9. Quality of Service

This section summarizes various kinds of service quality data filed by local exchange telephone companies through 1997. The Federal Communications Commission (FCC or Commission) does not impose service quality standards, *per se*, on communications common carriers. Rather, the Commission annually monitors carrier-submitted data and publishes this information in order to document customer-initiated trouble reports and company reactions. This section publicizes information about company performance and, specifically, statistics about company responsiveness to network failures and associated consumer complaints. The tables in this section include company comparison data about various service parameters including installation, maintenance, switch downtime, and trunk blocking, along with associated customer perception data.

This section indicates areas where there is room for carrier improvement. Further, as expanding services and technology choices cause users to place ever greater demands on the network, it will be critically important to maintain our monitoring effort to help ensure high levels of network performance and reliability in the future.

At the end of 1983, anticipating AT&T's imminent divestiture of its local operating companies, the Commission directed the Common Carrier Bureau to establish a monitoring program that would provide a basis for detecting adverse trends in network service quality. Throughout 1985, the Bureau modified the service quality reporting requirements to reduce unnecessary paperwork and to ensure that needed information would be provided in a more uniform format. The data were received semiannually, typically in March and August, and formed the basis for FCC summary reports published in June 1990 and July 1991.

With the implementation of price-cap regulation for certain local exchange carriers, the Commission made several major changes to the service quality monitoring program beginning with reports filed in 1991. First, the Commission expanded the class of companies filing reports to include non-Bell carriers subject to price-cap regulation.[1] Second, the Commission included service quality reports as part of the Automated Reporting Management Information System (ARMIS).[2] Third, the Commission ordered significant changes to the kinds of data reported.[3]

---

1 *See Policy and Rules Concerning Rates for Dominant Carriers*, Second Report and Order, 5 FCC Rcd 6786, 6827-31 (1990) (*LEC Price Cap Order*) (establishing the current service quality monitoring program and incorporating the service quality reports into the ARMIS program), Erratum, 5 FCC Rcd 7664 (Com. Car. Bur. 1990), *modified on recon.*, 6 FCC Rcd 2637 (1991); *aff'd sub nom., Nat'l Rural Telecom Ass'n v. FCC*, 988 F.2d 174 (D.C.Cir. 1993).

2 *LEC Price Cap Order*, 5 FCC Rcd 6786, 6827-30. The ARMIS database includes a variety of financial and infrastructure company mechanized reports in addition to the quality-of-service reports. Most data are available disaggregated to a study area or state

Following these developments, the Commission released service quality summary reports in February 1993, March 1994, and March 1996. Thereafter and pursuant to requirements in the Telecommunications Act of 1996[4] the Commission reduced the frequency of the filed data from quarterly to annual submissions.[5] In May 1997 relevant definitions were clarified further and these changes have been reflected starting with data covering the 1997 calendar year.[6]

The introduction of new technologies to the network has resulted in a greater concentration of telephone traffic on a smaller number of higher capacity switches and facilities. Outages on those facilities, although infrequent, could have serious consequences.

While the latest reporting period generally indicates fewer complaints per million access lines than for the previous period, the data suggest that some companies may still have problems with increasing complaint levels or the absolute number of customer complaints.[7] In examining

---

level.

3 *LEC Price Cap Order*, 5 FCC Rcd 6786, 6827-30; *See Policy and Rules Concerning Rates for Dominant Carriers*, Memorandum Opinion and Order, 6 FCC Rcd 2974 (Com. Car. Bur. 1991) (*Service Quality Order*), *reconsideration* 6 FCC Rcd 7462 (Com. Car. Bur. 1991). Previously the Common Carrier Bureau had collected data on five basic service quality measurements from the Bell Operating Companies. These were customer satisfaction levels, dial tone delay, transmission quality, on time service orders, and percentage of call blocking due to equipment failure.

4 Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (1996 Act).

5 Orders implementing filing frequency and other reporting requirement changes associated with implementation of the Telecommunications Act of 1996 are as follows: *Implementation of the Telecommunications Act of 1996: Reform of Filing Requirements and Carrier Classifications*, Order and Notice of Proposed Rulemaking, 11 FCC Rcd 11716 (rel. Sep. 12, 1996); *Revision of ARMIS Quarterly Report (FCC Report 43-01) et al.*, Order, 11 FCC Rcd 22508 (Com. Car. Bur., rel. Dec. 17, 1996); *Policy and Rules Concerning Rates for Dominant Carriers*, Memorandum Opinion and Order, 12 FCC Rcd 8115 (rel. May 30, 1997); *Revision of ARMIS Annual Summary Report (FCC Report 43-01) et al.*, Order, 12 FCC Rcd 21831 (Com. Car. Bur., rel. Dec. 16, 1997).

6 *See Policy and Rules Concerning Rates for Dominant Carriers*, Memorandum Opinion and Order, 12 FCC Rcd 8115 (rel. May 30, 1997).

7 Factors that could contribute to higher complaint levels are the delayed impact of capital investment or the presence of localized problems, and at least in some cases may suggest a need to more effectively deal with human resource and customer relations issues. Although technology and capital investment can address many quality of service issues, ultimately the quality of service provided is a significant function of human resources, a

historical data it often appears that where complaints have increased some other measured parameter has also been adversely affected, for example, items relating to installation and maintenance (such as trouble reports, outage levels, and installation and repair intervals).[8] At the same time, delays on the customer end (i.e. delays in filing complaints) and in company response times mean that overall customer satisfaction levels and other measurements do not necessarily correlate with the number of reported complaints. Nevertheless, it is our experience that, overall, complaint levels are a sensitive indicator of company service quality and that increases in complaint levels can be correlated to discrete problem areas. Thus continuing increases in complaint levels for more than one annual reporting period are of greatest concern.

In our 1966 summary report[9] we surmised that increasing customer complaint levels, could be attributed, in part, to unexpected access line growth, downsizing and consolidation efforts within the companies. Data for 1995 through 1997 suggest that not all companies have experienced the same problems and that responses to problems have varied by company.

The data presented in this section summarize ARMIS 43-05 and 43-06 carrier filings[10] and reflect changes in the filing frequency from quarterly to annually along with certain changes to the filing definitions. Other changes affecting the definitions and further modifying filing requirements have resulted in additional reporting requirements that have affected the format of these filed data submissions. Although many of the changes are minor and clarify the definitions, added caution should be exercised in analyzing time series data.

---

fact which is easily overlooked. Effective use of new technology will increasingly require that the companies effectively manage their human resources and address the human issues in providing service. *See* Gross Capital Expenditure data in ARMIS 43-07 reports (row 540) which shows evidence of increased capital investment by a number of companies in 1996.

8 Installation and maintenance data associated with interexchange carrier access services is provided separately from data associated with end users.

9 *Quality of Service for the Local Operating Companies Aggregated to the Holding Company Level*, released March 22, 1996.

10 The source data used in preparing this section are available on the FCC-State Link electronic bulletin board system (BBS) operated by the Industry Analysis Division of the Common Carrier Bureau. The electronic bulletin board can be reached by dialing (202) 418-0241. The data are also available from ITS, Inc., at (202) 857-3800. Selected paper filings are available in the Common Carrier Bureau public reference room at 2000 M Street, N.W., Room 575, Washington, D.C. 20554.

One of the most obvious changes is the elimination of the overall customer satisfaction levels reported previously in ARMIS 43-06 reports, beginning with data filed in 1997.[11] The tables accompanying this section highlight the key data now received. Tables include data from each major holding company: the regional Bell companies, GTE (including Contel), and Sprint.[12] These tables also reflect corrections for previously filed data as made by the companies.

The data items summarized in the tables largely contain raw data measurements that are not scaled by company indexing processes. This removes a degree of procedural variation among companies. For example, companies file a fairly extensive amount of raw data about switching outages, including outage durations and number of lines affected.

The data summarized in this section contain sums, or weighted averages, of data reported by states or study areas and may be useful in assessing overall trends. Where information is reported in terms of percentages or average time intervals, data presented here are based on a composite of individual study area data that is calculated by weighting the percentage or time

---

11 While customer perception surveys tend to be the most visible measures of service quality, there are a number of significant pitfalls in relying solely on this kind of data. First, there are differences in customer perception in different parts of the country and procedural variation among companies and over time in developing the data. Second, general frustration or stress levels in the population can be targeted and translated into poorer overall perception levels for the same service quality. Finally, not all perception measures are of equal statistical validity because some of the companies use very small sample sizes, particularly with business customers. In our 1996 report we noted significant declines in sample sizes of residence and small business customers for several companies, including US West, Southwestern Bell, and BellSouth. Southwestern Bell reported, for example, that new sample sizes increase confidence ranges from plus or minus 0.2% to plus or minus 0.4% with a 95% confidence, but significantly reduce survey cost. Sample size information is thus included in this section along with the customer perception results. Other problems with this information reflect underlying changes in company procedures used to collect customer perception data and reporting changes. These and other changes make it impossible to properly relate current measurements to the previous data series. The current data reflecting customer dissatisfication levels are provided directly as a composite of company filed study area data in which composite percentages were calculated as a weighted average of individual study area percentages. Starting with 1997 data, the companies were no longer required to file data on overall customer perception levels.

12 In February 1992, United Telecommunications Inc. became Sprint Corporation [Local Division]; and in March 1993, Sprint Corporation acquired Centel Corporation. Although Bell Altantic and NYNEX merged in August 1997, the tables continue to reflect the merged entities separately. Similarly, SBC and Pacific Telesis facilities are shown separately despite the merger of the two entities in April 1997.

interval figures. For example, we weight the percent of commitments met by the corresponding number of orders provided in the filed data.[13]

The items contained in the tables that cover data for 1995, 1996 and 1997, are summarized below.[14] Installation, maintenance and customer complaint data are shown in Table 9.1 and switch downtime and trunk servicing data are shown in Table 9.2. Installation and maintenance data are presented separately for services provided to end users and for interexchange carrier access facilities. Outage data categorized by cause are shown in Table 9.3. Customer perception data are contained in Table 9.4 and the associated survey sample sizes are contained in Table 9.5.

This summary has attempted to display data elements that are roughly comparable for the three years covered by this section. More detailed information on the raw data from which this section has been developed is contained in the raw data sets that can be examined using spreadsheet viewers that are maintained on the electronic BBS described above. In addition, complete data descriptions are available in the Commission Orders referenced above.[15] The following are descriptions of the variables included in the data tables.[16]

---

13 Company composite data were typically recalculated on a consistent basis from study area data, as a number of company supplied composites could not be confirmed. Although the companies have prepared their own company rollups, we have discovered various inconsistencies or inaccuracies in some of these company-prepared composites. We have therefore weighted data involving percentages or time intervals in order to arrive at the more consistent composite data shown in the tables and expect that the companies will want to review their procedures for preparing composites. Parameters used for weighting in this section were appropriate for the composite being calculated and were based on the raw data filed by the carriers but are not necessarily shown in the tables. For example, we calculate composite installation interval data by summing the individual study area results multiplied by the number of installation orders reported for each study area and then dividing the result by the total number of orders.

14 Although Bell Atlantic has acquired NYNEX and SBC has acquired Pacific Telesis, the tables continue to show the data for the companies as they were prior to the acquisitions.

15 *See* footnote 6, *supra.*

16 The row numbers and columns associated with the raw source data in the ARMIS 43-05 report are included in the FCC report *Quality of Service for the Local Operating Companies Aggregated to the Holding Company Level*, released September 28, 1998. The reader should note that there are variations in numbers of switches and access lines in the various ARMIS reports that may lead to inconsistencies when comparing data sources; however, these variations are not believed to be significant enough to alter the observations made in this section.

1. Percent of Installation Commitments Met

   Percent of installations that were met by the date promised by the company to the customer. It is presented separately for residential and business customers' local service.

2. Average Installation Interval (in days)

   Average interval (in days) between the installation service order and completion of installation. It is shown separately for access services provided to carriers and for residential and business customers' local service. Data on intervals for missed installations were replaced by average interval described above.

3. Average Repair Interval

   Average time (in hours) for the company to repair access lines and includes subcategories for switched access, high-speed special access, and all special access. Only data for switched and special access services provided to carriers are presented.

4. Initial Trouble Reports per Thousand Access Lines

   Calculated as the total count of trouble reports reported as "initial trouble reports," divided by the number of access lines in thousands. (Note that multiple calls within a 30 day period associated with the same problem are counted once, and the number of access lines reported and used in the calculation is the total number of access lines divided by 1,000.) This item is subcategorized by Metropolitan Statistical Areas (MSA); non-MSA; residence; and business. Note that access lines for data filed in 1997 was requested in whole numbers, but was requested in thousands for prior years.

5. Found or Verified Troubles per Thousand Access Lines

   Calculated as described in item 4, above. Represents the number of trouble reports in which the company identified a problem.

6. Repeat Troubles as a percent of Initial Trouble Reports

   Calculated as the number of trouble reports that recur, or remain unresolved, within 30 days of the initial trouble report, divided by the number of initial trouble reports as described above. Provides a measure of the effectiveness of the

company in resolving troubles at the outset. Subcategorized by MSA, non-MSA, residence, and business.

7. Complaints per Million Access Lines

   The number of residential and business customer complaints, per million access lines, reported to state or federal regulatory bodies during the reporting period.

8. Number of Access Lines, Trunk Groups and Switches

   The count of in-service access lines, trunk groups, and switches. Trunk groups only include common trunk groups between Local Exchange Carrier (LEC) access tandems and LEC end offices. Access lines were reported in thousands in pre 1997 data submissions. Starting with 1997 data submissions access line data was requested in whole numbers. Data for 1995 was annualized as the average of quarterly data.

9. Switches with Downtime

   Number of network switches experiencing downtime and the percentage of the total number of company network switches experiencing downtime.

10. Average Switch Downtime in Seconds per Switch

    Total switch downtime divided by the total number of company network switches indicates the average switch downtime in seconds per switch. Shown for all occurrences and for unscheduled occurrences greater than 2 minutes.

11. Unscheduled Downtime Over 2 Minutes per Occurrence

    Number of occurrences of more than 2 minutes duration that were unscheduled, the number of occurrences per million access lines, the average number of minutes per occurrence, the average number of lines affected per occurrence, the average number of line-minutes per occurrence in thousands, and the outage line-minutes per access line. For each outage, the number of lines affected was multiplied by the duration of the outage to provide the line-minutes of outage. The resulting sum of these data represents total outage line-minutes. This number was divided by the total number of access lines to provide line-minutes-per-access-line, and, by the number of occurrences, to provide the line-minutes-per-occurrence. This categorizes the normalized magnitude of the outage in two ways and provides a realistic means to compare the impact of such outages between companies. A separate table is provided for each company showing the number of outages and outage line-minutes by cause.

12. Scheduled Downtime Over 2 Minutes per Occurrence

Determined as in item 11, above, except that it consists of scheduled occurrences.

13. Percent of Trunk Groups Meeting Design Objectives

This data item provides the percentage of trunk groups exceeding an industry standard for blocking over the reporting interval. The trunk groups measured and reported are interexchange access facilities. These represent only a small portion of the total trunk groups in service.

Observations, Analytical Notes, and Methodological Qualifications

Overall, we caution readers to be aware of potential methodological shortcomings and inconsistencies associated with use of the service quality data presented in this section. First, carriers periodically revise submitted data as problems are discovered and data presented here may contain errors or may not reflect the latest updates. Second, although the data are subject to an initial screening by Commission staff and certain problems may have been corrected in carrier-submitted revised filings, there are still potential flaws in the data that will only become apparent when users subject the data to further analysis or compare it with data from other sources.[17]

Third, Commission staff have recalculated holding company totals or data composites and these might not match company-filed totals or composites.[18] This is primarily due to calculation variations regarding, *e.g.*, percentages or average intervals that require weighting in the calculations. In the case of some of the data sets presented in earlier reports but not continued in this section, carriers have updated earlier filings numerous times. In a few isolated instances

---

17 For example, small variations between GTE prepared composites and those that we calculated independently appear to have been caused by inclusion or exclusion of data from study areas such as Micronesia (GTMC) and Alaska (GTAK). We also note that GTE data available to us for the early quarters of 1995 was missing at least 2 study areas that appear to account for discrepancies in the composites for that year.

18 Recent Commission orders have modified definitions in the data collection process in an attempt to remove perceived ambiguities. We note, however, that because this section contains many items whose composites are calculated as weighted sums or averages, we have recalculated company composites for this section to improve consistency and we have pointed out general cautions in using the data. We expect that this will be useful to the companies in their review of internal processes associated with calculation of composites and may enable us to use company calculated composites in the future.

the most recent update could not be used or required minor adjustment. The data presented here typically reflect data updates filed with the Industry Analysis Division as of June 1998. We therefore caution the reader that some of the problems that may be discovered in connection with the data presented here resulted from differences in aggregation methodologies, data irregularities. or data revisions that either could not be used or were not available in time for use in this section.[19]

Fourth, outage measurements should be considered in context. For example, the average number of lines affected per event would tend to favor a company with a larger number of smaller or remote switches with lower line counts per switch, while the average outage duration might favor a company with larger switches. Thus, using the average number of lines per event measurement, one 25,000 line switch that is out of service for five minutes would appear to have a greater service impact than ten 2,500 line switches that are out of service for five minutes. That is why we present a grouping of outage measurements that include the outage line-minutes per event and per 1,000 access lines. We have also added the number of outages per switch as another metric for measuring a company's performance.

Fifth, we have identified some erroneous or incomplete company responses. Some of these deficiencies were corrected prior to preparation of this section, including one error that apparently resulted from an improper reading of the instructions or from otherwise misunderstanding the definitions. This error related to the new requirement that access lines now be provided in whole numbers rather than in thousands. Modifications to the definitions or changes in their interpretation may in some cases affect the ability to perform time series analysis. In addition, data revisions reflecting corrections or omissions have not necessarily been provided retroactively. Some of the errors may be in the process of correction or may not be evident until one performs further analysis with the data.

Notwithstanding these qualifications, we expect this section will promote company responsiveness and, thereby, assist in the elimination of errors that were not identified by earlier screenings or that can only be identified by the companies themselves. Therefore, except in the

---

19 Note that 1995 data has been annualized and items such as switching entities and access lines represent the average of the reported quantities over the 4 quarters of 1995. We have noted in some cases that total access lines as reported in the last column of row 140 does not agree with the sum of the first column entry of rows 320 and 330. Variations in access line and switch counts may affect normalized outage data reported in the tables. In some instances irregularities inherent in the underlying data at the study area level or the use of datasets prior to the latest version for this summary report may have resulted in other undetected errors in the calculated composites. In a few instances we have received revised diskettes without version number changes or have not received copies of the most recent revisions in time for inclusion in this section. Typically data revisions do not involve all study areas. In at least one case revised data had a data irregularity that made it unusable.

calculation of company composites, we have not, in most cases, deleted or adjusted data. It is expected that the process of data correction will continue as problems are further identified and corrected.

We also note the following specific caveat: responding to trouble reports is a process that can be affected by various externalities such as adverse weather conditions. Also, response times seem to be affected by such factors as company size and other company specific characteristics or factors.[20] As a result, we advise the reader to remember that slower responsiveness to problems in service quality should not be confused with a lack of responsiveness.

This section presents data that reflect several different ways of measuring switch outages, including line-minutes-per-access line and line-minutes-per-event. Outage line-minutes is a measure that combines both duration and number of lines affected in a single parameter. We derived this parameter from the raw data by simply multiplying the number of lines involved in each outage by the duration of the outage, summing the resulting values and dividing the sum by the total number of access lines or events. Because outage measurements tend to exhibit more variability than other measurements, we have shown in the tables several ways of presenting the results. Improvements in responding to outages by some of the reporting companies may be associated with efforts to improve switch reliability, including working with manufacturers to replace poorly performing switches and to improve performance of existing ones.[21]

Because performance within any single data category may vary widely over time, evaluating a given company's performance by looking at a single measurement may be misleading, especially considering that long lead times might be needed to correct certain problems or that corrections might already be underway. On the other hand, problems that are observed in several service quality measurement categories could also reflect overall service deterioration. We believe that customer complaint and perception levels should be viewed in the context of other measures of performance. However, we have found that it is practically

---

20 SBC, for example, had reported a high level of customer trouble reports for the fourth quarter of 1994 and attributed this to severe weather and flooding in Texas during the period. Similarly, Pacific Telesis attributed high first quarter 1995 trouble reports to weather-related problems. While the reduced frequency of data now filed reduces the number of data points available for trend analysis, it also smooths out the effects of seasonal and weather related problems.

21 GTE representatives met with the staff to express concerns about presentation of its outage data in this section, asserting that the raw number of outages taken out of context would result in GTE appearing worse than other companies due to the large number of small and remote switches in its territory. The use of a menu of data elements as a description of outage performance actually tends to portray performance more equitably for all companies and reduces reporting bias that would tend to result from a more limited description of the data.

impossible to ascertain whether changes in aggregate customer complaint levels result from developments in a single problem area or reflect a perception of a wider ranging set of problems. For these reasons and because data is now filed annually rather than quarterly we recommend the use of both trend and pattern analysis of the data.

Most measurements do not exhibit a consistent pattern of changes between 1995 and 1997. In at least one case there is a consistent increase in customer complaints and customer dissatisfaction over this period.[22] In fact, some companies which in previous reports had registered service indicator declines have shown improvements that might, at least in part, be related to significant increases in gross capital expenditures.[23] Recent Bell Atlantic data for New York and New England (formerly NYNEX) disclose capital expenditure increases and register concurrent improvement in some service quality measures. This illustrates the lag in addressing the causes of historically reported service quality declines.

Finally, one of the measurements for which service quality data is collected is the number of service affecting troubles reported by customers. Because of the various classifications of trouble reports, the Commission's May 1997 Order addressed problems relating to subtleties in the definitions associated with the terms "initial" and "repeat" trouble reports.[24] This and other issues were addressed in an October 1993 Order modifying filing requirements and were the

---

22 Ameritech for example does exhibit continued increases in residential complaints per million access lines and in the percentage of customers dissatisfied; however, there does appear to be improvement in other measurements that may lead to improvement in future customer satisfaction levels. Further steps may be required to avoid future increases in customer complaints and dissatisfaction levels.

23 *See* Infrastructure data in 1996 ARMIS 43-07 filings (row 540). In 1995 GTE and SBC reported the largest gains in ISDN-capable switches. *See* Federal Communications Commission, Industry Analysis Division, *Infrastructure of the Local Operating Companies Aggregated to the Holding Company Level,* released March 13, 1997 (mimeo 72687).

24 This issue was discussed in the last report on service quality and was addressed in recent Commission orders. *See Policy and Rules Concerning Rates for Dominant Carriers*, Memorandum Opinion and Order, 12 FCC Rcd 8115, 8133 (rel. May 30, 1997); *Revision of ARMIS Annual Summary Report (FCC Report 43-01) et al.*, Order, 12 FCC Rcd 21831, 21835 (Com. Car. Bur., rel. Dec. 16, 1997). *See also* Federal Communications Commission, Industry Analysis Division, *Quality-of-Service for the Local Operating Companies Aggregated to the Holding Company Level*, released March 22, 1996 (mimeo 60268) for further discussion.

subject of further clarification and expansion in subsequent orders leading to the reporting of a new category of recurring trouble reports.[25]

All of these reflections and observations essentially relate to the issue of maintaining the necessary continuity of data measurement. While an attempt has been made to preserve continuity up to this point, detection of errors and changes in reporting requirements that are deemed necessary to deal with price-cap and other requirements will introduce discontinuities into certain time series data or eliminate certain items of data entirely.

In addition, changes in technology have compelled changes in measurements required to adequately monitor service quality.[26] Compounding this problem is the fact that the companies themselves periodically wish to change their internal measurement procedures from which regulatory data are drawn, adding difficulty to long-term measurement.[27] In some cases procedural changes in the data measurement and collection process may be subtle enough so that they are not immediately noticeable in the data. Significant changes in company procedures, however, usually result in noticeable and abrupt changes in data levels. It appears that at least some of these changes are not reported to the Commission. These factors tend to limit the number of years of data available to track service quality trends and will affect the frequency and availability of summary reports that are prepared by the Commission. Although the Commission has made every effort to standardize and rationalize data reporting over the years, given the number of changes to the reporting regimes and predictable future changes, one should not assume exact comparability on all measurements for data sets as they are presented year by year.

It is our experience that service reliability data is, by its nature, subject to a greater volatility than other types of company data. As a general rule, one should be cautious about interpreting individual measurements until one develops a sense of what the data measurements disclose about company performance.

---

25 *See Policy and Rules Concerning Rates for Dominant Carriers*, Memorandum Opinion and Order, 8 FCC Rcd 7474, ¶ 26 and attachments (1993). *See also Revision of ARMIS Annual Summary Report (FCC Report 43-01) et al.*, 12 FCC Rcd 21831 (introducing reporting of "subsequent" troubles).

26 For example there is presently a lack of information on digital transmission characteristics particularly with respect to performance of high speed data modems used on analog lines. This lack of information and associated customer confusion may contribute to adverse customer perceptions. Furthermore, adequate public information on the performance of analog loops in terms of their performance when used with a data modem could provide a stimulus for the proliferation of digital and fiber subscriber loops.

27 For those interested in trending customer perception data in this section with that available in prior Reports it should be noted that Bell Atlantic, for example, reported changes to its customer perception surveys that were reflected in its post-1990 data, and Pacific Telesis had noted changes effective in January 1992.

Table 9.1(a): Company Comparison -- Installation, Maintenance, & Customer Complaints -- 1995 (Annualized)

Company	Ameritech	Bell Atlantic	BellSouth	NYNEX	Pacific	SBC	US West	GTE	Sprint
ACCESS SERVICES PROVIDED TO CARRIERS -- SWITCHED ACCESS									
Percent Installation Commitments Met	82.3	91.9	99.1	96.0	92.8	95.9	73.3	93.0	95.6
Average Installation Interval (days)	56.2	35.0	23.1	41.4	32.5	33.3	21.9	32.8	NA
Average Repair Interval (hours)	27.4	6.6	3.1	16.0	6.4	3.5	8.7	12.0	3.1
ACCESS SERVICES PROVIDED TO CARRIERS -- SPECIAL ACCESS									
Percent Installation Commitments Met	81.5	92.7	90.7	88.7	96.7	88.4	69.5	92.9	95.2
Average Installation Interval (days)	17.3	15.3	12.6	21.8	23.0	NA	14.8	12.1	1.8
Average Repair Interval (hours)	4.0	2.2	3.0	8.2	3.7	2.1	6.3	8.1	3.0
LOCAL SERVICES PROVIDED TO RESIDENTIAL AND BUSINESS CUSTOMERS									
Percent Installation Commitments Met	98.6	99.7	98.7	97.6	99.1	99.2	97.3	98.1	98.9
Residence	99.1	99.7	98.8	98.5	99.2	99.3	97.8	98.5	99.1
Business	96.7	99.4	98.3	95.7	98.9	98.6	94.6	95.9	97.9
Average Installation Interval (days)	3.0	1.6	NA	6.7	2.7	1.4	1.9	3.1	2.9
Residence	2.6	1.4	NA	5.4	2.3	1.3	1.3	2.9	2.5
Business	4.2	3.3	NA	7.4	4.2	1.7	3.4	4.1	4.9
Initial Trouble Reports per Thousand Lines	226.4	242.1	289.1	323.6	156.8	214.3	184.8	198.0	242.7
Total MSA	224.6	245.6	284.4	335.5	155.6	218.3	183.5	187.0	NA
Total Non MSA	245.6	200.1	308.2	247.2	181.9	222.1	189.3	226.2	NA
Total Residence	279.2	280.5	322.2	373.0	194.5	258.7	208.4	214.6	NA
Total Business	119.9	173.0	209.0	209.7	92.1	127.1	126.4	152.9	NA
Troubles Found per Thousand Lines	140.1	178.8	145.4	219.9	112.8	146.8	121.9	150.6	181.7
Repeat Troubles as a Pct. of Trouble Rpts.	18.2%	27.8%	15.3%	17.4%	18.0%	13.3%	26.7%	13.3%	11.8%
Total Residence	18.1%	29.6%	15.3%	17.1%	17.5%	13.5%	25.7%	13.2%	12.2%
Total Business	18.2%	22.3%	15.5%	18.9%	19.6%	12.2%	31.0%	13.7%	9.7%
Res. Complaints per Mill. Res. Access Lines	164.8	50.4	75.4	924.0	11.5	44.9	953.4	107.9	132.5
Bus.Complaints per Mill. Bus. Access Lines	54.7	14.6	40.2	490.8	3.2	20.6	544.5	NA	82.2

Table 9.1(b): Company Comparison -- Installation, Maintenance, & Customer Complaints -- 1996

Company	Ameritech	Bell Atlantic	BellSouth	NYNEX	Pacific	SBC	US West	GTE	Sprint
ACCESS SERVICES PROVIDED TO CARRIERS -- SWITCHED ACCESS									
Percent Installation Commitments Met	61.1	88.1	98.3	78.5	92.8	88.9	85.8	97.1	96.8
Average Installation Interval (days)	54.2	29.0	24.9	58.2	37.9	30.2	18.8	32.2	4.3
Average Repair Interval (hours)	28.0	9.3	2.1	NA	21.5	3.7	8.1	13.4	3.8
ACCESS SERVICES PROVIDED TO CARRIERS -- SPECIAL ACCESS									
Percent Installation Commitments Met	87.9	92.4	89.2	77.5	93.6	80.9	83.8	92.3	97.0
Average Installation Interval (days)	18.4	14.6	13.2	29.3	22.6	0.0	14.1	11.5	6.2
Average Repair Interval (hours)	3.7	2.5	3.3	10.7	4.7	2.1	5.1	8.9	3.1
LOCAL SERVICES PROVIDED TO RESIDENTIAL AND BUSINESS CUSTOMERS									
Percent Installation Commitments Met	98.3	99.3	98.7	98.1	99.0	99.0	97.8	98.0	98.8
Residence	98.4	99.4	98.9	98.5	99.0	99.1	98.3	98.4	99.0
Business	97.1	98.7	97.5	96.0	98.7	98.1	94.3	95.6	97.8
Average Installation Interval (days)	2.2	1.6	0.7	3.1	2.2	0.7	1.3	2.8	2.9
Residence	2.0	1.5	0.6	2.9	1.9	0.7	0.7	2.6	2.5
Business	3.5	2.6	1.4	5.3	3.4	0.7	3.4	4.2	5.1
Initial Trouble Reports per Thousand Lines	218.9	176.4	280.3	237.7	126.3	244.3	191.2	201.0	222.6
Total MSA	217.1	179.5	274.5	243.1	126.0	245.0	186.3	191.7	212.8
Total Non MSA	238.7	159.9	307.6	203.7	132.7	240.8	208.9	224.1	234.8
Total Residence	281.6	216.3	317.4	273.5	153.8	296.9	221.2	222.8	254.1
Total Business	103.3	112.8	195.7	158.2	79.0	129.2	122.0	143.9	140.3
Troubles Found per Thousand Lines	141.8	98.4	137.8	133.0	93.6	166.4	128.4	150.0	166.5
Repeat Troubles as a Pct. of Trouble Rpts.	16.7%	37.5%	17.4%	22.9%	15.9%	15.1%	31.2%	15.0%	12.7%
Total Residence	16.7%	39.9%	18.0%	22.9%	15.6%	15.4%	30.3%	14.7%	13.1%
Total Business	16.3%	29.4%	15.4%	23.1%	16.9%	13.2%	34.9%	16.3%	10.6%
Res. Complaints per Mill. Res. Access Lines	174.3	112.6	66.1	1,061.6	13.4	42.2	731.6	165.8	12.1
Bus.Complaints per Mill. Bus. Access Lines	29.1	24.6	31.6	576.9	5.2	17.6	419.5	86.8	5.2

Table 9.1(c): Company Comparison -- Installation, Maintenance, & Customer Complaints -- 1997

Company	Ameritech	Bell Atlantic	BellSouth	NYNEX	Pacific	SBC	US West	GTE	Sprint
ACCESS SERVICES PROVIDED TO CARRIERS -- SWITCHED ACCESS									
Percent Installation Commitments Met	51.5	82.2	99.0	97.3	92.9	82.3	90.9	94.7	96.9
Average Installation Interval (days)	50.3	33.9	22.0	16.3	84.0	34.0	33.1	30.4	4.1
Average Repair Interval (hours)	10.8	6.4	1.3	NA	14.0	2.9	17.0	13.4	24.3
ACCESS SERVICES PROVIDED TO CARRIERS -- SPECIAL ACCESS									
Percent Installation Commitments Met	92.5	93.1	88.5	98.6	89.4	80.1	86.7	89.7	97.8
Average Installation Interval (days)	13.4	15.0	13.9	11.8	107.5	0.0	22.1	12.9	7.1
Average Repair Interval (hours)	3.1	2.3	3.3	2.9	5.2	2.0	3.4	7.3	11.7
LOCAL SERVICES PROVIDED TO RESIDENTIAL AND BUSINESS CUSTOMERS									
Percent Installation Commitments Met	98.5	98.9	98.7	98.2	96.4	98.9	97.8	98.3	98.2
Residence	98.6	99.1	98.9	98.4	96.5	98.9	98.1	98.6	98.3
Business	97.3	97.5	97.8	97.0	95.8	98.3	95.4	95.8	97.6
Average Installation Interval (days)	2.2	2.6	0.7	1.0	3.0	0.7	1.2	2.9	2.9
Residence	2.1	2.4	0.6	0.9	2.8	0.7	0.8	2.8	2.7
Business	3.1	3.7	1.1	1.3	4.0	0.6	2.9	4.0	4.9
Initial Trouble Reports per Thousand Lines	205.3	166.1	274.1	187.4	105.0	241.4	188.3	186.7	202.5
Total MSA	203.7	168.0	259.8	192.9	NA	245.8	184.1	182.8	150.0
Total Non MSA	222.2	141.4	358.8	151.4	NA	218.1	204.2	196.6	304.8
Total Residence	262.5	199.4	312.9	228.1	NA	291.9	220.5	206.7	241.9
Total Business	99.8	109.2	184.3	114.4	NA	127.3	117.8	NA	NA
Troubles Found per Thousand Lines	205.3	90.0	137.4	128.4	76.4	152.1	127.2	143.3	202.5
Repeat Troubles as a Pct. of Trouble Rpts.	7.1%	22.8%	17.4%	19.5%	16.5%	16.6%	33.0%	13.9%	NA
Total Residence	7.0%	24.0%	18.0%	19.6%	16.8%	16.9%	32.3%	14.1%	NA
Total Business	7.2%	19.3%	14.9%	19.2%	15.1%	14.9%	36.1%	13.1%	NA
Res. Complaints per Mill. Res. Access Lines	240.9	93.3	52.9	539.5	52.2	52.3	532.3	112.7	15.2
Bus.Complaints per Mill. Bus. Access Lines	49.6	36.4	28.5	263.9	8.3	24.5	307.7	57.5	3.0

Table 9.2(a): Company Comparision -- Switch Downtime & Trunk Blocking -- 1995 (Annualized)

Company	Ameritech	Bell Atlantic	BellSouth	NYNEX	Pacific	SBC	US West	GTE	Sprint
Total Access Lines in Thousands	18,348	19,167	20,168	15,959	17,692	13,799	14,309	16,362	6,568
Total Trunk Groups	1,288	1,506	3,712	1,092	1,680	1,070	2,490	2,339	1,333
Total Switches	1,416	1,408	1,653	1,293	822	1,493	1,672	4,383	1,644
Switches with Downtime									
Number of Switches	1,137	432	232	165	157	608	1,547	822	217
As a percentage of Total Switches	80.3%	30.7%	14.0%	12.8%	19.1%	40.7%	92.5%	18.8%	13.2%
Average Switch Downtime in seconds per Switch									
For All Events	144.3	38.9	209.1	333.0	38.6	216.0	468.1	362.7	226.5
For Unscheduled Events Over 2 Minutes	92.2	23.5	202.1	304.9	29.1	177.0	413.3	351.6	198.2
For Unscheduled Downtime More than 2 Minutes									
Number of Occurrences or Events	50	27	111	101	15	67	138	328	124
Events per Hundred Switches	3.5	1.9	6.7	7.8	1.8	4.5	8.3	7.5	7.5
Events per Million Access Lines	2.73	1.41	5.50	6.33	0.85	4.86	9.64	20.05	18.88
Average Outage Duration in Minutes	43.5	20.4	50.2	65.0	26.5	65.7	83.4	78.3	43.8
Average Lines Affected per Event in Thousands	17.5	27.0	10.4	13.4	12.6	8.5	5.4	5.0	5.8
Outage Line-Minutes per Event in Thousands	2,027.4	543.3	194.4	694.8	360.4	240.8	419.2	169.4	190.7
Outage Line-Minutes per 1,000 Access Lines	5,524.8	765.3	1,070.2	4,397.2	305.5	1,169.5	4,042.8	3,395.8	3,599.8
For Scheduled Downtime More than 2 Minutes									
Number of Occurrences or Events	182	37	15	5	13	144	239	24	39
Events per Hundred Switches	12.9	2.6	0.9	0.4	1.6	9.6	14.3	0.5	2.4
Events per Million Access Lines	9.92	1.93	0.74	0.31	0.73	10.44	16.70	1.47	5.94
Average Outage Duration in Minutes	3.4	3.3	2.9	7.3	4.9	3.5	3.7	11.0	18.6
Avg. Lines Affected per Event in Thousands	23.8	27.1	32.5	22.2	20.2	11.9	7.2	7.9	7.1
Outage Line-Minutes per Event in Thousands	77.7	80.7	97.6	220.5	67.5	47.7	45.6	54.8	56.8
Outage Line-Minutes per 1,000 Access Lines	770.3	155.8	72.6	69.1	49.6	497.7	762.0	80.3	337.1
% Trunk Grps. Exceeding 3 Month Blocking Objectives During Calendar Year	1.01%	2.86%	0.89%	6.78%	1.19%	0.65%	2.05%	4.19%	2.10%

Table 9.2(b): Company Comparision -- Switch Downtime & Trunk Blocking -- 1996

Company	Ameritech	Bell Atlantic	BellSouth	NYNEX	Pacific	SBC	US West	GTE	Sprint
Total Access Lines in Thousands	19,553	20,767	21,822	16,541	20,466	14,104	15,405	17,393	6,956
Total Trunk Groups	1,578	1,677	3,706	1,087	1,956	875	2,555	2,893	1,046
Total Switches	1,410	1,396	1,650	1,245	826	872	1,521	4,396	1,658
Switches with Downtime									
Number of Switches	738	609	252	123	149	1,010	889	530	147
As a percentage of Total Switches	52.3%	43.6%	15.3%	9.9%	18.0%	115.8%	58.4%	12.1%	8.9%
Average Switch Downtime in seconds per Switch									
For All Events	149.4	220.3	236.9	115.5	46.2	437.5	301.2	354.8	351.0
For Unscheduled Events Over 2 Minutes	105.9	194.7	221.4	98.6	15.2	511.2	205.9	336.7	344.1
For Unscheduled Downtime More than 2 Minutes									
Number of Occurrences or Events	82	25	114	41	14	144	128	288	117
Events per Hundred Switches	5.8	1.8	6.9	3.3	1.7	16.5	8.4	6.6	7.1
Events per Million Access Lines	4.19	1.20	5.22	2.48	0.68	10.21	8.31	16.56	16.82
Average Outage Duration in Minutes	30.3	181.2	53.4	49.9	15.0	51.6	40.8	85.7	81.3
Average Lines Affected per Event in Thousands	15.8	23.2	14.4	15.3	29.8	12.3	7.3	5.2	5.5
Outage Line-Minutes per Event in Thousands	218.5	914.5	384.4	319.9	136.7	459.8	218.7	171.4	219.8
Outage Line-Minutes per 1,000 Access Lines	916.4	1,101.0	2,008.1	792.9	93.5	4,694.3	1,817.4	2,837.9	3,696.5
For Scheduled Downtime More than 2 Minutes									
Number of Occurrences or Events	186	44	52	25	44	141	256	16	15
Events per Hundred Switches	13.2	3.2	3.2	2.0	5.3	16.2	16.8	0.4	0.9
Events per Million Access Lines	9.51	2.12	2.38	1.51	2.15	10.00	16.62	0.92	2.16
Average Outage Duration in Minutes	2.7	3.0	4.3	9.4	2.8	2.9	3.8	20.2	11.3
Avg. Lines Affected per Event in Thousands	19.4	29.4	28.0	49.7	58.3	14.7	6.3	6.9	10.8
Outage Line-Minutes per Event in Thousands	53.3	94.7	102.9	299.6	182.5	58.5	21.1	78.7	44.4
Outage Line-Minutes per 1,000 Access Lines	507.3	200.6	245.2	452.8	392.3	585.3	350.8	72.4	95.8
% Trunk Grps. Exceeding Blocking Objectives	8.05%	16.99%	1.30%	18.22%	6.34%	2.97%	4.77%	3.18%	15.39%

Table 9.2(c): Company Comparision -- Switch Downtime & Trunk Blocking -- 1997

Company	Ameritech	Bell Atlantic	BellSouth	NYNEX	Pacific	SBC	US West	GTE	Sprint
Total Access Lines in Thousands	20,335	21,375	23,080	18,339	22,253	15,306	16,132	18,319	7,293
Total Trunk Groups	1,568	1,133	3,584	1,064	1,979	832	2,818	2,587	3,924
Total Switches	1,435	1,412	1,654	1,291	810	1,690	1,441	4,422	1,605
Switches with Downtime									
Number of Switches	761	262	345	258	148	355	910	408	64
As a percentage of Total Switches	53.0%	18.6%	20.9%	20.0%	18.3%	21.0%	63.2%	9.2%	4.0%
Average Switch Downtime in seconds per Switch									
For All Events	77.8	46.7	314.6	135.6	238.9	360.5	172.4	287.1	223.7
For Unscheduled Events Over 2 Minutes	60.3	28.3	298.0	120.0	223.4	322.4	102.8	281.3	226.9
For Unscheduled Downtime More than 2 Minutes									
Number of Occurrences or Events	42	20	102	44	15	187	85	227	55
Events per Hundred Switches	2.9	1.4	6.2	3.4	1.9	11.1	5.9	5.1	3.4
Events per Million Access Lines	2.07	0.94	4.42	2.40	0.67	12.22	5.27	12.39	7.54
Average Outage Duration in Minutes	34.4	33.3	80.5	58.7	201.1	48.6	29.1	91.3	110.4
Average Lines Affected per Event in Thousands	13.9	31.8	18.7	31.9	32.5	7.0	11.0	5.1	9.4
Outage Line-Minutes per Event in Thousands	338.0	374.3	946.9	1,452.3	786.5	256.6	242.2	166.1	763.3
Outage Line-Minutes per 1,000 Access Lines	698.2	350.2	4,184.5	3,484.5	530.2	3,134.6	1,275.9	2,058.5	5,756.6
For Scheduled Downtime More than 2 Minutes									
Number of Occurrences or Events	45	32	65	32	55	207	143	12	8
Events per Hundred Switches	3.1	2.3	3.9	2.5	6.8	12.2	9.9	0.3	0.5
Events per Million Access Lines	2.21	1.50	2.82	1.74	2.47	13.52	8.86	0.66	1.10
Average Outage Duration in Minutes	3.3	3.6	4.6	5.3	11.6	2.6	3.1	21.8	6.4
Avg. Lines Affected per Event in Thousands	10.6	32.8	31.4	45.3	37.2	8.7	11.3	8.2	35.7
Outage Line-Minutes per Event in Thousands	33.2	116.6	138.3	243.4	458.6	23.3	40.1	67.6	159.1
Outage Line-Minutes per 1,000 Access Lines	73.5	174.6	389.5	424.7	1,133.6	315.4	355.9	44.3	174.5
% Trunk Grps. Exceeding Blocking Objectives	4.53%	42.98%	1.56%	18.52%	5.71%	12.62%	9.08%	1.01%	3.34%

Table 9.3(a): Company Comparison -- Switch Downtime Causes -- 1995 (Annualized)

Company	Ameritech	Bell Atlantic	BellSouth	NYNEX	Pacific	SBC	US West	GTE	Sprint
TOTAL NUMBER OF OUTAGES									
1. Scheduled	182	37	15	5	13	144	239	24	39
2. Proced. Errors -- Telco. (Inst./Maint.)	2	3	0	9	1	20	45	19	19
3. Proced. Errors -- Telco. (Other)	5	2	19	0	1	1	10	30	3
4. Procedural Errors -- System Vendors	0	2	11	0	2	1	2	7	5
5. Procedural Errors -- Other Vendors	4	0	2	0	1	2	6	3	10
6. Software Design	24	5	26	11	1	27	12	82	13
7. Hardware design	0	1	3	12	0	1	0	8	2
8. Hardware Failure	13	12	29	12	7	9	48	141	29
9. Natural Causes	1	1	0	3	0	0	1	18	15
10. Traffic Overload	0	0	0	0	1	0	1	0	0
11. Environmental	0	0	0	0	0	1	4	7	3
12. External Power Failure	0	0	0	10	0	1	2	6	2
13. Massive Line Outage	0	0	0	3	0	4	0	2	1
14. Remote	0	0	1	0	0	0	0	0	2
15. Other/Unknown	1	1	20	41	0	0	7	5	20
TOTAL OUTAGE LINE-MINUTES PER THOUSAND ACCESS LINES									
1. Scheduled	770.3	155.8	72.6	69.1	49.6	497.7	762.0	80.3	337.1
2. Proced. Errors -- Telco. (Inst./Maint.)	1311.1	38.7	0.0	56.4	1.5	145.5	460.3	54.0	435.0
3. Proced. Errors -- Telco. (Other)	3249.5	85.3	161.1	0.0	0.8	145.5	159.8	279.7	7.0
4. Procedural Errors -- System Vendors	0.0	31.0	88.6	0.0	5.4	2.7	33.2	74.6	580.4
5. Procedural Errors -- Other Vendors	6.5	0.0	56.2	0.0	93.1	59.5	86.0	30.1	62.9
6. Software Design	76.9	201.2	159.0	718.9	112.3	104.5	887.0	811.5	360.3
7. Hardware design	0.0	7.8	26.7	889.0	0.0	3.3	0.0	187.9	100.9
8. Hardware Failure	875.5	156.5	250.4	1258.2	90.3	66.4	339.1	1370.1	1047.1
9. Natural Causes	2.1	239.4	0.0	195.4	0.0	0.0	0.2	494.0	621.1
10. Traffic Overload	0.0	0.0	0.0	0.0	2.1	0.0	1.2	0.0	0.0
11. Environmental	0.0	0.0	0.0	0.0	0.0	281.9	1573.9	54.9	6.9
12. External Power Failure	0.0	0.0	0.0	560.8	0.0	283.8	501.2	18.0	2.1
13. Massive Line Outage	0.0	0.0	0.0	145.6	0.0	76.5	0.0	6.3	29.3
14. Remote	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	201.4
15. Other/Unknown	3.2	5.5	327.8	573.0	0.0	0.0	0.8	14.6	145.4

Table 9.3(b): Company Comparison -- Switch Downtime Causes -- 1996

Company	Ameritech	Bell Atlantic	BellSouth	NYNEX	Pacific	SBC	US West	GTE	Sprint
TOTAL NUMBER OF OUTAGES									
1. Scheduled	186	44	52	25	44	141	256	16	15
2. Proced. Errors -- Telco. (Inst./Maint.)	9	3	0	0	0	4	10	14	13
3. Proced. Errors -- Telco. (Other)	3	1	25	2	1	5	9	17	3
4. Procedural Errors -- System Vendors	25	2	18	5	1	4	2	2	7
5. Procedural Errors -- Other Vendors	1	0	3	2	1	3	0	11	6
6. Software Design	23	1	19	2	1	85	45	74	7
7. Hardware design	2	2	5	0	0	4	0	0	5
8. Hardware Failure	16	10	24	7	4	14	18	137	31
9. Natural Causes	2	3	8	8	0	9	2	16	17
10. Traffic Overload	0	0	0	0	0	0	0	0	0
11. Environmental	1	0	0	0	0	0	1	1	1
12. External Power Failure	0	0	0	3	0	0	2	11	2
13. Massive Line Outage	0	0	0	0	0	15	0	5	2
14. Remote	0	0	1	1	0	1	0	0	3
15. Other/Unknown	0	3	11	11	6	0	39	0	20
TOTAL OUTAGE LINE-MINUTES PER THOUSAND ACCESS LINES									
1. Scheduled	507.3	200.6	245.2	452.8	392.3	585.3	350.8	72.4	95.8
2. Proced. Errors -- Telco. (Inst./Maint.)	83.7	135.0	0.0	0.0	0.0	6.8	38.3	109.4	275.8
3. Proced. Errors -- Telco. (Other)	84.5	111.5	355.1	10.0	6.8	311.0	41.6	127.6	100.4
4. Procedural Errors -- System Vendors	106.8	140.3	193.7	56.2	19.6	653.7	116.3	1.4	46.4
5. Procedural Errors -- Other Vendors	0.2	0.0	37.2	21.8	18.2	111.2	0.0	222.6	128.5
6. Software Design	403.8	2.7	134.8	17.1	4.2	177.6	436.5	713.6	81.5
7. Hardware design	7.7	68.3	31.6	0.0	0.0	47.6	0.0	0.0	45.8
8. Hardware Failure	212.6	348.5	334.3	152.4	31.0	2530.6	327.3	1406.0	995.7
9. Natural Causes	8.3	270.6	766.3	48.8	0.0	52.8	714.1	170.6	679.4
10. Traffic Overload	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11. Environmental	8.8	0.0	0.0	0.0	0.0	0.0	41.0	9.1	0.8
12. External Power Failure	0.0	0.0	0.0	240.7	0.0	0.0	47.5	57.5	80.5
13. Massive Line Outage	0.0	0.0	0.0	0.0	0.0	791.2	0.0	20.0	195.0
14. Remote	0.0	0.0	13.0	4.6	0.0	11.9	0.0	0.0	648.2
15. Other/Unknown	0.0	23.9	142.1	241.4	13.7	0.0	54.9	0.0	418.4

Table 9.3(c): Company Comparison -- Switch Downtime Causes -- 1997

Company	Ameritech	Bell Atlantic	BellSouth	NYNEX	Pacific	SBC	US West	GTE	Sprint
TOTAL NUMBER OF OUTAGES									
1. Scheduled	45	32	65	32	55	207	143	12	8
2. Proced. Errors -- Telco. (Inst./Maint.)	4	1	0	4	1	2	0	22	5
3. Proced. Errors -- Telco. (Other)	3	4	14	0	2	2	5	6	2
4. Procedural Errors -- System Vendors	4	3	15	4	3	2	0	4	5
5. Procedural Errors -- Other Vendors	0	1	3	3	0	5	0	6	1
6. Software Design	9	1	23	2	0	147	30	47	5
7. Hardware design	0	1	3	4	0	2	8	0	0
8. Hardware Failure	20	4	35	11	4	12	32	109	12
9. Natural Causes	0	1	2	1	1	4	0	12	8
10. Traffic Overload	0	0	1	0	0	1	1	0	0
11. Environmental	1	0	0	0	0	1	0	2	0
12. External Power Failure	0	0	3	0	0	1	4	17	4
13. Massive Line Outage	0	0	0	0	0	6	0	2	4
14. Remote	1	0	0	0	1	0	5	0	2
15. Other/Unknown	0	4	3	0	3	2	0	0	7
TOTAL OUTAGE LINE-MINUTES PER THOUSAND ACCESS LINES									
1. Scheduled	73.5	174.6	389.5	424.7	1133.6	315.4	355.9	44.3	174.5
2. Proced. Errors -- Telco. (Inst./Maint.)	5.4	55.4	0.0	167.9	21.7	1.3	0.0	166.5	54.7
3. Proced. Errors -- Telco. (Other)	6.9	96.8	133.2	0.0	38.0	437.5	386.4	90.2	35.5
4. Procedural Errors -- System Vendors	179.5	101.1	120.8	189.2	75.9	549.0	0.0	41.0	205.9
5. Procedural Errors -- Other Vendors	0.0	7.9	150.1	9.7	0.0	59.5	0.0	84.9	2.9
6. Software Design	74.2	5.1	528.5	14.7	0.0	1026.9	25.3	359.5	588.0
7. Hardware design	0.0	2.7	342.3	154.9	0.0	13.1	131.5	0.0	0.0
8. Hardware Failure	427.9	40.5	388.2	477.3	6.7	421.2	426.1	1045.6	370.9
9. Natural Causes	0.0	13.8	1750.0	82.3	0.2	351.2	0.0	63.9	505.9
10. Traffic Overload	0.0	0.0	47.3	0.0	0.0	15.2	0.4	0.0	0.0
11. Environmental	4.0	0.0	0.0	0.0	0.0	53.3	0.0	25.8	0.0
12. External Power Failure	0.0	0.0	597.1	0.0	0.0	0.9	264.9	172.2	2177.9
13. Massive Line Outage	0.0	0.0	0.0	0.0	0.0	169.5	0.0	9.0	1419.8
14. Remote	0.3	0.0	0.0	0.0	90.9	0.0	41.4	0.0	9.1
15. Other/Unknown	0.0	27.0	127.0	0.0	296.8	36.0	0.0	0.0	386.1

Table 9.4(a): Company Comparision -- Customer Perception Surveys -- 1995

Percentage of Customers Dissatisfied

Company	Ameritech	Bell Atlantic	BellSouth	NYNEX	Pacific	SBC	US West	GTE
Overall:								
Residential	1.24	7.51	1.39	17.12	10.82	6.75	5	7.34
Small Business	2.29	8.03	4.05	18.79	11.28	6.92	7.19	12.23
Large Business	8.35	11.19	5.38	17.9	8.41	2.92	8.33	4.18
Installations:								
Residential	3.60	5.90	6.27	13.46	7.75	4.80	4.08	7.34
Small Business	9.62	8.33	4.07	22.55	9.13	6.20	11.05	12.23
Large Business	7.18	13.61	NA	22.22	9.37	7.57	13.90	4.18
Repairs:								
Residential	8.63	12.21	10.87	22.52	17.06	8.18	10.82	10.76
Small Business	11.79	10.72	4.49	20.13	14.95	7.28	15.22	11.96
Large Business	9.22	19.05	NA	25.95	14.00	9.54	13.63	4.74
Business Office:								
Residential	4.89	4.55	5.88	12.46	9.31	7.26	5.68	2.60
Small Business	5.91	5.12	3.62	12.92	10.15	7.31	4.70	7.89
Large Business	11.24	13.14	NA	25.00	7.40	8.02	9.65	3.43

Table 9.4(b): Company Comparision -- Customer Perception Surveys -- 1996

Percentage of Customers Dissatisfied

Company	Ameritech	Bell Atlantic	BellSouth	NYNEX	Pacific	SBC	US West	GTE
Overall:								
Residential	2.9	2.25	6.28	3.83	3.99	7.12	8.67	3.07
Small Business	2.36	5.96	12.1	3.74	5.39	6.72	12.38	5.97
Large Business	10.86	9.18	3.92	20.24	6.21	8.21	8	1.51
Installations:								
Residential	4.13	8.66	5.19	14.13	3.10	5.83	5.33	7.31
Small Business	8.20	6.48	3.47	20.53	4.54	6.89	11.31	13.39
Large Business	9.38	11.36	NA	23.42	7.42	11.21	23.00	0.74
Repairs:								
Residential	9.55	20.69	8.72	27.33	7.41	8.44	10.50	13.43
Small Business	10.88	9.20	4.32	23.37	7.61	6.57	12.80	14.11
Large Business	11.83	13.17	NA	30.07	7.93	7.94	22.00	1.61
Business Office:								
Residential	5.94	11.17	5.21	18.90	2.07	7.15	2.17	1.88
Small Business	6.02	5.22	2.31	15.86	4.02	6.64	3.56	4.70
Large Business	13.37	9.79	NA	12.51	2.70	13.78	9.00	0.00

Table 9.4(c): Company Comparision -- Customer Perception Surveys -- 1997

Percentage of Customers Dissatisfied

Company	Ameritech	Bell Atlantic	BellSouth	NYNEX	Pacific	SBC	US West	GTE
Installations:								
Residential	5.52	3.11	5.73	11.54	4.00	5.52	4.86	7.77
Small Business	10.24	7.82	5.83	17.13	6.00	6.36	11.88	13.92
Large Business	10.33	9.29	4.49	16.92	8.00	11.85	18.00	6.38
Repairs:								
Residential	10.38	8.34	8.54	21.38	11.00	8.03	7.00	11.80
Small Business	11.93	10.30	7.37	20.21	9.00	5.73	7.96	13.71
Large Business	15.82	9.04	5.62	20.24	10.00	8.07	16.00	6.72
Business Office:								
Residential	8.24	3.47	6.11	14.03	3.00	6.64	2.02	2.15
Small Business	8.55	6.21	6.18	14.50	5.00	5.93	4.48	5.54
Large Business	9.54	5.75	4.15	18.22	7.00	15.41	16.00	0.00

Table 9.5(a): Company Comparision -- Customer Perception Surveys -- 1995

Sample Sizes

Company	Ameritech	Bell Atlantic	BellSouth	NYNEX	Pacific	SBC	US West	GTE
Overall:								
Residential	16,848	77,127	21,488	151,349	71,197	61,320	12,229	13,903
Small Business	8,154	68,200	132,530	104,082	69,918	60,185	12,500	6,991
Large Business	3,477	1,412	11,858	2,112	648	14,073	33,375	886
Installations:								
Residential	39,267	27,007	58,781	42,377	30,522	19,866	3,070	13,903
Small Business	3,696	25,221	65,677	37,442	30,508	20,081	4,850	6,991
Large Business	675	1,602	NA	1,548	625	7,900	6,345	886
Repairs:								
Residential	38,810	27,153	65,684	66,898	20,288	20,522	3,049	13,709
Small Business	3,747	23,474	45,394	41,461	23,326	20,424	4,845	6,965
Large Business	724	1,307	NA	1,557	597	6,756	6,435	931
Business Office:								
Residential	31,837	22,310	45,515	42,074	20,387	20,932	3,015	13,759
Small Business	4,124	19,505	11,329	25,179	16,084	19,680	4,686	7,009
Large Business	705	898	NA	192	520	4,094	6,510	935

Please refer to text for notes and data qualifications

Table 9.5(b): Company Comparision -- Customer Perception Surveys -- 1996

Sample Sizes

Company	Ameritech	Bell Atlantic	BellSouth	NYNEX	Pacific	SBC	US West	GTE
Overall:								
Residential	7,269	4,486	159,902	3,805	70,539	59,701	7,773	9,296
Small Business	6,530	2,768	120,400	3,156	68,727	59,740	7,833	9,083
Large Business	5,001	554	8,863	8,054	499	12,922	6,780	634
Installations:								
Residential	23,050	18,724	57,596	39,524	30,444	19,362	4,208	9,513
Small Business	5,839	17,828	85,446	35,171	29,532	19,781	4,195	9,546
Large Business	1,201	1,163	NA	5,300	485	6,938	3,525	476
Repairs:								
Residential	23,170	18,853	57,615	50,427	19,495	19,933	3,565	8,877
Small Business	5,916	17,701	66,227	34,684	22,021	20,061	3,638	8,905
Large Business	1,200	980	NA	4,492	479	5,096	3,495	467
Business Office:								
Residential	14,792	14,368	37,577	20,526	20,600	20,406	4,206	9,463
Small Business	6,530	12,897	91,671	9,675	17,174	19,898	4,063	6,454
Large Business	800	622	NA	3,502	408	3,372	3,375	453

Please refer to text for notes and data qualifications

Table 9.5(c): Company Comparision -- Customer Perception Surveys -- 1997

Sample Sizes

Company	Ameritech	Bell Atlantic	BellSouth	NYNEX	Pacific	SBC	US West	GTE
Installations:								
Residential	38,296	18,735	56,352	32,065	28,285	18,900	4,445	16,806
Small Business	13,493	12,913	39,077	30,125	30,498	19,346	3,798	17,079
Large Business	1,839	827	NA	5,879	884	5,285	9,915	863
Repairs:								
Residential	43,567	18,993	55,983	32,351	16,949	19,126	4,117	17,747
Small Business	20,501	17,809	18,266	30,776	23,015	19,052	3,871	16,687
Large Business	2,370	741	NA	5,292	792	3,779	9,360	790
Business Office:								
Residential	26,255	16,170	32,700	22,508	19,081	19,067	4,451	16,668
Small Business	4,037	12,650	22,780	10,614	18,233	19,399	3,773	12,622
Large Business	1,237	750	5,059	2,832	794	2,303	9,135	4

Please refer to text for notes and data qualifications

10. Infrastructure

This section updates infrastructure data contained in section 8 of the May 1997 Monitoring Report in CC Docket No. 87-339, which had included data covering the years 1991 through 1995. The data are now filed each year at the beginning of April and are summarized from ARMIS Infrastructure filings of major carriers (FCC report 43-07).[1] To date, information is available for the years 1989 through 1997. This summary covers the 5-year period 1993 through 1997 and is intended to highlight underlying recent changes in the use of technology in the local telephone company plant.

The ARMIS 43-07 reports are filed only by those local exchange companies originally subject to mandatory price-cap regulation -- the Bell operating companies and the telephone operating companies owned by GTE.[2] Together, these large companies provide service to more than 90% of the nation's telephone lines. The data are generally filed at the "study area" level (an operating company's operations within a state). The state-by-state data, including, in some cases, disaggregation into Metropolitan Statistical Area (MSA) and non-MSA detail, are available from the **FCC-State Link** electronic bulletin board.[3] They are also available on the ARMIS internet site (http://www.fcc.gov/ccb/armis/db/).

---

1 ARMIS, an acronym for Automated Reporting Management Information System, is a repository of financial, plant, demand, and quality of service data needed to administer various provisions of the Commission's Rules. Additional infrastructure data are contained in the ARMIS 43-08 report. See *Statistics of Communications Common Carriers*, published annually by the FCC (Industry Analysis Division) for a compilation of 43-08 infrastructure data.

2 *See Policy and Rules Concerning Rates for Dominant Carriers*, CC Docket No. 87-313, FCC Rcd 6786 (1990) (LEC Price Cap Order), *Erratum*, 5 FCC Rcd 7664 (Com. Car. Bur. 1990). *See also Policy and Rules Concerning Rates for Dominant Carriers*, CC Docket No. 87-313, 8 FCC Rcd 7474 (Common Carrier Bureau 1993).

3 Infrastructure summary reports released April 24, 1995 and March 13, 1997 are available from our **FCC-State Link** internet site (http://www.fcc.gov/ccb/stats) web page. The files are contained in the infrastructure section under the file names INFRA93.ZIP and INFRA95.ZIP, respectively. The raw data upon which the reports are based and the actual summary reports are also available on our dial-up **FCC-State Link** bulletin board system at (202) 418-0241. Raw data are contained on the BBS in a directory entitled ARMIS4307, and a spreadsheet template viewer file IVIEW2.ZIP can be downloaded to facilitate viewing the raw ASCII data files. Instructions for using the viewers are contained in a readme.txt file within the "zip" archive. This "zip" file contains two infrastructure data viewers, an executable program for translating the raw data files into ASCII output files with full annotations and data labels, and a second spreadsheet template for achieving the same goal by adding the annotations to the data using a spreadsheet template.

The information summarized in this section is arranged as two tables: Table 10.1 shows switching system data and Table 10.2 shows transmission system data. Each table contains segments for each of the regional Bell companies, one for the companies owned by GTE The data summarized for each holding company reflect the aggregate of data filed for individual states or study areas and should be useful in assessing overall trends.[4]

The data have been aggregated where region-wide or company-wide composites were not filed. Many of the company totals were recalculated to more effectively identify errors.[5] Some of the data originally filed by the companies contained errors, particularly in the earlier years.

The full range of infrastructure data received in the ARMIS 43-07 reports and the items listed below that are contained in Tables 10.1 and 10.2 are described in the report entitled "Infrastructure of the Local Operating Companies Aggregated to the Holding Company Level" along with data qualifications and observations about the data itself.[6] The user should also refer to the source data, which contain more detailed study area information. Further analysis supplemented with data from state regulatory commissions may be needed to address localized issues.

Description of the Technologies and Data

The data in the Tables 10.1 and 10.2 provide a historical series for a variety of plant elements that illustrate the deployment of technology in the networks of the major local exchange carriers. The data items provide a picture of the key technologies presently in use. For example, although the issue of fiber in the local loop has gained a great deal of attention because of its potential for facilitating development of wideband video services, the progression of lower data-rate digital technologies to greater numbers of customers through an increased use of digital local access has been occurring for some time now. Both switching and transmission technology

---

4 Due to the recent Bell Atlantic merger, facilities of NYNEX became part of a larger Bell Atlantic entity. Due to the large merged size of the new Bell Atlantic Entity and the fact that the merged entities operate in distinct regions of the country, the company still separates much of the filed data reflecting the the pre merger Bell Atlantic entity, now called Bell Atlantic South in some of its filings. To enable current data to be trended with the prior data series we have presented the old NYNEX data as Bell Atlantic North and the remaining Bell Atlantic data as Bell Atlantic South.

5 A number of obvious discrepancies in calculation of totals were corrected and may account for small differences between company-filed totals and the ones presented here. Most of these discrepancies were identified as being associated with cumulative effects of rounding, typically associated with data presented in thousands.

6 See Appendix A, *Infrastructure of the :Local Operating Companies Aggregated to the Holding Company Level,* released March 13, 1997.

provide the building blocks that make this possible. In the switch, Signalling System 7 (SS7) provides a means for networks and interoffice switches to communicate with each other. This system uses separate digital links outside the voice channel to accomplish this. Other elements in the data relating to equal access switches and touch-tone capable switches show that most switches now support equal access and that nearly all switches are equipped for touch-tone dialing.

A useful overall measure of company activity is gross capital expenditures. The data reported include all capital expenditures on both switching and transmission facilities. Capital expenditure levels should continue to be an important overall parameter in assessing deployment of new technology in the local service business and its relationship to future service quality.

Although there is considerable interest in digital switching, the term "digital switch" by itself is often misleading and does not address the important issues of switching capability and modularity. For example, while most network switches are presently classified as digital stored program controlled switches, this classification by itself does not indicate whether the switch has ISDN or SS7 capability and does not address the issue of modularity that allows lower-cost expansion. Therefore, measurement of digital switching proliferation requires one to look at more than a single statistic. While there are no across-the-board relationships between modularity and switch capability, many of the switches with ISDN capability also tend to be modular in design and can often be upgraded with software that can facilitate lower-cost expansion. The data presently being collected only cover circuit switches that provide a dedicated path through the network for the duration of a call, not routers or statistical switches that are used in internet services that are specifically designed to handle data packets.

ISDN technology provides the service protocols and channel designations for digital services to customers and can convey voice, computer data or compressed video. Basic rate ISDN services are provided as two 64-kilobit data channels and one 16-kilobit control channel associated with each basic-rate access line. The control channels allow the transfer of special information between the switch and the customer, unavailable with in-band signalling, as well as advanced network control features presently used in a number of enhanced services. Primary rate ISDN provides the capacity of twenty-three 64-kilobit data channels and one 64-kilobit control channel. Although these services can potentially provide for improved communication between computers, the lack of a critical mass of customers using ISDN was a stumbling block in the early proliferation of end-to-end digital services. Availability of the service is significant and expanding. There are, however, important regional and localized differences in investment and customer demand patterns that may require examination of data at a more localized level than presented here.[7]

---

7 Individual study-area data are also available to address more localized issues that will become increasingly important in the coming years. This information is available by dial-up access described in footnote 3. A new viewer in executable format also described in footnote 3 has been created to further facilitate examination of the raw data files.

The companies typically report the number of access lines that can be connected to ISDN service within each wire center or switch. In 1995 Bell Atlantic and NYNEX began to report all access lines that can receive ISDN service, even those requiring a foreign exchange link to another wire center. These companies were notified that their method of counting ISDN-capable access lines was inconsistent with the Commission's reporting requirements.[8] As a result NYNEX subsequently refiled its 1995 data to address this problem.[9]

Because ISDN is a digital service, it is equipped to handle communication between computers without the need to first convert the signal to an analog form. Early on it was primarily marketed as a medium for enhanced voice services and was primarily targeted to business users. It has become an increasingly attractive alternative for residential customers and small businesses needing a second line for a computer and therefore its pricing in relation to the cost of two analog lines can significantly affect proliferation of the service. Many of the companies had installed digital switches in response to equal access requirements of divestiture. Almost all of the Bell company switching entities have equal access capability. The companies generally have been responding to increased interest in ISDN service and internet use by replacing or upgrading existing switches for ISDN capability.[10]

A number of transmission elements are included in the tables. These illustrate the rapid development of fiber capacity in terms of terminations, sheath-kilometers, and links. The tables

---

8 Continuing changes in demand patterns for new access lines and in the character of telephone traffic from pure voice traffic to a changing mix of voice and data underscore the desirability of targeted improvement to the switching infrastructure. Use of easily upgradable switching systems will be increasingly important.

9 Company totals have been recalculated to minimize errors in summing raw study-area data. In calculating industry totals, some adjustments may have been made to account for missing or irregular company data and for rounding errors. In certain instances, the classification "other" was used for adjustment purposes so that the respective totals would properly reflect the sum of their components.

10 Increased use of ISDN services for internet access could lead to a critical mass of residential users that would be mutually beneficial to customers and the companies by driving down ISDN per-unit costs further. While increased business use should continue to be an important revenue source and a driving force leading to improved efficiencies in providing ISDN service, new marketing, pricing and regulatory factors could make ISDN more attractive for residential customers. Competitive activity and interconnection should require incumbent carriers to pay greater attention both to strategic planning and customer service. In the short term, investment, packaging and pricing strategies for ISDN services that consider local and regional issues might facilitate overall service quality improvement by encouraging migration from analog to digital access services, leading to improvement of the switching infrastructure. Next-generation wideband capabilities will become increasingly important in the longer term.

also highlight the relative magnitude of equipped and working channels, providing an indication of termination equipment utilization. Declines in the number of analog links can be noted, and for some time the number of interoffice fiber carrier links has significantly exceeded the number of copper carrier links for all companies shown. Although data on links and channels show that circuits connecting local central offices could typically be provided on only two fibers, the economics of fiber deployment have resulted in deployments of typical fiber cables containing more than 35 fibers. This suggests that there is a significant amount of fiber capacity presently unused in the *interoffice* transmission plant.[11]

Although the overall level of growth in fiber has been high, its use in the local loop is presently relatively small. Since fibers are not necessarily in current use and since there is a greater potential for more than one access line to be provided on one fiber than on one copper pair, especially nearer to the central offices, the ultimate number of central office fiber terminations needed to equip all access lines for fiber is expected to be considerably lower than the present number of copper terminations. However, due to the fact that less sharing of transmission facilities is possible in the portion of plant closest to customers, the cost of providing loop capacity nearest to the customer is greatest.

---

11 A large portion of the cost of fiber deployment is associated with labor and installation rather than with the cable itself. Thus, the incremental cost of installing a larger fiber cable is typically relatively small. This suggests that the sheath-kilometer parameter shown in the attached tables may be a better measure of fiber coverage than fiber kilometers. In general, care should be exercised in interpreting aggregate fiber data when determining, for example, whether fiber is concentrated in certain parts of a company's service area with relatively little fiber elsewhere. See *FCC Fiber Deployment Update - End of Year 1997*, released September 4, 1998.

Table 10.1 Switching System Data
(a): Ameritech

	1993	1994	1995	1996	1997
Gross Plant Expenditures (In Millions $)	1,719	1,517	1,578	1,997	1,912
Local Switches	1,422	1,413	1,415	1,410	1,435
Tandem Switches	47	47	46	46	47
Hosts	230	236	238	236	243
Remotes (Stand Alone Only)	684	717	731	743	769
Total Switching Entities	1,469	1,460	1,461	1,456	1,482
Electromechanical	0	0	0	0	0
Analog Stored Pgm. Control	224	119	97	71	58
Digital Stored Pgm. Control	1,245	1,341	1,364	1,385	1,424
Total Access Lines (000)	17,500	18,123	19,310	19,552	20,334
Electromechanical Switches	0	0	0	0	0
Analog Stored Pgm. Ctrl. Switches	5,862	3,845	3,727	3,228	2,792
Digital Stored Pgm. Ctrl. Switches	11,638	14,278	15,583	16,324	17,542
Touch Tone Capable Switches	1,469	1,460	1,415	1,410	1,435
T. Tone Capable Access Lines (000)	17,500	18,122	19,310	19,553	20,334
Equal Access Switches	1,469	1,450	1,461	1,456	1,482
Equal Access Lines (000)	17,500	18,122	19,310	19,553	20,334
Signal. Sys. 7 Switches (SS7-394)	1,001	1,254	1,400	1,438	1,463
SS7-394 Access Lines (000)	13,376	16,482	18,538	19,293	20,223
Signal. Sys. 7 Switches (SS7-317)	1,116	1,347	1,417	1,439	1,463
SS7-317 Access Lines (000)	13,961	17,217	18,653	19,322	20,208
ISDN Capable Switches	387	444	489	601	695
ISDN Access Line Capac. (000)	8,056	10,259	12,860	13,802	15,465
ISDN Basic Rate Interface Eq'pd.	67,415	87,862	101,711	155,731	180,280
ISDN Primary Rate Interface Eq'pd.	707	1,505	2,209	4,247	14,569

Table 10.1 Switching System Data
(b): Bell Atlantic - South

	1993	1994	1995	1996	1997
Gross Plant Expenditures (In Millions $)	2,133	2,107	2,390	2,816	2,855
Local Switches	1,405	1,408	1,406	1,410	1,412
Tandem Switches	42	42	42	48	42
Hosts	194	199	202	210	212
Remotes (Stand Alone Only)	666	685	696	712	718
Total Switching Entities	1,421	1,422	1,420	1,430	1,426
Electromechanical	0	0	0	0	0
Analog Stored Pgm. Control	157	123	93	79	64
Digital Stored Pgm. Control	1,264	1,299	1,327	1,351	1,362
Total Access Lines (000)	18,645	19,167	19,820	20,566	21,375
Electromechanical Switches	0	0	0	0	0
Analog Stored Pgm. Ctrl. Switches	5,627	4,769	3,607	3,022	2,607
Digital Stored Pgm. Ctrl. Switches	13,018	14,398	16,213	17,544	18,768
Touch Tone Capable Switches	1,405	1,408	1,406	1,410	1,412
T. Tone Capable Access Lines (000)	18,645	19,167	19,820	20,566	21,375
Equal Access Switches	1,421	1,422	1,420	1,430	1,426
Equal Access Lines (000)	18,645	19,167	19,820	20,566	21,375
Signal. Sys. 7 Switches (SS7-394)	720	1,262	1,374	1,415	1,415
SS7-394 Access Lines (000)	13,240	18,118	19,709	20,469	21,325
Signal. Sys. 7 Switches (SS7-317)	1,359	1,374	1,373	1,426	1,426
SS7-317 Access Lines (000)	18,221	19,049	19,780	20,518	21,375
ISDN Capable Switches	515	592	671	722	734
ISDN Access Line Capac. (000)	9,923	11,750	13,919	15,534	16,754
ISDN Basic Rate Interface Eq'pd.	101,858	163,901	223,626	279,372	357,469
ISDN Primary Rate Interface Eq'pd.	121	5,311	9,185	17,724	31,171

Table 10.1 Switching System Data
(c): BellSouth

	1993	1994	1995	1996	1997
Gross Plant Expenditures (In Millions $)	3,012	3,118	3,160	3,269	3,477
Local Switches	1,661	1,658	1,647	1,650	1,654
Tandem Switches	70	70	71	70	70
Hosts	269	280	289	297	317
Remotes (Stand Alone Only)	714	732	742	747	766
Total Switching Entities	1,680	1,677	1,668	1,670	1,674
Electromechanical	0	0	0	0	0
Analog Stored Pgm. Control	236	182	158	130	106
Digital Stored Pgm. Control	1,444	1,495	1,510	1,540	1,568
Total Access Lines (000)	19,233	20,141	21,064	22,017	23,080
Electromechanical Switches	0	0	0	0	0
Analog Stored Pgm. Ctrl. Switches	5,929	4,837	4,455	4,018	3,746
Digital Stored Pgm. Ctrl. Switches	13,304	15,304	16,609	17,999	19,334
Touch Tone Capable Switches	1,661	1,658	1,647	1,650	1,654
T. Tone Capable Access Lines (000)	19,233	20,141	21,064	22,017	23,080
Equal Access Switches	1,680	1,677	1,668	1,670	1,674
Equal Access Lines (000)	19,233	20,141	21,064	22,017	23,080
Signal. Sys. 7 Switches (SS7-394)	1,447	1,627	1,629	1,652	1,674
SS7-394 Access Lines (000)	18,067	20,118	20,737	21,873	23,080
Signal. Sys. 7 Switches (SS7-317)	1,452	1,628	1,630	1,652	1,674
SS7-317 Access Lines (000)	18,122	20,136	20,755	21,873	23,080
ISDN Capable Switches	324	407	467	518	584
ISDN Access Line Capac. (000)	7,606	9,708	10,988	12,947	14,894
ISDN Basic Rate Interface Eq'pd.	65,607	76,348	80,641	122,043	167,512
ISDN Primary Rate Interface Eq'pd.	1,814	3,534	4,803	9,154	21,389

Table 10.1 Switching System Data
(d): Bell Atlantic - North (NYNEX)

	1993	1994	1995	1996	1997
Gross Plant Expenditures (In Millions $)	2,152	2,208	2,316	2,214	2,478
Local Switches	1,307	1,297	1,290	1,274	1,291
Tandem Switches	23	23	23	23	25
Hosts	155	159	169	157	153
Remotes (Stand Alone Only)	699	722	728	732	729
Total Switching Entities	1,326	1,316	1,309	1,293	1,311
Electromechanical	0	0	0	0	0
Analog Stored Pgm. Control	192	123	101	58	22
Digital Stored Pgm. Control	1,134	1,193	1,208	1,235	1,289
Total Access Lines (000)	16,129	16,578	17,139	17,739	18,339
Electromechanical Switches	0	0	0	0	0
Analog Stored Pgm. Ctrl. Switches	4,123	2,800	1,969	1,035	368
Digital Stored Pgm. Ctrl. Switches	12,006	13,778	15,170	16,704	17,971
Touch Tone Capable Switches	1,307	1,297	1,286	1,274	1,291
T. Tone Capable Access Lines (000)	16,129	16,578	17,139	17,739	18,339
Equal Access Switches	1,307	1,316	1,308	1,293	1,311
Equal Access Lines (000)	16,077	16,578	17,139	17,739	18,339
Signal. Sys. 7 Switches (SS7-394)	970	1,119	1,203	1,235	1,292
SS7-394 Access Lines (000)	11,300	13,852	15,168	16,704	18,098
Signal. Sys. 7 Switches (SS7-317)	969	1,119	1,203	1,235	1,292
SS7-317 Access Lines (000)	11,300	13,832	15,168	16,704	18,098
ISDN Capable Switches	114	247	259	357	486
ISDN Access Line Capac. (000)	3,483	9,357	8,198	12,148	14,371
ISDN Basic Rate Interface Eq'pd.	62,522	118,150	139,694	226,280	303,073
ISDN Primary Rate Interface Eq'pd.	837	1,082	3,322	7,051	12,751

Table 10.1 Switching System Data
(e): SBC (Pacific Telesis)

	1993	1994	1995	1996	1997
Gross Plant Expenditures (In Millions $)	1,734	1,620	1,664	1,877	2,209
Local Switches	846	837	840	833	810
Tandem Switches	20	20	20	20	21
Hosts	111	121	117	114	135
Remotes (Stand Alone Only)	302	320	316	310	364
Total Switching Entities	866	856	859	853	830
Electromechanical	3	2	1	0	0
Analog Stored Pgm. Control	176	109	87	72	49
Digital Stored Pgm. Control	687	745	771	781	781
Total Access Lines (000)	14,971	15,384	15,984	16,460	17,155
Electromechanical Switches	1	1	0	0	0
Analog Stored Pgm. Ctrl. Switches	7,036	5,029	4,036	3,354	2,422
Digital Stored Pgm. Ctrl. Switches	7,934	10,354	11,948	13,106	14,733
Touch Tone Capable Switches	846	837	840	833	810
T. Tone Capable Access Lines (000)	14,971	15,384	15,984	16,460	17,155
Equal Access Switches	844	834	838	852	810
Equal Access Lines (000)	14,949	15,360	15,966	16,460	17,155
Signal. Sys. 7 Switches (SS7-394)	522	764	772	794	791
SS7-394 Access Lines (000)	12,490	14,781	15,512	15,616	16,956
Signal. Sys. 7 Switches (SS7-317)	522	764	772	794	804
SS7-317 Access Lines (000)	12,490	14,781	15,512	15,616	16,956
ISDN Capable Switches	229	347	417	473	531
ISDN Access Line Capac. (000)	5,349	8,494	10,291	11,895	13,632
ISDN Basic Rate Interface Eq'pd.	65,683	115,146	171,305	304,182	314,003
ISDN Primary Rate Interface Eq'pd.	357	708	3,491	13,448	20,125

Table 10.1 Switching System Data
(f): SBC (Southwestern Bell)

	1993	1994	1995	1996	1997
Gross Plant Expenditures (In Millions $)	1,723	1,739	1,759	2,326	2,741
Local Switches	1,437	1,511	1,644	1,670	1,690
Tandem Switches	64	60	60	60	60
Hosts	230	233	245	241	267
Remotes (Stand Alone Only)	672	779	935	1,077	1,077
Total Switching Entities	1,469	1,539	1,679	1,730	1,750
Electromechanical	83	73	58	0	0
Analog Stored Pgm. Control	308	264	252	162	136
Digital Stored Pgm. Control	1,078	1,202	1,369	1,568	1,614
Total Access Lines (000)	13,180	13,611	14,095	14,104	15,306
Electromechanical Switches	102	96	62	0	0
Analog Stored Pgm. Ctrl. Switches	7,078	6,608	6,531	5,657	5,055
Digital Stored Pgm. Ctrl. Switches	6,000	6,907	7,502	8,447	10,251
Touch Tone Capable Switches	1,437	1,511	1,644	1,670	1,690
T. Tone Capable Access Lines (000)	13,180	13,611	14,095	14,104	15,306
Equal Access Switches	1,340	1,511	1,644	1,670	1,741
Equal Access Lines (000)	13,060	13,611	14,095	14,104	15,306
Signal. Sys. 7 Switches (SS7-394)	723	1,263	1,466	1,597	1,724
SS7-394 Access Lines (000)	8,828	12,787	13,289	13,890	15,249
Signal. Sys. 7 Switches (SS7-317)	649	1,263	1,466	1,597	1,724
SS7-317 Access Lines (000)	8,468	12,787	13,289	13,890	15,249
ISDN Capable Switches	92	123	303	331	331
ISDN Access Line Capac. (000)	1,476	1,933	8,826	9,440	10,577
ISDN Basic Rate Interface Eq'pd.	88,960	57,041	108,784	104,604	185,018
ISDN Primary Rate Interface Eq'pd.	410	1,238	5,084	6,150	15,434

Table 10.1 Switching System Data
(g): US West

	1993	1994	1995	1996	1997
Gross Plant Expenditures (In Millions $)	2,210	2,359	2,570	2,995	2,540
Local Switches	1,841	1,738	1,641	1,521	1,441
Tandem Switches	51	51	51	51	51
Hosts	223	232	238	248	249
Remotes (Stand Alone Only)	880	984	961	852	781
Total Switching Entities	1,858	1,752	1,654	1,534	1,492
Electromechanical	210	20	1	1	0
Analog Stored Pgm. Control	261	213	188	146	113
Digital Stored Pgm. Control	1,387	1,519	1,465	1,387	1,379
Total Access Lines (000)	13,710	14,309	14,817	15,405	16,132
Electromechanical Switches	161	18	1	1	0
Analog Stored Pgm. Ctrl. Switches	6,257	5,303	4,706	4,245	4,228
Digital Stored Pgm. Ctrl. Switches	7,292	8,988	10,110	11,159	11,905
Touch Tone Capable Switches	1,841	1,738	1,641	1,521	1,441
T. Tone Capable Access Lines (000)	13,710	14,309	14,817	15,405	16,132
Equal Access Switches	1,636	1,724	1,638	1,520	1,492
Equal Access Lines (000)	13,529	14,287	14,816	15,404	16,132
Signal. Sys. 7 Switches (SS7-394)	620	819	1,116	1,143	1,305
SS7-394 Access Lines (000)	9,931	11,704	13,411	14,420	15,739
Signal. Sys. 7 Switches (SS7-317)	621	839	1,116	1,143	1,305
SS7-317 Access Lines (000)	9,931	11,663	13,411	14,420	15,739
ISDN Capable Switches	213	240	262	327	541
ISDN Access Line Capac. (000)	3,982	5,045	6,192	9,668	10,264
ISDN Basic Rate Interface Eq'pd.	108,775	120,058	126,530	146,570	162,953
ISDN Primary Rate Interface Eq'pd.	674	742	2,315	2,734	4,329

Table 10.1 Switching System Data
(h): GTE/CONTEL Companies

	1993	1994	1995	1996	1997
Gross Plant Expenditures (In Millions $)	2,748	2,719	2,555	2,628	3,021
Local Switches	6,164	5,976	6,119	6,498	6,453
Tandem Switches	149	142	157	165	165
Hosts	876	831	867	928	939
Remotes (Stand Alone Only)	1,618	1,702	1,970	1,925	2,143
Total Switching Entities	6,202	5,993	6,136	6,518	6,483
Electromechanical	1,115	893	649	393	168
Analog Stored Pgm. Control	78	46	26	17	10
Digital Stored Pgm. Control	5,009	5,054	5,461	6,108	6,305
Total Access Lines (000)	15,906	15,928	16,535	17,389	18,320
Electromechanical Switches	1,042	782	523	284	158
Analog Stored Pgm. Ctrl. Switches	836	509	380	241	197
Digital Stored Pgm. Ctrl. Switches	14,028	14,637	15,632	16,864	17,965
Touch Tone Capable Switches	6,164	5,976	6,119	6,498	6,453
T. Tone Capable Access Lines (000)	15,904	15,925	16,530	17,394	18,320
Equal Access Switches	4,983	5,010	5,497	6,121	6,309
Equal Access Lines (000)	14,774	15,081	16,015	17,099	18,153
Signal. Sys. 7 Switches (SS7-394)	1,990	2,234	2,907	3,897	4,215
SS7-394 Access Lines (000)	8,847	10,766	12,841	15,193	15,967
Signal. Sys. 7 Switches (SS7-317)	2,113	2,234	2,907	4,218	4,215
SS7-317 Access Lines (000)	9,676	10,766	12,841	15,438	15,967
ISDN Capable Switches	272	276	390	523	779
ISDN Access Line Capac. (000)	2,096	5,010	6,251	9,677	10,620
ISDN Basic Rate Interface Eq'pd.	30,741	63,012	91,326	98,145	126,946
ISDN Primary Rate Interface Eq'pd.	896	1,406	2,703	17,377	16,465

Table 10.1 Switching System Data
(i): Bell Company Totals

	1993	1994	1995	1996	1997
Gross Plant Expenditures (In Millions $)	14,683	14,667	15,436	17,494	18,213
Local Switches	9,919	9,862	9,883	9,768	9,733
Tandem Switches	317	313	313	318	316
Hosts	1,412	1,460	1,498	1,503	1,576
Remotes (Stand Alone Only)	4,617	4,939	5,109	5,173	5,204
Total Switching Entities	10,089	10,022	10,050	9,966	9,965
Electromechanical	296	95	60	1	0
Analog Stored Pgm. Control	1,554	1,133	976	718	548
Digital Stored Pgm. Control	8,239	8,794	9,014	9,247	9,417
Total Access Lines (000)	113,368	117,313	122,229	125,843	131,721
Electromechanical Switches	264	115	63	1	0
Analog Stored Pgm. Ctrl. Switches	41,912	33,191	29,031	24,559	21,217
Digital Stored Pgm. Ctrl. Switches	71,192	84,007	93,135	101,283	110,504
Touch Tone Capable Switches	9,966	9,909	9,879	9,768	9,733
T. Tone Capable Access Lines (000)	113,368	117,312	122,229	125,844	131,721
Equal Access Switches	9,697	9,934	9,977	9,891	9,936
Equal Access Lines (000)	112,993	117,266	122,210	125,843	131,721
Signal. Sys. 7 Switches (SS7-394)	6,003	8,108	8,960	9,274	9,664
SS7-394 Access Lines (000)	87,232	107,842	116,364	122,265	130,670
Signal. Sys. 7 Switches (SS7-317)	6,688	8,334	8,977	9,286	9,688
SS7-317 Access Lines (000)	92,493	109,465	116,568	122,343	130,705
ISDN Capable Switches	1,874	2,400	2,868	3,329	3,902
ISDN Access Line Capac. (000)	39,875	56,546	71,274	85,434	95,957
ISDN Basic Rate Interface Eq'pd.	560,820	738,506	952,291	1,338,782	1,670,308
ISDN Primary Rate Interface Eq'pd.	4,920	14,120	30,409	60,508	119,768

Table 10.1 Switching System Data
(j): All Company Totals

	1993	1994	1995	1996	1997
Gross Plant Expenditures (In Millions $)	17,432	17,386	17,991	20,122	21,234
Local Switches	16,083	15,838	16,002	16,266	16,186
Tandem Switches	466	455	470	483	481
Hosts	2,288	2,291	2,365	2,431	2,515
Remotes (Stand Alone Only)	6,235	6,641	7,079	7,098	7,347
Total Switching Entities	16,291	16,015	16,186	16,484	16,448
Electromechanical	1,411	988	709	394	168
Analog Stored Pgm. Control	1,632	1,179	1,002	735	558
Digital Stored Pgm. Control	13,248	13,848	14,475	15,355	15,722
Total Access Lines (000)	129,274	133,241	138,764	143,232	150,041
Electromechanical Switches	1,306	897	586	285	158
Analog Stored Pgm. Ctrl. Switches	42,748	33,700	29,411	24,800	21,414
Digital Stored Pgm. Ctrl. Switches	85,220	98,644	108,767	118,147	128,469
Touch Tone Capable Switches	16,130	15,885	15,998	16,266	16,186
T. Tone Capable Access Lines (000)	129,272	133,237	138,759	143,238	150,041
Equal Access Switches	14,680	14,944	15,474	16,012	16,245
Equal Access Lines (000)	127,767	132,347	138,225	142,942	149,874
Signal. Sys. 7 Switches (SS7-394)	7,993	10,342	11,867	13,171	13,879
SS7-394 Access Lines (000)	96,079	118,608	129,205	137,458	146,637
Signal. Sys. 7 Switches (SS7-317)	8,801	10,568	11,884	13,504	13,903
SS7-317 Access Lines (000)	102,169	120,231	129,409	137,781	146,672
ISDN Capable Switches	2,146	2,676	3,258	3,852	4,681
ISDN Access Line Capac. (000)	41,971	61,556	77,525	95,111	106,577
ISDN Basic Rate Interface Eq'pd.	591,561	801,518	1,043,617	1,436,927	1,797,254
ISDN Primary Rate Interface Eq'pd.	5,816	15,526	33,112	77,885	136,233

Table 10.2 Transmission System Data
(a): Ameritech

	1993	1994	1995	1996	1997
Total Sheath-Kilometers	556,814	537,133	562,934	575,407	586,712
Copper Sheath-Kilometers	521,187	498,238	519,775	526,955	533,491
Fiber Sheath-Kilometers	34,655	37,980	42,370	47,676	52,450
Other Sheath-Kilometers	972	915	789	776	771
Total Carrier Links	452,276	535,085	715,434	915,547	1,084,957
Copper Links	69,609	55,193	46,806	36,261	29,355
Fiber Links	377,963	475,981	667,746	878,959	1,055,285
Radio Links	4,704	3,911	882	327	317
Total Circuit Links	2,800,655	2,964,296	3,278,058	3,577,253	4,118,183
Baseband Links	59,460	56,164	56,287	53,688	47,196
Analog Links	468	440	189	38	38
Digital Links	2,740,727	2,907,692	3,221,582	3,523,527	4,070,949
Equipped Channels (000)	30,818	31,848	31,957	33,366	34,741
Copper	29,549	29,483	29,125	29,571	29,797
Fiber	1,269	2,365	2,832	3,795	4,944
Other	0	0	0	0	0
Working Channels (000)	18,611	19,106	19,714	20,506	21,152
Copper	17,812	18,096	18,479	18,896	19,083
Fiber	799	1,010	1,236	1,610	2,069
Other	0	0	0	0	0
Copper Pair Sw. Term.-Loop	28,687,860	28,645,732	28,217,638	28,693,472	28,970,660
Fiber Cent. Ofc. Loop Termin.	56,834	66,035	79,661	103,648	123,302
DS-1 Term.- Cust. Prem. Fiber	23,675	26,660	31,941	39,124	46,366
DS-3 Term.- Cust. Prem. Fiber	2,434	2,755	3,192	3,874	4,453

Table 10.2 Transmission System Data
(b): Bell Atlantic - South

	1993	1994	1995	1996	1997
Total Sheath-Kilometers	507,245	514,377	518,999	524,759	534,981
Copper Sheath-Kilometers	461,040	461,558	460,772	462,019	465,471
Fiber Sheath-Kilometers	45,402	52,014	57,425	62,740	69,509
Other Sheath-Kilometers	803	805	802	0	1
Total Carrier Links	252,108	278,199	303,468	342,525	373,549
Copper Links	62,122	63,297	66,127	72,045	76,842
Fiber Links	182,816	207,750	230,335	265,219	291,883
Radio Links	7,170	7,152	7,006	5,261	4,824
Total Circuit Links	2,550,021	2,604,573	2,766,872	2,935,557	3,248,498
Baseband Links	105,941	73,773	42,296	35,110	29,036
Analog Links	0	0	0	0	0
Digital Links	2,444,080	2,530,800	2,724,576	2,900,447	3,219,462
Equipped Channels (000)	50,194	52,800	56,614	42,917	44,864
Copper	33,723	33,569	34,269	33,740	34,259
Fiber	16,471	19,231	22,344	9,177	10,604
Other	0	0	0	0	0
Working Channels (000)	21,354	22,146	23,515	25,271	27,328
Copper	18,641	18,513	19,068	19,361	20,019
Fiber	2,713	3,633	4,447	5,911	7,309
Other	0	0	0	0	0
Copper Pair Sw. Term.-Loop	30,504,712	30,479,864	30,444,724	30,488,288	30,645,886
Fiber Cent. Ofc. Loop Termin.	129,509	416,307	490,314	564,146	595,890
DS-1 Term.- Cust. Prem. Fiber	25,922	37,197	47,737	72,187	86,820
DS-3 Term.- Cust. Prem. Fiber	437	731	970	1,683	2,523

Table 10.2 Transmission System Data
(c): BellSouth

	1993	1994	1995	1996	1997
Total Sheath-Kilometers	993,633	1,005,397	1,020,809	1,034,601	1,050,186
Copper Sheath-Kilometers	927,265	930,812	937,626	943,090	951,758
Fiber Sheath-Kilometers	65,100	73,370	82,012	90,093	96,852
Other Sheath-Kilometers	1,268	1,215	1,171	1,418	1,576
Total Carrier Links	991,365	1,035,404	1,210,164	1,490,563	1,873,566
Copper Links	86,390	52,813	48,503	69,210	66,326
Fiber Links	877,770	958,357	1,145,268	1,414,411	1,805,158
Radio Links	27,205	24,234	16,393	6,942	2,082
Total Circuit Links	2,935,064	4,287,654	4,756,430	5,245,925	6,107,816
Baseband Links	17,575	14,713	9,985	16,635	12,054
Analog Links	99	50	0	0	0
Digital Links	2,917,390	4,272,891	4,746,445	5,229,290	6,095,762
Equipped Channels (000)	33,070	34,670	36,022	37,867	39,551
Copper	29,291	29,996	30,352	30,903	31,271
Fiber	3,778	4,673	5,670	6,963	8,279
Other	0	0	0	0	0
Working Channels (000)	21,276	23,285	24,683	26,230	27,921
Copper	18,289	19,284	19,871	20,318	20,709
Fiber	2,987	4,001	4,812	5,912	7,212
Other	0	0	0	0	0
Copper Pair Sw. Term.-Loop	26,433,408	26,451,200	26,527,292	26,342,776	26,703,440
Fiber Cent. Ofc. Loop Termin.	59,663	73,260	106,710	138,364	157,957
DS-1 Term.- Cust. Prem. Fiber	9,078	13,941	19,132	27,482	36,911
DS-3 Term.- Cust. Prem. Fiber	3,294	4,034	4,559	5,353	6,847

Table 10.2 Transmission System Data
(d): Bell Atlantic - North (NYNEX)

	1993	1994	1995	1996	1997
Total Sheath-Kilometers	451,030	452,707	454,149	454,905	457,989
Copper Sheath-Kilometers	416,312	414,170	412,025	409,965	408,112
Fiber Sheath-Kilometers	33,013	37,118	41,000	44,401	49,478
Other Sheath-Kilometers	1,705	1,419	1,124	539	399
Total Carrier Links	442,636	459,959	467,055	525,240	765,039
Copper Links	50,392	51,873	45,579	26,365	27,652
Fiber Links	389,124	406,135	420,415	498,082	737,291
Radio Links	3,120	1,951	1,061	793	96
Total Circuit Links	2,609,151	2,596,631	2,446,475	2,421,465	2,605,246
Baseband Links	310,515	244,437	170,517	152,279	118,376
Analog Links	0	0	0	0	0
Digital Links	2,298,636	2,352,194	2,275,958	2,269,186	2,486,870
Equipped Channels (000)	32,787	33,222	33,494	34,371	35,464
Copper	31,400	31,707	31,394	31,594	32,167
Fiber	1,387	1,515	2,101	2,777	3,297
Other	0	0	0	0	0
Working Channels (000)	18,869	18,776	20,176	20,157	21,272
Copper	18,136	17,875	18,860	18,638	19,410
Fiber	733	902	1,316	1,519	1,862
Other	0	0	0	0	0
Copper Pair Sw. Term.-Loop	30,053,156	30,097,348	30,190,922	30,253,844	30,697,008
Fiber Cent. Ofc. Loop Termin.	143,770	188,194	214,587	240,641	276,320
DS-1 Term.- Cust. Prem. Fiber	21,911	28,732	30,529	31,120	45,009
DS-3 Term.- Cust. Prem. Fiber	869	1,036	1,363	1,698	1,571

Table 10.2 Transmission System Data
(e): SBC (Pacific Telesis)

	1993	1994	1995	1996	1997
Total Sheath-Kilometers	351,695	343,658	346,127	349,697	363,726
Copper Sheath-Kilometers	334,674	324,942	325,537	327,040	339,207
Fiber Sheath-Kilometers	15,814	17,598	19,472	21,513	23,375
Other Sheath-Kilometers	1,207	1,118	1,118	1,144	1,144
Total Carrier Links	890,851	962,858	1,383,705	2,545,435	3,281,078
Copper Links	335,250	153,493	123,014	117,895	110,874
Fiber Links	546,847	801,638	1,252,043	2,417,461	3,159,510
Radio Links	8,754	7,727	8,648	10,079	10,694
Total Circuit Links	2,137,179	2,568,706	2,646,904	2,240,779	3,369,967
Baseband Links	66,642	42,095	35,016	30,232	27,020
Analog Links	609	451	256	297	263
Digital Links	2,069,928	2,526,160	2,611,632	2,210,250	3,342,684
Equipped Channels (000)	26,287	26,447	26,850	27,732	28,635
Copper	25,860	25,915	26,179	26,952	27,549
Fiber	428	533	671	780	1,086
Other	0	0	0	0	0
Working Channels (000)	15,841	16,110	16,878	17,720	18,254
Copper	15,556	15,759	16,448	17,213	17,569
Fiber	285	351	430	507	685
Other	0	0	0	0	0
Copper Pair Sw. Term.-Loop	24,632,896	24,577,002	24,619,462	25,055,624	25,412,880
Fiber Cent. Ofc. Loop Termin.	39,830	33,538	34,692	37,156	88,192
DS-1 Term.- Cust. Prem. Fiber	701	756	655	719	762
DS-3 Term.- Cust. Prem. Fiber	2,410	3,108	4,047	3,113	6,145

Table 10.2 Transmission System Data
(f): SBC (Southwestern Bell)

	1993	1994	1995	1996	1997
Total Sheath-Kilometers	646,283	652,224	662,108	676,945	685,526
Copper Sheath-Kilometers	608,238	609,725	612,764	617,776	622,960
Fiber Sheath-Kilometers	35,548	40,621	47,530	57,228	60,561
Other Sheath-Kilometers	2,497	1,878	1,814	1,941	2,005
Total Carrier Links	661,969	717,489	1,116,226	1,236,940	1,510,028
Copper Links	114,280	119,709	120,615	44,723	35,548
Fiber Links	532,317	584,519	982,517	1,187,045	1,467,224
Radio Links	15,372	13,261	13,094	5,172	7,256
Total Circuit Links	2,132,469	2,271,891	2,583,685	2,887,611	3,374,225
Baseband Links	42,930	32,798	26,474	21,045	19,123
Analog Links	2,080	827	97	26	11
Digital Links	2,087,459	2,238,266	2,557,114	2,866,540	3,355,091
Equipped Channels (000)	22,802	23,675	23,990	23,766	26,003
Copper	21,895	22,011	23,357	22,976	24,957
Fiber	906	1,664	634	789	1,046
Other	0	0	0	0	0
Working Channels (000)	13,431	15,446	15,918	16,580	16,306
Copper	12,704	14,047	15,376	15,937	15,532
Fiber	728	1,400	541	643	773
Other	0	0	0	0	0
Copper Pair Sw. Term.-Loop	21,379,496	22,010,904	21,990,828	22,185,268	22,926,816
Fiber Cent. Ofc. Loop Termin.	56,560	66,497	124,026	189,365	193,409
DS-1 Term.- Cust. Prem. Fiber	38,568	44,622	48,552	77,598	77,545
DS-3 Term.- Cust. Prem. Fiber	1,916	2,566	2,733	4,365	5,039

Table 10.2 Transmission System Data (g): US West

	1993	1994	1995	1996	1997
Total Sheath-Kilometers	757,869	750,757	753,942	722,753	717,085
Copper Sheath-Kilometers	707,384	694,797	691,844	660,393	653,205
Fiber Sheath-Kilometers	50,485	55,960	62,098	62,360	63,880
Other Sheath-Kilometers	0	0	0	0	0
Total Carrier Links	471,975	508,530	633,861	901,580	1,180,771
Copper Links	89,849	73,050	35,964	68,779	67,240
Fiber Links	357,269	412,014	575,849	816,218	1,094,250
Radio Links	24,857	23,466	22,048	16,583	19,281
Total Circuit Links	2,315,598	2,569,216	2,802,203	3,178,552	3,561,748
Baseband Links	27,397	24,530	27,184	27,472	25,547
Analog Links	12,879	5,702	4,376	1,762	1,115
Digital Links	2,275,322	2,538,984	2,770,643	3,149,318	3,535,086
Equipped Channels (000)	23,877	24,089	24,247	25,284	24,894
Copper	23,171	23,394	23,561	23,501	23,194
Fiber	704	695	686	1,783	1,700
Other	2	0	0	0	0
Working Channels (000)	14,809	15,322	15,347	16,359	17,195
Copper	14,359	14,863	14,873	15,232	16,114
Fiber	449	459	474	1,127	1,082
Other	1	0	0	0	0
Copper Pair Sw. Term.-Loop	22,128,232	22,179,410	22,168,428	22,291,698	20,463,592
Fiber Cent. Ofc. Loop Termin.	73,993	83,313	81,953	112,185	123,691
DS-1 Term.- Cust. Prem. Fiber	20,010	24,386	28,875	30,109	46,296
DS-3 Term.- Cust. Prem. Fiber	1,066	1,297	1,339	1,223	1,142

Table 10.2 Transmission System Data
(h): GTE/CONTEL Companies

	1993	1994	1995	1996	1997
Total Sheath-Kilometers	1,522,253	1,276,369	1,209,595	1,248,505	1,268,110
Copper Sheath-Kilometers	1,218,440	1,214,758	1,143,855	1,177,702	1,188,835
Fiber Sheath-Kilometers	66,610	61,611	65,740	70,803	79,275
Other Sheath-Kilometers	237,203	0	0	0	0
Total Carrier Links	407,237	499,678	606,202	765,541	1,136,757
Copper Links	118,074	118,858	118,686	290,257	448,534
Fiber Links	275,733	368,202	475,876	467,328	680,858
Radio Links	13,430	12,618	11,640	7,956	7,365
Total Circuit Links	3,019,378	3,424,887	4,100,441	1,900,698	2,461,398
Baseband Links	61,703	58,835	55,704	43,652	40,770
Analog Links	6,727	4,736	3,729	1,375	833
Digital Links	2,950,948	3,361,316	4,041,008	1,855,671	2,419,795
Equipped Channels (000)	27,930	27,878	30,431	30,129	30,279
Copper	26,323	26,125	28,564	28,147	27,710
Fiber	1,598	1,749	1,863	1,979	2,559
Other	8	4	4	3	9
Working Channels (000)	18,321	18,719	19,653	20,422	20,654
Copper	17,212	17,553	18,387	18,982	18,850
Fiber	1,108	1,163	1,264	1,439	1,802
Other	0	2	2	2	2
Copper Pair Sw. Term.-Loop	27,735,992	25,933,740	28,562,746	27,804,888	29,713,976
Fiber Cent. Ofc. Loop Termin.	38,282	55,365	71,687	80,372	93,238
DS-1 Term.- Cust. Prem. Fiber	6,532	7,941	14,613	16,469	23,480
DS-3 Term.- Cust. Prem. Fiber	3,813	4,436	4,546	11,043	2,173

Table 10.2 Transmission System Data
(i): Bell Company Totals

	1993	1994	1995	1996	1997
Total Sheath-Kilometers	4,264,569	4,256,253	4,319,068	4,339,067	4,396,205
Copper Sheath-Kilometers	3,976,100	3,934,242	3,960,343	3,947,238	3,974,204
Fiber Sheath-Kilometers	280,017	314,661	351,907	386,011	416,105
Other Sheath-Kilometers	8,452	7,350	6,818	5,818	5,896
Total Carrier Links	4,163,180	4,497,524	5,829,913	7,957,830	10,068,988
Copper Links	807,892	569,428	486,608	435,278	413,837
Fiber Links	3,264,106	3,846,394	5,274,173	7,477,395	9,610,601
Radio Links	91,182	81,702	69,132	45,157	44,550
Total Circuit Links	17,480,137	19,862,967	21,280,627	22,487,142	26,385,683
Baseband Links	630,460	488,510	367,759	336,461	278,352
Analog Links	16,135	7,470	4,918	2,123	1,427
Digital Links	16,833,542	19,366,987	20,907,950	22,148,558	26,105,904
Equipped Channels (000)	219,835	226,750	233,175	225,302	234,151
Copper	194,889	196,073	198,236	199,237	203,193
Fiber	24,943	30,675	34,937	26,063	30,956
Other	2	0	0	0	0
Working Channels (000)	124,191	130,192	136,231	142,824	149,429
Copper	115,496	118,437	122,975	125,595	128,436
Fiber	8,694	11,755	13,255	17,228	20,992
Other	1	0	0	0	0
Copper Pair Sw. Term.-Loop	183,819,760	184,441,460	184,159,294	185,310,970	185,820,282
Fiber Cent. Ofc. Loop Termin.	560,159	927,144	1,131,943	1,385,505	1,558,761
DS-1 Term.- Cust. Prem. Fiber	139,865	176,294	207,421	278,339	339,709
DS-3 Term.- Cust. Prem. Fiber	12,426	15,527	18,203	21,309	27,720

Table 10.2 Transmission System Data
(j): All Company Totals

	1993	1994	1995	1996	1997
Total Sheath-Kilometers	5,786,822	5,532,622	5,528,663	5,587,572	5,664,315
Copper Sheath-Kilometers	5,194,540	5,149,000	5,104,198	5,124,940	5,163,039
Fiber Sheath-Kilometers	346,627	376,272	417,647	456,814	495,380
Other Sheath-Kilometers	245,655	7,350	6,818	5,818	5,896
Total Carrier Links	4,570,417	4,997,202	6,436,115	8,723,371	11,205,745
Copper Links	925,966	688,286	605,294	725,535	862,371
Fiber Links	3,539,839	4,214,596	5,750,049	7,944,723	10,291,459
Radio Links	104,612	94,320	80,772	53,113	51,915
Total Circuit Links	20,499,515	23,287,854	25,381,068	24,387,840	28,847,081
Baseband Links	692,163	547,345	423,463	380,113	319,122
Analog Links	22,862	12,206	8,647	3,498	2,260
Digital Links	19,784,490	22,728,303	24,948,958	24,004,229	28,525,699
Equipped Channels (000)	247,765	254,628	263,606	255,430	264,429
Copper	221,213	222,198	226,800	227,384	230,903
Fiber	26,541	32,424	36,800	28,042	33,515
Other	10	4	4	3	9
Working Channels (000)	142,512	148,910	155,884	163,246	170,083
Copper	132,708	135,990	141,362	144,577	147,286
Fiber	9,802	12,918	14,519	18,666	22,794
Other	1	2	2	2	2
Copper Pair Sw. Term.-Loop	211,555,752	210,375,200	212,722,040	213,115,858	215,534,258
Fiber Cent. Ofc. Loop Termin.	598,441	982,509	1,203,630	1,465,877	1,651,999
DS-1 Term.- Cust. Prem. Fiber	146,397	184,235	222,034	294,808	363,189
DS-3 Term.- Cust. Prem. Fiber	16,239	19,963	22,749	32,352	29,893

11. Revenues, Expenses, and Investment

This section provides information on revenues, expenses and investment by major local telephone companies. The information included in this section is calculated from some of the summary information in ARMIS. The original data plus more detailed data can be found in the ARMIS reports, which are available for public access on the ARMIS internet site (http://www.fcc.gov/ccb/armis/db/), or on the **FCC-State Link** Bulletin Board, which can be reached by dialing (202) 418-0241 with a computer modem.

The source of the data in this section is ARMIS 43-01 Annual Summary Report, prescribed for every local exchange carrier with operating revenues in 1996 in excess of $109 million. The report is filed on a study area basis and includes data on revenues, expenses and investment to enable the Commission to monitor the carriers' operations.[1] For this section. information was derived from ARMIS 43-01 data for 1997.

Table 11.1 shows Revenues and Other Operating Items.

Table 11.2 shows Expenses and Taxes.

Table 11.3 shows Gross Investment.

Table 11.4 shows Total Investment Reserves--row 1890 of the ARMIS report.

Table 11.5 shows Net Income which is the difference between
Table 11.1--Revenues and Other Operating Items and
Table 11.2--Expenses and Taxes.

Table 11.6 shows Average Net Investment--row 1910 of the ARMIS report--which is the difference between
Table 11.3--Gross Investment and
Table 11.4--Total Investment Reserves.

---

1 13 Tier 1 carriers furnished the data for 125 study areas used in this report. The data covers all 50 states (except Alaska), the District of Columbia, and the Commonwealth of Puerto Rico. ARMIS data are not filed by smaller carriers that, in the aggregate, serve about 7% of the nation's telephone lines.

Tables 11.7 and 11.8 show the detail items that when aggregated constitute Table 11.1--Revenues and Other Operating Items.

Table 11.7 shows Total Operating Revenues--row 1090 of the ARMIS report.

Table 11.8 shows Other Operating Income or Loss--row 1290 of the ARMIS report.

Tables 11.9 through 11.12 show the detail items that when aggregated constitute Table 11.2--Expenses and Taxes.

Table 11.9 shows Total Operating Expenses--row 1190 of the ARMIS report.

Table 11.10 shows Total Non-operating Items--row 1390 of the ARMIS report.

Table 11.11 shows Federal Income Taxes--row 1590 of the ARMIS report.

Table 11.12 shows Total Other Taxes--row 1490 of the ARMIS report.

Tables 11.13 and 11.14 show the detail items that when aggregated constitute Table 11.3--Gross Investment.

Table 11.13 shows Total Plant Investment--row 1690 of the ARMIS report.

Table 11.14 shows Total Other Investments--row 1790 of the ARMIS report.

Each table in this section contains columns headed Subject to Separations, Intrastate, and Interstate.[2] The Subject to Separations column reflects the total amount that is subject to separations allocation between the state and interstate jurisdictions pursuant to Part 36 of the Commission's Rules. The Interstate and Intrastate columns reflect the amounts allocated to the interstate and state jurisdictions pursuant to those rules. In some instances, the Interstate column also reflects FCC prescribed adjustments made after the separations process. These adjustments are made only at the interstate level; consequently, the Intrastate and Interstate columns may not necessarily add up to the Subject to Separations column.

Each table also contains a column headed Percent Interstate. The data in this column is calculated by dividing the data in the Interstate column by the data in the Subject to Separations column.

---

2 These are reported in columns (f), (g), and (h) in the ARMIS 43-01 reports. The numbers are in thousands of dollars.

Table 11.6--Average Net Investment--has one additional column headed Interstate Rate of Return. The data in this column is calculated by dividing the data in the Interstate column of Table 11.5--Net Income--by the data in the Interstate column of Table 11.6.

TABLE 11.1
REVENUES AND OTHER OPERATING ITEMS
($000) -- 1997

STUDY AREA	State Code	Subject to Separations	Intrastate	Interstate	Percent Interstate
ALL REPORTING LOCAL EXCHANGE COS.		$96,465,461	$71,555,877	$24,909,572	25.82%
BELL OPERATING COS.		75,725,592	56,077,649	19,647,936	25.95%
OTER REPORTING LOCAL EXCHANGE COS.		20,739,869	15,478,228	5,261,636	25.37%
BELLSOUTH - ALABAMA	AL	1,168,862	886,923	281,938	24.12%
GTE -- CONTEL SO - ALABAMA	AL	82,045	59,848	22,196	27.05%
GTE -- SO - ALABAMA	AL	128,847	82,617	46,230	35.88%
GTE -- CONTEL - ARIZONA	AZ	7,895	4,807	3,088	39.11%
US WEST -- ARIZONA	AZ	1,423,032	1,003,458	419,573	29.48%
GTE -- SW - ARKANSAS	AR	72,744	46,851	25,893	35.59%
SOUTHWESTERN BELL - ARKANSAS	AR	594,074	447,078	146,996	24.74%
GTE -- CALIFORNIA	CA	2,703,613	2,187,414	516,199	19.09%
GTE -- CONTEL - CALIFORNIA	CA	280,075	213,018	67,056	23.94%
GTE -- NW - WEST COAST OF CA	CA	12,371	8,378	3,993	32.28%
SBC -- PACIFIC BELL - CALIFORNIA	CA	8,144,916	6,298,759	1,846,156	22.67%
US WEST -- COLORADO	CO	1,770,635	1,279,047	491,589	27.76%
SOUTHERN NEW ENGLAND TEL. - CT	CT	1,466,838	1,077,602	389,236	26.54%
BELL ATLANTIC - DISTRICT OF COLUMBIA	DC	548,047	370,007	178,040	32.49%
BELL ATLANTIC - DELAWARE	DE	249,317	165,321	83,995	33.69%
BELLSOUTH - FLORIDA	FL	3,344,326	2,393,719	950,607	28.42%
GTE -- FLORIDA	FL	1,417,591	1,057,055	360,536	25.43%
SPRINT -- FLORIDA	FL	1,102,656	793,758	308,897	28.01%
ALLTEL - GEORGIA	GA	209,765	164,363	45,403	21.64%
BELLSOUTH - GEORGIA	GA	2,595,260	1,894,866	700,394	26.99%
GTE -- HAWAIIAN TELEPHONE	HI	487,834	346,829	141,005	28.90%
GTE -- NW - IDAHO	ID	108,573	56,729	51,845	47.75%
US WEST -- IDAHO	ID	271,580	188,223	83,358	30.69%
US WEST -- IDAHO	ID	17,013	11,253	5,760	33.86%
SPRINT -- CENTEL OF ILLINOIS	IL	132,958	99,760	33,197	24.97%
GTE -- NO - CONTEL ILLINOIS	IL	115,998	84,057	31,941	27.54%
GTE -- NO - ILLINOIS	IL	421,548	306,318	115,230	27.33%
GTE -- SO - ILLINOIS	IL	23,892	18,252	5,639	23.60%
AMERITECH - ILLINOIS BELL	IL	3,358,238	2,595,421	762,817	22.71%
GTE -- CONTEL SO - ILLINOIS	IN	5,487	4,174	1,312	23.91%
GTE -- NO - CONTEL INDIANA	IN	108,580	81,215	27,365	25.20%
GTE -- NO - INDIANA	IN	527,558	391,998	135,560	25.70%
AMERITECH - INDIANA BELL	IN	1,170,562	871,766	298,796	25.53%
SPRINT -- UTC OF INDIANA	IN	154,890	114,991	39,899	25.76%
GTE -- MD - CONTEL SYSTEMS OF IOWA	IA	45,835	31,026	14,809	32.31%
GTE -- MD - CONTEL - IOWA	IA	57,935	43,386	14,549	25.11%
GTE -- MD - IOWA	IA	87,240	63,989	23,251	26.65%
US WEST -- IOWA	IA	566,464	404,356	162,108	28.62%
SOUTHWESTERN BELL - KANSAS	KS	822,317	611,298	211,019	25.66%
BELLSOUTH - KENTUCKY	KY	740,202	557,784	182,418	24.64%
GTE -- SO - CONTEL - KENTUCKY	KY	68,928	46,216	22,713	32.95%
GTE -- SO - KENTUCKY	KY	326,499	241,524	84,975	26.03%
BELLSOUTH - LOUISIANA	LA	1,371,339	1,054,340	316,996	23.12%
BELL ATLANTIC - NEW ENGLAND - MA	MA	2,808,746	1,973,344	835,401	29.74%
BELL ATLANTIC - MARYLAND	MD	1,927,851	1,429,882	497,970	25.83%
BELL ATLANTIC - NEW ENGLAND - ME	ME	457,261	335,459	121,802	26.64%
GTE -- CONTEL - MICHIGAN	MI	28,263	21,381	6,882	24.35%
GTE -- NO - MICHIGAN	MI	454,431	354,070	100,360	22.08%
AMERITECH - MICHIGAN BELL	MI	3,104,374	2,471,512	632,862	20.39%
US WEST -- MINNESOTA	MN	1,246,012	909,841	336,170	26.98%
BELLSOUTH - MISSISSIPPI	MS	875,871	678,312	197,558	22.56%
GTE -- MD - CONTEL OF EASTERN MO	MO	1,912	1,543	369	19.30%
GTE -- MD - CONTEL OF SYS MO	MO	38,762	24,495	14,267	36.81%
GTE -- MD - CONTEL MISSOURI	MO	190,392	139,831	50,561	26.56%
GTE -- MD - MISSOURI	MO	86,756	64,945	21,812	25.14%
SOUTHWESTERN BELL - MISSOURI	MO	1,508,096	1,097,812	410,284	27.21%
SPRINT -- UTC OF MISSOURI	MO	185,051	133,922	51,129	27.63%
US WEST -- MONTANA	MT	230,055	169,520	60,535	26.31%
ALIANT TELECOMMUNICATIONS CO.	NE	191,176	153,416	37,759	19.75%
GTE -- MD - NEBRASKA	NE	34,387	24,991	9,396	27.32%
US WEST -- NEBRASKA	NE	443,402	323,219	120,184	27.10%

TABLE 11.1
REVENUES AND OTHER OPERATING ITEMS
($000) -- 1997

STUDY AREA	State Code	Subject to Separations	Intrastate	Interstate	Percent Interstate
GTE -- CONTEL NEVADA	NV	21,582	12,542	9,040	41.89%
SBC - NEVADA BELL	NV	155,603	96,127	59,477	38.22%
SPRINT -- CENTEL OF NEVADA	NV	321,382	224,443	96,939	30.16%
BELL ATLANTIC - NEW ENGLAND - NH	NH	521,602	342,517	179,084	34.33%
BELL ATLANTIC - NEW JERSEY	NJ	3,225,516	2,276,280	949,236	29.43%
SPRINT -- UTC OF NEW JERSEY	NJ	128,507	98,099	30,408	23.66%
GTE -- SW - CONTEL - NEW MEXICO	NM	39,603	22,400	17,203	43.44%
GTE -- SW - NEW MEXICO	NM	30,227	19,832	10,395	34.39%
US WEST -- NEW MEXICO	NM	526,051	387,501	138,549	26.34%
BELL ATLANTIC - NEW YORK	NY	7,572,473	5,541,367	2,031,106	26.82%
CITIZENS TELECOM -- RED HOOK	NY	9,298	6,142	3,156	33.94%
CITIZENS TELECOM -- UPSTATE	NY	161,410	111,130	50,280	31.15%
CITIZENS TELECOM -- W. COUNTIES	NY	18,789	10,918	7,871	41.89%
FRONTIER OF ROCHESTER	NY	306,153	239,914	66,239	21.64%
BELLSOUTH - NORTH CAROLINA	NC	1,486,726	1,104,313	382,411	25.72%
SPRINT -- CAROLINA TEL & TEL OF NC	NC	659,106	499,468	159,638	24.22%
SPRINT -- CENTEL OF NORTH CAROLINA	NC	158,904	123,880	35,023	22.04%
GTE -- SO - CONTEL - NORTH CAROLINA	NC	81,487	53,826	27,661	33.95%
GTE -- SO - NORTH CAROLINA	NC	179,537	130,195	49,341	27.48%
US WEST -- NORTH DAKOTA	ND	170,054	121,498	48,555	28.55%
CINCINNATI BELL TELEPHONE CO.	OH	591,475	456,056	135,420	22.90%
GTE - NO - OHIO	OH	541,040	410,962	130,079	24.04%
AMERITECH - OHIO BELL	OH	2,088,298	1,608,413	479,885	22.98%
GTE -- NO - WESTERN RESERVE - OHIO	OH	103,972	81,615	22,359	21.50%
SPRINT -- UTC OF OHIO	OH	418,837	319,638	99,198	23.68%
GTE -- SW - OKLAHOMA	OK	69,025	46,529	22,496	32.59%
SOUTHWESTERN BELL - OKLAHOMA	OK	919,466	687,136	232,330	25.27%
GTE -- NW - OREGON	OR	316,110	214,953	101,157	32.00%
US WEST -- OREGON	OR	769,613	548,672	220,941	28.71%
SPRINT -- UTC OF THE NW - OREGON	OR	52,570	34,775	17,795	33.85%
ALLTEL - PENNSYLVANIA	PA	131,436	104,508	26,929	20.49%
BELL ATLANTIC OF PENNSYLVANIA	PA	3,152,641	2,315,359	837,282	26.56%
GTE -- NO - CONTEL - PENNSYLANIA	PA	40,663	30,963	9,700	23.85%
GTE -- NO - CONTEL - QUAKER STATE	PA	24,647	18,151	6,496	26.36%
GTE -- NO - PENNSYLVANIA	PA	305,305	220,400	84,906	27.81%
SPRINT -- UTC OF PENNSYLVANIA	PA	232,939	182,244	50,695	21.76%
PUERTO RICO TEL CO	PR	1,011,108	769,556	241,552	23.89%
PUERTO RICO TEL CO - CENTRAL	PR	136,833	89,168	47,665	34.83%
BELL ATLANTIC - NEW ENGLAND - RI	RI	385,692	262,482	123,210	31.95%
BELLSOUTH - SOUTH CAROLINA	SC	875,014	647,372	227,643	26.02%
GTE -- SO - CONTEL - SOUTH CAROLINA	SC	14,572	9,308	5,263	36.12%
GTE -- SO - CAROLINA	SC	132,165	94,323	37,842	28.63%
US WEST -- SOUTH DAKOTA	SD	172,958	122,049	50,909	29.43%
BELLSOUTH - TENNESSEE	TN	1,609,492	1,196,644	412,848	25.65%
SPRINT -- UTC -- SE - TENNESSEE	TN	129,767	94,748	35,019	26.99%
GTE -- SW - CONTEL - TEXAS	TX	139,788	101,192	38,594	27.61%
GTE -- SW - TEXAS	TX	1,176,648	878,209	298,439	25.36%
SOUTHWESTERN BELL - TEXAS	TX	5,545,611	4,235,367	1,310,244	23.63%
SPRINT -- UTC OF TEXAS	TX	99,651	75,830	23,821	23.90%
US WEST -- UTAH	UT	619,776	429,485	190,291	30.70%
BELL ATLANTIC - VIRGINIA	VA	1,904,726	1,389,374	515,352	27.06%
SPRINT -- CENTEL OF VIRGINIA	VA	181,086	137,053	44,033	24.32%
GTE -- SO - CONTEL - VIRGINIA	VA	378,238	264,276	113,961	30.13%
GTE -- SO - VIRGINIA	VA	25,399	15,959	9,440	37.17%
SPRINT -- UTC -- SE - VIRGINIA	VA	63,418	46,182	17,236	27.18%
BELL ATLANTIC - NEW ENGLAND - VT	VT	247,169	175,361	71,809	29.05%
GTE -- NW - CONTEL - WASHINGTON	WA	62,363	42,505	19,858	31.84%
GTE -- NW - WASHINGTON	WA	523,161	387,417	135,744	25.95%
US WEST -- WASHINGTON	WA	1,191,205	800,811	390,395	32.77%
SPRINT -- UTC OF THE NW - WA	WA	57,339	38,655	18,684	32.59%
BELL ATLANTIC - WEST VIRGINIA	WV	554,054	411,012	143,042	25.82%
GTE -- NO - WISCONSIN	WI	295,004	215,495	79,509	26.95%
AMERITECH - WISCONSIN BELL	WI	1,101,503	841,387	260,116	23.61%
US WEST -- WYOMING	WY	172,497	114,602	57,895	33.56%

TABLE 11.2
EXPENSES AND TAXES
($000) -- 1997

STUDY AREA	State Code	Subject to Separations	Intrastate	Interstate	Percent Interstate
ALL REPORTING LOCAL EXCHANGE COS.		$81,309,468	$61,530,825	$19,850,188	24.41%
BELL OPERATING COS.		64,633,100	48,754,132	15,886,037	24.58%
OTER REPORTING LOCAL EXCHANGE COS.		16,676,368	12,776,693	3,964,151	23.77%
BELLSOUTH - ALABAMA	AL	950,055	724,091	226,002	23.79%
GTE -- CONTEL SO - ALABAMA	AL	67,032	51,989	17,552	26.18%
GTE -- SO - ALABAMA	AL	104,117	75,497	36,335	34.90%
GTE -- CONTEL - ARIZONA	AZ	5,904	3,563	2,579	43.68%
US WEST -- ARIZONA	AZ	1,231,732	907,183	324,991	26.38%
GTE -- SW - ARKANSAS	AR	54,687	38,158	21,290	38.93%
SOUTHWESTERN BELL - ARKANSAS	AR	484,547	364,537	120,034	24.77%
GTE -- CALIFORNIA	CA	2,146,095	1,759,812	386,309	18.00%
GTE -- CONTEL - CALIFORNIA	CA	225,438	174,548	52,411	23.25%
GTE -- NW - WEST COAST OF CA	CA	9,292	6,335	3,427	36.88%
SBC -- PACIFIC BELL - CALIFORNIA	CA	7,552,697	6,018,023	1,534,723	20.32%
US WEST -- COLORADO	CO	1,481,165	1,089,090	392,598	26.51%
SOUTHERN NEW ENGLAND TEL. - CT	CT	1,277,054	959,677	318,390	24.93%
BELL ATLANTIC - DISTRICT OF COLUMBIA	DC	462,408	320,110	142,294	30.77%
BELL ATLANTIC - DELAWARE	DE	204,463	138,675	65,825	32.19%
BELLSOUTH - FLORIDA	FL	2,844,182	2,101,188	743,284	26.13%
GTE -- FLORIDA	FL	1,163,405	897,382	267,918	23.03%
SPRINT -- FLORIDA	FL	895,417	661,366	234,052	26.14%
ALLTEL - GEORGIA	GA	152,476	118,611	35,213	23.09%
BELLSOUTH - GEORGIA	GA	2,115,724	1,573,585	542,262	25.63%
GTE -- HAWAIIAN TELEPHONE	HI	397,221	289,632	107,653	27.10%
GTE -- NW - IDAHO	ID	78,051	47,441	37,486	48.03%
US WEST -- IDAHO	ID	221,969	157,052	65,011	29.29%
US WEST -- IDAHO	ID	13,737	9,419	4,323	31.47%
SPRINT -- CENTEL OF ILLINOIS	IL	109,906	82,078	27,828	25.32%
GTE -- NO - CONTEL ILLINOIS	IL	80,961	60,128	20,834	25.73%
GTE -- NO - ILLINOIS	IL	311,899	233,929	77,976	25.00%
GTE -- SO - ILLINOIS	IL	18,557	14,085	4,471	24.09%
AMERITECH - ILLINOIS BELL	IL	2,658,988	2,049,258	610,342	22.95%
GTE -- CONTEL SO - ILLINOIS	IN	4,301	3,176	1,137	26.44%
GTE -- NO - CONTEL INDIANA	IN	77,556	58,676	18,880	24.34%
GTE -- NO - INDIANA	IN	393,801	297,489	96,320	24.46%
AMERITECH - INDIANA BELL	IN	894,097	672,771	221,911	24.82%
SPRINT -- UTC OF INDIANA	IN	123,665	92,877	30,787	24.90%
GTE -- MD - CONTEL SYSTEMS OF IOWA	IA	37,206	27,179	10,030	26.96%
GTE -- MD - CONTEL - IOWA	IA	46,572	36,205	10,371	22.27%
GTE -- MD - IOWA	IA	70,825	54,012	16,815	23.74%
US WEST -- IOWA	IA	489,957	353,072	137,058	27.97%
SOUTHWESTERN BELL - KANSAS	KS	720,169	536,698	183,488	25.48%
BELLSOUTH - KENTUCKY	KY	600,243	458,904	141,366	23.55%
GTE -- SO - CONTEL - KENTUCKY	KY	57,138	42,271	19,845	34.73%
GTE -- SO - KENTUCKY	KY	262,138	201,032	61,701	23.54%
BELLSOUTH - LOUISIANA	LA	1,141,577	886,254	255,386	22.37%
BELL ATLANTIC - NEW ENGLAND - MA	MA	2,420,398	1,742,117	678,281	28.02%
BELL ATLANTIC - MARYLAND	MD	1,605,554	1,203,765	401,943	25.03%
BELL ATLANTIC - NEW ENGLAND - ME	ME	380,685	281,070	99,611	26.17%
GTE -- CONTEL - MICHIGAN	MI	23,024	18,095	4,931	21.42%
GTE -- NO - MICHIGAN	MI	357,936	288,249	71,854	20.07%
AMERITECH - MICHIGAN BELL	MI	2,371,388	1,893,047	478,812	20.19%
US WEST -- MINNESOTA	MN	1,024,510	768,726	256,210	25.01%
BELLSOUTH - MISSISSIPPI	MS	723,359	557,608	165,747	22.91%
GTE -- MD - CONTEL OF EASTERN MO	MO	2,310	1,865	445	19.26%
GTE -- MD - CONTEL OF SYS MO	MO	31,299	22,612	11,314	36.15%
GTE -- MD - CONTEL MISSOURI	MO	169,313	133,115	40,672	24.02%
GTE -- MD - MISSOURI	MO	79,433	63,688	16,700	21.02%
SOUTHWESTERN BELL - MISSOURI	MO	1,304,617	969,272	335,398	25.71%
SPRINT -- UTC OF MISSOURI	MO	146,544	108,935	37,609	25.66%
US WEST -- MONTANA	MT	198,810	147,032	51,863	26.09%
ALIANT TELECOMMUNICATIONS CO.	NE	153,115	121,052	32,064	20.94%
GTE -- MD - NEBRASKA	NE	27,852	21,445	6,408	23.01%
US WEST -- NEBRASKA	NE	372,439	272,171	100,381	26.95%

TABLE 11.2
EXPENSES AND TAXES
($000) -- 1997

	State Code	Subject to Separations	Intrastate	Interstate	Percent Interstate
GTE -- CONTEL NEVADA	NV	15,919	9,711	6,211	39.02%
SBC - NEVADA BELL	NV	135,051	90,123	44,932	33.27%
SPRINT -- CENTEL OF NEVADA	NV	278,907	202,047	76,820	27.54%
BELL ATLANTIC - NEW ENGLAND - NH	NH	407,953	275,786	132,155	32.39%
BELL ATLANTIC - NEW JERSEY	NJ	2,826,353	2,085,160	741,347	26.23%
SPRINT -- UTC OF NEW JERSEY	NJ	101,739	78,569	23,170	22.77%
GTE -- SW - CONTEL - NEW MEXICO	NM	29,618	19,250	14,024	47.35%
GTE -- SW - NEW MEXICO	NM	22,527	14,972	7,562	33.57%
US WEST -- NEW MEXICO	NM	419,265	313,522	105,929	25.27%
BELL ATLANTIC - NEW YORK	NY	6,888,057	5,094,337	1,793,787	26.04%
CITIZENS TELECOM -- RED HOOK	NY	8,224	5,430	2,792	33.95%
CITIZENS TELECOM -- UPSTATE	NY	151,006	110,223	40,971	27.13%
CITIZENS TELECOM -- W. COUNTIES	NY	16,217	10,824	7,124	43.93%
FRONTIER OF ROCHESTER	NY	250,512	198,094	52,418	20.92%
BELLSOUTH - NORTH CAROLINA	NC	1,188,588	897,443	291,184	24.50%
SPRINT -- CAROLINA TEL & TEL OF NC	NC	558,886	427,243	131,644	23.55%
SPRINT -- CENTEL OF NORTH CAROLINA	NC	131,597	104,042	27,556	20.94%
GTE -- SO - CONTEL - NORTH CAROLINA	NC	68,030	48,924	23,261	34.19%
GTE -- SO - NORTH CAROLINA	NC	151,863	116,818	35,053	23.08%
US WEST -- NORTH DAKOTA	ND	139,438	101,567	37,930	27.20%
CINCINNATI BELL TELEPHONE CO.	OH	491,000	385,359	105,664	21.52%
GTE - NO - OHIO	OH	396,888	308,175	88,720	22.35%
AMERITECH - OHIO BELL	OH	1,740,777	1,357,295	383,913	22.05%
GTE -- NO - WESTERN RESERVE - OHIO	OH	82,140	64,355	17,691	21.54%
SPRINT -- UTC OF OHIO	OH	348,122	262,280	85,843	24.66%
GTE -- SW - OKLAHOMA	OK	60,892	44,938	17,509	28.75%
SOUTHWESTERN BELL - OKLAHOMA	OK	805,265	606,244	199,049	24.72%
GTE -- NW - OREGON	OR	231,873	164,300	67,582	29.15%
US WEST -- OREGON	OR	665,478	483,562	181,945	27.34%
SPRINT -- UTC OF THE NW - OREGON	OR	41,412	29,019	12,393	29.93%
ALLTEL - PENNSYLVANIA	PA	107,690	86,818	20,331	18.88%
BELL ATLANTIC OF PENNSYLVANIA	PA	2,727,631	2,062,741	665,065	24.38%
GTE -- NO - CONTEL - PENNSYLANIA	PA	29,398	23,496	5,905	20.09%
GTE -- NO - CONTEL - QUAKER STATE	PA	20,392	15,269	5,124	25.13%
GTE -- NO - PENNSYLVANIA	PA	243,030	186,314	56,733	23.34%
SPRINT -- UTC OF PENNSYLVANIA	PA	193,353	152,755	40,598	21.00%
PUERTO RICO TEL CO	PR	750,835	570,279	180,555	24.05%
PUERTO RICO TEL CO - CENTRAL	PR	104,550	74,303	30,247	28.93%
BELL ATLANTIC - NEW ENGLAND - RI	RI	315,465	224,150	91,325	28.95%
BELLSOUTH - SOUTH CAROLINA	SC	749,945	565,149	184,688	24.63%
GTE -- SO - CONTEL - SOUTH CAROLINA	SC	11,943	8,320	3,623	30.34%
GTE -- SO - CAROLINA	SC	107,991	80,600	28,945	26.80%
US WEST -- SOUTH DAKOTA	SD	143,541	102,683	40,925	28.51%
BELLSOUTH - TENNESSEE	TN	1,279,215	961,071	318,194	24.87%
SPRINT -- UTC -- SE - TENNESSEE	TN	106,904	80,215	26,689	24.97%
GTE -- SW - CONTEL - TEXAS	TX	135,123	106,839	29,349	21.72%
GTE -- SW - TEXAS	TX	946,788	727,847	221,644	23.41%
SOUTHWESTERN BELL - TEXAS	TX	4,766,512	3,642,212	1,124,435	23.59%
SPRINT -- UTC OF TEXAS	TX	89,652	69,368	20,286	22.63%
US WEST -- UTAH	UT	519,902	376,593	143,521	27.61%
BELL ATLANTIC - VIRGINIA	VA	1,603,817	1,203,044	400,820	24.99%
SPRINT -- CENTEL OF VIRGINIA	VA	147,161	111,444	35,717	24.27%
GTE -- SO - CONTEL - VIRGINIA	VA	286,936	210,886	76,058	26.51%
GTE -- SO - VIRGINIA	VA	22,512	15,933	7,626	33.88%
SPRINT -- UTC -- SE - VIRGINIA	VA	48,913	35,999	12,914	26.40%
BELL ATLANTIC - NEW ENGLAND - VT	VT	210,053	151,758	58,300	27.75%
GTE -- NW - CONTEL - WASHINGTON	WA	44,340	32,496	13,785	31.09%
GTE -- NW - WASHINGTON	WA	394,290	300,351	94,338	23.93%
US WEST -- WASHINGTON	WA	1,153,748	846,971	307,233	26.63%
SPRINT -- UTC OF THE NW - WA	WA	45,225	32,771	12,455	27.54%
BELL ATLANTIC - WEST VIRGINIA	WV	456,209	344,268	111,967	24.54%
GTE -- NO - WISCONSIN	WI	240,430	183,613	57,614	23.96%
AMERITECH - WISCONSIN BELL	WI	880,338	675,894	204,891	23.27%
US WEST -- WYOMING	WY	141,029	97,841	43,358	30.74%

TABLE 11.3
GROSS INVESTMENT
($000) -- 1997

STUDY AREA	State Code	Subject to Separations	Intrastate	Interstate	Percent Interstate
ALL REPORTING LOCAL EXCHANGE COS.		$297,742,779	$221,088,635	$77,411,317	26.00%
BELL OPERATING COS.		233,733,014	172,035,643	61,930,820	26.50%
OTER REPORTING LOCAL EXCHANGE COS.		64,009,765	49,052,992	15,480,497	24.18%
BELLSOUTH - ALABAMA	AL	4,371,729	3,244,487	1,129,751	25.84%
GTE -- CONTEL SO - ALABAMA	AL	262,583	202,451	61,145	23.29%
GTE -- SO - ALABAMA	AL	350,584	264,654	87,599	24.99%
GTE -- CONTEL - ARIZONA	AZ	19,128	10,969	8,136	42.53%
US WEST -- ARIZONA	AZ	4,554,508	3,402,141	1,158,345	25.43%
GTE -- SW - ARKANSAS	AR	241,120	183,374	58,756	24.37%
SOUTHWESTERN BELL - ARKANSAS	AR	2,030,396	1,514,493	511,505	25.19%
GTE -- CALIFORNIA	CA	8,716,990	7,127,694	1,697,738	19.48%
GTE -- CONTEL - CALIFORNIA	CA	868,832	670,558	195,694	22.52%
GTE -- NW - WEST COAST OF CA	CA	37,604	25,763	12,070	32.10%
SBC -- PACIFIC BELL - CALIFORNIA	CA	28,584,123	22,464,303	6,086,154	21.29%
US WEST -- COLORADO	CO	5,970,375	4,334,901	1,646,503	27.58%
SOUTHERN NEW ENGLAND TEL. - CT	CT	4,417,467	3,267,212	1,162,413	26.31%
BELL ATLANTIC - DISTRICT OF COLUMBIA	DC	1,512,993	1,012,032	500,305	33.07%
BELL ATLANTIC - DELAWARE	DE	792,220	547,453	243,670	30.76%
BELLSOUTH - FLORIDA	FL	10,934,124	8,133,979	2,804,557	25.65%
GTE -- FLORIDA	FL	4,164,350	3,195,641	1,010,036	24.25%
SPRINT -- FLORIDA	FL	3,434,825	2,549,024	899,553	26.19%
ALLTEL - GEORGIA	GA	722,640	553,437	170,240	23.56%
BELLSOUTH - GEORGIA	GA	8,062,585	5,886,145	2,178,517	27.02%
GTE -- HAWAIIAN TELEPHONE	HI	1,805,553	1,365,057	482,394	26.72%
GTE -- NW - IDAHO	ID	358,519	259,069	101,525	28.32%
US WEST -- IDAHO	ID	876,687	604,598	274,425	31.30%
US WEST -- IDAHO	ID	70,002	49,237	21,005	30.01%
SPRINT -- CENTEL OF ILLINOIS	IL	338,388	253,196	84,259	24.90%
GTE -- NO - CONTEL ILLINOIS	IL	388,473	298,452	92,547	23.82%
GTE -- NO - ILLINOIS	IL	1,386,434	1,063,911	354,965	25.60%
GTE -- SO - ILLINOIS	IL	122,531	88,840	26,388	21.54%
AMERITECH - ILLINOIS BELL	IL	9,158,469	6,909,444	2,310,354	25.23%
GTE -- CONTEL SO - ILLINOIS	IN	25,711	18,341	6,639	25.82%
GTE -- NO - CONTEL INDIANA	IN	329,220	250,437	80,392	24.42%
GTE -- NO - INDIANA	IN	1,584,936	1,212,446	387,502	24.45%
AMERITECH - INDIANA BELL	IN	3,218,565	2,391,534	832,178	25.86%
SPRINT -- UTC OF INDIANA	IN	468,818	353,525	119,818	25.56%
GTE -- MD - CONTEL SYSTEMS OF IOWA	IA	140,486	107,322	30,632	21.80%
GTE -- MD - CONTEL - IOWA	IA	186,346	144,793	41,880	22.47%
GTE -- MD - IOWA	IA	285,733	219,540	68,453	23.96%
US WEST -- IOWA	IA	1,860,658	1,285,178	580,668	31.21%
SOUTHWESTERN BELL - KANSAS	KS	2,357,271	1,667,927	680,685	28.88%
BELLSOUTH - KENTUCKY	KY	2,373,237	1,747,821	627,765	26.45%
GTE -- SO - CONTEL - KENTUCKY	KY	243,069	185,893	57,527	23.67%
GTE -- SO - KENTUCKY	KY	1,034,393	794,036	250,580	24.22%
BELLSOUTH - LOUISIANA	LA	4,803,665	3,720,430	1,084,466	22.58%
BELL ATLANTIC - NEW ENGLAND - MA	MA	8,237,577	5,895,251	2,351,192	28.54%
BELL ATLANTIC - MARYLAND	MD	5,516,131	3,943,904	1,575,872	28.57%
BELL ATLANTIC - NEW ENGLAND - ME	ME	1,381,374	1,012,195	371,013	26.86%
GTE -- CONTEL - MICHIGAN	MI	126,735	96,852	24,982	19.71%
GTE -- NO - MICHIGAN	MI	1,445,466	1,120,732	356,848	24.69%
AMERITECH - MICHIGAN BELL	MI	8,160,816	6,300,214	1,886,339	23.11%
US WEST -- MINNESOTA	MN	3,828,512	2,812,257	1,028,839	26.87%
BELLSOUTH - MISSISSIPPI	MS	2,874,332	2,131,205	739,185	25.72%
GTE -- MD - CONTEL OF EASTERN MO	MO	9,809	7,313	2,537	25.86%
GTE -- MD - CONTEL OF SYS MO	MO	133,093	102,039	31,279	23.50%
GTE -- MD - CONTEL MISSOURI	MO	741,074	571,202	172,890	23.33%
GTE -- MD - MISSOURI	MO	271,756	212,223	61,456	22.61%
SOUTHWESTERN BELL - MISSOURI	MO	5,109,237	3,638,695	1,463,258	28.64%
SPRINT -- UTC OF MISSOURI	MO	475,498	353,226	128,414	27.01%
US WEST -- MONTANA	MT	777,868	551,296	227,001	29.18%
ALIANT TELECOMMUNICATIONS CO.	NE	481,095	362,355	121,276	25.21%
GTE -- MD - NEBRASKA	NE	116,940	89,570	28,192	24.11%
US WEST -- NEBRASKA	NE	1,432,469	984,114	451,055	31.49%

TABLE 11.3
GROSS INVESTMENT
($000) -- 1997

	State Code	Subject to Separations	Intrastate	Interstate	Percent Interstate
GTE -- CONTEL NEVADA	NV	67,903	38,852	28,972	42.67%
SBC - NEVADA BELL	NV	538,282	363,708	173,104	32.16%
SPRINT -- CENTEL OF NEVADA	NV	937,710	704,436	238,487	25.43%
BELL ATLANTIC - NEW ENGLAND - NH	NH	1,591,811	1,079,372	512,086	32.17%
BELL ATLANTIC - NEW JERSEY	NJ	9,019,946	6,183,763	2,853,322	31.63%
SPRINT -- UTC OF NEW JERSEY	NJ	309,870	229,080	83,790	27.04%
GTE -- SW - CONTEL - NEW MEXICO	NM	113,537	81,031	32,815	28.90%
GTE -- SW - NEW MEXICO	NM	99,929	63,378	37,123	37.15%
US WEST -- NEW MEXICO	NM	1,761,299	1,290,081	475,567	27.00%
BELL ATLANTIC - NEW YORK	NY	20,767,968	15,070,317	5,733,754	27.61%
CITIZENS TELECOM -- RED HOOK	NY	25,427	16,408	9,104	35.80%
CITIZENS TELECOM -- UPSTATE	NY	537,409	416,258	122,366	22.77%
CITIZENS TELECOM -- W. COUNTIES	NY	61,354	45,393	16,086	26.22%
FRONTIER OF ROCHESTER	NY	904,115	664,181	243,610	26.94%
BELLSOUTH - NORTH CAROLINA	NC	4,759,219	3,546,488	1,219,915	25.63%
SPRINT -- CAROLINA TEL & TEL OF NC	NC	1,904,113	1,449,573	468,402	24.60%
SPRINT -- CENTEL OF NORTH CAROLINA	NC	429,293	337,966	91,758	21.37%
GTE -- SO - CONTEL - NORTH CAROLINA	NC	269,581	203,744	66,221	24.56%
GTE -- SO - NORTH CAROLINA	NC	549,719	420,065	133,188	24.23%
US WEST -- NORTH DAKOTA	ND	481,036	318,030	164,971	34.29%
CINCINNATI BELL TELEPHONE CO.	OH	1,525,563	1,181,382	343,983	22.55%
GTE - NO - OHIO	OH	1,624,533	1,263,068	393,178	24.20%
AMERITECH - OHIO BELL	OH	6,051,336	4,556,531	1,513,743	25.02%
GTE -- NO - WESTERN RESERVE - OHIO	OH	352,089	269,727	82,912	23.55%
SPRINT -- UTC OF OHIO	OH	1,173,734	878,031	307,942	26.24%
GTE -- SW - OKLAHOMA	OK	272,189	204,846	68,668	25.23%
SOUTHWESTERN BELL - OKLAHOMA	OK	2,915,064	2,112,185	797,971	27.37%
GTE -- NW - OREGON	OR	913,805	674,733	244,846	26.79%
US WEST -- OREGON	OR	2,416,428	1,742,472	687,849	28.47%
SPRINT -- UTC OF THE NW - OREGON	OR	144,853	105,381	40,819	28.18%
ALLTEL - PENNSYLVANIA	PA	441,455	341,317	100,765	22.83%
BELL ATLANTIC OF PENNSYLVANIA	PA	9,435,814	6,804,626	2,630,897	27.88%
GTE -- NO - CONTEL - PENNSYLANIA	PA	95,433	75,303	21,358	22.38%
GTE -- NO - CONTEL - QUAKER STATE	PA	83,067	58,979	24,386	29.36%
GTE -- NO - PENNSYLVANIA	PA	993,280	764,486	252,158	25.39%
SPRINT -- UTC OF PENNSYLVANIA	PA	663,571	507,901	159,546	24.04%
PUERTO RICO TEL CO	PR	2,695,939	2,011,776	697,765	25.88%
PUERTO RICO TEL CO - CENTRAL	PR	312,687	238,138	76,987	24.62%
BELL ATLANTIC - NEW ENGLAND - RI	RI	946,880	678,734	270,614	28.58%
BELLSOUTH - SOUTH CAROLINA	SC	2,791,354	2,064,069	725,804	26.00%
GTE -- SO - CONTEL - SOUTH CAROLINA	SC	40,679	28,219	12,550	30.85%
GTE -- SO - CAROLINA	SC	379,666	288,333	92,917	24.47%
US WEST -- SOUTH DAKOTA	SD	592,555	395,302	198,202	33.45%
BELLSOUTH - TENNESSEE	TN	4,790,432	3,547,421	1,239,068	25.87%
SPRINT -- UTC -- SE - TENNESSEE	TN	420,468	320,300	101,973	24.25%
GTE -- SW - CONTEL - TEXAS	TX	624,348	496,042	128,358	20.56%
GTE -- SW - TEXAS	TX	3,788,736	2,846,654	969,075	25.58%
SOUTHWESTERN BELL - TEXAS	TX	17,481,213	12,729,966	4,735,006	27.09%
SPRINT -- UTC OF TEXAS	TX	356,669	271,946	88,409	24.79%
US WEST -- UTAH	UT	2,061,121	1,481,673	584,878	28.38%
BELL ATLANTIC - VIRGINIA	VA	5,310,163	3,693,465	1,620,255	30.51%
SPRINT -- CENTEL OF VIRGINIA	VA	587,371	447,156	138,438	23.57%
GTE -- SO - CONTEL - VIRGINIA	VA	1,041,066	789,453	255,777	24.57%
GTE -- SO - VIRGINIA	VA	86,720	65,134	21,936	25.30%
SPRINT -- UTC -- SE - VIRGINIA	VA	202,003	149,262	53,692	26.58%
BELL ATLANTIC - NEW ENGLAND - VT	VT	799,818	569,572	230,704	28.84%
GTE -- NW - CONTEL - WASHINGTON	WA	200,347	157,909	43,219	21.57%
GTE -- NW - WASHINGTON	WA	1,766,396	1,385,810	395,468	22.39%
US WEST -- WASHINGTON	WA	4,963,417	3,676,920	1,306,333	26.32%
SPRINT -- UTC OF THE NW - WA	WA	167,288	126,797	41,741	24.95%
BELL ATLANTIC - WEST VIRGINIA	WV	1,713,118	1,254,582	460,421	26.88%
GTE -- NO - WISCONSIN	WI	1,109,651	853,397	272,954	24.60%
AMERITECH - WISCONSIN BELL	WI	2,965,477	2,189,938	800,866	27.01%
US WEST -- WYOMING	WY	729,340	501,194	230,883	31.66%

TABLE 11.4
TOTAL INVESTMENT RESERVES
($000) -- 1997

STUDY AREA	State Code	Subject to Separations	Intrastate	Interstate	Percent Interstate
ALL REPORTING LOCAL EXCHANGE COS.		$175,281,792	$131,019,965	$44,540,772	25.41%
BELL OPERATING COS.		138,780,449	103,019,783	36,040,414	25.97%
OTER REPORTING LOCAL EXCHANGE COS.		36,501,343	28,000,182	8,500,358	23.29%
BELLSOUTH - ALABAMA	AL	2,584,837	1,919,260	665,575	25.75%
GTE -- CONTEL SO - ALABAMA	AL	154,240	121,788	32,451	21.04%
GTE -- SO - ALABAMA	AL	202,014	155,723	46,291	22.91%
GTE -- CONTEL - ARIZONA	AZ	12,015	6,658	5,357	44.59%
US WEST -- ARIZONA	AZ	2,655,074	1,985,804	669,271	25.21%
GTE -- SW - ARKANSAS	AR	119,473	88,816	30,657	25.66%
SOUTHWESTERN BELL - ARKANSAS	AR	1,090,563	796,651	293,912	26.95%
GTE -- CALIFORNIA	CA	5,276,943	4,287,311	989,632	18.75%
GTE -- CONTEL - CALIFORNIA	CA	527,315	407,182	120,133	22.78%
GTE -- NW - WEST COAST OF CA	CA	19,766	13,350	6,417	32.46%
SBC -- PACIFIC BELL - CALIFORNIA	CA	14,880,144	11,582,589	3,297,555	22.16%
US WEST -- COLORADO	CO	3,168,328	2,307,161	861,166	27.18%
SOUTHERN NEW ENGLAND TEL. - CT	CT	2,572,447	1,904,923	667,524	25.95%
BELL ATLANTIC - DISTRICT OF COLUMBIA	DC	802,321	551,705	265,010	33.03%
BELL ATLANTIC - DELAWARE	DE	426,812	299,644	133,480	31.27%
BELLSOUTH - FLORIDA	FL	6,599,307	4,901,974	1,697,332	25.72%
GTE -- FLORIDA	FL	2,300,479	1,783,712	516,767	22.46%
SPRINT -- FLORIDA	FL	1,993,713	1,470,737	522,976	26.23%
ALLTEL - GEORGIA	GA	336,800	257,663	79,137	23.50%
BELLSOUTH - GEORGIA	GA	4,678,483	3,423,500	1,254,979	26.82%
GTE -- HAWAIIAN TELEPHONE	HI	976,893	741,318	235,574	24.11%
GTE -- NW - IDAHO	ID	179,561	125,622	53,939	30.04%
US WEST -- IDAHO	ID	506,031	350,068	155,964	30.82%
US WEST -- IDAHO	ID	43,219	30,005	13,213	30.57%
SPRINT -- CENTEL OF ILLINOIS	IL	209,891	156,978	52,913	25.21%
GTE -- NO - CONTEL ILLINOIS	IL	255,426	194,799	60,628	23.74%
GTE -- NO - ILLINOIS	IL	829,600	636,483	193,117	23.28%
GTE -- SO - ILLINOIS	IL	57,706	41,805	15,901	27.56%
AMERITECH - ILLINOIS BELL	IL	6,539,044	5,173,202	1,365,842	20.89%
GTE -- CONTEL SO - ILLINOIS	IN	12,927	9,240	3,687	28.52%
GTE -- NO - CONTEL INDIANA	IN	206,815	157,080	49,734	24.05%
GTE -- NO - INDIANA	IN	945,229	726,979	218,249	23.09%
AMERITECH - INDIANA BELL	IN	2,381,897	1,848,397	533,500	22.40%
SPRINT -- UTC OF INDIANA	IN	343,692	258,512	85,179	24.78%
GTE -- MD - CONTEL SYSTEMS OF IOWA	IA	71,553	54,582	16,970	23.72%
GTE -- MD - CONTEL - IOWA	IA	120,923	94,121	26,802	22.16%
GTE -- MD - IOWA	IA	162,758	123,483	39,275	24.13%
US WEST -- IOWA	IA	1,166,528	788,549	377,977	32.40%
SOUTHWESTERN BELL - KANSAS	KS	1,327,426	931,911	395,515	29.80%
BELLSOUTH - KENTUCKY	KY	1,407,483	1,035,135	372,348	26.45%
GTE -- SO - CONTEL - KENTUCKY	KY	131,488	101,183	30,305	23.05%
GTE -- SO - KENTUCKY	KY	615,992	474,531	141,462	22.96%
BELLSOUTH - LOUISIANA	LA	3,050,496	2,347,392	703,102	23.05%
BELL ATLANTIC - NEW ENGLAND - MA	MA	4,992,189	3,569,224	1,422,965	28.50%
BELL ATLANTIC - MARYLAND	MD	3,050,128	2,221,315	870,224	28.53%
BELL ATLANTIC - NEW ENGLAND - ME	ME	834,041	610,921	223,120	26.75%
GTE -- CONTEL - MICHIGAN	MI	62,586	49,309	13,278	21.22%
GTE -- NO - MICHIGAN	MI	843,671	661,797	181,875	21.56%
AMERITECH - MICHIGAN BELL	MI	6,019,779	4,853,406	1,166,373	19.38%
US WEST -- MINNESOTA	MN	2,310,461	1,698,841	611,622	26.47%
BELLSOUTH - MISSISSIPPI	MS	1,760,272	1,304,860	455,414	25.87%
GTE -- MD - CONTEL OF EASTERN MO	MO	3,012	2,408	604	20.05%
GTE -- MD - CONTEL OF SYS MO	MO	72,201	55,861	16,340	22.63%
GTE -- MD - CONTEL MISSOURI	MO	387,682	302,779	84,902	21.90%
GTE -- MD - MISSOURI	MO	151,308	122,527	28,781	19.02%
SOUTHWESTERN BELL - MISSOURI	MO	2,671,789	1,887,406	784,383	29.36%
SPRINT -- UTC OF MISSOURI	MO	223,657	164,943	58,726	26.26%
US WEST -- MONTANA	MT	423,688	299,471	124,217	29.32%
ALIANT TELECOMMUNICATIONS CO.	NE	277,200	208,947	68,253	24.62%
GTE -- MD - NEBRASKA	NE	69,437	53,810	15,627	22.51%
US WEST -- NEBRASKA	NE	904,658	620,841	283,815	31.37%

TABLE 11.4
TOTAL INVESTMENT RESERVES
($000) -- 1997

	State Code	Subject to Separations	Intrastate	Interstate	Percent Interstate
GTE -- CONTEL NEVADA	NV	40,910	24,343	16,567	40.50%
SBC - NEVADA BELL	NV	291,258	196,591	97,745	33.56%
SPRINT -- CENTEL OF NEVADA	NV	465,490	350,958	113,843	24.46%
BELL ATLANTIC - NEW ENGLAND - NH	NH	927,780	630,126	297,654	32.08%
BELL ATLANTIC - NEW JERSEY	NJ	5,150,908	3,633,197	1,598,803	31.04%
SPRINT -- UTC OF NEW JERSEY	NJ	180,980	133,627	47,353	26.16%
GTE -- SW - CONTEL - NEW MEXICO	NM	79,610	56,497	23,113	29.03%
GTE -- SW - NEW MEXICO	NM	68,710	43,365	25,345	36.89%
US WEST -- NEW MEXICO	NM	1,013,060	741,329	271,731	26.82%
BELL ATLANTIC - NEW YORK	NY	12,477,333	8,992,595	3,484,739	27.93%
CITIZENS TELECOM -- RED HOOK	NY	13,149	8,387	4,764	36.23%
CITIZENS TELECOM -- UPSTATE	NY	255,652	197,633	58,020	22.69%
CITIZENS TELECOM -- W. COUNTIES	NY	31,499	23,302	8,197	26.02%
FRONTIER OF ROCHESTER	NY	539,121	397,009	142,112	26.36%
BELLSOUTH - NORTH CAROLINA	NC	2,694,252	1,995,484	698,768	25.94%
SPRINT -- CAROLINA TEL & TEL OF NC	NC	1,202,295	905,236	296,935	24.70%
SPRINT -- CENTEL OF NORTH CAROLINA	NC	237,763	186,766	50,997	21.45%
GTE -- SO - CONTEL - NORTH CAROLINA	NC	164,664	125,360	39,304	23.87%
GTE -- SO - NORTH CAROLINA	NC	318,156	245,371	72,786	22.88%
US WEST -- NORTH DAKOTA	ND	314,422	207,931	106,490	33.87%
CINCINNATI BELL TELEPHONE CO.	OH	838,126	648,633	189,491	22.61%
GTE - NO - OHIO	OH	1,026,015	803,239	222,776	21.71%
AMERITECH - OHIO BELL	OH	4,376,635	3,457,966	918,669	20.99%
GTE -- NO - WESTERN RESERVE - OHIO	OH	190,765	145,392	45,373	23.78%
SPRINT -- UTC OF OHIO	OH	799,571	595,486	204,085	25.52%
GTE -- SW - OKLAHOMA	OK	156,827	120,966	35,861	22.87%
SOUTHWESTERN BELL - OKLAHOMA	OK	1,825,912	1,320,557	505,355	27.68%
GTE -- NW - OREGON	OR	466,784	345,065	121,719	26.08%
US WEST -- OREGON	OR	1,360,129	980,327	379,330	27.89%
SPRINT -- UTC OF THE NW - OREGON	OR	88,387	63,850	24,537	27.76%
ALLTEL - PENNSYLVANIA	PA	246,883	190,795	56,087	22.72%
BELL ATLANTIC OF PENNSYLVANIA	PA	5,447,212	3,997,005	1,532,682	28.14%
GTE -- NO - CONTEL - PENNSYLANIA	PA	62,455	50,062	12,393	19.84%
GTE -- NO - CONTEL - QUAKER STATE	PA	55,081	40,029	15,052	27.33%
GTE -- NO - PENNSYLVANIA	PA	630,130	489,458	140,672	22.32%
SPRINT -- UTC OF PENNSYLVANIA	PA	411,881	313,495	98,386	23.89%
PUERTO RICO TEL CO	PR	1,069,961	784,556	285,405	26.67%
PUERTO RICO TEL CO - CENTRAL	PR	132,986	101,376	31,610	23.77%
BELL ATLANTIC - NEW ENGLAND - RI	RI	561,439	402,040	159,399	28.39%
BELLSOUTH - SOUTH CAROLINA	SC	1,680,621	1,244,413	436,210	25.96%
GTE -- SO - CONTEL - SOUTH CAROLINA	SC	19,842	13,792	6,049	30.49%
GTE -- SO - CAROLINA	SC	222,604	169,710	52,894	23.76%
US WEST -- SOUTH DAKOTA	SD	374,722	250,041	124,683	33.27%
BELLSOUTH - TENNESSEE	TN	2,671,156	1,967,514	703,641	26.34%
SPRINT -- UTC -- SE - TENNESSEE	TN	236,188	178,037	58,151	24.62%
GTE -- SW - CONTEL - TEXAS	TX	400,157	320,892	79,265	19.81%
GTE -- SW - TEXAS	TX	2,117,504	1,607,631	509,873	24.08%
SOUTHWESTERN BELL - TEXAS	TX	10,224,692	7,476,395	2,748,297	26.88%
SPRINT -- UTC OF TEXAS	TX	225,721	171,870	53,850	23.86%
US WEST -- UTAH	UT	1,099,887	789,350	310,537	28.23%
BELL ATLANTIC - VIRGINIA	VA	3,059,255	2,216,210	880,838	28.79%
SPRINT -- CENTEL OF VIRGINIA	VA	321,509	245,770	75,739	23.56%
GTE -- SO - CONTEL - VIRGINIA	VA	545,195	411,584	133,611	24.51%
GTE -- SO - VIRGINIA	VA	45,800	34,483	11,317	24.71%
SPRINT -- UTC -- SE - VIRGINIA	VA	123,545	91,112	32,433	26.25%
BELL ATLANTIC - NEW ENGLAND - VT	VT	483,372	344,139	139,233	28.80%
GTE -- NW - CONTEL - WASHINGTON	WA	100,744	77,955	22,789	22.62%
GTE -- NW - WASHINGTON	WA	849,016	654,130	194,886	22.95%
US WEST -- WASHINGTON	WA	2,855,962	2,106,372	749,577	26.25%
SPRINT -- UTC OF THE NW - WA	WA	93,718	71,050	22,668	24.19%
BELL ATLANTIC - WEST VIRGINIA	WV	1,070,528	801,747	282,513	26.39%
GTE -- NO - WISCONSIN	WI	699,536	544,950	154,587	22.10%
AMERITECH - WISCONSIN BELL	WI	2,128,007	1,643,309	484,651	22.77%
US WEST -- WYOMING	WY	416,909	285,913	130,995	31.42%

TABLE 11.5
NET INCOME
($000) -- 1997

STUDY AREA	State Code	Subject to Separations	Intrastate	Interstate	Percent Interstate
ALL REPORTING LOCAL EXCHANGE COS.		$15,155,993	$10,025,052	$5,059,384	33.38%
BELL OPERATING COS.		11,092,492	7,323,517	3,761,899	33.91%
OTER REPORTING LOCAL EXCHANGE COS.		4,063,501	2,701,535	1,297,485	31.93%
BELLSOUTH - ALABAMA	AL	218,807	162,832	55,936	25.56%
GTE -- CONTEL SO - ALABAMA	AL	15,013	7,859	4,644	30.93%
GTE -- SO - ALABAMA	AL	24,730	7,120	9,895	40.01%
GTE -- CONTEL - ARIZONA	AZ	1,991	1,244	509	25.57%
US WEST -- ARIZONA	AZ	191,300	96,275	94,582	49.44%
GTE -- SW - ARKANSAS	AR	18,057	8,693	4,603	25.49%
SOUTHWESTERN BELL - ARKANSAS	AR	109,527	82,541	26,962	24.62%
GTE -- CALIFORNIA	CA	557,518	427,602	129,890	23.30%
GTE -- CONTEL - CALIFORNIA	CA	54,637	38,470	14,645	26.80%
GTE -- NW - WEST COAST OF CA	CA	3,079	2,043	566	18.38%
SBC -- PACIFIC BELL - CALIFORNIA	CA	592,219	280,736	311,433	52.59%
US WEST -- COLORADO	CO	289,470	189,957	98,991	34.20%
SOUTHERN NEW ENGLAND TEL. - CT	CT	189,784	117,925	70,846	37.33%
BELL ATLANTIC - DISTRICT OF COLUMBIA	DC	85,639	49,897	35,746	41.74%
BELL ATLANTIC - DELAWARE	DE	44,854	26,646	18,170	40.51%
BELLSOUTH - FLORIDA	FL	500,144	292,531	207,323	41.45%
GTE -- FLORIDA	FL	254,186	159,673	92,618	36.44%
SPRINT -- FLORIDA	FL	207,239	132,392	74,845	36.12%
ALLTEL - GEORGIA	GA	57,289	45,752	10,190	17.79%
BELLSOUTH - GEORGIA	GA	479,536	321,281	158,132	32.98%
GTE -- HAWAIIAN TELEPHONE	HI	90,613	57,197	33,352	36.81%
GTE -- NW - IDAHO	ID	30,522	9,288	14,359	47.04%
US WEST -- IDAHO	ID	49,611	31,171	18,347	36.98%
US WEST -- IDAHO	ID	3,276	1,834	1,437	43.86%
SPRINT -- CENTEL OF ILLINOIS	IL	23,052	17,682	5,369	23.29%
GTE -- NO - CONTEL ILLINOIS	IL	35,037	23,929	11,107	31.70%
GTE -- NO - ILLINOIS	IL	109,649	72,389	37,254	33.98%
GTE -- SO - ILLINOIS	IL	5,335	4,167	1,168	21.89%
AMERITECH - ILLINOIS BELL	IL	699,250	546,163	152,475	21.81%
GTE -- CONTEL SO - ILLINOIS	IN	1,186	998	175	14.76%
GTE -- NO - CONTEL INDIANA	IN	31,024	22,539	8,485	27.35%
GTE -- NO - INDIANA	IN	133,757	94,509	39,240	29.34%
AMERITECH - INDIANA BELL	IN	276,465	198,995	76,885	27.81%
SPRINT -- UTC OF INDIANA	IN	31,225	22,114	9,112	29.18%
GTE -- MD - CONTEL SYSTEMS OF IOWA	IA	8,629	3,847	4,779	55.38%
GTE -- MD - CONTEL - IOWA	IA	11,363	7,181	4,178	36.77%
GTE -- MD - IOWA	IA	16,415	9,977	6,436	39.21%
US WEST -- IOWA	IA	76,507	51,284	25,050	32.74%
SOUTHWESTERN BELL - KANSAS	KS	102,148	74,600	27,531	26.95%
BELLSOUTH - KENTUCKY	KY	139,959	98,880	41,052	29.33%
GTE -- SO - CONTEL - KENTUCKY	KY	11,790	3,945	2,868	24.33%
GTE -- SO - KENTUCKY	KY	64,361	40,492	23,274	36.16%
BELLSOUTH - LOUISIANA	LA	229,762	168,086	61,610	26.81%
BELL ATLANTIC - NEW ENGLAND - MA	MA	388,348	231,227	157,120	40.46%
BELL ATLANTIC - MARYLAND	MD	322,297	226,117	96,027	29.79%
BELL ATLANTIC - NEW ENGLAND - ME	ME	76,576	54,389	22,191	28.98%
GTE -- CONTEL - MICHIGAN	MI	5,239	3,286	1,951	37.24%
GTE -- NO - MICHIGAN	MI	96,495	65,821	28,506	29.54%
AMERITECH - MICHIGAN BELL	MI	732,986	578,465	154,050	21.02%
US WEST -- MINNESOTA	MN	221,502	141,115	79,960	36.10%
BELLSOUTH - MISSISSIPPI	MS	152,512	120,704	31,811	20.86%
GTE -- MD - CONTEL OF EASTERN MO	MO	(398)	(322)	(76)	19.10%
GTE -- MD - CONTEL OF SYS MO	MO	7,463	1,883	2,953	39.57%
GTE -- MD - CONTEL MISSOURI	MO	21,079	6,716	9,889	46.91%
GTE -- MD - MISSOURI	MO	7,323	1,257	5,112	69.81%
SOUTHWESTERN BELL - MISSOURI	MO	203,479	128,540	74,886	36.80%
SPRINT -- UTC OF MISSOURI	MO	38,507	24,987	13,520	35.11%
US WEST -- MONTANA	MT	31,245	22,488	8,672	27.75%
ALIANT TELECOMMUNICATIONS CO.	NE	38,061	32,364	5,695	14.96%
GTE -- MD - NEBRASKA	NE	6,535	3,546	2,988	45.72%
US WEST -- NEBRASKA	NE	70,963	51,048	19,803	27.91%

TABLE 11.5
NET INCOME
($000) -- 1997

	State Code	Subject to Separations	Intrastate	Interstate	Percent Interstate
GTE -- CONTEL NEVADA	NV	5,663	2,831	2,829	49.96%
SBC - NEVADA BELL	NV	20,552	6,004	14,545	70.77%
SPRINT -- CENTEL OF NEVADA	NV	42,475	22,396	20,119	47.37%
BELL ATLANTIC - NEW ENGLAND - NH	NH	113,649	66,731	46,929	41.29%
BELL ATLANTIC - NEW JERSEY	NJ	399,163	191,120	207,889	52.08%
SPRINT -- UTC OF NEW JERSEY	NJ	26,768	19,530	7,238	27.04%
GTE -- SW - CONTEL - NEW MEXICO	NM	9,985	3,150	3,179	31.84%
GTE -- SW - NEW MEXICO	NM	7,700	4,860	2,833	36.79%
US WEST -- NEW MEXICO	NM	106,786	73,979	32,620	30.55%
BELL ATLANTIC - NEW YORK	NY	684,416	447,030	237,319	34.67%
CITIZENS TELECOM -- RED HOOK	NY	1,074	712	364	33.89%
CITIZENS TELECOM -- UPSTATE	NY	10,404	907	9,309	89.48%
CITIZENS TELECOM -- W. COUNTIES	NY	2,572	94	747	29.04%
FRONTIER OF ROCHESTER	NY	55,641	41,820	13,821	24.84%
BELLSOUTH - NORTH CAROLINA	NC	298,138	206,870	91,227	30.60%
SPRINT -- CAROLINA TEL & TEL OF NC	NC	100,220	72,225	27,994	27.93%
SPRINT -- CENTEL OF NORTH CAROLINA	NC	27,307	19,838	7,467	27.34%
GTE -- SO - CONTEL - NORTH CAROLINA	NC	13,457	4,902	4,400	32.70%
GTE -- SO - NORTH CAROLINA	NC	27,674	13,377	14,288	51.63%
US WEST -- NORTH DAKOTA	ND	30,616	19,931	10,625	34.70%
CINCINNATI BELL TELEPHONE CO.	OH	100,475	70,697	29,756	29.62%
GTE - NO - OHIO	OH	144,152	102,787	41,359	28.69%
AMERITECH - OHIO BELL	OH	347,521	251,118	95,972	27.62%
GTE -- NO - WESTERN RESERVE - OHIO	OH	21,832	17,260	4,668	21.38%
SPRINT -- UTC OF OHIO	OH	70,715	57,358	13,355	18.89%
GTE -- SW - OKLAHOMA	OK	8,133	1,591	4,987	61.32%
SOUTHWESTERN BELL - OKLAHOMA	OK	114,201	80,892	33,281	29.14%
GTE -- NW - OREGON	OR	84,237	50,653	33,575	39.86%
US WEST -- OREGON	OR	104,135	65,110	38,996	37.45%
SPRINT -- UTC OF THE NW - OREGON	OR	11,158	5,756	5,402	48.41%
ALLTEL - PENNSYLVANIA	PA	23,746	17,690	6,598	27.79%
BELL ATLANTIC OF PENNSYLVANIA	PA	425,010	252,618	172,217	40.52%
GTE -- NO - CONTEL - PENNSYLANIA	PA	11,265	7,467	3,795	33.69%
GTE -- NO - CONTEL - QUAKER STATE	PA	4,255	2,882	1,372	32.24%
GTE -- NO - PENNSYLVANIA	PA	62,275	34,086	28,173	45.24%
SPRINT -- UTC OF PENNSYLVANIA	PA	39,586	29,489	10,097	25.51%
PUERTO RICO TEL CO	PR	260,273	199,277	60,997	23.44%
PUERTO RICO TEL CO - CENTRAL	PR	32,283	14,865	17,418	53.95%
BELL ATLANTIC - NEW ENGLAND - RI	RI	70,227	38,332	31,885	45.40%
BELLSOUTH - SOUTH CAROLINA	SC	125,069	82,223	42,955	34.35%
GTE -- SO - CONTEL - SOUTH CAROLINA	SC	2,629	988	1,640	62.38%
GTE -- SO - CAROLINA	SC	24,174	13,723	8,897	36.80%
US WEST -- SOUTH DAKOTA	SD	29,417	19,366	9,984	33.94%
BELLSOUTH - TENNESSEE	TN	330,277	235,573	94,654	28.66%
SPRINT -- UTC -- SE - TENNESSEE	TN	22,863	14,533	8,330	36.43%
GTE -- SW - CONTEL - TEXAS	TX	4,665	(5,647)	9,245	198.18%
GTE -- SW - TEXAS	TX	229,860	150,362	76,795	33.41%
SOUTHWESTERN BELL - TEXAS	TX	779,099	593,155	185,809	23.85%
SPRINT -- UTC OF TEXAS	TX	9,999	6,462	3,535	35.35%
US WEST -- UTAH	UT	99,874	52,892	46,770	46.83%
BELL ATLANTIC - VIRGINIA	VA	300,909	186,330	114,532	38.06%
SPRINT -- CENTEL OF VIRGINIA	VA	33,925	25,609	8,316	24.51%
GTE -- SO - CONTEL - VIRGINIA	VA	91,302	53,390	37,903	41.51%
GTE -- SO - VIRGINIA	VA	2,887	26	1,814	62.83%
SPRINT -- UTC -- SE - VIRGINIA	VA	14,505	10,183	4,322	29.80%
BELL ATLANTIC - NEW ENGLAND - VT	VT	37,116	23,603	13,509	36.40%
GTE -- NW - CONTEL - WASHINGTON	WA	18,023	10,009	6,073	33.70%
GTE -- NW - WASHINGTON	WA	128,871	87,066	41,406	32.13%
US WEST -- WASHINGTON	WA	37,457	(46,160)	83,162	222.02%
SPRINT -- UTC OF THE NW - WA	WA	12,114	5,884	6,229	51.42%
BELL ATLANTIC - WEST VIRGINIA	WV	97,845	66,744	31,075	31.76%
GTE -- NO - WISCONSIN	WI	54,574	31,882	21,895	40.12%
AMERITECH - WISCONSIN BELL	WI	221,165	165,493	55,225	24.97%
US WEST -- WYOMING	WY	31,468	16,761	14,537	46.20%

TABLE 11.6
AVERAGE NET INVESTMENT
($000) -- 1997

STUDY AREA	State Code	Subject to Separations	Intrastate	Interstate	Percent Interstate	Interstate Rate of Return
ALL REPORTING LOCAL EXCHANGE COS.		$122,460,987	$90,068,670	$32,870,545	26.84%	15.39%
BELL OPERATING COS.		94,952,565	69,015,860	25,890,406	27.27%	14.53%
OTER REPORTING LOCAL EXCHANGE COS.		27,508,422	21,052,810	6,980,139	25.37%	18.59%
BELLSOUTH - ALABAMA	AL	1,786,892	1,325,227	464,176	25.98%	12.05%
GTE -- CONTEL SO - ALABAMA	AL	108,343	80,663	28,694	26.48%	16.18%
GTE -- SO - ALABAMA	AL	148,570	108,931	41,308	27.80%	23.95%
GTE -- CONTEL - ARIZONA	AZ	7,113	4,311	2,779	39.07%	18.32%
US WEST -- ARIZONA	AZ	1,899,434	1,416,337	489,074	25.75%	19.34%
GTE -- SW - ARKANSAS	AR	121,647	94,558	28,099	23.10%	16.38%
SOUTHWESTERN BELL - ARKANSAS	AR	939,833	717,842	217,593	23.15%	12.39%
GTE -- CALIFORNIA	CA	3,440,047	2,840,383	708,106	20.58%	18.34%
GTE -- CONTEL - CALIFORNIA	CA	341,517	263,376	75,561	22.13%	19.38%
GTE -- NW - WEST COAST OF CA	CA	17,838	12,413	5,653	31.69%	10.01%
SBC -- PACIFIC BELL - CALIFORNIA	CA	13,703,979	10,881,714	2,788,599	20.35%	11.17%
US WEST -- COLORADO	CO	2,802,047	2,027,740	785,337	28.03%	12.60%
SOUTHERN NEW ENGLAND TEL. - CT	CT	1,845,020	1,362,289	494,889	26.82%	14.32%
BELL ATLANTIC - DISTRICT OF COLUMBIA	DC	710,672	460,327	235,295	33.11%	15.19%
BELL ATLANTIC - DELAWARE	DE	365,408	247,809	110,190	30.16%	16.49%
BELLSOUTH - FLORIDA	FL	4,334,817	3,232,005	1,107,225	25.54%	18.72%
GTE -- FLORIDA	FL	1,863,871	1,411,929	493,269	26.46%	18.78%
SPRINT -- FLORIDA	FL	1,441,112	1,078,287	376,577	26.13%	19.88%
ALLTEL - GEORGIA	GA	385,840	295,774	91,103	23.61%	11.19%
BELLSOUTH - GEORGIA	GA	3,384,102	2,462,645	923,538	27.29%	17.12%
GTE -- HAWAIIAN TELEPHONE	HI	828,660	623,739	246,820	29.79%	13.51%
GTE -- NW - IDAHO	ID	178,958	133,447	47,586	26.59%	30.17%
US WEST -- IDAHO	ID	370,656	254,530	118,461	31.96%	15.49%
US WEST -- IDAHO	ID	26,783	19,232	7,792	29.09%	18.44%
SPRINT -- CENTEL OF ILLINOIS	IL	128,497	96,218	31,346	24.39%	17.13%
GTE -- NO - CONTEL ILLINOIS	IL	133,047	103,653	31,919	23.99%	34.80%
GTE -- NO - ILLINOIS	IL	556,834	427,428	161,848	29.07%	23.02%
GTE -- SO - ILLINOIS	IL	64,825	47,035	10,487	16.18%	11.14%
AMERITECH - ILLINOIS BELL	IL	2,619,425	1,736,242	944,512	36.06%	16.14%
GTE -- CONTEL SO - ILLINOIS	IN	12,784	9,101	2,952	23.09%	5.93%
GTE -- NO - CONTEL INDIANA	IN	122,405	93,357	30,658	25.05%	27.68%
GTE -- NO - INDIANA	IN	639,707	485,467	169,253	26.46%	23.18%
AMERITECH - INDIANA BELL	IN	836,668	543,137	298,678	35.70%	25.74%
SPRINT -- UTC OF INDIANA	IN	125,126	95,013	34,639	27.68%	26.31%
GTE -- MD - CONTEL SYSTEMS OF IOWA	IA	68,933	52,740	13,662	19.82%	34.98%
GTE -- MD - CONTEL - IOWA	IA	65,423	50,672	15,078	23.05%	27.71%
GTE -- MD - IOWA	IA	122,975	96,057	29,178	23.73%	22.06%
US WEST -- IOWA	IA	694,130	496,629	202,691	29.20%	12.36%
SOUTHWESTERN BELL - KANSAS	KS	1,029,845	736,016	285,170	27.69%	9.65%
BELLSOUTH - KENTUCKY	KY	965,754	712,686	255,417	26.45%	16.07%
GTE -- SO - CONTEL - KENTUCKY	KY	111,581	84,710	27,222	24.40%	10.54%
GTE -- SO - KENTUCKY	KY	418,401	319,505	109,118	26.08%	21.33%
BELLSOUTH - LOUISIANA	LA	1,753,169	1,373,038	381,364	21.75%	16.16%
BELL ATLANTIC - NEW ENGLAND - MA	MA	3,245,388	2,326,027	928,227	28.60%	16.93%
BELL ATLANTIC - MARYLAND	MD	2,466,003	1,722,589	705,648	28.62%	13.61%
BELL ATLANTIC - NEW ENGLAND - ME	ME	547,333	401,274	147,893	27.02%	15.00%
GTE -- CONTEL - MICHIGAN	MI	64,149	47,543	11,704	18.25%	16.67%
GTE -- NO - MICHIGAN	MI	601,795	458,935	174,973	29.08%	16.29%
AMERITECH - MICHIGAN BELL	MI	2,141,037	1,446,808	719,966	33.63%	21.40%
US WEST -- MINNESOTA	MN	1,518,051	1,113,416	417,217	27.48%	19.17%
BELLSOUTH - MISSISSIPPI	MS	1,114,060	826,345	283,771	25.47%	11.21%
GTE -- MD - CONTEL OF EASTERN MO	MO	6,797	4,905	1,933	28.44%	-3.93%
GTE -- MD - CONTEL OF SYS MO	MO	60,892	46,178	14,939	24.53%	19.77%
GTE -- MD - CONTEL MISSOURI	MO	353,392	268,423	87,988	24.90%	11.24%
GTE -- MD - MISSOURI	MO	120,448	89,696	32,675	27.13%	15.64%
SOUTHWESTERN BELL - MISSOURI	MO	2,437,448	1,751,289	678,875	27.85%	11.03%
SPRINT -- UTC OF MISSOURI	MO	251,841	188,283	69,688	27.67%	19.40%
US WEST -- MONTANA	MT	354,180	251,825	102,784	29.02%	8.44%
ALIANT TELECOMMUNICATIONS CO.	NE	203,895	153,408	53,023	26.01%	10.74%
GTE -- MD - NEBRASKA	NE	47,503	35,760	12,565	26.45%	23.78%
US WEST -- NEBRASKA	NE	527,811	363,273	167,240	31.69%	11.84%

TABLE 11.6
AVERAGE NET INVESTMENT
($000) -- 1997

	State Code	Subject to Separations	Intrastate	Interstate	Percent Interstate	Interstate Rate of Return
GTE -- CONTEL NEVADA	NV	26,993	14,509	12,405	45.96%	22.81%
SBC - NEVADA BELL	NV	247,024	167,117	75,359	30.51%	19.30%
SPRINT -- CENTEL OF NEVADA	NV	472,220	353,478	124,644	26.40%	16.14%
BELL ATLANTIC - NEW ENGLAND - NH	NH	664,031	449,246	214,432	32.29%	21.89%
BELL ATLANTIC - NEW JERSEY	NJ	3,869,038	2,550,566	1,254,519	32.42%	16.57%
SPRINT -- UTC OF NEW JERSEY	NJ	128,890	95,453	36,437	28.27%	19.86%
GTE -- SW - CONTEL - NEW MEXICO	NM	33,927	24,534	9,702	28.60%	32.77%
GTE -- SW - NEW MEXICO	NM	31,219	20,013	11,778	37.73%	24.05%
US WEST -- NEW MEXICO	NM	748,239	548,752	203,836	27.24%	16.00%
BELL ATLANTIC - NEW YORK	NY	8,290,635	6,077,722	2,249,015	27.13%	10.55%
CITIZENS TELECOM -- RED HOOK	NY	12,278	8,021	4,340	35.35%	8.39%
CITIZENS TELECOM -- UPSTATE	NY	281,757	218,625	64,346	22.84%	14.47%
CITIZENS TELECOM -- W. COUNTIES	NY	29,855	22,091	7,889	26.42%	9.47%
FRONTIER OF ROCHESTER	NY	364,994	267,172	101,498	27.81%	13.62%
BELLSOUTH - NORTH CAROLINA	NC	2,064,967	1,551,004	521,147	25.24%	17.51%
SPRINT -- CAROLINA TEL & TEL OF NC	NC	701,818	544,337	171,467	24.43%	16.33%
SPRINT -- CENTEL OF NORTH CAROLINA	NC	191,530	151,200	40,761	21.28%	18.32%
GTE -- SO - CONTEL - NORTH CAROLINA	NC	104,917	78,384	26,917	25.66%	16.35%
GTE -- SO - NORTH CAROLINA	NC	231,563	174,694	60,402	26.08%	23.65%
US WEST -- NORTH DAKOTA	ND	166,614	110,099	58,481	35.10%	18.17%
CINCINNATI BELL TELEPHONE CO.	OH	687,437	532,749	154,492	22.47%	19.26%
GTE - NO - OHIO	OH	598,518	459,829	170,402	28.47%	24.27%
AMERITECH - OHIO BELL	OH	1,674,701	1,098,565	595,074	35.53%	16.13%
GTE -- NO - WESTERN RESERVE - OHIO	OH	161,324	124,335	37,539	23.27%	12.44%
SPRINT -- UTC OF OHIO	OH	374,163	282,545	103,857	27.76%	12.86%
GTE -- SW - OKLAHOMA	OK	115,362	83,880	32,807	28.44%	15.20%
SOUTHWESTERN BELL - OKLAHOMA	OK	1,089,152	791,628	292,616	26.87%	11.37%
GTE -- NW - OREGON	OR	447,021	329,668	123,127	27.54%	27.27%
US WEST -- OREGON	OR	1,056,299	762,145	308,519	29.21%	12.64%
SPRINT -- UTC OF THE NW - OREGON	OR	56,466	41,531	16,282	28.84%	33.18%
ALLTEL - PENNSYLVANIA	PA	194,572	150,522	44,678	22.96%	14.77%
BELL ATLANTIC OF PENNSYLVANIA	PA	3,988,602	2,807,621	1,098,215	27.53%	15.68%
GTE -- NO - CONTEL - PENNSYLANIA	PA	32,978	25,241	8,965	27.18%	42.33%
GTE -- NO - CONTEL - QUAKER STATE	PA	27,986	18,950	9,334	33.35%	14.70%
GTE -- NO - PENNSYLVANIA	PA	363,150	275,028	111,486	30.70%	25.27%
SPRINT -- UTC OF PENNSYLVANIA	PA	251,690	194,406	61,160	24.30%	16.51%
PUERTO RICO TEL CO	PR	1,625,978	1,227,220	412,360	25.36%	14.79%
PUERTO RICO TEL CO - CENTRAL	PR	179,701	136,762	45,377	25.25%	38.39%
BELL ATLANTIC - NEW ENGLAND - RI	RI	385,441	276,694	111,215	28.85%	28.67%
BELLSOUTH - SOUTH CAROLINA	SC	1,110,733	819,656	289,594	26.07%	14.83%
GTE -- SO - CONTEL - SOUTH CAROLINA	SC	20,837	14,427	6,501	31.20%	25.23%
GTE -- SO - CAROLINA	SC	157,062	118,623	40,023	25.48%	22.23%
US WEST -- SOUTH DAKOTA	SD	217,833	145,261	73,519	33.75%	13.58%
BELLSOUTH - TENNESSEE	TN	2,119,276	1,579,907	535,427	25.26%	17.68%
SPRINT -- UTC -- SE - TENNESSEE	TN	184,280	142,263	43,822	23.78%	19.01%
GTE -- SW - CONTEL - TEXAS	TX	224,191	175,150	49,093	21.90%	18.83%
GTE -- SW - TEXAS	TX	1,671,232	1,239,023	459,202	27.48%	16.72%
SOUTHWESTERN BELL - TEXAS	TX	7,256,521	5,253,571	1,986,709	27.38%	9.35%
SPRINT -- UTC OF TEXAS	TX	130,948	100,076	34,559	26.39%	10.23%
US WEST -- UTAH	UT	961,234	692,323	274,341	28.54%	17.05%
BELL ATLANTIC - VIRGINIA	VA	2,250,908	1,477,255	739,417	32.85%	15.49%
SPRINT -- CENTEL OF VIRGINIA	VA	265,862	201,386	62,699	23.58%	13.26%
GTE -- SO - CONTEL - VIRGINIA	VA	495,871	377,869	122,166	24.64%	31.03%
GTE -- SO - VIRGINIA	VA	40,920	30,651	10,619	25.95%	17.08%
SPRINT -- UTC -- SE - VIRGINIA	VA	78,458	58,150	21,259	27.10%	20.33%
BELL ATLANTIC - NEW ENGLAND - VT	VT	316,446	225,433	91,471	28.91%	14.77%
GTE -- NW - CONTEL - WASHINGTON	WA	99,603	79,954	20,430	20.51%	29.73%
GTE -- NW - WASHINGTON	WA	917,380	731,680	200,582	21.86%	20.64%
US WEST -- WASHINGTON	WA	2,107,455	1,570,548	556,756	26.42%	14.94%
SPRINT -- UTC OF THE NW - WA	WA	73,570	55,747	19,073	25.92%	32.66%
BELL ATLANTIC - WEST VIRGINIA	WV	642,590	452,835	177,908	27.69%	17.47%
GTE -- NO - WISCONSIN	WI	410,115	308,447	118,367	28.86%	18.50%
AMERITECH - WISCONSIN BELL	WI	837,470	546,629	316,215	37.76%	17.46%
US WEST -- WYOMING	WY	312,431	215,281	99,888	31.97%	14.55%

TABLE 11.7
TOTAL OPERATING REVENUES
($000) -- 1997

STUDY AREA	State Code	Subject to Separations	Intrastate	Interstate	Percent Interstate
ALL REPORTING LOCAL EXCHANGE COS.		$96,449,616	$71,542,795	$24,906,821	25.82%
BELL OPERATING COS.		75,723,108	56,075,215	19,647,890	25.95%
OTER REPORTING LOCAL EXCHANGE COS.		20,726,508	15,467,580	5,258,931	25.37%
BELLSOUTH - ALABAMA	AL	1,168,939	886,981	281,957	24.12%
GTE -- CONTEL SO - ALABAMA	AL	82,043	59,847	22,196	27.05%
GTE -- SO - ALABAMA	AL	128,837	82,609	46,227	35.88%
GTE -- CONTEL - ARIZONA	AZ	7,895	4,807	3,088	39.11%
US WEST -- ARIZONA	AZ	1,423,032	1,003,458	419,573	29.48%
GTE -- SW - ARKANSAS	AR	72,744	46,851	25,893	35.59%
SOUTHWESTERN BELL - ARKANSAS	AR	593,400	446,579	146,821	24.74%
GTE -- CALIFORNIA	CA	2,694,194	2,179,750	514,444	19.09%
GTE -- CONTEL - CALIFORNIA	CA	279,951	212,923	67,028	23.94%
GTE -- NW - WEST COAST OF CA	CA	12,371	8,378	3,993	32.28%
SBC -- PACIFIC BELL - CALIFORNIA	CA	8,153,231	6,305,012	1,848,219	22.67%
US WEST -- COLORADO	CO	1,770,635	1,279,047	491,589	27.76%
SOUTHERN NEW ENGLAND TEL. - CT	CT	1,468,912	1,079,171	389,741	26.53%
BELL ATLANTIC - DISTRICT OF COLUMBIA	DC	547,989	369,968	178,021	32.49%
BELL ATLANTIC - DELAWARE	DE	249,316	165,321	83,995	33.69%
BELLSOUTH - FLORIDA	FL	3,344,580	2,393,922	950,659	28.42%
GTE -- FLORIDA	FL	1,417,585	1,057,051	360,535	25.43%
SPRINT -- FLORIDA	FL	1,102,655	793,757	308,897	28.01%
ALLTEL - GEORGIA	GA	209,765	164,363	45,403	21.64%
BELLSOUTH - GEORGIA	GA	2,595,228	1,894,842	700,386	26.99%
GTE -- HAWAIIAN TELEPHONE	HI	487,818	346,817	141,001	28.90%
GTE -- NW - IDAHO	ID	107,220	55,758	51,463	48.00%
US WEST -- IDAHO	ID	271,580	188,223	83,358	30.69%
US WEST -- IDAHO	ID	17,013	11,253	5,760	33.86%
SPRINT -- CENTEL OF ILLINOIS	IL	132,568	99,469	33,099	24.97%
GTE -- NO - CONTEL ILLINOIS	IL	115,998	84,057	31,941	27.54%
GTE -- NO - ILLINOIS	IL	421,521	306,297	115,224	27.34%
GTE -- SO - ILLINOIS	IL	23,894	18,254	5,640	23.60%
AMERITECH - ILLINOIS BELL	IL	3,359,811	2,596,614	763,197	22.72%
GTE -- CONTEL SO - ILLINOIS	IN	5,487	4,174	1,312	23.91%
GTE -- NO - CONTEL INDIANA	IN	108,583	81,217	27,366	25.20%
GTE -- NO - INDIANA	IN	527,551	391,993	135,558	25.70%
AMERITECH - INDIANA BELL	IN	1,171,054	872,134	298,920	25.53%
SPRINT -- UTC OF INDIANA	IN	154,890	114,991	39,899	25.76%
GTE -- MD - CONTEL SYSTEMS OF IOWA	IA	45,852	31,039	14,813	32.31%
GTE -- MD - CONTEL - IOWA	IA	57,935	43,386	14,549	25.11%
GTE -- MD - IOWA	IA	87,240	63,989	23,251	26.65%
US WEST -- IOWA	IA	566,464	404,356	162,108	28.62%
SOUTHWESTERN BELL - KANSAS	KS	822,209	611,215	210,994	25.66%
BELLSOUTH - KENTUCKY	KY	740,187	557,773	182,414	24.64%
GTE -- SO - CONTEL - KENTUCKY	KY	68,927	46,215	22,713	32.95%
GTE -- SO - KENTUCKY	KY	326,483	241,512	84,971	26.03%
BELLSOUTH - LOUISIANA	LA	1,370,938	1,054,033	316,903	23.12%
BELL ATLANTIC - NEW ENGLAND - MA	MA	2,798,875	1,965,877	832,997	29.76%
BELL ATLANTIC - MARYLAND	MD	1,927,585	1,429,683	497,902	25.83%
BELL ATLANTIC - NEW ENGLAND - ME	ME	457,307	335,460	121,847	26.64%
GTE -- CONTEL - MICHIGAN	MI	28,209	21,340	6,869	24.35%
GTE -- NO - MICHIGAN	MI	454,424	354,065	100,358	22.08%
AMERITECH - MICHIGAN BELL	MI	3,105,693	2,472,538	633,155	20.39%
US WEST -- MINNESOTA	MN	1,246,012	909,841	336,170	26.98%
BELLSOUTH - MISSISSIPPI	MS	876,084	678,472	197,611	22.56%
GTE -- MD - CONTEL OF EASTERN MO	MO	1,912	1,543	369	19.30%
GTE -- MD - CONTEL OF SYS MO	MO	38,762	24,495	14,267	36.81%
GTE -- MD - CONTEL MISSOURI	MO	190,392	139,831	50,561	26.56%
GTE -- MD - MISSOURI	MO	86,756	64,945	21,812	25.14%
SOUTHWESTERN BELL - MISSOURI	MO	1,507,495	1,097,385	410,110	27.20%
SPRINT -- UTC OF MISSOURI	MO	185,051	133,922	51,129	27.63%
US WEST -- MONTANA	MT	230,055	169,520	60,535	26.31%
ALIANT TELECOMMUNICATIONS CO.	NE	191,170	153,412	37,758	19.75%
GTE -- MD - NEBRASKA	NE	34,387	24,991	9,396	27.32%
US WEST -- NEBRASKA	NE	443,402	323,219	120,184	27.10%

TABLE 11.7
TOTAL OPERATING REVENUES
($000) -- 1997

	State Code	Subject to Separations	Intrastate	Interstate	Percent Interstate
GTE -- CONTEL NEVADA	NV	21,582	12,542	9,040	41.89%
SBC - NEVADA BELL	NV	155,553	96,092	59,461	38.23%
SPRINT -- CENTEL OF NEVADA	NV	321,382	224,443	96,939	30.16%
BELL ATLANTIC - NEW ENGLAND - NH	NH	521,682	342,518	179,164	34.34%
BELL ATLANTIC - NEW JERSEY	NJ	3,225,597	2,276,340	949,257	29.43%
SPRINT -- UTC OF NEW JERSEY	NJ	128,507	98,099	30,408	23.66%
GTE -- SW - CONTEL - NEW MEXICO	NM	39,536	22,352	17,184	43.46%
GTE -- SW - NEW MEXICO	NM	30,225	19,831	10,394	34.39%
US WEST -- NEW MEXICO	NM	526,051	387,501	138,549	26.34%
BELL ATLANTIC - NEW YORK	NY	7,572,908	5,541,387	2,031,521	26.83%
CITIZENS TELECOM -- RED HOOK	NY	9,297	6,141	3,156	33.95%
CITIZENS TELECOM -- UPSTATE	NY	159,472	109,629	49,843	31.26%
CITIZENS TELECOM -- W. COUNTIES	NY	18,788	10,917	7,871	41.89%
FRONTIER OF ROCHESTER	NY	306,153	239,914	66,239	21.64%
BELLSOUTH - NORTH CAROLINA	NC	1,486,852	1,104,411	382,440	25.72%
SPRINT -- CAROLINA TEL & TEL OF NC	NC	659,106	499,468	159,638	24.22%
SPRINT -- CENTEL OF NORTH CAROLINA	NC	158,904	123,880	35,023	22.04%
GTE -- SO - CONTEL - NORTH CAROLINA	NC	81,504	53,839	27,665	33.94%
GTE -- SO - NORTH CAROLINA	NC	179,548	130,204	49,344	27.48%
US WEST -- NORTH DAKOTA	ND	170,054	121,498	48,555	28.55%
CINCINNATI BELL TELEPHONE CO.	OH	591,475	456,056	135,420	22.90%
GTE - NO - OHIO	OH	541,041	410,963	130,079	24.04%
AMERITECH - OHIO BELL	OH	2,089,110	1,609,033	480,077	22.98%
GTE -- NO - WESTERN RESERVE - OHIO	OH	103,972	81,615	22,359	21.50%
SPRINT -- UTC OF OHIO	OH	418,840	319,641	99,199	23.68%
GTE -- SW - OKLAHOMA	OK	69,017	46,523	22,494	32.59%
SOUTHWESTERN BELL - OKLAHOMA	OK	919,182	686,929	232,253	25.27%
GTE -- NW - OREGON	OR	316,110	214,953	101,157	32.00%
US WEST -- OREGON	OR	769,613	548,672	220,941	28.71%
SPRINT -- UTC OF THE NW - OREGON	OR	52,570	34,775	17,795	33.85%
ALLTEL - PENNSYLVANIA	PA	131,436	104,508	26,929	20.49%
BELL ATLANTIC OF PENNSYLVANIA	PA	3,153,266	2,315,827	837,439	26.56%
GTE -- NO - CONTEL - PENNSYLANIA	PA	40,663	30,963	9,700	23.85%
GTE -- NO - CONTEL - QUAKER STATE	PA	24,647	18,151	6,496	26.36%
GTE -- NO - PENNSYLVANIA	PA	305,305	220,400	84,906	27.81%
SPRINT -- UTC OF PENNSYLVANIA	PA	232,938	182,243	50,695	21.76%
PUERTO RICO TEL CO	PR	1,011,108	769,556	241,552	23.89%
PUERTO RICO TEL CO - CENTRAL	PR	136,833	89,168	47,665	34.83%
BELL ATLANTIC - NEW ENGLAND - RI	RI	385,870	262,482	123,388	31.98%
BELLSOUTH - SOUTH CAROLINA	SC	875,103	647,397	227,707	26.02%
GTE -- SO - CONTEL - SOUTH CAROLINA	SC	14,572	9,308	5,263	36.12%
GTE -- SO - CAROLINA	SC	132,165	94,323	37,842	28.63%
US WEST -- SOUTH DAKOTA	SD	172,958	122,049	50,909	29.43%
BELLSOUTH - TENNESSEE	TN	1,609,513	1,196,660	412,853	25.65%
SPRINT -- UTC -- SE - TENNESSEE	TN	129,767	94,748	35,019	26.99%
GTE -- SW - CONTEL - TEXAS	TX	139,747	101,160	38,586	27.61%
GTE -- SW - TEXAS	TX	1,175,885	877,636	298,249	25.36%
SOUTHWESTERN BELL - TEXAS	TX	5,540,663	4,231,613	1,309,050	23.63%
SPRINT -- UTC OF TEXAS	TX	99,663	75,839	23,824	23.90%
US WEST -- UTAH	UT	619,776	429,485	190,291	30.70%
BELL ATLANTIC - VIRGINIA	VA	1,904,519	1,389,220	515,299	27.06%
SPRINT -- CENTEL OF VIRGINIA	VA	181,086	137,053	44,033	24.32%
GTE -- SO - CONTEL - VIRGINIA	VA	378,191	264,240	113,950	30.13%
GTE -- SO - VIRGINIA	VA	25,390	15,952	9,438	37.17%
SPRINT -- UTC -- SE - VIRGINIA	VA	63,418	46,182	17,236	27.18%
BELL ATLANTIC - NEW ENGLAND - VT	VT	247,194	175,361	71,834	29.06%
GTE -- NW - CONTEL - WASHINGTON	WA	62,363	42,505	19,858	31.84%
GTE -- NW - WASHINGTON	WA	521,982	386,495	135,487	25.96%
US WEST -- WASHINGTON	WA	1,191,205	800,811	390,395	32.77%
SPRINT -- UTC OF THE NW - WA	WA	57,339	38,655	18,684	32.59%
BELL ATLANTIC - WEST VIRGINIA	WV	554,045	411,005	143,040	25.82%
GTE -- NO - WISCONSIN	WI	294,999	215,491	79,508	26.95%
AMERITECH - WISCONSIN BELL	WI	1,101,783	841,596	260,187	23.62%
US WEST -- WYOMING	WY	172,497	114,602	57,895	33.56%

TABLE 11.8
OTHER OPERATING INCOME OR LOSS
($000) -- 1997

STUDY AREA	State Code	Subject to Separations	Intrastate	Interstate	Percent Interstate
ALL REPORTING LOCAL EXCHANGE COS.		$15,845	$13,082	$2,751	17.36%
BELL OPERATING COS.		2,484	2,434	46	1.85%
OTER REPORTING LOCAL EXCHANGE COS.		13,361	10,648	2,705	20.25%
BELLSOUTH - ALABAMA	AL	(77)	(58)	(19)	24.68%
GTE -- CONTEL SO - ALABAMA	AL	2	1	0	0.00%
GTE -- SO - ALABAMA	AL	10	8	3	30.00%
GTE -- CONTEL - ARIZONA	AZ	0	0	0	0.00%
US WEST -- ARIZONA	AZ	0	0	0	0.00%
GTE -- SW - ARKANSAS	AR	0	0	0	0.00%
SOUTHWESTERN BELL - ARKANSAS	AR	674	499	175	25.96%
GTE -- CALIFORNIA	CA	9,419	7,664	1,755	18.63%
GTE -- CONTEL - CALIFORNIA	CA	124	95	28	22.58%
GTE -- NW - WEST COAST OF CA	CA	0	0	0	0.00%
SBC -- PACIFIC BELL - CALIFORNIA	CA	(8,315)	(6,253)	(2,063)	24.81%
US WEST -- COLORADO	CO	0	0	0	0.00%
SOUTHERN NEW ENGLAND TEL. - CT	CT	(2,074)	(1,569)	(505)	24.35%
BELL ATLANTIC - DISTRICT OF COLUMBIA	DC	58	39	19	32.76%
BELL ATLANTIC - DELAWARE	DE	1	0	0	0.00%
BELLSOUTH - FLORIDA	FL	(254)	(203)	(52)	20.47%
GTE -- FLORIDA	FL	6	4	1	16.67%
SPRINT -- FLORIDA	FL	1	1	0	0.00%
ALLTEL - GEORGIA	GA	0	0	0	0.00%
BELLSOUTH - GEORGIA	GA	32	24	8	25.00%
GTE -- HAWAIIAN TELEPHONE	HI	16	12	4	25.00%
GTE -- NW - IDAHO	ID	1,353	971	382	28.23%
US WEST -- IDAHO	ID	0	0	0	0.00%
US WEST -- IDAHO	ID	0	0	0	0.00%
SPRINT -- CENTEL OF ILLINOIS	IL	390	291	98	25.13%
GTE -- NO - CONTEL ILLINOIS	IL	0	0	0	0.00%
GTE -- NO - ILLINOIS	IL	27	21	6	22.22%
GTE -- SO - ILLINOIS	IL	(2)	(2)	(1)	50.00%
AMERITECH - ILLINOIS BELL	IL	(1,573)	(1,193)	(380)	24.16%
GTE -- CONTEL SO - ILLINOIS	IN	0	0	0	0.00%
GTE -- NO - CONTEL INDIANA	IN	(3)	(2)	(1)	33.33%
GTE -- NO - INDIANA	IN	7	5	2	28.57%
AMERITECH - INDIANA BELL	IN	(492)	(368)	(124)	25.20%
SPRINT -- UTC OF INDIANA	IN	0	0	0	0.00%
GTE -- MD - CONTEL SYSTEMS OF IOWA	IA	(17)	(13)	(4)	23.53%
GTE -- MD - CONTEL - IOWA	IA	0	0	0	0.00%
GTE -- MD - IOWA	IA	0	0	0	0.00%
US WEST -- IOWA	IA	0	0	0	0.00%
SOUTHWESTERN BELL - KANSAS	KS	108	83	25	23.15%
BELLSOUTH - KENTUCKY	KY	15	11	4	26.67%
GTE -- SO - CONTEL - KENTUCKY	KY	1	1	0	0.00%
GTE -- SO - KENTUCKY	KY	16	12	4	25.00%
BELLSOUTH - LOUISIANA	LA	401	307	93	23.19%
BELL ATLANTIC - NEW ENGLAND - MA	MA	9,871	7,467	2,404	24.35%
BELL ATLANTIC - MARYLAND	MD	266	199	68	25.56%
BELL ATLANTIC - NEW ENGLAND - ME	ME	(46)	(1)	(45)	97.83%
GTE -- CONTEL - MICHIGAN	MI	54	41	13	24.07%
GTE -- NO - MICHIGAN	MI	7	5	2	28.57%
AMERITECH - MICHIGAN BELL	MI	(1,319)	(1,026)	(293)	22.21%
US WEST -- MINNESOTA	MN	0	0	0	0.00%
BELLSOUTH - MISSISSIPPI	MS	(213)	(160)	(53)	24.88%
GTE -- MD - CONTEL OF EASTERN MO	MO	0	0	0	0.00%
GTE -- MD - CONTEL OF SYS MO	MO	0	0	0	0.00%
GTE -- MD - CONTEL MISSOURI	MO	0	0	0	0.00%
GTE -- MD - MISSOURI	MO	0	0	0	0.00%
SOUTHWESTERN BELL - MISSOURI	MO	601	427	174	28.95%
SPRINT -- UTC OF MISSOURI	MO	0	0	0	0.00%
US WEST -- MONTANA	MT	0	0	0	0.00%
ALIANT TELECOMMUNICATIONS CO.	NE	6	4	1	16.67%
GTE -- MD - NEBRASKA	NE	0	0	0	0.00%
US WEST -- NEBRASKA	NE	0	0	0	0.00%

TABLE 11.8
OTHER OPERATING INCOME OR LOSS
($000) -- 1997

	State Code	Subject to Separations	Intrastate	Interstate	Percent Interstate
GTE -- CONTEL NEVADA	NV	0	0	0	0.00%
SBC - NEVADA BELL	NV	50	35	16	32.00%
SPRINT -- CENTEL OF NEVADA	NV	0	0	0	0.00%
BELL ATLANTIC - NEW ENGLAND - NH	NH	(80)	(1)	(80)	100.00%
BELL ATLANTIC - NEW JERSEY	NJ	(81)	(60)	(21)	25.93%
SPRINT -- UTC OF NEW JERSEY	NJ	0	0	0	0.00%
GTE -- SW - CONTEL - NEW MEXICO	NM	67	48	19	28.36%
GTE -- SW - NEW MEXICO	NM	2	1	1	50.00%
US WEST -- NEW MEXICO	NM	0	0	0	0.00%
BELL ATLANTIC - NEW YORK	NY	(435)	(20)	(415)	95.40%
CITIZENS TELECOM -- RED HOOK	NY	1	1	0	0.00%
CITIZENS TELECOM -- UPSTATE	NY	1,938	1,501	437	22.55%
CITIZENS TELECOM -- W. COUNTIES	NY	1	1	0	0.00%
FRONTIER OF ROCHESTER	NY	0	0	0	0.00%
BELLSOUTH - NORTH CAROLINA	NC	(126)	(98)	(29)	23.02%
SPRINT -- CAROLINA TEL & TEL OF NC	NC	0	0	0	0.00%
SPRINT -- CENTEL OF NORTH CAROLINA	NC	0	0	0	0.00%
GTE -- SO - CONTEL - NORTH CAROLINA	NC	(17)	(13)	(4)	23.53%
GTE -- SO - NORTH CAROLINA	NC	(11)	(9)	(3)	27.27%
US WEST -- NORTH DAKOTA	ND	0	0	0	0.00%
CINCINNATI BELL TELEPHONE CO.	OH	0	0	0	0.00%
GTE - NO - OHIO	OH	(1)	(1)	0	0.00%
AMERITECH - OHIO BELL	OH	(812)	(620)	(192)	23.65%
GTE -- NO - WESTERN RESERVE - OHIO	OH	0	0	0	0.00%
SPRINT -- UTC OF OHIO	OH	(3)	(3)	(1)	33.33%
GTE -- SW - OKLAHOMA	OK	8	6	2	25.00%
SOUTHWESTERN BELL - OKLAHOMA	OK	284	207	77	27.11%
GTE -- NW - OREGON	OR	0	0	0	0.00%
US WEST -- OREGON	OR	0	0	0	0.00%
SPRINT -- UTC OF THE NW - OREGON	OR	0	0	0	0.00%
ALLTEL - PENNSYLVANIA	PA	0	0	0	0.00%
BELL ATLANTIC OF PENNSYLVANIA	PA	(625)	(468)	(157)	25.12%
GTE -- NO - CONTEL - PENNSYLANIA	PA	0	0	0	0.00%
GTE -- NO - CONTEL - QUAKER STATE	PA	0	0	0	0.00%
GTE -- NO - PENNSYLVANIA	PA	0	0	0	0.00%
SPRINT -- UTC OF PENNSYLVANIA	PA	1	1	0	0.00%
PUERTO RICO TEL CO	PR	0	0	0	0.00%
PUERTO RICO TEL CO - CENTRAL	PR	0	0	0	0.00%
BELL ATLANTIC - NEW ENGLAND - RI	RI	(178)	0	(178)	100.00%
BELLSOUTH - SOUTH CAROLINA	SC	(89)	(25)	(64)	71.91%
GTE -- SO - CONTEL - SOUTH CAROLINA	SC	0	0	0	0.00%
GTE -- SO - CAROLINA	SC	0	0	0	0.00%
US WEST -- SOUTH DAKOTA	SD	0	0	0	0.00%
BELLSOUTH - TENNESSEE	TN	(21)	(16)	(5)	23.81%
SPRINT -- UTC -- SE - TENNESSEE	TN	0	0	0	0.00%
GTE -- SW - CONTEL - TEXAS	TX	41	32	8	19.51%
GTE -- SW - TEXAS	TX	763	573	190	24.90%
SOUTHWESTERN BELL - TEXAS	TX	4,948	3,754	1,194	24.13%
SPRINT -- UTC OF TEXAS	TX	(12)	(9)	(3)	25.00%
US WEST -- UTAH	UT	0	0	0	0.00%
BELL ATLANTIC - VIRGINIA	VA	207	154	53	25.60%
SPRINT -- CENTEL OF VIRGINIA	VA	0	0	0	0.00%
GTE -- SO - CONTEL - VIRGINIA	VA	47	36	11	23.40%
GTE -- SO - VIRGINIA	VA	9	7	2	22.22%
SPRINT -- UTC -- SE - VIRGINIA	VA	0	0	0	0.00%
BELL ATLANTIC - NEW ENGLAND - VT	VT	(25)	0	(25)	100.00%
GTE -- NW - CONTEL - WASHINGTON	WA	0	0	0	0.00%
GTE -- NW - WASHINGTON	WA	1,179	922	257	21.80%
US WEST -- WASHINGTON	WA	0	0	0	0.00%
SPRINT -- UTC OF THE NW - WA	WA	0	0	0	0.00%
BELL ATLANTIC - WEST VIRGINIA	WV	9	7	2	22.22%
GTE -- NO - WISCONSIN	WI	5	4	1	20.00%
AMERITECH - WISCONSIN BELL	WI	(280)	(209)	(71)	25.36%
US WEST -- WYOMING	WY	0	0	0	0.00%

TABLE 11.9
TOTAL OPERATING EXPENSES
($000) -- 1997

STUDY AREA	State Code	Subject to Separations	Intrastate	Interstate	Percent Interstate
ALL REPORTING LOCAL EXCHANGE COS.		$68,182,022	$51,778,933	$16,516,009	24.22%
BELL OPERATING COS.		54,647,218	41,272,854	13,382,475	24.49%
OTER REPORTING LOCAL EXCHANGE COS.		13,534,804	10,506,079	3,133,534	23.15%
BELLSOUTH - ALABAMA	AL	774,637	583,963	190,706	24.62%
GTE -- CONTEL SO - ALABAMA	AL	52,228	40,903	15,313	29.32%
GTE -- SO - ALABAMA	AL	79,551	61,489	30,337	38.14%
GTE -- CONTEL - ARIZONA	AZ	4,070	2,414	2,059	50.59%
US WEST -- ARIZONA	AZ	1,056,608	811,010	246,212	23.30%
GTE -- SW - ARKANSAS	AR	46,066	35,552	18,348	39.83%
SOUTHWESTERN BELL - ARKANSAS	AR	417,514	312,120	105,431	25.25%
GTE -- CALIFORNIA	CA	1,737,311	1,435,193	302,142	17.39%
GTE -- CONTEL - CALIFORNIA	CA	177,488	138,742	41,310	23.27%
GTE -- NW - WEST COAST OF CA	CA	6,838	4,653	2,978	43.55%
SBC -- PACIFIC BELL - CALIFORNIA	CA	6,721,279	5,343,108	1,378,221	20.51%
US WEST -- COLORADO	CO	1,289,647	960,267	330,115	25.60%
SOUTHERN NEW ENGLAND TEL. - CT	CT	1,134,311	866,787	267,524	23.58%
BELL ATLANTIC - DISTRICT OF COLUMBIA	DC	372,883	258,658	114,222	30.63%
BELL ATLANTIC - DELAWARE	DE	177,692	123,546	54,181	30.49%
BELLSOUTH - FLORIDA	FL	2,425,528	1,822,182	603,678	24.89%
GTE -- FLORIDA	FL	887,336	685,171	205,242	23.13%
SPRINT -- FLORIDA	FL	761,662	573,691	187,971	24.68%
ALLTEL - GEORGIA	GA	119,362	92,275	29,760	24.93%
BELLSOUTH - GEORGIA	GA	1,748,917	1,299,980	449,025	25.67%
GTE -- HAWAIIAN TELEPHONE	HI	354,884	268,376	86,586	24.40%
GTE -- NW - IDAHO	ID	57,882	40,968	28,410	49.08%
US WEST -- IDAHO	ID	187,332	135,653	51,815	27.66%
US WEST -- IDAHO	ID	12,066	8,447	3,629	30.08%
SPRINT -- CENTEL OF ILLINOIS	IL	91,507	67,860	23,647	25.84%
GTE -- NO - CONTEL ILLINOIS	IL	66,496	51,162	15,336	23.06%
GTE -- NO - ILLINOIS	IL	241,074	186,510	54,571	22.64%
GTE -- SO - ILLINOIS	IL	14,749	11,020	3,729	25.28%
AMERITECH - ILLINOIS BELL	IL	2,223,130	1,707,601	516,125	23.22%
GTE -- CONTEL SO - ILLINOIS	IN	3,572	2,560	1,032	28.89%
GTE -- NO - CONTEL INDIANA	IN	56,993	43,557	13,437	23.58%
GTE -- NO - INDIANA	IN	301,359	231,050	70,318	23.33%
AMERITECH - INDIANA BELL	IN	695,106	529,048	166,642	23.97%
SPRINT -- UTC OF INDIANA	IN	103,123	78,297	24,826	24.07%
GTE -- MD - CONTEL SYSTEMS OF IOWA	IA	29,477	23,183	6,296	21.36%
GTE -- MD - CONTEL - IOWA	IA	35,743	28,615	7,130	19.95%
GTE -- MD - IOWA	IA	56,291	44,628	11,665	20.72%
US WEST -- IOWA	IA	423,829	306,862	117,227	27.66%
SOUTHWESTERN BELL - KANSAS	KS	622,128	462,515	159,639	25.66%
BELLSOUTH - KENTUCKY	KY	486,505	369,047	117,489	24.15%
GTE -- SO - CONTEL - KENTUCKY	KY	44,684	34,812	18,218	40.77%
GTE -- SO - KENTUCKY	KY	200,391	155,626	45,760	22.84%
BELLSOUTH - LOUISIANA	LA	902,506	691,039	211,537	23.44%
BELL ATLANTIC - NEW ENGLAND - MA	MA	2,161,283	1,586,929	574,322	26.57%
BELL ATLANTIC - MARYLAND	MD	1,286,312	961,860	324,605	25.24%
BELL ATLANTIC - NEW ENGLAND - ME	ME	319,641	237,491	82,143	25.70%
GTE -- CONTEL - MICHIGAN	MI	17,532	13,846	3,688	21.04%
GTE -- NO - MICHIGAN	MI	256,457	205,360	54,427	21.22%
AMERITECH - MICHIGAN BELL	MI	1,911,190	1,531,904	379,757	19.87%
US WEST -- MINNESOTA	MN	895,456	685,517	210,517	23.51%
BELLSOUTH - MISSISSIPPI	MS	559,532	421,086	138,432	24.74%
GTE -- MD - CONTEL OF EASTERN MO	MO	2,175	1,646	529	24.32%
GTE -- MD - CONTEL OF SYS MO	MO	23,277	18,063	9,479	40.72%
GTE -- MD - CONTEL MISSOURI	MO	133,446	105,108	35,595	26.67%
GTE -- MD - MISSOURI	MO	63,789	51,885	13,453	21.09%
SOUTHWESTERN BELL - MISSOURI	MO	1,139,628	846,296	293,413	25.75%
SPRINT -- UTC OF MISSOURI	MO	121,557	91,811	29,746	24.47%
US WEST -- MONTANA	MT	168,768	126,145	42,741	25.33%
ALIANT TELECOMMUNICATIONS CO.	NE	127,656	99,436	28,220	22.11%
GTE -- MD - NEBRASKA	NE	21,221	16,685	4,538	21.38%
US WEST -- NEBRASKA	NE	319,917	231,165	88,920	27.79%

TABLE 11.9
TOTAL OPERATING EXPENSES
($000) -- 1997

	State Code	Subject to Separations	Intrastate	Interstate	Percent Interstate
GTE -- CONTEL NEVADA	NV	11,619	7,211	4,411	37.96%
SBC - NEVADA BELL	NV	135,320	93,919	41,405	30.60%
SPRINT -- CENTEL OF NEVADA	NV	259,118	191,844	67,235	25.95%
BELL ATLANTIC - NEW ENGLAND - NH	NH	347,379	240,494	106,864	30.76%
BELL ATLANTIC - NEW JERSEY	NJ	2,248,860	1,633,160	615,855	27.39%
SPRINT -- UTC OF NEW JERSEY	NJ	87,376	68,112	19,264	22.05%
GTE -- SW - CONTEL - NEW MEXICO	NM	22,622	16,856	11,852	52.39%
GTE -- SW - NEW MEXICO	NM	17,587	11,894	5,705	32.44%
US WEST -- NEW MEXICO	NM	352,011	265,709	86,554	24.59%
BELL ATLANTIC - NEW YORK	NY	5,912,068	4,369,882	1,542,094	26.08%
CITIZENS TELECOM -- RED HOOK	NY	7,314	4,836	2,478	33.88%
CITIZENS TELECOM -- UPSTATE	NY	136,713	103,198	33,804	24.73%
CITIZENS TELECOM -- W. COUNTIES	NY	13,874	10,067	6,470	46.63%
FRONTIER OF ROCHESTER	NY	191,671	151,185	40,486	21.12%
BELLSOUTH - NORTH CAROLINA	NC	954,246	716,513	237,761	24.92%
SPRINT -- CAROLINA TEL & TEL OF NC	NC	489,141	374,779	114,362	23.38%
SPRINT -- CENTEL OF NORTH CAROLINA	NC	113,712	90,570	23,143	20.35%
GTE -- SO - CONTEL - NORTH CAROLINA	NC	57,582	43,919	20,573	35.73%
GTE -- SO - NORTH CAROLINA	NC	125,455	98,276	27,188	21.67%
US WEST -- NORTH DAKOTA	ND	118,823	87,202	31,708	26.69%
CINCINNATI BELL TELEPHONE CO.	OH	394,088	308,666	85,457	21.68%
GTE - NO - OHIO	OH	293,986	230,957	63,039	21.44%
AMERITECH - OHIO BELL	OH	1,408,981	1,095,593	313,818	22.27%
GTE -- NO - WESTERN RESERVE - OHIO	OH	64,163	49,732	14,430	22.49%
SPRINT -- UTC OF OHIO	OH	287,662	211,883	75,780	26.34%
GTE -- SW - OKLAHOMA	OK	48,845	37,252	14,137	28.94%
SOUTHWESTERN BELL - OKLAHOMA	OK	718,564	541,759	176,847	24.61%
GTE -- NW - OREGON	OR	176,950	130,154	46,808	26.45%
US WEST -- OREGON	OR	593,459	441,791	151,684	25.56%
SPRINT -- UTC OF THE NW - OREGON	OR	35,295	26,104	9,191	26.04%
ALLTEL - PENNSYLVANIA	PA	90,818	73,277	17,833	19.64%
BELL ATLANTIC OF PENNSYLVANIA	PA	2,240,145	1,680,954	559,366	24.97%
GTE -- NO - CONTEL - PENNSYLANIA	PA	19,938	16,341	3,601	18.06%
GTE -- NO - CONTEL - QUAKER STATE	PA	16,208	11,662	4,548	28.06%
GTE -- NO - PENNSYLVANIA	PA	171,523	132,722	38,829	22.64%
SPRINT -- UTC OF PENNSYLVANIA	PA	164,084	129,628	34,456	21.00%
PUERTO RICO TEL CO	PR	560,169	425,280	134,889	24.08%
PUERTO RICO TEL CO - CENTRAL	PR	82,284	62,579	19,705	23.95%
BELL ATLANTIC - NEW ENGLAND - RI	RI	246,100	180,243	65,857	26.76%
BELLSOUTH - SOUTH CAROLINA	SC	618,386	459,870	158,324	25.60%
GTE -- SO - CONTEL - SOUTH CAROLINA	SC	9,429	6,910	2,521	26.74%
GTE -- SO - CAROLINA	SC	83,751	64,574	21,690	25.90%
US WEST -- SOUTH DAKOTA	SD	121,552	86,617	35,029	28.82%
BELLSOUTH - TENNESSEE	TN	1,018,589	763,377	255,261	25.06%
SPRINT -- UTC -- SE - TENNESSEE	TN	93,726	72,159	21,566	23.01%
GTE -- SW - CONTEL - TEXAS	TX	117,251	95,060	23,830	20.32%
GTE -- SW - TEXAS	TX	773,733	598,373	179,503	23.20%
SOUTHWESTERN BELL - TEXAS	TX	4,106,045	3,090,541	1,015,711	24.74%
SPRINT -- UTC OF TEXAS	TX	81,894	63,886	18,009	21.99%
US WEST -- UTAH	UT	442,725	329,220	113,801	25.70%
BELL ATLANTIC - VIRGINIA	VA	1,295,838	967,159	328,725	25.37%
SPRINT -- CENTEL OF VIRGINIA	VA	128,452	97,380	31,072	24.19%
GTE -- SO - CONTEL - VIRGINIA	VA	234,758	181,621	53,148	22.64%
GTE -- SO - VIRGINIA	VA	19,876	15,177	6,412	32.26%
SPRINT -- UTC -- SE - VIRGINIA	VA	40,971	30,568	10,403	25.39%
BELL ATLANTIC - NEW ENGLAND - VT	VT	173,548	125,298	48,253	27.80%
GTE -- NW - CONTEL - WASHINGTON	WA	35,949	28,439	10,496	29.20%
GTE -- NW - WASHINGTON	WA	335,850	262,821	73,641	21.93%
US WEST -- WASHINGTON	WA	1,105,380	843,449	262,591	23.76%
SPRINT -- UTC OF THE NW - WA	WA	38,634	29,675	8,959	23.19%
BELL ATLANTIC - WEST VIRGINIA	WV	366,126	276,092	90,061	24.60%
GTE -- NO - WISCONSIN	WI	169,175	131,518	38,990	23.05%
AMERITECH - WISCONSIN BELL	WI	695,962	539,357	157,053	22.57%
US WEST -- WYOMING	WY	128,077	91,216	37,109	28.97%

TABLE 11.10
TOTAL NON-OPERATING ITEMS
($000) -- 1997

STUDY AREA	State Code	Subject to Separations	Intrastate	Interstate	Percent Interstate
ALL REPORTING LOCAL EXCHANGE COS.		$2,121,848	$2,146,867	($25,025)	-1.18%
BELL OPERATING COS.		1,717,250	1,738,492	(21,245)	-1.24%
OTER REPORTING LOCAL EXCHANGE COS.		404,598	408,375	(3,780)	-0.93%
BELLSOUTH - ALABAMA	AL	38,219	38,107	112	0.29%
GTE -- CONTEL SO - ALABAMA	AL	7,764	7,754	11	0.14%
GTE -- SO - ALABAMA	AL	9,063	9,041	22	0.24%
GTE -- CONTEL - ARIZONA	AZ	45	46	(1)	-2.22%
US WEST -- ARIZONA	AZ	821	536	285	34.71%
GTE -- SW - ARKANSAS	AR	(2,967)	(2,962)	(5)	0.17%
SOUTHWESTERN BELL - ARKANSAS	AR	826	644	182	22.03%
GTE -- CALIFORNIA	CA	54,800	54,409	391	0.71%
GTE -- CONTEL - CALIFORNIA	CA	5,975	5,949	25	0.42%
GTE -- NW - WEST COAST OF CA	CA	159	155	4	2.52%
SBC -- PACIFIC BELL - CALIFORNIA	CA	650,733	657,640	(6,907)	-1.06%
US WEST -- COLORADO	CO	1,349	3,106	(1,757)	-130.24%
SOUTHERN NEW ENGLAND TEL. - CT	CT	15,646	16,508	(862)	-5.51%
BELL ATLANTIC - DISTRICT OF COLUMBIA	DC	(233)	(344)	110	-47.21%
BELL ATLANTIC - DELAWARE	DE	(1,418)	(1,400)	(17)	1.20%
BELLSOUTH - FLORIDA	FL	37,046	37,122	(77)	-0.21%
GTE -- FLORIDA	FL	82,700	82,756	(56)	-0.07%
SPRINT -- FLORIDA	FL	(1,789)	(1,332)	(457)	25.54%
ALLTEL - GEORGIA	GA	(676)	(517)	(158)	23.37%
BELLSOUTH - GEORGIA	GA	69,890	70,198	(309)	-0.44%
GTE -- HAWAIIAN TELEPHONE	HI	(10,943)	(10,650)	(293)	2.68%
GTE -- NW - IDAHO	ID	1,761	1,756	5	0.28%
US WEST -- IDAHO	ID	(902)	(962)	59	-6.54%
US WEST -- IDAHO	ID	22	12	9	40.91%
SPRINT -- CENTEL OF ILLINOIS	IL	214	151	62	28.97%
GTE -- NO - CONTEL ILLINOIS	IL	(698)	(690)	(8)	1.15%
GTE -- NO - ILLINOIS	IL	290	429	(139)	-47.93%
GTE -- SO - ILLINOIS	IL	(5)	(4)	(2)	40.00%
AMERITECH - ILLINOIS BELL	IL	(21,599)	(21,900)	301	-1.39%
GTE -- CONTEL SO - ILLINOIS	IN	(4)	(3)	(1)	25.00%
GTE -- NO - CONTEL INDIANA	IN	794	804	(10)	-1.26%
GTE -- NO - INDIANA	IN	2,792	2,945	(153)	-5.48%
AMERITECH - INDIANA BELL	IN	(4,011)	(4,105)	94	-2.34%
SPRINT -- UTC OF INDIANA	IN	78	74	4	5.13%
GTE -- MD - CONTEL SYSTEMS OF IOWA	IA	152	156	(3)	-1.97%
GTE -- MD - CONTEL - IOWA	IA	1,484	1,498	(15)	-1.01%
GTE -- MD - IOWA	IA	252	280	(28)	-11.11%
US WEST -- IOWA	IA	6,570	6,246	324	4.93%
SOUTHWESTERN BELL - KANSAS	KS	(503)	(308)	(195)	38.77%
BELLSOUTH - KENTUCKY	KY	25,509	25,576	(65)	-0.25%
GTE -- SO - CONTEL - KENTUCKY	KY	5,827	5,821	6	0.10%
GTE -- SO - KENTUCKY	KY	17,150	17,197	(47)	-0.27%
BELLSOUTH - LOUISIANA	LA	68,628	68,652	(25)	-0.04%
BELL ATLANTIC - NEW ENGLAND - MA	MA	3,612	5,475	(1,863)	-51.58%
BELL ATLANTIC - MARYLAND	MD	52,386	52,935	(549)	-1.05%
BELL ATLANTIC - NEW ENGLAND - ME	ME	(128)	(132)	4	-3.13%
GTE -- CONTEL - MICHIGAN	MI	1,820	1,828	(8)	-0.44%
GTE -- NO - MICHIGAN	MI	40,066	40,131	(64)	-0.16%
AMERITECH - MICHIGAN BELL	MI	(17,988)	(18,370)	382	-2.12%
US WEST -- MINNESOTA	MN	14,510	14,147	364	2.51%
BELLSOUTH - MISSISSIPPI	MS	38,799	38,826	(25)	-0.06%
GTE -- MD - CONTEL OF EASTERN MO	MO	521	520	1	0.19%
GTE -- MD - CONTEL OF SYS MO	MO	3,334	3,342	(8)	-0.24%
GTE -- MD - CONTEL MISSOURI	MO	26,902	27,021	(118)	-0.44%
GTE -- MD - MISSOURI	MO	9,592	9,654	(62)	-0.65%
SOUTHWESTERN BELL - MISSOURI	MO	1,527	1,205	322	21.09%
SPRINT -- UTC OF MISSOURI	MO	1,526	1,581	(55)	-3.60%
US WEST -- MONTANA	MT	(3,732)	(3,738)	7	-0.19%
ALIANT TELECOMMUNICATIONS CO.	NE	876	697	179	20.43%
GTE -- MD - NEBRASKA	NE	2,759	2,764	(5)	-0.18%
US WEST -- NEBRASKA	NE	4,462	4,318	144	3.23%

TABLE 11.10
TOTAL NON-OPERATING ITEMS
($000) -- 1997

	State Code	Subject to Separations	Intrastate	Interstate	Percent Interstate
GTE -- CONTEL NEVADA	NV	612	612	0	0.00%
SBC - NEVADA BELL	NV	(8,123)	(5,566)	(2,557)	31.48%
SPRINT -- CENTEL OF NEVADA	NV	(482)	(185)	(297)	61.62%
BELL ATLANTIC - NEW ENGLAND - NH	NH	1,153	1,393	(240)	-20.82%
BELL ATLANTIC - NEW JERSEY	NJ	236,912	238,461	(1,549)	-0.65%
SPRINT -- UTC OF NEW JERSEY	NJ	(99)	(68)	(31)	31.31%
GTE -- SW - CONTEL - NEW MEXICO	NM	(1)	9	(10)	1000.00%
GTE -- SW - NEW MEXICO	NM	(163)	(141)	(22)	13.50%
US WEST -- NEW MEXICO	NM	646	645	0	0.00%
BELL ATLANTIC - NEW YORK	NY	148,964	152,580	(3,616)	-2.43%
CITIZENS TELECOM -- RED HOOK	NY	(115)	(75)	(41)	35.65%
CITIZENS TELECOM -- UPSTATE	NY	(1,007)	(781)	(226)	22.44%
CITIZENS TELECOM -- W. COUNTIES	NY	(185)	(137)	(48)	25.95%
FRONTIER OF ROCHESTER	NY	1,144	1,436	(292)	-25.52%
BELLSOUTH - NORTH CAROLINA	NC	39,980	40,058	(79)	-0.20%
SPRINT -- CAROLINA TEL & TEL OF NC	NC	(352)	(322)	(29)	8.24%
SPRINT -- CENTEL OF NORTH CAROLINA	NC	(88)	(74)	(15)	17.05%
GTE -- SO - CONTEL - NORTH CAROLINA	NC	4,936	4,922	13	0.26%
GTE -- SO - NORTH CAROLINA	NC	8,761	8,747	14	0.16%
US WEST -- NORTH DAKOTA	ND	3,365	3,285	80	2.38%
CINCINNATI BELL TELEPHONE CO.	OH	7,548	7,760	(213)	-2.82%
GTE - NO - OHIO	OH	6,127	6,141	(14)	-0.23%
AMERITECH - OHIO BELL	OH	1,142	1,364	(222)	-19.44%
GTE -- NO - WESTERN RESERVE - OHIO	OH	(202)	(153)	(47)	23.27%
SPRINT -- UTC OF OHIO	OH	609	637	(28)	-4.60%
GTE -- SW - OKLAHOMA	OK	6,043	6,038	5	0.08%
SOUTHWESTERN BELL - OKLAHOMA	OK	553	473	80	14.47%
GTE -- NW - OREGON	OR	1,281	1,330	(49)	-3.83%
US WEST -- OREGON	OR	(7,044)	(6,982)	(62)	0.88%
SPRINT -- UTC OF THE NW - OREGON	OR	(38)	(27)	(11)	28.95%
ALLTEL - PENNSYLVANIA	PA	(124)	(96)	(28)	22.58%
BELL ATLANTIC OF PENNSYLVANIA	PA	145,606	146,536	(930)	-0.64%
GTE -- NO - CONTEL - PENNSYLANIA	PA	2,716	2,713	3	0.11%
GTE -- NO - CONTEL - QUAKER STATE	PA	2,233	2,227	6	0.27%
GTE -- NO - PENNSYLVANIA	PA	27,623	27,582	41	0.15%
SPRINT -- UTC OF PENNSYLVANIA	PA	(309)	(247)	(62)	20.06%
PUERTO RICO TEL CO	PR	0	0	0	0.00%
PUERTO RICO TEL CO - CENTRAL	PR	0	0	0	0.00%
BELL ATLANTIC - NEW ENGLAND - RI	RI	6,831	6,878	(47)	-0.69%
BELLSOUTH - SOUTH CAROLINA	SC	44,939	44,486	453	1.01%
GTE -- SO - CONTEL - SOUTH CAROLINA	SC	602	600	2	0.33%
GTE -- SO - CAROLINA	SC	2,052	2,044	7	0.34%
US WEST -- SOUTH DAKOTA	SD	4,730	4,665	65	1.37%
BELLSOUTH - TENNESSEE	TN	25,718	25,725	(7)	-0.03%
SPRINT -- UTC -- SE - TENNESSEE	TN	(856)	(896)	41	-4.79%
GTE -- SW - CONTEL - TEXAS	TX	12,632	12,646	(15)	-0.12%
GTE -- SW - TEXAS	TX	45,134	45,416	(283)	-0.63%
SOUTHWESTERN BELL - TEXAS	TX	(9,562)	(6,734)	(2,828)	29.58%
SPRINT -- UTC OF TEXAS	TX	14	13	1	7.14%
US WEST -- UTAH	UT	5,796	5,622	174	3.00%
BELL ATLANTIC - VIRGINIA	VA	112,262	113,198	(936)	-0.83%
SPRINT -- CENTEL OF VIRGINIA	VA	(279)	(229)	(50)	17.92%
GTE -- SO - CONTEL - VIRGINIA	VA	(729)	(798)	68	-9.33%
GTE -- SO - VIRGINIA	VA	560	556	4	0.71%
SPRINT -- UTC -- SE - VIRGINIA	VA	(646)	(608)	(38)	5.88%
BELL ATLANTIC - NEW ENGLAND - VT	VT	7,565	7,580	(15)	-0.20%
GTE -- NW - CONTEL - WASHINGTON	WA	(1,509)	(1,506)	(3)	0.20%
GTE -- NW - WASHINGTON	WA	(15,350)	(15,243)	(107)	0.70%
US WEST -- WASHINGTON	WA	(11,665)	(11,883)	217	-1.86%
SPRINT -- UTC OF THE NW - WA	WA	(35)	(26)	(8)	22.86%
BELL ATLANTIC - WEST VIRGINIA	WV	9,058	9,034	23	0.25%
GTE -- NO - WISCONSIN	WI	19,280	19,449	(170)	-0.88%
AMERITECH - WISCONSIN BELL	WI	(5,153)	(5,288)	135	-2.62%
US WEST -- WYOMING	WY	(818)	(524)	(294)	35.94%

TABLE 11.11
FEDERAL INCOME TAXES
($000) -- 1997

STUDY AREA	State Code	Subject to Separations	Intrastate	Interstate	Percent Interstate
ALL REPORTING LOCAL EXCHANGE COS.		$5,723,851	$3,594,393	$2,093,485	36.57%
BELL OPERATING COS.		4,024,718	2,514,524	1,509,158	37.50%
OTER REPORTING LOCAL EXCHANGE COS.		1,699,133	1,079,869	584,327	34.39%
BELLSOUTH - ALABAMA	AL	90,796	67,430	23,373	25.74%
GTE -- CONTEL SO - ALABAMA	AL	4,559	1,528	1,682	36.89%
GTE -- SO - ALABAMA	AL	11,127	2,182	4,792	43.07%
GTE -- CONTEL - ARIZONA	AZ	1,064	665	271	25.47%
US WEST -- ARIZONA	AZ	68,228	25,981	42,075	61.67%
GTE -- SW - ARKANSAS	AR	8,302	3,607	2,131	25.67%
SOUTHWESTERN BELL - ARKANSAS	AR	40,716	31,013	9,690	23.80%
GTE -- CALIFORNIA	CA	237,275	179,016	58,261	24.55%
GTE -- CONTEL - CALIFORNIA	CA	27,031	18,877	7,338	27.15%
GTE -- NW - WEST COAST OF CA	CA	1,606	1,065	288	17.93%
SBC -- PACIFIC BELL - CALIFORNIA	CA	(6,949)	(102,905)	95,955	-1380.85%
US WEST -- COLORADO	CO	112,218	70,709	41,295	36.80%
SOUTHERN NEW ENGLAND TEL. - CT	CT	61,875	33,527	29,361	47.45%
BELL ATLANTIC - DISTRICT OF COLUMBIA	DC	35,146	19,497	15,650	44.53%
BELL ATLANTIC - DELAWARE	DE	17,610	9,845	7,766	44.10%
BELLSOUTH - FLORIDA	FL	183,851	93,782	90,028	48.97%
GTE -- FLORIDA	FL	103,348	60,438	41,897	40.54%
SPRINT -- FLORIDA	FL	81,619	48,899	32,721	40.09%
ALLTEL - GEORGIA	GA	24,611	19,854	3,433	13.95%
BELLSOUTH - GEORGIA	GA	190,586	122,919	67,703	35.52%
GTE -- HAWAIIAN TELEPHONE	HI	28,607	15,753	12,843	44.89%
GTE -- NW - IDAHO	ID	13,045	2,558	6,786	52.02%
US WEST -- IDAHO	ID	19,972	12,117	7,815	39.13%
US WEST -- IDAHO	ID	1,248	629	615	49.28%
SPRINT -- CENTEL OF ILLINOIS	IL	12,706	9,738	2,968	23.36%
GTE -- NO - CONTEL ILLINOIS	IL	15,273	10,105	5,167	33.83%
GTE -- NO - ILLINOIS	IL	47,075	29,824	17,250	36.64%
GTE -- SO - ILLINOIS	IL	2,635	2,071	564	21.40%
AMERITECH - ILLINOIS BELL	IL	309,966	249,016	60,966	19.67%
GTE -- CONTEL SO - ILLINOIS	IN	444	400	38	8.56%
GTE -- NO - CONTEL INDIANA	IN	13,560	9,725	3,834	28.27%
GTE -- NO - INDIANA	IN	60,212	41,852	18,359	30.49%
AMERITECH - INDIANA BELL	IN	137,601	99,409	38,193	27.76%
SPRINT -- UTC OF INDIANA	IN	13,716	9,560	4,156	30.30%
GTE -- MD - CONTEL SYSTEMS OF IOWA	IA	3,761	1,401	2,360	62.75%
GTE -- MD - CONTEL - IOWA	IA	4,291	2,453	1,840	42.88%
GTE -- MD - IOWA	IA	6,679	3,731	2,948	44.14%
US WEST -- IOWA	IA	25,681	16,684	8,910	34.69%
SOUTHWESTERN BELL - KANSAS	KS	34,839	25,924	8,906	25.56%
BELLSOUTH - KENTUCKY	KY	55,116	38,207	16,903	30.67%
GTE -- SO - CONTEL - KENTUCKY	KY	3,792	171	941	24.82%
GTE -- SO - KENTUCKY	KY	29,150	17,583	11,249	38.59%
BELLSOUTH - LOUISIANA	LA	89,353	64,393	24,954	27.93%
BELL ATLANTIC - NEW ENGLAND - MA	MA	154,487	85,165	69,354	44.89%
BELL ATLANTIC - MARYLAND	MD	128,167	88,976	39,192	30.58%
BELL ATLANTIC - NEW ENGLAND - ME	ME	32,513	22,866	9,650	29.68%
GTE -- CONTEL - MICHIGAN	MI	1,841	1,022	819	44.49%
GTE -- NO - MICHIGAN	MI	38,142	24,713	12,265	32.16%
AMERITECH - MICHIGAN BELL	MI	337,655	270,530	67,125	19.88%
US WEST -- MINNESOTA	MN	89,708	54,168	35,387	39.45%
BELLSOUTH - MISSISSIPPI	MS	60,980	49,128	11,860	19.45%
GTE -- MD - CONTEL OF EASTERN MO	MO	(502)	(385)	(117)	23.31%
GTE -- MD - CONTEL OF SYS MO	MO	2,582	(83)	1,250	48.41%
GTE -- MD - CONTEL MISSOURI	MO	2,461	(3,214)	3,269	132.83%
GTE -- MD - MISSOURI	MO	1,534	(1,201)	2,222	144.85%
SOUTHWESTERN BELL - MISSOURI	MO	58,649	32,788	25,833	44.05%
SPRINT -- UTC OF MISSOURI	MO	14,953	9,146	5,807	38.84%
US WEST -- MONTANA	MT	10,330	7,570	2,726	26.39%
ALIANT TELECOMMUNICATIONS CO.	NE	17,159	14,911	2,248	13.10%
GTE -- MD - NEBRASKA	NE	2,452	1,099	1,353	55.18%
US WEST -- NEBRASKA	NE	26,516	19,403	7,058	26.62%

TABLE 11.11
FEDERAL INCOME TAXES
($000) -- 1997

	State Code	Subject to Separations	Intrastate	Interstate	Percent Interstate
GTE -- CONTEL NEVADA	NV	3,132	1,568	1,564	49.94%
SBC - NEVADA BELL	NV	1,636	(3,224)	4,860	297.07%
SPRINT -- CENTEL OF NEVADA	NV	13,506	5,015	8,490	62.86%
BELL ATLANTIC - NEW ENGLAND - NH	NH	53,158	30,486	22,681	42.67%
BELL ATLANTIC - NEW JERSEY	NJ	142,510	52,224	90,286	63.35%
SPRINT -- UTC OF NEW JERSEY	NJ	11,564	8,405	3,159	27.32%
GTE -- SW - CONTEL - NEW MEXICO	NM	4,816	1,294	1,555	32.29%
GTE -- SW - NEW MEXICO	NM	3,546	2,235	1,307	36.86%
US WEST -- NEW MEXICO	NM	44,282	30,126	14,092	31.82%
BELL ATLANTIC - NEW YORK	NY	178,292	101,118	77,334	43.37%
CITIZENS TELECOM -- RED HOOK	NY	579	383	196	33.85%
CITIZENS TELECOM -- UPSTATE	NY	5,602	489	5,012	89.47%
CITIZENS TELECOM -- W. COUNTIES	NY	1,385	51	402	29.03%
FRONTIER OF ROCHESTER	NY	35,469	26,569	8,900	25.09%
BELLSOUTH - NORTH CAROLINA	NC	123,617	83,847	39,782	32.18%
SPRINT -- CAROLINA TEL & TEL OF NC	NC	40,766	28,690	12,076	29.62%
SPRINT -- CENTEL OF NORTH CAROLINA	NC	10,321	7,225	3,096	30.00%
GTE -- SO ; CONTEL - NORTH CAROLINA	NC	4,761	750	1,774	37.26%
GTE -- SO - NORTH CAROLINA	NC	8,945	2,689	6,255	69.93%
US WEST -- NORTH DAKOTA	ND	11,830	7,609	4,193	35.44%
CINCINNATI BELL TELEPHONE CO.	OH	43,903	30,027	13,864	31.58%
GTE - NO - OHIO	OH	64,790	45,426	19,361	29.88%
AMERITECH - OHIO BELL	OH	148,815	109,004	39,812	26.75%
GTE -- NO - WESTERN RESERVE - OHIO	OH	8,315	6,644	1,576	18.95%
SPRINT -- UTC OF OHIO	OH	31,014	25,552	5,462	17.61%
GTE -- SW - OKLAHOMA	OK	2,606	(467)	2,236	85.80%
SOUTHWESTERN BELL - OKLAHOMA	OK	36,478	25,237	11,227	30.78%
GTE -- NW - OREGON	OR	37,394	21,434	15,957	42.67%
US WEST -- OREGON	OR	40,166	23,619	16,560	41.23%
SPRINT -- UTC OF THE NW - OREGON	OR	4,440	1,954	2,486	55.99%
ALLTEL - PENNSYLVANIA	PA	9,107	6,680	1,593	17.49%
BELL ATLANTIC OF PENNSYLVANIA	PA	148,371	77,435	70,936	47.81%
GTE -- NO - CONTEL - PENNSYLANIA	PA	5,318	3,429	1,888	35.50%
GTE -- NO - CONTEL - QUAKER STATE	PA	1,499	990	508	33.89%
GTE -- NO - PENNSYLVANIA	PA	25,098	11,895	13,194	52.57%
SPRINT -- UTC OF PENNSYLVANIA	PA	14,499	10,632	3,867	26.67%
PUERTO RICO TEL CO	PR	140,104	107,270	32,834	23.44%
PUERTO RICO TEL CO - CENTRAL	PR	17,383	8,005	9,378	53.95%
BELL ATLANTIC - NEW ENGLAND - RI	RI	30,709	15,536	15,182	49.44%
BELLSOUTH - SOUTH CAROLINA	SC	41,496	25,592	15,989	38.53%
GTE -- SO - CONTEL - SOUTH CAROLINA	SC	1,120	328	791	70.63%
GTE -- SO - CAROLINA	SC	10,179	5,241	4,105	40.33%
US WEST -- SOUTH DAKOTA	SD	10,999	7,159	3,812	34.66%
BELLSOUTH - TENNESSEE	TN	146,564	103,486	43,079	29.39%
SPRINT -- UTC -- SE - TENNESSEE	TN	8,117	4,603	3,514	43.29%
GTE -- SW - CONTEL - TEXAS	TX	(760)	(5,635)	4,302	-566.05%
GTE -- SW - TEXAS	TX	87,875	53,986	32,450	36.93%
SOUTHWESTERN BELL - TEXAS	TX	264,590	205,555	58,963	22.28%
SPRINT -- UTC OF TEXAS	TX	2,678	1,410	1,268	47.35%
US WEST -- UTAH	UT	39,591	18,226	21,281	53.75%
BELL ATLANTIC - VIRGINIA	VA	112,699	64,842	47,857	42.46%
SPRINT -- CENTEL OF VIRGINIA	VA	13,001	9,790	3,211	24.70%
GTE -- SO - CONTEL - VIRGINIA	VA	37,226	19,670	17,554	47.16%
GTE -- SO - VIRGINIA	VA	884	(490)	811	91.74%
SPRINT -- UTC -- SE - VIRGINIA	VA	5,959	4,114	1,845	30.96%
BELL ATLANTIC - NEW ENGLAND - VT	VT	16,387	10,142	6,247	38.12%
GTE -- NW - CONTEL - WASHINGTON	WA	7,794	3,875	2,874	36.87%
GTE -- NW - WASHINGTON	WA	52,238	33,572	18,452	35.32%
US WEST -- WASHINGTON	WA	(20,542)	(54,288)	33,543	-163.29%
SPRINT -- UTC OF THE NW - WA	WA	4,772	1,840	2,932	61.44%
BELL ATLANTIC - WEST VIRGINIA	WV	37,848	25,014	12,834	33.91%
GTE -- NO - WISCONSIN	WI	20,203	10,140	9,634	47.69%
AMERITECH - WISCONSIN BELL	WI	99,666	75,886	23,779	23.86%
US WEST -- WYOMING	WY	10,573	4,649	5,847	55.30%

TABLE 11.12
TOTAL OTHER TAXES
($000) -- 1997

STUDY AREA	State Code	Subject to Separations	Intrastate	Interstate	Percent Interstate
ALL REPORTING LOCAL EXCHANGE COS.		$5,281,747	$4,010,632	$1,265,719	23.96%
BELL OPERATING COS.		4,243,914	3,228,262	1,015,649	23.93%
OTER REPORTING LOCAL EXCHANGE COS.		1,037,833	782,370	250,070	24.10%
BELLSOUTH - ALABAMA	AL	46,403	34,591	11,811	25.45%
GTE -- CONTEL SO - ALABAMA	AL	2,481	1,804	546	22.01%
GTE -- SO - ALABAMA	AL	4,376	2,785	1,184	27.06%
GTE -- CONTEL - ARIZONA	AZ	725	438	250	34.48%
US WEST -- ARIZONA	AZ	106,075	69,656	36,419	34.33%
GTE -- SW - ARKANSAS	AR	3,286	1,961	816	24.83%
SOUTHWESTERN BELL - ARKANSAS	AR	25,491	20,760	4,731	18.56%
GTE -- CALIFORNIA	CA	116,709	91,194	25,515	21.86%
GTE -- CONTEL - CALIFORNIA	CA	14,944	10,980	3,738	25.01%
GTE -- NW - WEST COAST OF CA	CA	689	462	157	22.79%
SBC -- PACIFIC BELL - CALIFORNIA	CA	187,634	120,180	67,454	35.95%
US WEST -- COLORADO	CO	77,951	55,008	22,945	29.44%
SOUTHERN NEW ENGLAND TEL. - CT	CT	65,222	42,855	22,367	34.29%
BELL ATLANTIC - DISTRICT OF COLUMBIA	DC	54,612	42,299	12,312	22.54%
BELL ATLANTIC - DELAWARE	DE	10,579	6,684	3,895	36.82%
BELLSOUTH - FLORIDA	FL	197,757	148,102	49,655	25.11%
GTE -- FLORIDA	FL	90,021	69,017	20,835	23.14%
SPRINT -- FLORIDA	FL	53,925	40,108	13,817	25.62%
ALLTEL - GEORGIA	GA	9,179	6,999	2,178	23.73%
BELLSOUTH - GEORGIA	GA	106,331	80,488	25,843	24.30%
GTE -- HAWAIIAN TELEPHONE	HI	24,673	16,153	8,517	34.52%
GTE -- NW - IDAHO	ID	5,363	2,159	2,285	42.61%
US WEST -- IDAHO	ID	15,567	10,244	5,322	34.19%
US WEST -- IDAHO	ID	401	331	70	17.46%
SPRINT -- CENTEL OF ILLINOIS	IL	5,479	4,329	1,151	21.01%
GTE -- NO - CONTEL ILLINOIS	IL	(110)	(449)	339	-308.18%
GTE -- NO - ILLINOIS	IL	23,460	17,166	6,294	26.83%
GTE -- SO - ILLINOIS	IL	1,178	998	180	15.28%
AMERITECH - ILLINOIS BELL	IL	147,491	114,541	32,950	22.34%
GTE -- CONTEL SO - ILLINOIS	IN	289	219	68	23.53%
GTE -- NO - CONTEL INDIANA	IN	6,209	4,590	1,619	26.08%
GTE -- NO - INDIANA	IN	29,438	21,642	7,796	26.48%
AMERITECH - INDIANA BELL	IN	65,401	48,419	16,982	25.97%
SPRINT -- UTC OF INDIANA	IN	6,748	4,946	1,801	26.69%
GTE -- MD - CONTEL SYSTEMS OF IOWA	IA	3,816	2,439	1,377	36.08%
GTE -- MD - CONTEL - IOWA	IA	5,054	3,639	1,416	28.02%
GTE -- MD - IOWA	IA	7,603	5,373	2,230	29.33%
US WEST -- IOWA	IA	33,877	23,280	10,597	31.28%
SOUTHWESTERN BELL - KANSAS	KS	63,705	48,567	15,138	23.76%
BELLSOUTH - KENTUCKY	KY	33,113	26,074	7,039	21.26%
GTE -- SO - CONTEL - KENTUCKY	KY	2,835	1,467	680	23.99%
GTE -- SO - KENTUCKY	KY	15,447	10,626	4,739	30.68%
BELLSOUTH - LOUISIANA	LA	81,090	62,170	18,920	23.33%
BELL ATLANTIC - NEW ENGLAND - MA	MA	101,016	64,548	36,468	36.10%
BELL ATLANTIC - MARYLAND	MD	138,689	99,994	38,695	27.90%
BELL ATLANTIC - NEW ENGLAND - ME	ME	28,659	20,845	7,814	27.27%
GTE -- CONTEL - MICHIGAN	MI	1,831	1,399	432	23.59%
GTE -- NO - MICHIGAN	MI	23,271	18,045	5,226	22.46%
AMERITECH - MICHIGAN BELL	MI	140,531	108,983	31,548	22.45%
US WEST -- MINNESOTA	MN	24,836	14,894	9,942	40.03%
BELLSOUTH - MISSISSIPPI	MS	64,048	48,568	15,480	24.17%
GTE -- MD - CONTEL OF EASTERN MO	MO	116	84	32	27.59%
GTE -- MD - CONTEL OF SYS MO	MO	2,106	1,290	593	28.16%
GTE -- MD - CONTEL MISSOURI	MO	6,504	4,200	1,926	29.61%
GTE -- MD - MISSOURI	MO	4,518	3,350	1,087	24.06%
SOUTHWESTERN BELL - MISSOURI	MO	104,813	88,983	15,830	15.10%
SPRINT -- UTC OF MISSOURI	MO	8,508	6,397	2,111	24.81%
US WEST -- MONTANA	MT	23,444	17,055	6,389	27.25%
ALIANT TELECOMMUNICATIONS CO.	NE	7,424	6,008	1,417	19.09%
GTE -- MD - NEBRASKA	NE	1,420	897	522	36.76%
US WEST -- NEBRASKA	NE	21,544	17,285	4,259	19.77%

TABLE 11.12
TOTAL OTHER TAXES
($000) -- 1997

	State Code	Subject to Separations	Intrastate	Interstate	Percent Interstate
GTE -- CONTEL NEVADA	NV	556	320	236	42.45%
SBC - NEVADA BELL	NV	6,218	4,994	1,224	19.68%
SPRINT -- CENTEL OF NEVADA	NV	6,765	5,373	1,392	20.58%
BELL ATLANTIC - NEW ENGLAND - NH	NH	6,263	3,413	2,850	45.51%
BELL ATLANTIC - NEW JERSEY	NJ	198,071	161,315	36,755	18.56%
SPRINT -- UTC OF NEW JERSEY	NJ	2,898	2,120	778	26.85%
GTE -- SW - CONTEL - NEW MEXICO	NM	2,181	1,091	627	28.75%
GTE -- SW - NEW MEXICO	NM	1,557	984	572	36.74%
US WEST -- NEW MEXICO	NM	22,326	17,042	5,283	23.66%
BELL ATLANTIC - NEW YORK	NY	648,733	470,757	177,975	27.43%
CITIZENS TELECOM -- RED HOOK	NY	446	286	159	35.65%
CITIZENS TELECOM -- UPSTATE	NY	9,698	7,317	2,381	24.55%
CITIZENS TELECOM -- W. COUNTIES	NY	1,143	843	300	26.25%
FRONTIER OF ROCHESTER	NY	22,228	18,904	3,324	14.95%
BELLSOUTH - NORTH CAROLINA	NC	70,745	57,025	13,720	19.39%
SPRINT -- CAROLINA TEL & TEL OF NC	NC	29,331	24,096	5,235	17.85%
SPRINT -- CENTEL OF NORTH CAROLINA	NC	7,652	6,321	1,332	17.41%
GTE -- SO - CONTEL - NORTH CAROLINA	NC	751	(667)	901	119.97%
GTE -- SO - NORTH CAROLINA	NC	8,702	7,106	1,596	18.34%
US WEST -- NORTH DAKOTA	ND	5,420	3,471	1,949	35.96%
CINCINNATI BELL TELEPHONE CO.	OH	45,461	38,906	6,556	14.42%
GTE - NO - OHIO	OH	31,985	25,651	6,334	19.80%
AMERITECH - OHIO BELL	OH	181,839	151,334	30,505	16.78%
GTE -- NO - WESTERN RESERVE - OHIO	OH	9,864	8,132	1,732	17.56%
SPRINT -- UTC OF OHIO	OH	28,837	24,208	4,629	16.05%
GTE -- SW - OKLAHOMA	OK	3,398	2,115	1,131	33.28%
SOUTHWESTERN BELL - OKLAHOMA	OK	49,670	38,775	10,895	21.93%
GTE -- NW - OREGON	OR	16,248	11,382	4,866	29.95%
US WEST -- OREGON	OR	38,897	25,134	13,763	35.38%
SPRINT -- UTC OF THE NW - OREGON	OR	1,715	988	727	42.39%
ALLTEL - PENNSYLVANIA	PA	7,889	6,957	933	11.83%
BELL ATLANTIC OF PENNSYLVANIA	PA	193,509	157,816	35,693	18.45%
GTE -- NO - CONTEL - PENNSYLANIA	PA	1,426	1,013	413	28.96%
GTE -- NO - CONTEL - QUAKER STATE	PA	452	390	62	13.72%
GTE -- NO - PENNSYLVANIA	PA	18,786	14,115	4,669	24.85%
SPRINT -- UTC OF PENNSYLVANIA	PA	15,079	12,742	2,337	15.50%
PUERTO RICO TEL CO	PR	50,562	37,729	12,832	25.38%
PUERTO RICO TEL CO - CENTRAL	PR	4,883	3,719	1,164	23.84%
BELL ATLANTIC - NEW ENGLAND - RI	RI	31,825	21,493	10,333	32.47%
BELLSOUTH - SOUTH CAROLINA	SC	45,124	35,201	9,922	21.99%
GTE -- SO - CONTEL - SOUTH CAROLINA	SC	792	482	309	39.02%
GTE -- SO - CAROLINA	SC	12,009	8,741	3,143	26.17%
US WEST -- SOUTH DAKOTA	SD	6,260	4,242	2,019	32.25%
BELLSOUTH - TENNESSEE	TN	88,344	68,483	19,861	22.48%
SPRINT -- UTC -- SE - TENNESSEE	TN	5,917	4,349	1,568	26.50%
GTE -- SW - CONTEL - TEXAS	TX	6,000	4,768	1,232	20.53%
GTE -- SW - TEXAS	TX	40,046	30,072	9,974	24.91%
SOUTHWESTERN BELL - TEXAS	TX	405,439	352,850	52,589	12.97%
SPRINT -- UTC OF TEXAS	TX	5,066	4,059	1,008	19.90%
US WEST -- UTAH	UT	31,790	23,525	8,265	26.00%
BELL ATLANTIC - VIRGINIA	VA	83,018	57,845	25,174	30.32%
SPRINT -- CENTEL OF VIRGINIA	VA	5,987	4,503	1,484	24.79%
GTE -- SO - CONTEL - VIRGINIA	VA	15,681	10,393	5,288	33.72%
GTE -- SO - VIRGINIA	VA	1,192	690	399	33.47%
SPRINT -- UTC -- SE - VIRGINIA	VA	2,629	1,925	704	26.78%
BELL ATLANTIC - NEW ENGLAND - VT	VT	12,553	8,738	3,815	30.39%
GTE -- NW - CONTEL - WASHINGTON	WA	2,106	1,688	418	19.85%
GTE -- NW - WASHINGTON	WA	21,552	19,201	2,352	10.91%
US WEST -- WASHINGTON	WA	80,575	69,693	10,882	13.51%
SPRINT -- UTC OF THE NW - WA	WA	1,854	1,282	572	30.85%
BELL ATLANTIC - WEST VIRGINIA	WV	43,177	34,128	9,049	20.96%
GTE -- NO - WISCONSIN	WI	31,772	22,506	9,160	28.83%
AMERITECH - WISCONSIN BELL	WI	89,863	65,939	23,924	26.62%
US WEST -- WYOMING	WY	3,197	2,500	696	21.77%

TABLE 11.13
TOTAL PLANT INVESTMENT
($000) -- 1997

STUDY AREA	State Code	Subject to Separations	Intrastate	Interstate	Percent Interstate
ALL REPORTING LOCAL EXCHANGE COS.		$291,410,228	$216,074,233	$75,336,000	25.85%
BELL OPERATING COS.		228,953,413	168,262,529	60,690,886	26.51%
OTER REPORTING LOCAL EXCHANGE COS.		62,456,815	47,811,704	14,645,114	23.45%
BELLSOUTH - ALABAMA	AL	4,431,705	3,324,622	1,107,083	24.98%
GTE -- CONTEL SO - ALABAMA	AL	260,314	200,715	59,599	22.90%
GTE -- SO - ALABAMA	AL	348,603	263,169	85,433	24.51%
GTE -- CONTEL - ARIZONA	AZ	19,010	10,896	8,114	42.68%
US WEST -- ARIZONA	AZ	4,379,451	3,249,688	1,129,764	25.80%
GTE -- SW - ARKANSAS	AR	239,687	182,296	57,391	23.94%
SOUTHWESTERN BELL - ARKANSAS	AR	1,908,007	1,395,540	512,467	26.86%
GTE -- CALIFORNIA	CA	8,431,437	6,860,712	1,570,725	18.63%
GTE -- CONTEL - CALIFORNIA	CA	859,129	662,406	196,723	22.90%
GTE -- NW - WEST COAST OF CA	CA	36,979	25,234	11,745	31.76%
SBC -- PACIFIC BELL - CALIFORNIA	CA	26,607,385	20,643,154	5,964,229	22.42%
US WEST -- COLORADO	CO	5,720,142	4,125,132	1,595,011	27.88%
SOUTHERN NEW ENGLAND TEL. - CT	CT	4,278,795	3,166,075	1,112,720	26.01%
BELL ATLANTIC - DISTRICT OF COLUMBIA	DC	1,496,092	1,000,219	495,873	33.14%
BELL ATLANTIC - DELAWARE	DE	775,238	533,279	241,959	31.21%
BELLSOUTH - FLORIDA	FL	10,856,260	8,081,845	2,774,415	25.56%
GTE -- FLORIDA	FL	4,116,685	3,159,721	956,964	23.25%
SPRINT -- FLORIDA	FL	3,343,808	2,481,537	862,271	25.79%
ALLTEL - GEORGIA	GA	688,742	527,508	161,232	23.41%
BELLSOUTH - GEORGIA	GA	8,220,973	6,081,137	2,139,836	26.03%
GTE -- HAWAIIAN TELEPHONE	HI	1,765,836	1,335,005	430,831	24.40%
GTE -- NW - IDAHO	ID	350,297	251,435	98,862	28.22%
US WEST -- IDAHO	ID	863,606	593,775	269,831	31.24%
US WEST -- IDAHO	ID	65,333	44,747	20,585	31.51%
SPRINT -- CENTEL OF ILLINOIS	IL	335,073	250,574	84,498	25.22%
GTE -- NO - CONTEL ILLINOIS	IL	383,924	294,975	88,949	23.17%
GTE -- NO - ILLINOIS	IL	1,366,047	1,048,324	317,723	23.26%
GTE -- SO - ILLINOIS	IL	95,379	69,148	26,231	27.50%
AMERITECH - ILLINOIS BELL	IL	8,946,651	6,723,076	2,223,575	24.85%
GTE -- CONTEL SO - ILLINOIS	IN	22,723	16,207	6,516	28.68%
GTE -- NO - CONTEL INDIANA	IN	326,403	248,302	78,102	23.93%
GTE -- NO - INDIANA	IN	1,562,684	1,195,500	367,184	23.50%
AMERITECH - INDIANA BELL	IN	3,198,090	2,378,618	819,472	25.62%
SPRINT -- UTC OF INDIANA	IN	461,564	347,861	113,703	24.63%
GTE -- MD - CONTEL SYSTEMS OF IOWA	IA	126,038	96,158	29,880	23.71%
GTE -- MD - CONTEL - IOWA	IA	183,540	142,394	41,146	22.42%
GTE -- MD - IOWA	IA	279,019	213,483	65,536	23.49%
US WEST -- IOWA	IA	1,855,533	1,283,883	571,650	30.81%
SOUTHWESTERN BELL - KANSAS	KS	2,284,367	1,603,570	680,797	29.80%
BELLSOUTH - KENTUCKY	KY	2,411,488	1,793,078	618,410	25.64%
GTE -- SO - CONTEL - KENTUCKY	KY	241,734	184,883	56,851	23.52%
GTE -- SO - KENTUCKY	KY	1,021,175	783,222	237,952	23.30%
BELLSOUTH - LOUISIANA	LA	4,434,992	3,360,986	1,074,009	24.22%
BELL ATLANTIC - NEW ENGLAND - MA	MA	7,980,233	5,712,269	2,267,964	28.42%
BELL ATLANTIC - MARYLAND	MD	5,531,859	3,977,090	1,554,769	28.11%
BELL ATLANTIC - NEW ENGLAND - ME	ME	1,367,435	1,001,973	365,461	26.73%
GTE -- CONTEL - MICHIGAN	MI	103,902	79,406	24,496	23.58%
GTE -- NO - MICHIGAN	MI	1,427,674	1,107,050	320,624	22.46%
AMERITECH - MICHIGAN BELL	MI	8,093,235	6,248,169	1,845,066	22.80%
US WEST -- MINNESOTA	MN	3,756,651	2,757,563	999,088	26.60%
BELLSOUTH - MISSISSIPPI	MS	2,919,689	2,183,657	736,032	25.21%
GTE -- MD - CONTEL OF EASTERN MO	MO	9,581	7,120	2,462	25.70%
GTE -- MD - CONTEL OF SYS MO	MO	132,083	101,248	30,835	23.35%
GTE -- MD - CONTEL MISSOURI	MO	725,462	558,006	167,456	23.08%
GTE -- MD - MISSOURI	MO	263,331	205,048	58,283	22.13%
SOUTHWESTERN BELL - MISSOURI	MO	4,978,254	3,525,448	1,452,806	29.18%
SPRINT -- UTC OF MISSOURI	MO	471,064	351,210	119,854	25.44%
US WEST -- MONTANA	MT	735,290	512,178	223,109	30.34%
ALIANT TELECOMMUNICATIONS CO.	NE	472,171	355,684	116,487	24.67%
GTE -- MD - NEBRASKA	NE	115,432	88,217	27,215	23.58%
US WEST -- NEBRASKA	NE	1,413,115	967,828	445,288	31.51%

TABLE 11.13
TOTAL PLANT INVESTMENT
($000) -- 1997

	State Code	Subject to Separations	Intrastate	Interstate	Percent Interstate
GTE -- CONTEL NEVADA	NV	67,446	38,570	28,875	42.81%
SBC - NEVADA BELL	NV	538,130	369,054	169,076	31.42%
SPRINT -- CENTEL OF NEVADA	NV	892,978	670,024	222,955	24.97%
BELL ATLANTIC - NEW ENGLAND - NH	NH	1,563,220	1,059,872	503,348	32.20%
BELL ATLANTIC - NEW JERSEY	NJ	9,224,054	6,425,830	2,798,224	30.34%
SPRINT -- UTC OF NEW JERSEY	NJ	301,975	223,236	78,739	26.07%
GTE -- SW - CONTEL - NEW MEXICO	NM	112,098	79,990	32,108	28.64%
GTE -- SW - NEW MEXICO	NM	98,491	62,434	36,057	36.61%
US WEST -- NEW MEXICO	NM	1,708,328	1,244,400	463,930	27.16%
BELL ATLANTIC - NEW YORK	NY	20,296,136	14,728,605	5,567,532	27.43%
CITIZENS TELECOM -- RED HOOK	NY	25,044	16,158	8,889	35.49%
CITIZENS TELECOM -- UPSTATE	NY	522,019	404,360	117,660	22.54%
CITIZENS TELECOM -- W. COUNTIES	NY	60,421	44,702	15,721	26.02%
FRONTIER OF ROCHESTER	NY	859,108	629,528	229,580	26.72%
BELLSOUTH - NORTH CAROLINA	NC	4,645,243	3,448,382	1,196,861	25.77%
SPRINT -- CAROLINA TEL & TEL OF NC	NC	1,881,938	1,432,737	449,201	23.87%
SPRINT -- CENTEL OF NORTH CAROLINA	NC	423,030	333,052	89,978	21.27%
GTE -- SO - CONTEL - NORTH CAROLINA	NC	267,410	202,109	65,301	24.42%
GTE -- SO - NORTH CAROLINA	NC	545,841	417,142	128,699	23.58%
US WEST -- NORTH DAKOTA	ND	478,435	316,282	162,153	33.89%
CINCINNATI BELL TELEPHONE CO.	OH	1,499,090	1,161,565	337,525	22.52%
GTE - NO - OHIO	OH	1,593,596	1,235,732	357,865	22.46%
AMERITECH - OHIO BELL	OH	5,971,916	4,496,667	1,475,249	24.70%
GTE -- NO - WESTERN RESERVE - OHIO	OH	339,866	260,392	79,474	23.38%
SPRINT -- UTC OF OHIO	OH	1,141,614	852,929	288,685	25.29%
GTE -- SW - OKLAHOMA	OK	267,841	201,583	66,257	24.74%
SOUTHWESTERN BELL - OKLAHOMA	OK	2,867,116	2,077,282	789,834	27.55%
GTE -- NW - OREGON	OR	892,785	656,702	236,082	26.44%
US WEST -- OREGON	OR	2,319,422	1,660,789	658,632	28.40%
SPRINT -- UTC OF THE NW - OREGON	OR	142,632	103,766	38,867	27.25%
ALLTEL - PENNSYLVANIA	PA	427,504	330,563	96,941	22.68%
BELL ATLANTIC OF PENNSYLVANIA	PA	9,398,393	6,795,857	2,602,536	27.69%
GTE -- NO - CONTEL - PENNSYLANIA	PA	94,892	74,886	20,006	21.08%
GTE -- NO - CONTEL - QUAKER STATE	PA	82,586	58,629	23,957	29.01%
GTE -- NO - PENNSYLVANIA	PA	984,836	758,046	226,790	23.03%
SPRINT -- UTC OF PENNSYLVANIA	PA	650,939	498,289	152,651	23.45%
PUERTO RICO TEL CO	PR	2,512,175	1,874,588	637,586	25.38%
PUERTO RICO TEL CO - CENTRAL	PR	295,359	224,944	70,415	23.84%
BELL ATLANTIC - NEW ENGLAND - RI	RI	928,835	665,790	263,045	28.32%
BELLSOUTH - SOUTH CAROLINA	SC	2,840,508	2,118,145	722,364	25.43%
GTE -- SO - CONTEL - SOUTH CAROLINA	SC	40,376	28,003	12,373	30.64%
GTE -- SO - CAROLINA	SC	378,239	287,495	90,744	23.99%
US WEST -- SOUTH DAKOTA	SD	587,795	392,085	195,709	33.30%
BELLSOUTH - TENNESSEE	TN	4,746,909	3,516,028	1,230,880	25.93%
SPRINT -- UTC -- SE - TENNESSEE	TN	416,279	317,604	98,675	23.70%
GTE -- SW - CONTEL - TEXAS	TX	611,817	486,105	125,711	20.55%
GTE -- SW - TEXAS	TX	3,732,526	2,801,922	930,603	24.93%
SOUTHWESTERN BELL - TEXAS	TX	17,282,129	12,624,004	4,658,125	26.95%
SPRINT -- UTC OF TEXAS	TX	352,948	269,128	83,819	23.75%
US WEST -- UTAH	UT	2,046,948	1,474,590	572,358	27.96%
BELL ATLANTIC - VIRGINIA	VA	5,613,993	4,023,601	1,590,392	28.33%
SPRINT -- CENTEL OF VIRGINIA	VA	577,380	439,553	137,827	23.87%
GTE -- SO - CONTEL - VIRGINIA	VA	1,036,573	786,079	250,495	24.17%
GTE -- SO - VIRGINIA	VA	86,474	64,951	21,523	24.89%
SPRINT -- UTC -- SE - VIRGINIA	VA	201,295	149,005	52,291	25.98%
BELL ATLANTIC - NEW ENGLAND - VT	VT	791,006	563,278	227,728	28.79%
GTE -- NW - CONTEL - WASHINGTON	WA	198,589	156,484	42,105	21.20%
GTE -- NW - WASHINGTON	WA	1,726,953	1,351,040	375,913	21.77%
US WEST -- WASHINGTON	WA	4,573,520	3,303,080	1,270,442	27.78%
SPRINT -- UTC OF THE NW - WA	WA	164,609	124,773	39,836	24.20%
BELL ATLANTIC - WEST VIRGINIA	WV	1,677,659	1,222,874	454,785	27.11%
GTE -- NO - WISCONSIN	WI	1,083,918	832,177	251,742	23.23%
AMERITECH - WISCONSIN BELL	WI	2,926,383	2,157,789	768,594	26.26%
US WEST -- WYOMING	WY	696,261	475,721	220,540	31.67%

TABLE 11.14
TOTAL OTHER INVESTMENT
($000) -- 1997

STUDY AREA	State Code	Subject to Separations	Intrastate	Interstate	Percent Interstate
ALL REPORTING LOCAL EXCHANGE COS.		$6,332,551	$5,014,402	$2,075,317	32.77%
BELL OPERATING COS.		4,779,601	3,773,114	1,239,934	25.94%
OTER REPORTING LOCAL EXCHANGE COS.		1,552,950	1,241,288	835,383	53.79%
BELLSOUTH - ALABAMA	AL	(59,976)	(80,135)	22,668	-37.80%
GTE -- CONTEL SO - ALABAMA	AL	2,269	1,736	1,546	68.14%
GTE -- SO - ALABAMA	AL	1,981	1,485	2,166	109.34%
GTE -- CONTEL - ARIZONA	AZ	118	73	22	18.64%
US WEST -- ARIZONA	AZ	175,057	152,453	28,581	16.33%
GTE -- SW - ARKANSAS	AR	1,433	1,078	1,365	95.25%
SOUTHWESTERN BELL - ARKANSAS	AR	122,389	118,953	(962)	-0.79%
GTE -- CALIFORNIA	CA	285,553	266,982	127,013	44.48%
GTE -- CONTEL - CALIFORNIA	CA	9,703	8,152	(1,029)	-10.60%
GTE -- NW - WEST COAST OF CA	CA	625	529	325	52.00%
SBC -- PACIFIC BELL - CALIFORNIA	CA	1,976,738	1,821,149	121,925	6.17%
US WEST -- COLORADO	CO	250,233	209,769	51,492	20.58%
SOUTHERN NEW ENGLAND TEL. - CT	CT	138,672	101,137	49,693	35.83%
BELL ATLANTIC - DISTRICT OF COLUMBIA	DC	16,901	11,813	4,432	26.22%
BELL ATLANTIC - DELAWARE	DE	16,982	14,174	1,711	10.08%
BELLSOUTH - FLORIDA	FL	77,864	52,134	30,142	38.71%
GTE -- FLORIDA	FL	47,665	35,920	53,072	111.34%
SPRINT -- FLORIDA	FL	91,017	67,487	37,282	40.96%
ALLTEL - GEORGIA	GA	33,898	25,929	9,008	26.57%
BELLSOUTH - GEORGIA	GA	(158,388)	(194,992)	38,681	-24.42%
GTE -- HAWAIIAN TELEPHONE	HI	39,717	30,052	51,563	129.83%
GTE -- NW - IDAHO	ID	8,222	7,634	2,663	32.39%
US WEST -- IDAHO	ID	13,081	10,823	4,594	35.12%
US WEST -- IDAHO	ID	4,669	4,490	420	9.00%
SPRINT -- CENTEL OF ILLINOIS	IL	3,315	2,622	(239)	-7.21%
GTE -- NO - CONTEL ILLINOIS	IL	4,549	3,477	3,598	79.09%
GTE -- NO - ILLINOIS	IL	20,387	15,587	37,242	182.68%
GTE -- SO - ILLINOIS	IL	27,152	19,692	157	0.58%
AMERITECH - ILLINOIS BELL	IL	211,818	186,368	86,779	40.97%
GTE -- CONTEL SO - ILLINOIS	IN	2,988	2,134	123	4.12%
GTE -- NO - CONTEL INDIANA	IN	2,817	2,135	2,290	81.29%
GTE -- NO - INDIANA	IN	22,252	16,946	20,318	91.31%
AMERITECH - INDIANA BELL	IN	20,475	12,916	12,706	62.06%
SPRINT -- UTC OF INDIANA	IN	7,254	5,664	6,115	84.30%
GTE -- MD - CONTEL SYSTEMS OF IOWA	IA	14,448	11,164	752	5.20%
GTE -- MD - CONTEL - IOWA	IA	2,806	2,399	734	26.16%
GTE -- MD - IOWA	IA	6,714	6,057	2,917	43.45%
US WEST -- IOWA	IA	5,125	1,295	9,018	175.96%
SOUTHWESTERN BELL - KANSAS	KS	72,904	64,357	(112)	-0.15%
BELLSOUTH - KENTUCKY	KY	(38,251)	(45,257)	9,355	-24.46%
GTE -- SO - CONTEL - KENTUCKY	KY	1,335	1,010	676	50.64%
GTE -- SO - KENTUCKY	KY	13,218	10,814	12,628	95.54%
BELLSOUTH - LOUISIANA	LA	368,673	359,444	10,457	2.84%
BELL ATLANTIC - NEW ENGLAND - MA	MA	257,344	182,982	83,228	32.34%
BELL ATLANTIC - MARYLAND	MD	(15,728)	(33,186)	21,103	-134.17%
BELL ATLANTIC - NEW ENGLAND - ME	ME	13,939	10,222	5,552	39.83%
GTE -- CONTEL - MICHIGAN	MI	22,633	17,446	486	2.13%
GTE -- NO - MICHIGAN	MI	17,792	13,682	36,224	203.60%
AMERITECH - MICHIGAN BELL	MI	67,581	52,045	41,273	61.07%
US WEST -- MINNESOTA	MN	71,861	54,694	29,751	41.40%
BELLSOUTH - MISSISSIPPI	MS	(45,357)	(52,452)	3,153	-6.95%
GTE -- MD - CONTEL OF EASTERN MO	MO	228	193	75	32.89%
GTE -- MD - CONTEL OF SYS MO	MO	1,010	791	444	43.96%
GTE -- MD - CONTEL MISSOURI	MO	15,612	13,196	5,434	34.81%
GTE -- MD - MISSOURI	MO	8,425	7,175	3,173	37.66%
SOUTHWESTERN BELL - MISSOURI	MO	130,983	113,247	10,452	7.98%
SPRINT -- UTC OF MISSOURI	MO	4,434	2,016	8,560	193.05%
US WEST -- MONTANA	MT	42,578	39,118	3,892	9.14%
ALIANT TELECOMMUNICATIONS CO.	NE	8,924	6,671	4,789	53.66%
GTE -- MD - NEBRASKA	NE	1,508	1,353	977	64.79%
US WEST -- NEBRASKA	NE	19,354	16,286	5,767	29.80%

TABLE 11.14
TOTAL OTHER INVESTMENT
($000) -- 1997

	State Code	Subject to Separations	Intrastate	Interstate	Percent Interstate
GTE -- CONTEL NEVADA	NV	457	282	97	21.23%
SBC - NEVADA BELL	NV	152	(5,346)	4,028	2650.00%
SPRINT -- CENTEL OF NEVADA	NV	44,732	34,412	15,532	34.72%
BELL ATLANTIC - NEW ENGLAND - NH	NH	28,591	19,500	8,738	30.56%
BELL ATLANTIC - NEW JERSEY	NJ	(204,108)	(242,067)	55,098	-26.99%
SPRINT -- UTC OF NEW JERSEY	NJ	7,895	5,844	5,051	63.98%
GTE -- SW - CONTEL - NEW MEXICO	NM	1,439	1,041	707	49.13%
GTE -- SW - NEW MEXICO	NM	1,438	944	1,066	74.13%
US WEST -- NEW MEXICO	NM	52,971	45,681	11,637	21.97%
BELL ATLANTIC - NEW YORK	NY	471,832	341,712	166,222	35.23%
CITIZENS TELECOM -- RED HOOK	NY	383	250	215	56.14%
CITIZENS TELECOM -- UPSTATE	NY	15,390	11,898	4,706	30.58%
CITIZENS TELECOM -- W. COUNTIES	NY	933	691	365	39.12%
FRONTIER OF ROCHESTER	NY	45,007	34,653	14,030	31.17%
BELLSOUTH - NORTH CAROLINA	NC	113,976	98,106	23,054	20.23%
SPRINT -- CAROLINA TEL & TEL OF NC	NC	22,175	16,836	19,201	86.59%
SPRINT -- CENTEL OF NORTH CAROLINA	NC	6,263	4,914	1,780	28.42%
GTE -- SO - CONTEL - NORTH CAROLINA	NC	2,171	1,635	920	42.38%
GTE -- SO - NORTH CAROLINA	NC	3,878	2,923	4,489	115.76%
US WEST -- NORTH DAKOTA	ND	2,601	1,748	2,818	108.34%
CINCINNATI BELL TELEPHONE CO.	OH	26,473	19,817	6,458	24.39%
GTE - NO - OHIO	OH	30,937	27,336	35,313	114.14%
AMERITECH - OHIO BELL	OH	79,420	59,864	38,494	48.47%
GTE -- NO - WESTERN RESERVE - OHIO	OH	12,223	9,335	3,438	28.13%
SPRINT -- UTC OF OHIO	OH	32,120	25,102	19,257	59.95%
GTE -- SW - OKLAHOMA	OK	4,348	3,263	2,411	55.45%
SOUTHWESTERN BELL - OKLAHOMA	OK	47,948	34,903	8,137	16.97%
GTE -- NW - OREGON	OR	21,020	18,031	8,764	41.69%
US WEST -- OREGON	OR	97,006	81,683	29,217	30.12%
SPRINT -- UTC OF THE NW - OREGON	OR	2,221	1,615	1,952	87.89%
ALLTEL - PENNSYLVANIA	PA	13,951	10,754	3,824	27.41%
BELL ATLANTIC OF PENNSYLVANIA	PA	37,421	8,769	28,361	75.79%
GTE -- NO - CONTEL - PENNSYLANIA	PA	541	417	1,352	249.91%
GTE -- NO - CONTEL - QUAKER STATE	PA	481	350	429	89.19%
GTE -- NO - PENNSYLVANIA	PA	8,444	6,440	25,368	300.43%
SPRINT -- UTC OF PENNSYLVANIA	PA	12,632	9,612	6,895	54.58%
PUERTO RICO TEL CO	PR	183,764	137,188	60,179	32.75%
PUERTO RICO TEL CO - CENTRAL	PR	17,328	13,194	6,572	37.93%
BELL ATLANTIC - NEW ENGLAND - RI	RI	18,045	12,944	7,569	41.95%
BELLSOUTH - SOUTH CAROLINA	SC	(49,154)	(54,076)	3,440	-7.00%
GTE -- SO - CONTEL - SOUTH CAROLINA	SC	303	216	177	58.42%
GTE -- SO - CAROLINA	SC	1,427	838	2,173	152.28%
US WEST -- SOUTH DAKOTA	SD	4,760	3,217	2,493	52.37%
BELLSOUTH - TENNESSEE	TN	43,523	31,393	8,188	18.81%
SPRINT -- UTC -- SE - TENNESSEE	TN	4,189	2,696	3,298	78.73%
GTE -- SW - CONTEL - TEXAS	TX	12,531	9,937	2,647	21.12%
GTE -- SW - TEXAS	TX	56,210	44,732	38,472	68.44%
SOUTHWESTERN BELL - TEXAS	TX	199,084	105,962	76,881	38.62%
SPRINT -- UTC OF TEXAS	TX	3,721	2,818	4,590	123.35%
US WEST -- UTAH	UT	14,173	7,083	12,520	88.34%
BELL ATLANTIC - VIRGINIA	VA	(303,830)	(330,136)	29,863	-9.83%
SPRINT -- CENTEL OF VIRGINIA	VA	9,991	7,603	611	6.12%
GTE -- SO - CONTEL - VIRGINIA	VA	4,493	3,374	5,282	117.56%
GTE -- SO - VIRGINIA	VA	246	183	413	167.89%
SPRINT -- UTC -- SE - VIRGINIA	VA	708	257	1,401	197.88%
BELL ATLANTIC - NEW ENGLAND - VT	VT	8,812	6,294	2,976	33.77%
GTE -- NW - CONTEL - WASHINGTON	WA	1,758	1,425	1,114	63.37%
GTE -- NW - WASHINGTON	WA	39,443	34,770	19,555	49.58%
US WEST -- WASHINGTON	WA	389,897	373,840	35,891	9.21%
SPRINT -- UTC OF THE NW - WA	WA	2,679	2,024	1,905	71.11%
BELL ATLANTIC - WEST VIRGINIA	WV	35,459	31,708	5,636	15.89%
GTE -- NO - WISCONSIN	WI	25,733	21,220	21,212	82.43%
AMERITECH - WISCONSIN BELL	WI	39,094	32,149	32,272	82.55%
US WEST -- WYOMING	WY	33,079	25,473	10,343	31.27%

Customer Response

Publication: Monitoring Report
December 1998

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

1. Please check the category that best describes you:

_____ press
_____ current telecommunications carrier
_____ potential telecommunications carrier
_____ business customer evaluating vendors/service options
_____ consultant, law firm, lobbyist
_____ other business customer
_____ academic/student
_____ residential customer
_____ FCC employee
_____ other federal government employee
_____ state or local government employee
_____ Other (please specify) _____

2. Please rate the report:

	Excellent	Good	Satisfactory	Poor	No opinion
Data accuracy	(_)	(_)	(_)	(_)	(_)
Data presentation	(_)	(_)	(_)	(_)	(_)
Timeliness of data	(_)	(_)	(_)	(_)	(_)
Completeness of data	(_)	(_)	(_)	(_)	(_)
Text clarity	(_)	(_)	(_)	(_)	(_)
Completeness of text	(_)	(_)	(_)	(_)	(_)

3. Overall, how do you rate this report?

Excellent	Good	Satisfactory	Poor	No opinion
(_)	(_)	(_)	(_)	(_)

4. How can this report be improved?

_____

_____

_____

_____

_____

_____

_____

5. May we contact you to discuss possible improvements?
Name:
Telephone #:

To discuss the information in this report contact: Industry Analysis Division at 202-418-0940		
Fax this response to	or	Mail this response to
202-418-0520		FCC/IAD Mail Stop 1600 F Washington, DC 20554