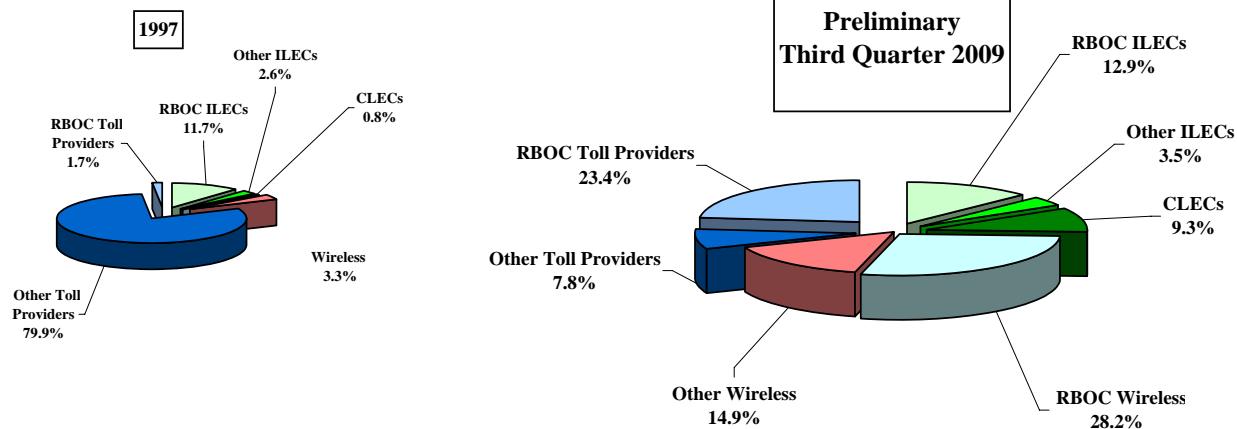
Note: Detail may not add to totals due to rounding. Some data for prior years have been revised. Data for 1997 are available in prior year reports.

<sup>1</sup> For years 1997 through 2002, the percentages are based on shares of reported subject interstate and international end-user billed revenues. The percentages shown for 2003 through 2007 are based on shares of reported subject interstate and international end-user collected revenues. Preliminary percentages shown for 2008 and 2009 are based on projected collected revenues from FCC Form 499-Q filings. Calculations exclude revenues for calls that both originate and terminate in foreign points. Calculations for years 1999 through 2003 include revenues for all filers. For the purposes of this table, AT&T and MCI filings are classified as RBOC filings as of the first quarter of 2006. The Sprint Nextel 2004 and 2005 wireless and toll filings are classified as non-ILEC to be consistent with later years.

<sup>2</sup> Prior to 2004, the FCC Form 499-A asked each filer to identify a single category of communications business that best described its operations. The service provider categories listed on FCC Form 499-A correspond to traditional breakdowns of the industry. For 2004 and 2005, carriers were allowed to specify more than one category and were allowed to identify themselves as an All Distance service provider. Revenues from these filers have been categorized using the traditional industry classification that best described each company.

Source: Industry Analysis and Technology Division, Wireline Competition Bureau, *Telecommunications Industry Revenues* and FCC 499-Q filings.

**Chart 19.9**  
**Share of Universal Service Contributions by Principal Type of Contributor**



## **20 Appendix A – List of Publications by the Industry Analysis and Technology Division**

Most recent release dates are shown in parentheses:

*Infrastructure of the Local Operating Companies* (October 2000). Updates can be found in Section 10 of the December 2008 *Monitoring Report*.

*Internet Access Services (formerly High-Speed Services for Internet Access): Status as of June 30, 2009* (September 2010)

*Local Telephone Competition: Status as of June 30, 2009* (September 2010).

*Universal Service Monitoring Report* (December 2009).

*Numbering Resource Utilization in the United States* (February 2010).

*Quality of Service Report of the Local Operating Companies* (December 2009).

*Reference Book of Rates, Price Indices, and Household Expenditures for Telephone Service* (August 2008).

*State-by-State Telephone Revenues and Universal Service Data* (April 2001). Updates can be found in Section 1 of the *Monitoring Report*.

*Statistics of Communications Common Carriers, 2006/2007 Edition* (September 2010).

*Statistics of the Long Distance Telecommunications Industry* (May 2003).

*Telecommunications Industry Revenues: 2008* (September 2010).

*Telecommunications Provider Locator* (January 2010).

*Telephone Penetration by Income by State* (May 2010).

*Telephone Subscribership in the United States* (August 2010).

*Telephone Subscribership on American Indian Reservations and Off-Reservations Trust Lands* (May 2003).

*Trends in Telephone Service* (August 2008).

## 21 Appendix B – Sources of Telecommunications Information

The information in this report and, in many cases, more detailed information can be downloaded from the Wireline Competition Bureau Statistical Reports web page at [www.fcc.gov/wcb/stats](http://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, Best Copy and Printing, Inc., 800-378-3160.

Additional information on regulated carriers, including investments, revenues, expenses, and earnings, is contained in the annual *Statistics of Communications Common Carriers*. The 2006/2007 edition can be found on the Wireline Competition Bureau Statistical Reports web page at [www.fcc.gov/wcb/iatd/socc.html](http://www.fcc.gov/wcb/iatd/socc.html).

Filings with the Securities and Exchange Commission, such as the annual reports on Form 10-K, can be downloaded from the U.S. Securities and Exchange Commission web page at [www.sec.gov](http://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 at [www.fcc.gov/wcb/iatd/locator.html](http://www.fcc.gov/wcb/iatd/locator.html). The most recent report was released on January 2010.

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 Universal Service Administrative Company. Copies of the form can be downloaded from the Internet at [www.fcc.gov/formpage.html](http://www.fcc.gov/formpage.html). Information on registered companies can be found on the Internet at <http://fjallfoss.fcc.gov/cgb/form499/499a.cfm>.

The information on personal consumption expenditures (Table 3.3) comes from the Bureau of Economic Analysis, National Economic Accounts, Table 2.4.5. Personal Consumption Expenditures by Type of Product. See <http://www.bea.gov/national/nipaweb/SelectTable.asp?Selected=N>.

The information on consumer expenditures (Table 3.1), employment (Tables 5.1 and 5.2), and price indices (Tables 12.1 - 12.3) comes from the Bureau of Labor Statistics and can be found on the Internet at [www.bls.gov](http://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 International Bureau and are available at [www.fcc.gov/wcb/iatd/intl.html](http://www.fcc.gov/wcb/iatd/intl.html).

Tables 18.4 and 18.5 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](http://www.nanpa.com).

The information on wireless telephone service shown in Tables 11.1 and 11.3 was prepared from data received from CTIA-The Wireless Association<sup>TM</sup> 1600 16th Street N.W., Washington, D.C. 20036, 202-785-0081. CTIA can be found on the Internet at [www.ctia.org](http://www.ctia.org).

TNS Telecoms (TNS) has donated databases to the Commission containing information on residential phone usage collected from actual consumer telecommunications bills. TNS has granted the Commission permission to use these databases for research purposes and to publish the industry level results. TNS 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 9.5, 9.6, and 14.1 - 14.6 are developed from these databases. For additional information, visit [www.tnstelecoms.com](http://www.tnstelecoms.com) or contact them at 1-866-811-TNST or by e-mail at [contact@tnstelecoms.com](mailto:contact@tnstelecoms.com). Their address is 101 Greenwood Avenue, Suite 502, Jenkintown, PA 19046.

On June 12, 2008, the Commission released its Fifth Report to the Congress on the *Availability of Advanced Telecommunications Capability in the United States*. A copy of this can be found on the Commission's web site at [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/FCC-08-88A1.pdf](http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-08-88A1.pdf). A copy may also be obtained through from the Commission's duplicating contractor.

Copies of NTIA's 2010 report entitled, *Digital Nation: 21<sup>st</sup> Century America's Progress Toward Universal Broadband Internet Access*, as well as NTIA's 2008 report entitled, *Networked Nation: Broadband in America 2007* can be obtained through NTIA's web site at [www.ntia.doc.gov](http://www.ntia.doc.gov) or by contacting NTIA's Office of Public Affairs at (202) 482-7002.

Tables 17.1, 17.2, and 17.4 contain information from the ARMIS 43-07 reports for the Bell operating companies. Table 17.3 contains information from the ARMIS 43-05. Individual carrier information can be obtained from the ARMIS web page at [www.fcc.gov/wcb/armis](http://www.fcc.gov/wcb/armis).

Chart 17.1 shows the number of patents granted for telecommunications. Additional information on U.S. patents can be found on the Internet at [www.uspto.gov](http://www.uspto.gov).

The National Exchange Carrier Association (NECA) administers access charge revenue pooling for about 1,100 local telephone companies. Their headquarters is located at 80 South Jefferson Road, Whippany, NJ 07981-1009, and they can be reached at 800-228-8597. NECA's website can be found on the Internet at [www.neca.org](http://www.neca.org).

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. It publishes and sells various reports including an annual publication called *Phone Facts*. USTA's website can be found on the Internet at [www.usta.org](http://www.usta.org).

Comptel/ALTS was formed in March 2005 by the merger of Comptel/ASCENT and the Association for Local Telecommunications Services (ALTS) and is currently located at 900 17<sup>th</sup> Street, N.W., Suite 400, Washington, D.C. 20006, 202-296-6650). They represent facilities-based competitive telecommunications service providers, emerging VOIP providers, integrated communications companies, and their service partners, and can be found on the Internet at <http://www.comptel.org>.

## 22 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.

|   |   |
|---|---|
| Access Charges .....                            | James Eisner                            |
| Advanced Telecommunications.....                | James Eisner or Suzanne Mendez          |
| Consumer Expenditures .....                     | James Eisner or Jim Lande               |
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| Price Levels.....                               | Jonathan Kraushaar or Jim Lande         |
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| Revenues .....                                  | Jim Lande                               |
| Subscribership.....                             | James Eisner                            |
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| Telephone Numbers and Area Codes .....          | Craig Stroup                            |
| Universal Service - High Cost .....             | James Eisner                            |
| Universal Service – Lifeline/Link-Up .....      | Suzanne Mendez or James Eisner          |
| Universal Service – Rural Health Care .....     | Craig Stroup                            |
| Universal Service – Schools and Libraries ..... | Craig Stroup                            |

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