

Monitoring Report

CC Docket No. 87-339

September 1988

Prepared by the Staff of the

Federal-State Joint Board

In CC Docket No. 80-286

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Introduction and Summary

This is the fifth report of a series of quarterly reports being issued over a five-year period that is intended to help telecommunications policymakers and the general public monitor the impact of two major decisions adopted by the Federal Communications Commission (Commission) during 1987. In the first of these decisions, the Commission adopted the recommendations of the Federal-State Joint Board in CC Docket No. 80-286 to increase subscriber line charges, expand the federal lifeline assistance program, retarget the formula for high cost assistance, and modify the common line pooling system. In the second decision, the Commission adopted the recommendations of the Federal-State Joint Board in CC Docket No. 86-297 to simplify jurisdictional separations rules and conform those rules to the recently revised Uniform System of Accounts. This report concludes the first year of the monitoring program and includes most of the data that have appeared in previous reports. Since this report will be a key input into the Joint Board's 90-day study and review of the subscriber line charge increases, a special effort has been made to make it as comprehensive as possible.

In an Order released on August 26, 1987, the Commission acted upon the recommendations of the Joint Boards in CC Docket Nos. 80-286 and 86-297, and established a program to monitor the impact of the two decisions noted above. This report presents currently available data in each of the eight subject categories selected for monitoring, which are: (1) subscribership and penetration levels; (2) lifeline assistance plans, including both the subscriber line charge waiver and Link-Up programs; (3) costs and high cost assistance; (4) network usage and growth; (5) rates and revenues; (6) bypass; (7) pooling and rate deaveraging; and (8) jurisdictional shifts in revenue requirements.

The eight monitoring categories, and much of the text describing those monitoring categories, remain unchanged from our previous monitoring report. However, since our June monitoring report, new information in several of the areas we are monitoring has become available. For example, the July 1988 telephone penetration report from the Bureau of the Census is now available and shows the percentage of households with telephone service is 92.8%, an increase of 0.5% from a year earlier. As a result, 2 million households were added to the nation's telephone system in the past year. Network usage data show substantial increases in traffic growth rates since 1984, when subscriber line charges were introduced and interstate toll rates started declining. The Consumer Price Index (CPI) and Producer Price Index (PPI) are now available through June 1988. The most recent data show that for the first 7 months of 1988, the nation's overall annualized rate of

inflation was 4.6% (measured by the CPI for all items). The CPI price of telephone service increased at an annual rate of 0.1% during the same period. The CPI for telephone services is based on a market basket of services purchased by typical consumers and thus includes both local and long distance service. More specifically, the overall CPI for telephone service is composed of three subindexes. During this period, the local service component (including subscriber line charges) increased at an annual rate of 3.1%, while the price of interstate toll calls fell at an annual rate of 4.4% and the price of state toll calls fell at an annual rate of 5.5%.

The data and comments in this report and in past and future reports will serve as the foundation for the review to be undertaken by members of the Joint Board and the FCC in CC Docket No. 80-286 prior to the scheduled implementation of subscriber line charge increases in December 1988 and April 1989. We emphasize that our monitoring efforts are being conducted in the context of an open docket (CC Docket No. 87-339) which allows materials, comments, and studies to be submitted at any time. The comments that have been received since the last report are summarized in each section of this report, insofar as they relate to that section. We plan to continue to include in future reports a list and summary of comments that have been received in the docket in the period since the previous report. To help the Joint Board and the FCC study and review the effects of their decisions, the June report asked that interested parties review the information in the monitoring reports and submit comments during the 90 days following the issuance of that report.¹ We are again asking interested parties to review the information in these reports and to submit comments. Comments that are to be considered for the second 90-day study and review are due by December 9, 1988, with reply and further comments due by January 17, 1989.

1 On or before August 29, 1988, comments reflecting this 90-day study and review regarding the subscriber line charge increases were filed by Ameritech, Bell Atlantic, United States Telephone Association, the US West companies, the Public Service Commission of the District of Columbia, and the National Association of State Utility Consumer Advocates. Filings not commenting on the subscriber line charge increases were made by AT&T, Institutional Communications Company, and Teleport Communications. These comments are summarized herein only to the extent that they provide new information related to the subjects being monitored in this docket. Comments addressing the merits of the subscriber line charge increase will be discussed in the Joint Board report on that issue.

The deadline for submission of information for each future monitoring report is the first day of the month preceding the one which the report is released. Thus, the deadline for March reports is February 1, for June reports May 1, for September reports August 1, and for December reports November 1. Despite this deadline, the staff intends to report all filings made in the docket at the earliest possible time. In this report we have been able to incorporate all information received prior to August 31, 1988. While materials filed after the formal cutoff date will continue to be included whenever possible, filings received after the deadline will usually appear in the next report. For ease of public reference, we ask that parties submitting materials for the docket provide a duplicate copy to the Public Reference Room of the Common Carrier Bureau's Industry Analysis Division, ² where copies of all materials filed in the docket are available for public reference.

² 1919 M Street, N.W., Room 537, FCC, Washington, DC 20554.

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1. Subscribership and Penetration Levels

The number and percentage of households that have telephone service represent the most basic measures of the extent of universal service. Continuing analysis of telephone penetration statistics allows us to examine trends in households' decisions to maintain, acquire or drop telephone service due to Commission actions and other factors such as general trends in employment levels and the strength of the economy. Attachment I presents comprehensive data on telephone penetration statistics collected by the Bureau of the Census under contract with the FCC. Along with telephone penetration statistics for the United States and each of the states from November 1983 to July 1988, data are provided on penetration based on various demographic characteristics. Summaries of the second group of disconnect studies that have been submitted, as well as other materials relating to telephone subscribership received since the last report, are also included in this report.

Prior to the 1980s, precise measurements of telephone subscribership received little attention. The most widely used measure of telephone availability is the percentage of households with telephone service—sometimes called a measure of telephone "penetration". This statistic, however, can be subject to large measurement errors. Traditionally, telephone penetration was measured by dividing the number of residential telephone lines by the number of households. With some households adding second telephone lines and with an increasing number of second homes, measures of penetration based on the number of residential lines became subject to a large margin of error.

By 1980, the traditional penetration measure (residential lines divided by the number of households) reached 96% while the number of households reporting that they had telephones in the 1980 census was slightly less than 93%. Recognizing the need for precise periodic measurements of subscribership, the FCC requested that the Bureau of the Census include questions on telephones as part of its Current Population Survey (CPS), which monitors demographic trends between the decennial censuses. This survey is a staggered panel survey in which the people residing at particular addresses are included for four consecutive months in one year and the same four months in the following year. Use of the CPS has several advantages -- it is conducted every month by an independent and expert agency, the sample is large and the questions are consistent. Thus, changes in the results can be compared over time with a great deal of confidence.

Unfortunately, the results of the CPS cannot be directly compared with the penetration figures contained in the 1980 decennial census. This is because of differences in the sampling methodologies and because of differences in the context in which the questions were asked.

The specific questions asked in the CPS are: "Is there a telephone in this house/apartment?" and, if the answer to the first question is "no", "Is there a telephone elsewhere on which people in this household can be called?" Although the survey is conducted every month, not all questions are asked every month. The telephone questions are asked once every four months, in the month that a household is first included in the sample and in the month that the household reenters the sample a year later. Since the sample is staggered, the information that is reported for any given month actually reflects responses over the preceding four months. Aggregated summaries of the responses are reported to the FCC, based on the surveys conducted through March, July, and November of each year. These reports are generally released approximately two-months after the final month of each four-month survey period.

Census Bureau figures for July 1988, the most recent data available, show that in the past year the percentage of households subscribing to telephone service has increased by 0.5%. As a result of this increase and an increasing number of households, 2 million households were added to the nation's telephone system between July 1987 and July 1988.

Attachment I contains eleven tables and two charts presenting penetration statistics broken out for various geographic and demographic characteristics. They are updates of the tables and charts that appeared in the March 1988 monitoring report.

Table 1.1 in Attachment I summarizes the telephone penetration for the United States, combining information on the number of households with the penetration rates. It shows that, for July 1988, 92.8% of all households in the U.S. have a telephone. The percentage of households with telephones is up 0.5% from the July 1987 report and down 0.1% from the March 1988 report. The increase from last July is statistically significant, and the decrease from March is not statistically significant.

Attachment I also includes figures showing subscribership percentages by state (Table 1.2), by householder's age and race (Table 1.3), by household size (Table 1.4), by family income (Table 1.5), and for individual persons by labor force status (Table 1.6). The data for individual persons (Table 1.6 and Chart 1.2) show that 93.9% of those adults in the civilian noninstitutionalized population have a telephone in their household. This is the highest percentage ever reported by the CPS. This figure is up 0.5% from July 1987 and up 0.1% from March 1988. The increase from last July is statistically significant, but the increase from March is not.

Table 1.2 shows the CPS responses for the United States and for each state for the period from November 1983 through July 1988. Because the CPS began collecting this data only in 1983, comparable values are not available prior to November 1983. For each of the surveys, the column headed "Unit" indicates the percentage of households for which the response to the

question of whether they had a telephone was "yes". The column headed "Avail." indicates the percentage of households which responded "yes" to either that question or the question of whether there was a telephone elsewhere at which they could be called. The annual averages are the average of the 3 surveys of the year in question.

Chart 1.1 depicts the nationwide penetration rates for households graphically, with the values taken from the top line of Table 1.2.

Table 1.3 shows the nationwide penetration rates for households by the age and race of the householder. It shows that the penetration rate is lowest for young and non-white households. The penetration rate for the elderly is above the average for all age groups.

Table 1.4 shows the nationwide penetration rates for households by the size of the household and the race of the householder. It shows that penetration is highest for households of 2 to 5 people.

Table 1.5 shows the nationwide penetration rates for households by family income and the race of the householder. It shows a strong positive relationship between income and penetration.

Table 1.6 shows the nationwide penetration rates for all persons at least 16 years old in the civilian noninstitutionalized population by their race and employment status. Since this table is for individuals rather than households, the total penetration rates are different from those in the previous tables. It shows that penetration is lowest among the unemployed.

Chart 1.2 depicts the nationwide penetration rates for individuals graphically, with the values taken from the totals in Table 1.6.

Tables 1.7-1.11 present critical values for determining whether changes in penetration in the earlier Tables are statistically significant. The Census Bureau data are based on a nationwide sample of about 58,000 households. Because a sample is used, the estimates are subject to sampling error. For the nationwide totals, the critical value for determining a significant difference in telephone penetration over time is 0.5% (at the 95% confidence level). For individual states, the amount of sampling variability is much greater. These critical values are shown in Table 1.7 and are relevant because changes less than or equal to the values shown are likely to be due to sampling error and thus cannot be regarded as demonstrating that a change in telephone penetration has occurred. Because there is an overlap of half of the sample from year to year, but no overlap in the sample between surveys that are four months apart, annual changes are less subject to variations in sampling error. Consequently the critical values should be multiplied by .8 when making a comparison for the same month in two consecutive years. When comparing the annual averages, the critical values should be multiplied by 0.5774, since these are based on

three surveys and hence have a lower standard error. Tables 1.8, 1.9, 1.10 and 1.11 show the corresponding critical values for testing for significant differences over time for the penetration rates shown in Tables 1.3, 1.4, 1.5, and 1.6, respectively. In some cases these critical values are very large because the sample sizes are very small for these subcategories, rendering the estimated penetration rates unreliable.

The December 1987 monitoring report presented various tables relating telephone penetration for March 1987 to various household characteristics. They are not reproduced here.

Disconnect Studies

In addition to the CPS reports, the Joint Board asked that all of the seven Regional Bell Operating Companies and GTE voluntarily conduct special disconnect studies and report the results in this docket. We asked that each study involve taking a sample of telephone exchanges from one of the company's study areas and surveying those customers whose service is terminated as to the reason for the termination. We asked that the survey commence as soon as possible so that a benchmark of information would be available for the period prior to the July 1, 1987, subscriber line charge (SLC) increase, to enable us to make a comparison of the effects before and after the increase. We requested that the study continue for at least three months after the initial increase to allow time for customers to react to it. We asked that the exchanges sampled include representation of low income areas, in which any possible effect on subscribership is most likely to occur, as well as medium and high income areas. For those subscribers disconnected during the study period, we requested that the study attempt to determine: (1) whether the termination of service was voluntary or involuntary; (2) the composition of the unpaid bill for involuntary disconnections (e.g., the dollar amounts of SLCs, nonrecurring charges, interstate and intrastate toll charges, basic local service charges, and other recurring charges) as determined from the company's billing records; (3) the type of service subscribed to (e.g., flat rate, measured, lifeline, etc.); and (4) the reason for voluntary disconnections, i.e., whether the reason was economic (such as an increase in telephone bills or a decrease in personal income) or noneconomic (such as death or relocation), as well as the composition of the bills for the preceding three months in the case of voluntary disconnections for economic reasons. We requested that the results of those studies be reported by February 15, 1988. In addition, we requested the designated LECs to update their disconnect studies and report the results by August 31, 1988, and December 31, 1988, so that they may be considered by the Joint Board and the FCC during the study and review period in advance of the December 1, 1988, and April 1, 1989, SLC increases.

The second reports of these studies were submitted in August. Some overall observations can be made of common and disparate elements of these

reports. In general, the results of the follow-up disconnect studies confirm the findings of the original studies. Most customers that are involuntarily disconnected or who disconnect for voluntary economic reasons are above-average users of telephone services and find themselves in a position in which they cannot afford their level of usage. They tend to have higher than average toll usage, are more likely to have flat-rate local service, and are more likely to have purchased discretionary services such as Touch-Tone and Call Waiting than customers who are able to maintain their service. There is no reported evidence that the SLC increase has had an adverse effect on the disconnection rate. Since disconnected customers are generally heavy toll users, the SLC increase for them was generally more than offset by the accompanying reduction in interstate toll rates. Consequently, many companies found lower involuntary disconnects in the second study than in the first study. There appears to be seasonality in the disconnect rates, but this seems to be primarily in voluntary disconnects due to moving. Involuntary disconnects do not appear to be very seasonal, although this would be more apparent if future disconnect studies would include the ratio of involuntary disconnects to current customers. In general, it appears that very few customers voluntarily disconnect for economic reasons. Each of the studies is summarized below.

In addition to the disconnect studies, other telephone subscribership information was supplied by the Minnesota Department of Public Service. This is also summarized below.

Ameritech

Ameritech chose Wisconsin Bell territory as the study area for its disconnect study. It submitted comparative data for April, May, and June 1987, prior to the latest subscriber line charge (SLC) increase, and for July 1987 through June 1988 after the SLC increase. It reports the following results of its study: (1) The July 1 SLC increase has not caused any discernable change in the number of disconnects. (2) Customers disconnecting voluntarily for economic reasons account for only 1% of all disconnected customers. Of these, less than 4% subscribed to the lowest-priced basic service available. (3) Customers' bills have not changed significantly due to the SLC increase. (4) Customers disconnected for economic or involuntary reasons spent more on discretionary services, including toll, than on basic service. (5) The SLC increase has had no adverse effect on disconnects.

Bell Atlantic

Bell Atlantic chose Chesapeake and Potomac of Virginia territory for its disconnect study. It submitted comparative data for June 1987 before the SLC increase, and for August 1987 through June 1988 after the SLC increase. It reports the following results from its study: (1) 96.5% of the customers involuntarily disconnected could have subscribed to a less

expensive class of service and potentially saved more than the SLC. (2) Nearly all customers disconnected for economic or involuntary reasons spent more than the full SLC on toll calling. 65.3% of the bills of involuntarily disconnected customers were for toll charges compared to 2.5% for subscriber line charges. (3) Fluctuations in the number of involuntary disconnects do not appear to be a result of the SLC increase. There were fewer disconnects in June 1988 than in June 1987. (4) The most significant segment of an average customer's bill, whether disconnected or not, is toll charges. (5) The access charge plan, which significantly reduces interstate toll rates through modest SLC increases, provides benefit to all customers, particularly those who might otherwise be involuntarily disconnected.

BellSouth

BellSouth's disconnect study used Southern Bell territory in all four states (Florida, Georgia, North Carolina, and South Carolina) that it serves. Its first study included comparative data for April, May, and June 1987 before the SLC increase, and July, August, and September 1987 after the SLC increase. The second study includes data for October 1987 through June 1988. It also provides data on total disconnects from June 1985 through July 1988. It reports the following results from its study: (1) The monthly variation in disconnects appears to be seasonal and unrelated to the SLC increase. (2) Customers disconnected for economic or involuntary reasons had toll charges that were substantially higher than the average for current customers. (3) Involuntarily disconnected customers in low income areas had toll charges that were on the average more than twice as high as toll charges of current customers in those areas.

GTE

GTE used the Tampa exchange of GTE Florida for its disconnect study. Its first study included comparative data for June (and partial data for May) 1987 before the SLC increase, and July, August, and September 1987 after the SLC increase. The second study includes data for March through May 1988. It provides little analysis of its data but does note that the gradual decrease in involuntary disconnections is probably the result of a change in policy in January 1988 requiring deposits and advance payments upon initial installation.

NYNEX

NYNEX chose New York Telephone territory for its disconnect study. Its first study included comparative data for April, May, and June 1987 before the SLC increase, and July through December 1987 after the SLC increase. The second study includes data for January through June 1988. It reports the following results of its study: (1) The SLC increase has had no adverse effect on the number of subscribers who disconnect from the

network. (2) Disconnected customers spend significant amounts on optional local services. (3) Customers who disconnect for involuntary and voluntary economic reasons generally have high charges for toll calls and unpaid previous bills.

Pacific Telesis

Pacific Telesis provided disconnect information for both of its operating companies, Nevada Bell and Pacific Bell. For Nevada Bell, its first study included data on the number of disconnects from April through December 1987, and bill composition data for September through December 1987. Its second study includes data for January through June 1988. It notes that in Nevada the July 1, 1987, SLC increase was offset for six months by an equal intrastate credit, thus effectively delaying the impact of the SLC increase until January 1, 1988. The reports do not draw any conclusions from the data. The Pacific Bell disconnect data for California includes information on the number of voluntary and involuntary disconnects from January 1986 through June 1988. It also submitted partial billing information for a 5% sample of accounts for disconnected Pacific Bell customers for April, May, and June 1987 before the SLC increase, and July 1987 through June 1988 after the SLC increase, as well as for a 5% sample of current customers. It reports the following results of its study: (1) Voluntary disconnects follow a strong seasonal pattern with a peak in June. Involuntary disconnects have substantially less seasonal variation, but there is a peak in January. This seasonality must be considered in evaluating economic changes. (2) There has been a growth in total disconnects from 1986 to 1988, but this can be explained by the increase in the number of access lines. (3) Involuntary disconnects have decreased from 1986 to 1988. (4) Voluntary disconnects have increased from 1986 to 1988, but this can be explained by the increase in access lines. (5) There was no notable increase in disconnects after July 1987; thus, it appears that the SLC increase had no noticeable effect.

Southwestern Bell

Southwestern Bell chose its territory in Arkansas as the study area for its disconnect study. It submitted comparative data for May and June 1987 before the SLC increase, and July, August, and September 1987, and March 1988 after the SLC increase. It supplemented its company records with surveys of disconnected customers. A survey of customers disconnected in May through September 1987 was reported in the first disconnect study. A second survey, of customers disconnected in March 1988 is reported in the second disconnect study. It reports the following results of its study: (1) There was little difference in the survey results before and after the SLC increase. The results of the second survey were similar to those of the first survey. (2) Substantially more of those surveyed cited the high cost of long distance calls than the cost of local service as the reason for being disconnected. (3) 36% of all disconnects were involuntary for

nonpayment. Only 2% disconnected voluntarily for economic reasons. There were more new customers than disconnects, causing the total number of residential subscribers to increase slightly. (4) There was little difference in customer bills before and after the SLC increase. (5) Customers disconnected involuntarily or voluntarily for economic reasons had higher total bills than current customers or those disconnected for voluntary non-economic reasons. (6) Customers disconnected involuntarily or voluntarily for economic reasons spent significantly more than other customers on other local services such as Touch-Tone and Custom Calling. (7) Disconnected customers with higher incomes used more toll than disconnected customers with lower incomes.

US West

US West chose Mountain States Telephone and Telegraph territory in Arizona as the study area for its disconnect study. Its first study included data for August, September, and October 1987. No data from before the SLC increase was available. Its second study included data for March, April, and May 1988. It supplemented its company records with a sample survey of disconnected customers. It reports the following results of its second study: (1) Most of the disconnected customers were disconnected because they moved. (2) Only about 3% of all disconnects were for economic reasons. (3) Only three customers in the survey identified the SLC as the reason for disconnecting. (4) Only 8% of the surveyed disconnected customers understood the purpose of the SLC. 65% admitted that they didn't know, and the remainder made incorrect guesses. (5) Significant seasonal differences were found between the first study and the second study. (6) Involuntary disconnects had higher average toll charges than voluntary disconnects. (7) Most disconnects are temporary.

Minnesota Department of Public Service

A report "A Minnesota Low-Income Telephone Assistance Program to Maintain Universal Service" was submitted. The report notes that while Minnesota has one of the highest telephone penetration rates in the U.S., rural and low-income areas have lower penetration rates. It also reports penetration rates from the 1980 Census of Population for the five largest telephone companies in Minnesota.

**ATTACHMENT I
CHARTS AND TABLES**

TABLE 1.1

Telephone Penetration in the U.S.

<u>Date</u>	<u>Households</u> (millions)	<u>Households</u> <u>with</u> <u>Telephones</u> (millions)	<u>Percentage</u> <u>with</u> <u>Telephones</u>	<u>Households</u> <u>without</u> <u>Telephones</u> (millions)	<u>Percentage</u> <u>without</u> <u>Telephones</u>
November 1983	85.8	78.4	91.4%	7.4	8.6%
March 1984	86.0	78.9	91.8	7.1	8.2
July 1984	86.6	79.3	91.6	7.3	8.4
November 1984	87.4	79.9	91.4	7.5	8.6
March 1985	87.4	80.2	91.8	7.2	8.2
July 1985	88.2	81.0	91.8	7.2	8.2
November 1985	88.8	81.6	91.9	7.2	8.1
March 1986	89.0	82.1	92.2	6.9	7.8
July 1986	89.5	82.5	92.2	7.0	7.8
November 1986	89.9	83.1	92.4	6.8	7.6
March 1987	90.2	83.4	92.5	6.8	7.5
July 1987	90.7	83.7	92.3	7.0	7.7
November 1987	91.3	84.3	92.3	7.0	7.7
March 1988	91.8	85.3	92.9	6.5	7.1
July 1988	92.4	85.7	92.8	6.7	7.2

TABLE 1.2

PERCENTAGE OF HOUSEHOLDS WITH A TELEPHONE BY NATIONAL TOTAL AND STATES

	1983		1984		JULY		NOVEMBER		1984 ANNUAL AVERAGE		1985 MARCH	
	Unit	Avail	Unit	Avail	Unit	Avail	Unit	Avail	Unit	Avail	Unit	Avail
	UNITED STATES	91.4	93.7	91.8	93.6	91.6	93.8	91.4	93.6	91.6	93.7	91.8
ALABAMA	87.9	90.2	88.9	90.4	90.3	91.8	86.1	89.3	88.4	90.5	88.4	90.3
ALASKA	83.8	88.8	85.8	88.7	87.6	90.0	86.1	88.4	86.5	89.0	89.4	91.7
ARIZONA	88.8	90.7	89.6	90.6	84.2	86.8	87.0	90.7	86.9	89.4	87.0	89.4
ARKANSAS	88.2	91.4	87.1	90.1	87.8	92.6	84.8	89.2	86.6	90.6	85.7	89.8
CALIFORNIA	91.7	93.5	92.8	93.8	92.2	93.8	92.4	93.8	92.5	93.8	93.0	94.1
COLORADO	94.4	96.5	94.7	96.4	91.9	94.4	93.2	95.2	93.2	95.4	96.2	97.7
CONNECTICUT	95.5	98.4	94.5	96.2	96.0	97.6	96.0	97.2	95.5	97.0	94.9	97.2
DELAWARE	95.0	96.6	95.4	96.3	93.7	95.1	93.7	95.8	94.3	95.7	96.6	97.4
DIST OF COL	94.7	95.6	96.1	97.5	93.5	95.4	95.1	96.0	94.9	96.3	91.6	93.5
FLORIDA	85.5	89.9	89.9	92.4	89.6	91.4	86.6	90.1	88.7	91.3	88.8	90.9
GEORGIA	88.9	92.1	85.8	88.2	86.8	90.5	86.0	88.7	86.2	89.1	89.0	91.1
HAWAII	94.6	96.4	93.6	94.2	95.1	96.3	91.9	94.3	93.5	94.9	93.3	95.1
IDAHO	89.5	92.2	90.4	91.8	91.0	91.8	90.8	91.4	90.7	91.7	91.7	93.3
ILLINOIS	95.0	95.9	95.7	96.8	93.6	95.0	93.2	95.5	94.2	95.8	94.4	95.6
INDIANA	90.3	93.5	91.8	93.2	91.2	93.3	91.7	94.4	91.6	93.6	91.7	94.8
IOWA	95.4	97.2	95.7	96.2	97.5	98.7	95.4	97.2	96.2	97.4	96.0	96.9
KANSAS	94.9	96.7	94.4	95.4	95.1	96.4	93.5	95.6	94.3	95.8	94.8	97.1
KENTUCKY	86.9	90.9	87.1	90.6	88.3	91.2	89.1	91.1	88.1	91.0	89.0	92.1
LOUISIANA	88.9	93.3	89.8	92.2	88.7	93.1	90.5	92.7	89.7	92.7	90.5	93.5
MAINE	90.7	93.1	94.4	95.7	92.1	94.9	93.9	95.2	93.4	95.3	94.2	95.3
MARYLAND	96.3	96.7	96.1	96.9	94.9	95.7	96.1	96.8	95.7	96.5	95.2	96.2
MASSACHUSETTS	94.3	95.9	95.7	96.5	96.5	97.4	95.4	96.9	95.9	96.9	95.6	96.7
MICHIGAN	93.8	94.9	93.1	95.0	93.0	94.5	92.4	94.0	92.8	94.5	92.6	94.1
MINNESOTA	96.4	97.5	95.8	97.4	96.6	97.2	95.0	96.6	95.8	97.1	97.1	98.2
MISSISSIPPI	82.4	89.1	81.8	86.1	83.1	89.8	82.2	86.6	82.4	87.5	81.6	87.0
MISSOURI	92.1	94.1	92.1	94.0	91.3	93.2	91.0	93.9	91.5	93.7	92.6	94.2
MONTANA	92.8	94.5	90.2	93.9	91.6	94.5	91.1	93.8	91.0	94.0	92.2	95.2
NEBRASKA	94.0	95.3	96.4	97.2	94.8	95.8	95.9	97.3	95.7	96.8	96.4	96.9
NEVADA	89.4	91.9	93.0	95.6	88.2	89.8	89.8	93.0	90.4	92.8	91.3	93.6
NEW HAMPSHIRE	95.0	96.9	94.7	96.3	95.9	96.4	92.4	94.7	94.3	95.8	93.4	94.4
NEW JERSEY	94.1	95.1	93.5	95.0	96.0	96.9	94.8	96.3	94.8	96.1	95.1	96.5
NEW MEXICO	85.3	90.9	81.0	85.8	81.2	86.3	84.0	88.8	82.0	87.0	85.0	88.0
NEW YORK	90.8	92.2	91.2	92.5	92.3	94.5	91.8	93.6	91.8	93.6	92.0	93.1
N. CAROLINA	89.3	92.9	88.5	92.2	87.9	91.4	88.5	92.2	88.3	91.9	89.8	92.2
N. DAKOTA	95.1	97.3	94.1	96.3	95.2	97.7	94.6	96.3	94.6	96.8	95.0	96.1
OHIO	92.2	93.9	93.2	94.9	93.4	95.1	90.8	93.3	92.4	94.4	91.7	94.7
OKLAHOMA	91.5	93.7	91.1	92.5	89.4	92.3	90.3	92.6	90.3	92.5	90.3	92.7
OREGON	91.2	93.5	91.1	92.6	92.2	93.5	88.5	90.9	90.6	92.3	89.2	91.0
PENNSYLVANIA	95.1	97.1	94.4	96.0	95.1	96.4	95.1	97.2	94.9	96.5	94.2	95.5
RHODE ISLAND	93.3	94.6	94.2	95.1	92.7	93.9	93.9	95.0	93.6	94.6	93.4	94.4
S. CAROLINA	81.8	84.9	84.5	87.9	83.6	88.1	82.9	87.1	83.7	87.7	87.2	90.6
S. DAKOTA	92.7	95.0	92.8	94.3	92.8	95.2	94.0	95.2	93.2	94.9	92.4	94.5
TENNESSEE	87.6	92.6	87.0	90.3	88.3	92.0	90.1	93.8	88.5	92.0	87.7	90.0
TEXAS	89.0	92.6	88.2	91.7	87.6	91.0	89.4	92.3	88.4	91.6	87.8	91.5
UTAH	90.3	92.2	92.2	94.1	93.2	94.6	92.2	93.9	92.5	94.2	95.3	95.7
VERMONT	92.7	94.3	91.2	93.4	93.1	94.6	92.5	94.0	92.3	94.0	90.6	91.8
VIRGINIA	93.1	94.7	93.2	95.1	93.0	95.6	92.9	94.6	93.1	95.1	92.8	94.5
WASHINGTON	92.5	93.7	92.7	94.3	93.6	95.2	92.7	93.6	93.0	94.4	92.7	94.4
W. VIRGINIA	88.1	91.1	87.2	93.5	86.5	90.0	89.4	92.1	87.7	91.8	88.1	91.4
WISCONSIN	94.8	96.1	95.9	96.3	93.5	96.0	96.3	97.4	95.2	96.6	93.8	95.7
WYOMING	89.7	93.3	89.2	92.3	88.4	91.2	92.1	95.0	89.9	92.8	91.7	94.2

TABLE 1.2

	1985											
	JULY		NOVEMBER		ANNUAL AVERAGE		1986 MARCH		JULY		NOVEMBER	
	Unit	Avail	Unit	Avail	Unit	Avail	Unit	Avail	Unit	Avail	Unit	Avail
UNITED STATES	91.8	93.9	91.9	94.0	91.8	93.9	92.2	93.9	92.2	94.0	92.4	94.4
ALABAMA	89.1	90.9	89.9	91.8	89.1	91.0	89.1	90.6	89.5	91.3	87.5	89.4
ALASKA	86.4	88.0	85.7	88.7	87.1	89.5	88.4	91.0	83.5	86.1	87.3	89.6
ARIZONA	88.0	89.8	86.9	89.8	87.3	89.6	90.8	91.8	89.8	91.4	87.6	89.4
ARKANSAS	86.6	90.8	85.5	89.2	85.9	89.9	85.8	89.4	85.1	89.8	88.3	92.1
CALIFORNIA	92.7	94.1	93.0	94.1	92.9	94.1	93.3	94.1	92.3	93.2	93.4	94.8
COLORADO	93.7	95.9	93.1	95.0	94.3	96.2	95.0	97.1	93.2	94.8	94.2	96.0
CONNECTICUT	96.5	97.6	97.1	98.0	96.2	97.6	97.3	97.7	96.8	98.3	97.0	97.8
DELAWARE	94.4	96.1	93.4	95.2	94.8	96.2	95.2	97.0	93.5	95.4	95.3	96.5
DIST OF COL	93.6	94.9	95.6	97.4	93.6	95.2	91.9	93.3	93.6	94.8	91.1	93.9
FLORIDA	89.5	91.6	90.3	92.7	89.6	91.7	89.1	91.3	89.9	92.4	91.1	93.8
GEORGIA	88.4	90.2	85.4	88.0	87.6	89.7	88.2	91.4	89.1	91.4	88.0	90.2
HAWAII	92.7	95.8	93.1	94.2	93.0	95.0	94.3	96.0	92.8	94.0	89.6	93.2
IDAHO	91.1	92.7	92.6	93.5	91.8	93.1	92.1	93.6	89.8	91.8	92.7	93.7
ILLINOIS	93.4	95.3	93.3	95.2	93.7	95.3	93.4	94.7	94.4	95.5	93.2	95.5
INDIANA	92.8	95.0	92.4	94.3	92.3	94.7	92.9	94.7	91.4	93.8	92.4	94.5
IOWA	94.6	96.4	94.7	95.9	95.1	96.4	95.5	96.6	96.0	96.9	95.6	96.1
KANSAS	93.9	95.9	94.4	96.2	94.4	96.4	93.9	95.4	94.5	96.0	95.4	96.9
KENTUCKY	86.8	90.3	86.4	90.8	87.4	91.1	87.3	90.3	85.3	90.0	86.1	91.6
LOUISIANA	90.3	94.0	90.2	93.4	90.3	93.6	90.5	93.0	89.7	93.2	85.9	89.6
MAINE	93.8	95.2	94.2	96.2	94.0	95.6	92.8	95.5	93.0	94.8	94.3	95.9
MARYLAND	96.2	98.1	95.3	95.9	95.5	96.7	95.7	96.6	95.6	96.8	95.9	96.7
MASSACHUSETTS	95.0	95.9	94.8	96.5	95.2	96.3	96.3	97.2	96.5	97.1	96.4	97.1
MICHIGAN	93.5	94.7	92.6	93.7	92.9	94.2	93.7	94.5	93.3	94.7	93.4	94.4
MINNESOTA	96.8	97.4	95.3	96.7	96.4	97.4	95.6	97.0	96.4	96.9	96.7	97.9
MISSISSIPPI	80.1	88.7	81.0	87.0	80.9	87.6	81.9	87.5	76.9	86.6	81.6	87.8
MISSOURI	92.9	95.2	92.0	95.0	92.5	94.8	93.0	93.8	94.1	95.8	93.1	95.0
MONTANA	90.0	91.4	92.0	95.1	91.4	93.9	93.0	95.1	89.1	92.6	90.6	93.5
NEBRASKA	95.0	96.3	94.6	96.7	95.3	96.6	96.0	97.2	95.0	96.1	95.8	97.1
NEVADA	90.3	92.8	94.0	95.1	91.8	93.8	91.0	92.7	92.9	93.6	93.1	94.8
NEW HAMPSHIRE	93.0	94.2	93.4	95.4	93.2	94.6	93.9	95.0	93.4	94.0	94.6	96.1
NEW JERSEY	95.4	96.5	94.1	95.5	94.9	96.2	94.2	95.6	96.0	96.9	94.4	96.0
NEW MEXICO	85.1	88.8	82.1	87.8	84.1	88.2	86.0	89.4	85.2	88.9	84.2	89.1
NEW YORK	91.2	93.1	93.0	94.5	92.1	93.6	92.9	93.9	93.7	94.7	93.0	94.3
N. CAROLINA	89.2	92.7	89.2	92.2	89.4	92.4	90.0	92.1	90.6	93.0	90.1	92.5
N. DAKOTA	95.1	96.7	95.7	97.4	95.3	96.7	95.0	95.5	95.6	97.2	97.9	98.2
OHIO	93.3	95.1	91.7	93.8	92.2	94.5	93.6	95.1	92.7	94.0	92.8	94.1
OKLAHOMA	87.0	89.6	89.2	92.6	88.8	91.7	89.7	92.7	91.1	93.0	90.5	93.4
OREGON	91.0	93.2	90.6	92.0	90.3	92.1	92.6	94.6	92.6	94.5	92.9	93.6
PENNSYLVANIA	95.8	96.8	95.8	97.5	95.3	96.6	95.9	97.4	96.3	97.1	96.7	97.7
RHODE ISLAND	95.1	96.4	93.6	94.5	94.0	95.1	95.0	95.8	97.1	97.7	95.5	96.8
S. CAROLINA	85.6	90.5	87.6	90.4	86.8	90.5	88.8	91.6	83.8	88.8	86.3	91.4
S. DAKOTA	93.1	94.2	92.2	94.9	92.6	94.5	93.4	94.2	91.5	93.3	92.9	95.1
TENNESSEE	88.3	91.8	91.9	95.9	89.3	92.6	89.7	92.9	88.5	93.3	90.8	94.8
TEXAS	87.7	91.6	88.9	91.8	88.1	91.6	87.7	90.7	89.4	92.1	89.5	92.8
UTAH	93.3	95.1	93.2	94.5	93.9	95.1	93.8	94.5	91.8	93.0	93.3	94.3
VERMONT	93.0	94.4	95.1	96.2	92.9	94.1	93.7	94.9	93.4	95.2	94.4	96.5
VIRGINIA	90.4	92.3	92.0	94.5	91.7	93.8	92.0	93.7	91.3	93.7	92.9	94.9
WASHINGTON	96.1	97.5	95.3	96.6	94.7	96.2	92.2	94.6	96.6	97.7	95.2	96.4
W. VIRGINIA	88.7	92.8	86.1	90.8	87.6	91.7	90.7	93.7	87.4	91.6	86.5	90.3
WISCONSIN	94.4	95.5	94.1	95.0	94.1	95.4	94.6	95.1	95.4	95.8	95.4	96.7
WYOMING	92.7	93.8	95.7	96.7	93.4	94.9	90.5	93.7	92.4	94.8	93.3	96.8

TABLE 1.2

	1986		1987				1987		1988			
	ANNUAL AVERAGE		MARCH		JULY		NOVEMBER		ANNUAL AVERAGE		MARCH	
	Unit	Avail	Unit	Avail	Unit	Avail	Unit	Avail	Unit	Avail	Unit	Avail
UNITED STATES	92.3	94.1	92.5	94.3	92.3	94.2	92.3	94.3	92.4	94.2	92.9	94.6
ALABAMA	88.7	90.4	87.2	89.9	86.3	88.5	88.9	90.5	87.5	89.6	88.4	89.6
ALASKA	86.4	88.9	88.3	90.5	87.4	89.6	87.8	90.3	87.8	90.2	87.2	89.4
ARIZONA	89.4	90.9	89.1	91.8	88.6	90.4	88.2	89.8	88.6	90.7	90.5	92.5
ARKANSAS	86.4	90.4	87.0	90.4	85.8	90.4	86.0	91.3	86.3	90.7	83.6	87.7
CALIFORNIA	93.0	94.0	94.3	95.4	93.2	94.5	93.8	95.0	93.8	95.0	94.7	95.6
COLORADO	94.1	96.0	93.2	96.4	93.0	95.0	92.5	95.2	92.9	95.5	95.1	96.3
CONNECTICUT	97.0	97.9	97.9	97.9	96.7	98.2	96.4	97.9	97.0	98.0	96.5	99.0
DELAWARE	94.7	96.3	96.5	97.6	96.9	97.7	96.1	96.5	96.5	97.3	97.2	98.4
DIST OF COL	92.2	94.0	91.2	93.1	92.1	94.2	94.0	95.4	92.4	94.2	93.3	95.2
FLORIDA	90.0	92.5	91.2	93.1	92.3	94.5	91.7	93.9	91.7	93.8	93.0	94.7
GEORGIA	88.4	91.0	87.5	90.7	89.2	92.0	89.5	91.2	88.7	91.3	91.5	93.2
HAWAII	92.2	94.4	94.8	96.5	94.8	96.9	93.1	96.2	94.2	96.6	95.3	96.2
IDAH0	91.5	93.1	90.9	91.7	90.4	92.1	92.0	93.8	91.1	92.5	92.9	93.1
ILLINDIS	93.6	95.2	94.0	95.6	93.3	95.2	93.7	94.7	93.7	95.2	94.3	95.6
INDIANA	92.2	94.3	91.3	92.9	91.0	93.4	91.4	93.3	91.2	93.2	91.4	94.2
IOWA	95.7	96.5	95.5	96.7	94.9	96.4	94.8	96.0	95.1	96.3	94.5	96.2
KANSAS	94.6	96.1	95.5	96.6	95.2	96.4	94.9	96.8	95.2	96.6	95.3	95.9
KENTUCKY	86.2	90.6	87.4	90.9	85.0	89.9	87.2	91.0	86.5	90.6	89.5	92.2
LOUISIANA	88.7	91.9	86.9	90.6	89.5	91.6	86.1	90.3	87.5	90.8	86.8	90.1
MAINE	93.4	95.4	94.2	95.9	93.1	94.6	93.1	95.2	93.5	95.2	94.3	95.3
MARYLAND	95.7	96.7	96.2	96.5	94.2	96.1	96.0	97.3	95.4	96.6	96.4	97.4
MASSACHUSETTS	96.4	97.1	96.7	97.5	97.0	97.4	95.5	96.1	96.4	97.0	97.3	97.7
MICHIGAN	93.4	94.5	94.1	95.0	93.3	94.4	93.7	94.9	93.7	94.8	94.4	95.5
MINNESOTA	96.2	97.2	95.8	97.6	96.0	97.5	96.1	97.3	96.0	97.4	97.3	98.3
MISSISSIPPI	80.1	87.3	82.6	87.7	79.8	82.8	81.9	88.4	81.5	86.3	83.8	88.9
MISSOURI	93.4	94.9	91.5	94.3	93.5	95.6	94.0	95.9	93.0	95.3	93.0	95.5
MONTANA	90.9	93.7	91.4	94.2	89.3	92.1	91.9	95.2	90.9	93.9	91.4	93.2
NEBRASKA	95.6	96.8	95.0	96.4	95.1	95.7	93.8	96.0	94.6	96.1	96.4	96.9
NEVADA	92.4	93.7	92.1	92.6	92.5	94.3	92.5	94.2	92.4	93.7	91.8	92.8
NEW HAMPSHIRE	94.0	95.0	94.0	96.2	94.8	96.1	93.6	96.3	94.1	96.2	96.5	97.1
NEW JERSEY	94.9	96.1	94.3	95.5	95.6	96.6	95.2	96.9	95.0	96.3	94.3	96.0
NEW MEXICO	85.1	89.1	89.1	91.7	83.6	87.9	85.5	88.2	86.0	89.3	85.9	89.1
NEW YORK	93.2	94.3	93.3	94.2	92.5	94.1	92.5	94.1	92.7	94.2	93.0	94.4
N. CAROLINA	90.2	92.5	89.7	92.1	89.5	91.9	88.5	91.2	89.2	91.7	90.1	92.7
N. DAKOTA	96.1	97.0	97.8	98.2	96.1	96.8	96.4	97.1	96.8	97.4	96.7	97.9
OHIO	93.1	94.4	93.4	94.8	93.9	95.0	92.9	94.2	93.4	94.7	94.0	94.9
OKLAHOMA	90.4	93.0	88.5	91.9	89.1	92.5	88.6	91.1	88.7	91.8	89.6	92.0
OREGON	92.7	94.3	91.1	92.3	94.5	96.6	94.3	95.5	93.3	94.8	89.4	91.8
PENNSYLVANIA	96.3	97.4	96.0	97.0	97.0	97.8	96.1	97.2	96.4	97.3	96.1	97.2
RHODE ISLAND	95.9	96.8	95.1	96.6	95.0	95.8	95.6	96.6	95.2	96.3	95.4	96.7
S. CAROLINA	86.3	90.6	89.0	91.2	85.6	89.0	88.5	91.6	87.7	90.6	88.3	91.6
S. DAKOTA	92.6	94.2	92.2	95.1	93.3	94.9	92.8	95.1	92.8	95.0	92.2	95.0
TENNESSEE	89.6	93.6	89.3	92.3	89.1	91.6	89.2	93.9	89.2	92.6	91.7	94.7
TEXAS	88.9	91.9	90.4	92.4	89.5	92.3	88.6	91.8	89.5	92.2	87.8	90.6
UTAH	93.0	93.9	93.2	94.6	90.1	94.5	93.7	94.6	92.3	94.6	93.0	93.7
VERMONT	93.8	95.6	95.8	96.8	95.4	96.7	94.8	97.4	95.3	96.9	95.9	97.2
VIRGINIA	92.1	94.1	92.9	94.8	92.7	94.5	91.9	94.3	92.5	94.6	94.7	96.2
WASHINGTON	94.6	96.3	93.2	96.5	94.5	95.9	95.1	96.8	94.3	96.4	93.4	94.9
W. VIRGINIA	88.2	91.9	88.7	91.5	88.1	91.5	86.7	91.5	87.8	91.5	87.9	92.1
WISCONSIN	95.1	95.9	96.2	97.0	95.5	96.1	97.5	98.2	96.4	97.1	95.9	97.4
WYOMING	92.1	95.1	93.3	95.2	93.5	95.3	90.1	91.8	92.3	94.1	93.6	94.6

TABLE 1.2

	1988 JULY	
	Unit	Avail
UNITED STATES	92.8	94.6
ALABAMA	86.5	89.2
ALASKA	88.2	90.3
ARIZONA	91.2	91.9
ARKANSAS	87.5	92.1
CALIFORNIA	94.0	95.1
COLORADO	94.1	95.7
CONNECTICUT	97.6	98.4
DELAWARE	97.4	98.2
DIST OF COL	94.4	95.3
FLORIDA	92.8	94.8
GEORGIA	90.4	92.5
HAWAII	92.2	95.0
IDAHO	91.9	93.6
ILLINOIS	94.0	95.9
INDIANA	92.8	95.3
IOWA	96.6	97.8
KANSAS	94.0	96.2
KENTUCKY	86.8	90.1
LOUISIANA	87.8	91.9
MAINE	93.5	96.0
MARYLAND	96.0	96.9
MASSACHUSETTS	97.1	97.5
MICHIGAN	93.6	94.9
MINNESOTA	97.3	98.0
MISSISSIPPI	83.7	88.7
MISSOURI	95.5	96.4
MONTANA	91.5	94.0
NEBRASKA	95.3	96.0
NEVADA	92.6	93.7
NEW HAMPSHIRE	94.8	95.4
NEW JERSEY	94.8	96.3
NEW MEXICO	85.5	87.8
NEW YORK	91.6	93.5
N. CAROLINA	91.2	92.9
N. DAKOTA	95.8	96.4
OHIO	95.1	96.1
OKLAHOMA	87.4	90.0
OREGON	94.4	95.0
PENNSYLVANIA	96.8	97.5
RHODE ISLAND	94.4	95.5
S. CAROLINA	87.4	91.1
S. DAKOTA	92.9	95.8
TENNESSEE	90.4	93.1
TEXAS	89.1	92.2
UTAH	91.4	95.4
VERMONT	95.4	96.5
VIRGINIA	91.4	95.2
WASHINGTON	95.2	96.4
W. VIRGINIA	85.8	90.1
WISCONSIN	97.2	97.9
WYOMING	94.3	95.9

CHART 1.1

Telephone Penetration

Households

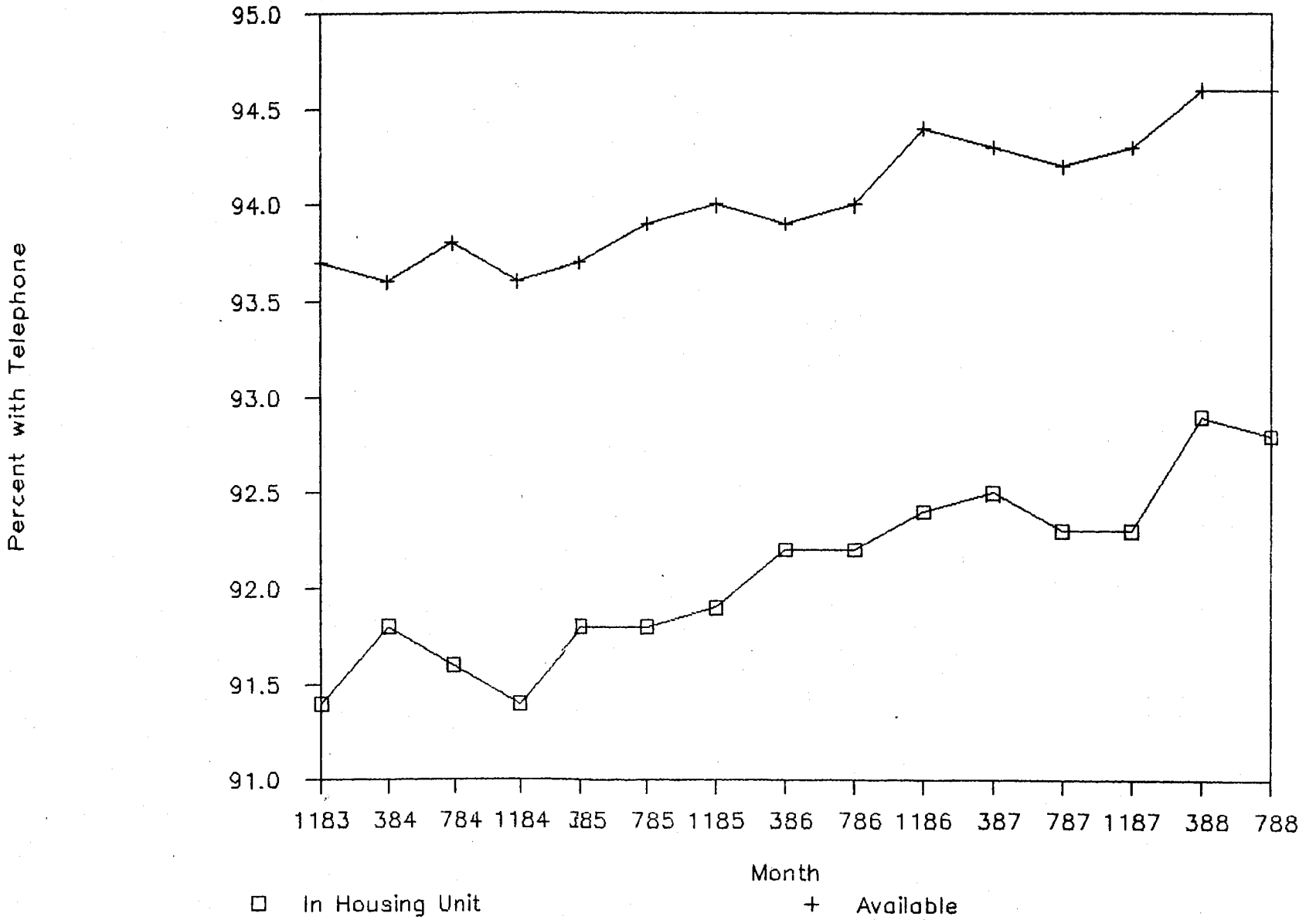


TABLE 1.3

PERCENTAGE OF HOUSEHOLDS WITH A TELEPHONE BY HOUSEHOLDER'S AGE

	ALL RACES		WHITE		BLACK		HISPANIC ORIGIN	
	Unit	Avail	Unit	Avail	Unit	Avail	Unit	Avail
NOVEMBER 83								
TOTAL HOUSEHOLDS	91.4	93.7	93.1	95.0	78.8	83.9	80.7	84.6
16-24 YRS OLD	76.6	84.1	80.2	86.2	49.9	68.2	64.9	71.9
25-54 YRS OLD	91.5	93.7	93.4	95.2	78.7	83.3	81.8	85.6
55-59 YRS OLD	95.0	96.1	96.1	97.0	86.3	88.5	89.3	89.3
60-64 YRS OLD	95.5	96.4	96.4	97.2	89.5	90.7	87.3	90.2
65-69 YRS OLD	95.5	96.2	96.5	97.0	87.2	89.0	90.7	90.7
70-99 YRS OLD	95.4	96.5	96.0	97.0	90.1	92.3	85.5	89.1
MARCH 84								
TOTAL HOUSEHOLDS	91.8	93.6	93.3	94.9	80.1	84.1	80.7	83.6
16-24 YRS OLD	77.8	84.0	80.3	85.5	57.9	71.5	59.0	66.2
25-54 YRS OLD	91.9	93.7	93.5	95.0	80.4	84.0	83.2	85.6
55-59 YRS OLD	94.9	95.9	95.7	96.6	87.6	89.9	88.7	90.5
60-64 YRS OLD	94.2	95.3	95.9	96.7	81.7	85.0	87.4	89.6
65-69 YRS OLD	96.1	96.6	97.0	97.4	87.8	89.3	85.8	87.8
70-99 YRS OLD	95.3	96.3	96.2	97.1	87.2	88.8	82.2	85.5
JULY 84								
TOTAL HOUSEHOLDS	91.6	93.8	93.2	95.0	80.5	85.3	81.1	84.6
16-24 YRS OLD	77.0	83.3	79.4	85.3	60.4	70.0	62.9	70.8
25-54 YRS OLD	91.7	93.8	93.4	95.1	79.8	84.9	83.1	85.8
55-59 YRS OLD	95.1	96.3	96.1	97.1	87.5	90.2	87.4	91.4
60-64 YRS OLD	95.0	96.2	95.8	96.9	87.7	89.5	88.1	90.5
65-69 YRS OLD	96.4	97.1	97.3	97.9	89.3	91.3	88.7	90.6
70-99 YRS OLD	95.2	96.5	95.9	96.9	89.6	93.1	84.0	88.5
NOVEMBER 84								
TOTAL HOUSEHOLDS	91.4	93.6	93.1	95.0	78.9	84.0	81.1	84.5
16-24 YRS OLD	76.1	83.4	79.0	85.4	56.3	70.8	60.8	70.8
25-54 YRS OLD	91.4	93.6	93.3	95.1	78.5	83.3	83.1	85.8
55-59 YRS OLD	94.9	96.2	96.3	97.5	84.7	87.4	85.3	88.3
60-64 YRS OLD	95.6	96.5	96.5	97.3	90.3	92.1	86.0	87.2
65-69 YRS OLD	96.0	96.7	97.1	97.6	86.7	89.1	96.2	96.2
70-99 YRS OLD	95.3	96.6	96.1	97.2	88.0	90.7	87.1	88.8
1984 ANNUAL AVERAGE								
TOTAL HOUSEHOLDS	91.6	93.7	93.2	94.9	79.8	84.5	80.9	84.3
16-24 YRS OLD	77.0	83.6	79.6	85.4	58.2	70.8	60.9	69.2
25-54 YRS OLD	91.7	93.7	93.4	95.1	79.6	84.1	83.1	85.7
55-59 YRS OLD	94.9	96.1	96.1	97.1	86.6	89.2	87.1	90.1
60-64 YRS OLD	94.9	96.0	96.0	97.0	86.6	88.8	87.1	89.1
65-69 YRS OLD	96.2	96.8	97.1	97.6	87.9	89.9	90.2	91.5
70-99 YRS OLD	95.3	96.5	96.0	97.1	88.2	90.9	84.4	87.6

TABLE 1.3

PERCENTAGE OF HOUSEHOLDS WITH A TELEPHONE BY HOUSEHOLDER'S AGE

	ALL RACES		WHITE		BLACK		HISPANIC ORIGIN	
	Unit	Avail	Unit	Avail	Unit	Avail	Unit	Avail
MARCH 85								
TOTAL HOUSEHOLDS	91.8	93.7	93.3	95.0	80.1	84.4	81.2	84.1
16-24 YRS OLD	77.3	83.1	79.6	84.8	59.8	70.0	62.4	67.1
25-54 YRS OLD	91.9	93.8	93.6	95.2	79.5	83.9	83.0	85.5
55-59 YRS OLD	94.9	95.9	95.8	96.7	87.3	89.1	86.5	89.1
60-64 YRS OLD	94.3	95.4	95.5	96.2	84.4	87.6	91.3	93.2
65-69 YRS OLD	96.1	97.0	96.8	97.5	90.7	93.6	86.5	90.4
70-99 YRS OLD	95.6	96.5	96.5	97.3	87.4	89.4	87.4	91.7
JULY 85								
TOTAL HOUSEHOLDS	91.8	93.9	93.2	95.0	81.6	85.8	80.3	83.3
16-24 YRS OLD	78.3	84.4	80.7	86.3	59.6	70.2	67.8	73.7
25-54 YRS OLD	91.8	93.9	93.3	95.1	81.4	85.8	81.0	83.6
55-59 YRS OLD	94.7	95.9	95.9	96.8	86.3	89.4	87.2	88.0
60-64 YRS OLD	95.0	95.9	95.5	96.4	91.1	91.8	85.5	88.3
65-69 YRS OLD	95.5	96.5	96.7	97.4	86.1	88.5	85.9	89.7
70-99 YRS OLD	95.6	96.8	96.2	97.3	90.8	92.4	87.6	90.5
NOVEMBER 85								
TOTAL HOUSEHOLDS	91.9	94.0	93.3	95.2	81.5	85.3	82.5	85.7
16-24 YRS OLD	78.0	83.9	80.6	86.3	60.7	68.1	64.3	71.6
25-54 YRS OLD	91.9	94.0	93.5	95.3	81.1	85.2	83.4	86.5
55-59 YRS OLD	95.0	96.2	95.7	96.8	90.0	91.4	88.4	90.6
60-64 YRS OLD	95.5	96.3	96.3	97.0	89.8	91.3	92.3	92.3
65-69 YRS OLD	96.1	97.0	97.0	97.7	88.0	90.8	95.1	95.1
70-99 YRS OLD	95.3	96.6	96.0	97.2	88.9	90.5	87.8	90.4
1985 ANNUAL AVERAGE								
TOTAL HOUSEHOLDS	91.8	93.9	93.3	95.0	81.1	85.2	81.3	84.4
16-24 YRS OLD	77.9	83.8	80.3	85.8	60.0	69.4	64.8	70.8
25-54 YRS OLD	91.9	93.9	93.5	95.2	80.7	85.0	82.5	85.2
55-59 YRS OLD	94.9	96.0	95.8	96.8	87.8	90.0	87.4	89.2
60-64 YRS OLD	94.9	95.9	95.8	96.5	88.4	90.2	89.7	91.3
65-69 YRS OLD	95.9	96.8	96.8	97.5	88.2	90.9	89.1	91.7
70-99 YRS OLD	95.5	96.6	96.2	97.3	89.1	90.7	87.6	90.9
MARCH 86								
TOTAL HOUSEHOLDS	92.2	93.9	93.6	95.0	82.0	85.8	81.5	83.9
16-24 YRS OLD	78.1	82.9	80.6	84.7	58.2	69.0	60.1	63.8
25-54 YRS OLD	92.3	93.9	93.8	95.1	82.1	85.6	83.1	85.3
55-59 YRS OLD	95.2	96.3	96.1	97.0	87.8	90.6	86.8	90.3
60-64 YRS OLD	95.5	96.2	96.2	96.9	89.0	90.5	92.4	92.4
65-69 YRS OLD	95.7	96.7	96.6	97.4	87.2	89.8	94.1	95.1
70-99 YRS OLD	95.9	97.0	96.4	97.5	91.2	93.0	93.1	96.2

TABLE 1.3

PERCENTAGE OF HOUSEHOLDS WITH A TELEPHONE BY HOUSEHOLDER'S AGE

	ALL RACES		WHITE		BLACK		HISPANIC ORIGIN	
	Unit	Avail	Unit	Avail	Unit	Avail	Unit	Avail
JULY 86								
TOTAL HOUSEHOLDS	92.2	94.0	93.7	95.2	81.5	85.7	81.1	83.6
16-24 YRS OLD	79.7	85.4	82.0	86.7	63.8	76.6	64.1	69.7
25-54 YRS OLD	92.1	93.9	93.8	95.3	80.4	84.4	83.0	85.1
55-59 YRS OLD	95.0	96.0	96.0	96.9	87.9	90.0	86.0	87.1
60-64 YRS OLD	95.3	96.2	95.9	96.6	90.9	92.9	81.8	85.1
65-69 YRS OLD	95.7	96.5	96.7	97.4	87.8	89.4	91.4	92.6
70-99 YRS OLD	95.8	96.5	96.4	97.1	90.6	91.8	85.3	86.1
NOVEMBER 86								
TOTAL HOUSEHOLDS	92.4	94.4	93.8	95.5	81.3	86.1	81.6	84.7
16-24 YRS OLD	79.4	84.7	81.9	86.3	57.5	71.1	65.9	68.8
25-54 YRS OLD	92.2	94.3	93.9	95.6	80.8	85.5	82.6	86.0
55-59 YRS OLD	95.3	96.6	96.1	97.0	88.3	93.2	90.1	93.8
60-64 YRS OLD	95.4	96.2	96.6	97.4	86.7	87.8	93.2	93.6
65-69 YRS OLD	96.0	96.9	96.7	97.5	90.2	92.5	85.7	88.0
70-99 YRS OLD	96.4	97.3	96.8	97.7	92.2	93.9	84.1	86.9
1986 ANNUAL AVERAGE								
TOTAL HOUSEHOLDS	92.3	94.1	93.7	95.2	81.6	85.9	81.4	84.1
16-24 YRS OLD	79.0	84.4	81.5	85.9	59.8	72.2	63.4	67.4
25-54 YRS OLD	92.2	94.0	93.8	95.3	81.1	85.2	82.9	85.5
55-59 YRS OLD	95.2	96.3	96.1	97.0	88.0	91.3	87.6	90.4
60-64 YRS OLD	95.4	96.2	96.2	97.0	88.9	90.4	89.1	90.3
65-69 YRS OLD	95.8	96.7	96.7	97.4	88.4	90.6	90.4	91.9
70-99 YRS OLD	96.0	97.0	96.5	97.4	91.3	92.9	87.5	89.8
MARCH 87								
TOTAL HOUSEHOLDS	92.5	94.3	93.9	95.4	82.2	85.7	84.1	86.5
16-24 YRS OLD	79.7	85.5	81.9	87.0	64.3	73.8	68.1	75.1
25-54 YRS OLD	92.6	94.2	94.1	95.5	81.7	85.3	85.1	87.0
55-59 YRS OLD	95.0	96.1	96.4	97.0	85.0	88.6	87.4	90.5
60-64 YRS OLD	95.6	96.4	96.5	97.2	87.6	89.8	92.6	92.6
65-69 YRS OLD	95.6	96.2	96.5	97.0	87.9	89.2	89.4	89.4
70-99 YRS OLD	95.8	97.0	96.3	97.5	91.4	92.3	95.3	96.1
JULY 87								
TOTAL HOUSEHOLDS	92.3	94.2	93.7	95.3	82.0	86.0	83.1	85.2
16-24 YRS OLD	78.2	83.3	81.2	85.7	57.6	67.2	66.2	69.7
25-54 YRS OLD	92.1	94.2	93.6	95.3	81.9	86.2	84.2	86.1
55-59 YRS OLD	95.4	96.2	96.5	97.2	87.1	89.8	90.8	92.4
60-64 YRS OLD	95.8	96.4	96.7	97.2	88.5	90.2	91.1	93.7
65-69 YRS OLD	96.5	97.2	97.5	98.1	88.9	90.2	87.5	87.5
70-99 YRS OLD	96.0	96.9	96.4	97.3	93.4	94.1	88.8	91.6

TABLE 1.3

PERCENTAGE OF HOUSEHOLDS WITH A TELEPHONE BY HOUSEHOLDER'S AGE

	ALL RACES		WHITE		BLACK		HISPANIC ORIGIN	
	Unit	Avail	Unit	Avail	Unit	Avail	Unit	Avail
NOVEMBER 87								
TOTAL HOUSEHOLDS	92.3	94.3	93.8	95.4	81.2	85.9	81.9	84.6
16-24 YRS OLD	78.9	84.4	81.0	85.5	63.6	76.0	61.3	67.8
25-54 YRS OLD	92.1	94.2	93.9	95.5	80.4	85.1	83.9	86.4
55-59 YRS OLD	95.3	96.4	96.3	97.3	88.9	90.3	89.1	89.3
60-64 YRS OLD	95.7	96.5	96.7	97.4	88.0	90.5	89.0	89.9
65-69 YRS OLD	95.7	96.6	97.0	97.6	84.6	88.4	89.6	89.6
70-99 YRS OLD	96.3	97.3	96.8	97.7	90.8	92.7	90.7	91.7
1987 ANNUAL AVERAGE								
TOTAL HOUSEHOLDS	92.4	94.2	93.8	95.4	81.8	85.9	83.0	85.4
16-24 YRS OLD	78.9	84.4	81.4	86.1	61.8	72.3	65.2	70.8
25-54 YRS OLD	92.3	94.2	93.9	95.4	81.4	85.5	84.4	86.5
55-59 YRS OLD	95.2	96.2	96.4	97.2	87.0	89.6	89.1	90.7
60-64 YRS OLD	95.7	96.4	96.6	97.3	88.0	90.2	90.9	92.0
65-69 YRS OLD	95.9	96.7	97.0	97.5	87.1	89.3	88.8	88.8
70-99 YRS OLD	96.0	97.0	96.5	97.5	91.9	93.0	91.6	93.1
MARCH 88								
TOTAL HOUSEHOLDS	92.9	94.6	94.2	95.7	82.7	86.3	82.6	85.7
16-24 YRS OLD	81.2	85.7	83.3	87.2	67.3	75.1	66.1	72.7
25-54 YRS OLD	92.8	94.4	94.3	95.7	81.2	84.9	83.9	86.5
55-59 YRS OLD	95.5	97.0	96.4	97.7	89.1	92.4	91.7	94.1
60-64 YRS OLD	95.4	96.4	96.4	97.2	87.7	90.8	85.3	88.4
65-69 YRS OLD	96.3	96.9	96.8	97.3	91.3	93.1	84.5	87.4
70-99 YRS OLD	95.8	97.3	96.2	97.7	92.7	94.0	91.2	93.5
JULY 88								
TOTAL HOUSEHOLDS	92.8	94.6	94.1	95.6	83.8	87.6	83.0	86.4
16-24 YRS OLD	80.6	85.5	82.6	87.1	65.6	73.8	67.0	73.4
25-54 YRS OLD	92.6	94.5	94.0	95.5	83.5	87.6	84.1	87.4
55-59 YRS OLD	94.4	95.7	95.8	97.0	85.7	87.6	88.6	89.1
60-64 YRS OLD	95.3	96.2	96.2	97.0	88.3	89.7	85.6	89.8
65-69 YRS OLD	96.7	97.4	97.5	97.9	89.6	93.2	92.9	93.9
70-99 YRS OLD	96.6	97.5	97.1	98.1	92.7	93.9	92.4	92.9

TABLE 1.4

PERCENTAGE OF HOUSEHOLDS WITH A TELEPHONE BY HOUSEHOLD SIZE

HOUSEHOLD SIZE	ALL RACES		WHITE		BLACK		HISPANIC ORIGIN	
	Unit	Avail	Unit	Avail	Unit	Avail	Unit	Avail
NOVEMBER 83								
TOTAL	91.4	93.7	93.1	95.0	78.8	83.9	80.7	84.6
1 PERSON	87.5	91.3	90.2	93.7	71.2	77.1	73.8	82.0
2 - 3	93.3	95.0	94.5	95.9	82.5	87.8	80.7	84.3
4 - 5	92.4	94.2	93.6	95.0	83.1	87.3	83.4	86.2
6 +	86.6	88.9	90.5	92.2	74.5	78.5	81.0	84.0
MARCH 84								
TOTAL	91.8	93.6	93.3	94.9	80.1	84.1	80.7	83.6
1 PERSON	88.6	91.7	90.7	93.3	73.9	79.9	72.2	76.4
2 - 3	93.3	94.9	94.5	95.8	82.4	86.2	80.7	84.2
4 - 5	92.7	94.0	94.1	95.2	82.9	85.7	85.4	87.2
6 +	86.4	88.3	88.6	90.2	78.8	82.0	78.8	81.5
JULY 84								
TOTAL	91.6	93.8	93.2	95.0	80.5	85.3	81.1	84.6
1 PERSON	88.6	92.1	90.2	93.4	77.3	83.2	71.9	80.5
2 - 3	93.1	94.9	94.4	95.8	82.2	87.2	82.5	85.1
4 - 5	92.3	93.9	93.8	95.1	81.9	86.1	83.9	86.3
6 +	87.6	89.3	91.0	92.3	76.1	79.0	79.5	83.1
NOVEMBER 84								
TOTAL	91.4	93.6	93.1	95.0	78.9	84.0	81.1	84.5
1 PERSON	87.8	91.5	90.1	93.5	73.5	78.9	74.6	81.1
2 - 3	93.1	95.0	94.4	96.0	82.3	87.1	82.7	86.2
4 - 5	92.3	93.9	93.9	95.1	80.6	85.3	82.6	85.1
6 +	86.8	88.8	89.8	91.0	74.0	79.3	79.1	80.8
1984 ANNUAL AVERAGE								
TOTAL	91.6	93.7	93.2	94.9	79.8	84.5	80.9	84.3
1 PERSON	88.3	91.8	90.3	93.4	74.9	80.7	72.9	79.4
2 - 3	93.2	94.9	94.5	95.9	82.3	86.8	82.0	85.2
4 - 5	92.5	94.0	93.9	95.1	81.8	85.7	83.9	86.2
6 +	86.9	88.8	89.8	91.1	76.3	80.1	79.2	81.8
MARCH 85								
TOTAL	91.8	93.7	93.3	95.0	80.1	84.4	81.2	84.1
1 PERSON	88.9	92.3	91.1	94.0	73.7	80.4	75.0	82.4
2 - 3	93.4	94.8	94.5	95.7	83.8	86.8	82.4	84.8
4 - 5	92.2	93.7	93.6	94.8	81.9	86.2	81.5	83.4
6 +	87.4	89.4	90.7	92.0	75.0	79.0	84.0	85.5

TABLE 1.4

PERCENTAGE OF HOUSEHOLDS WITH A TELEPHONE BY HOUSEHOLD SIZE

HOUSEHOLD SIZE	ALL RACES		WHITE		BLACK		HISPANIC ORIGIN	
	Unit	Avail	Unit	Avail	Unit	Avail	Unit	Avail
JULY 85								
TOTAL	91.8	93.9	93.2	95.0	81.6	85.8	80.3	83.3
1 PERSON	87.0	90.7	89.3	92.6	73.9	80.2	67.8	74.3
2 - 3	93.5	95.1	94.5	95.9	85.1	88.4	83.8	85.9
4 - 5	95.1	96.0	95.7	96.4	91.9	93.5	86.5	87.6
6 +	91.6	92.2	94.4	94.5	82.2	85.0	84.5	84.5
NOVEMBER 85								
TOTAL	91.9	94.0	93.3	95.2	81.5	85.3	82.5	85.7
1 PERSON	86.8	90.6	89.3	92.8	73.3	78.8	73.0	78.8
2 - 3	93.7	95.2	94.7	95.9	85.9	88.6	84.7	87.5
4 - 5	95.2	96.3	96.3	97.0	89.1	91.3	89.0	90.1
6 +	91.9	93.8	93.5	94.2	86.6	90.9	88.3	88.3
1985 ANNUAL AVERAGE								
TOTAL	91.8	93.9	93.3	95.0	81.1	85.2	81.3	84.4
1 PERSON	87.6	91.2	89.9	93.1	73.6	79.8	71.9	78.5
2 - 3	93.5	95.0	94.5	95.8	84.9	87.9	83.6	86.0
4 - 5	94.2	95.3	95.2	96.1	87.6	90.4	85.6	87.0
6 +	90.3	91.8	92.8	93.6	81.3	84.9	85.6	86.1
MARCH 86								
TOTAL	92.2	93.9	93.6	95.0	82.0	85.8	81.5	83.9
1 PERSON	89.1	92.3	90.6	93.5	79.2	83.9	79.1	85.0
2 - 3	93.9	95.2	95.0	96.0	84.5	88.0	81.2	83.3
4 - 5	92.7	93.8	94.1	94.9	82.8	86.4	83.8	85.5
6 +	86.7	88.0	89.7	90.7	74.2	76.9	78.8	79.8
JULY 86								
TOTAL	92.2	94.0	93.7	95.2	81.5	85.7	81.1	83.6
1 PERSON	87.6	90.8	90.1	92.9	74.3	79.5	71.8	76.6
2 - 3	94.0	95.3	94.9	96.0	85.4	89.1	83.4	85.5
4 - 5	95.1	95.8	96.0	96.4	89.6	91.2	86.8	87.5
6 +	92.5	94.2	95.4	95.5	78.0	87.4	88.2	88.2
NOVEMBER 86								
TOTAL	92.4	94.4	93.8	95.5	81.3	86.1	81.6	84.7
1 PERSON	87.7	91.2	90.4	93.3	72.6	79.5	70.9	76.5
2 - 3	94.1	95.5	95.0	96.2	86.0	89.7	84.7	87.4
4 - 5	95.5	96.3	96.3	96.8	91.3	93.5	85.9	87.1
6 +	91.1	92.3	93.5	94.1	81.2	84.1	82.8	84.3
1986 ANNUAL AVERAGE								
TOTAL	92.3	94.1	93.7	95.2	81.6	85.9	81.4	84.1
1 PERSON	88.1	91.4	90.4	93.2	75.4	81.0	73.9	79.3
2 - 3	94.0	95.3	95.0	96.1	85.3	88.9	83.1	85.4
4 - 5	94.4	95.3	95.4	96.1	87.9	90.4	85.5	86.7
6 +	90.1	91.5	92.9	93.5	77.8	82.8	83.3	84.1

TABLE 1.4

PERCENTAGE OF HOUSEHOLDS WITH A TELEPHONE BY HOUSEHOLD SIZE

HOUSEHOLD SIZE	ALL RACES		WHITE		BLACK		HISPANIC ORIGIN	
	Unit	Avail	Unit	Avail	Unit	Avail	Unit	Avail
MARCH 87								
TOTAL	92.5	94.3	93.9	95.4	82.2	85.7	84.1	86.5
1 PERSON	89.5	92.8	91.3	94.2	77.6	82.9	80.3	84.5
2 - 3	93.9	95.2	95.1	96.2	84.0	86.6	84.4	86.8
4 - 5	93.5	94.7	94.5	95.5	85.2	88.4	86.6	88.8
6 +	88.0	89.9	90.5	91.6	78.6	82.6	80.4	80.7
JULY 87								
TOTAL	92.3	94.2	93.7	95.3	82.0	86.0	83.1	85.2
1 PERSON	89.6	92.8	91.3	94.2	78.8	83.5	79.5	83.1
2 - 3	93.9	95.2	95.1	96.2	84.0	87.5	85.6	87.3
4 - 5	92.5	94.1	93.8	95.1	82.6	86.9	81.5	83.4
6 +	88.3	90.0	90.7	91.9	78.8	82.5	83.3	84.9
NOVEMBER 87								
TOTAL	92.3	94.3	93.8	95.4	81.2	85.9	81.9	84.6
1 PERSON	89.4	92.5	91.3	94.0	77.0	83.0	78.6	82.8
2 - 3	93.8	95.5	95.1	96.4	83.6	87.9	81.5	84.8
4 - 5	93.1	94.6	94.5	95.7	83.0	86.8	85.2	87.0
6 +	85.8	87.5	88.1	89.4	74.9	79.3	78.2	79.2
1987 ANNUAL AVERAGE								
TOTAL	92.4	94.2	93.8	95.4	81.8	85.9	83.0	85.4
1 PERSON	89.5	92.7	91.3	94.1	77.8	83.1	79.5	83.5
2 - 3	93.9	95.3	95.1	96.3	83.9	87.3	83.8	86.3
4 - 5	93.0	94.5	94.3	95.4	83.6	87.4	84.4	86.4
6 +	87.4	89.1	89.8	91.0	77.4	81.5	80.6	81.6
MARCH 88								
TOTAL	92.9	94.6	94.2	95.7	82.7	86.3	82.6	85.7
1 PERSON	88.7	92.0	90.8	93.7	77.5	82.5	76.8	82.2
2 - 3	94.6	95.7	95.5	96.4	85.9	88.7	84.2	86.9
4 - 5	94.6	95.5	95.7	96.6	85.7	87.6	83.6	85.0
6 +	93.8	95.0	95.3	95.3	86.7	93.1	91.0	91.0
JULY 88								
TOTAL	92.8	94.6	94.1	95.6	83.8	87.6	83.0	86.4
1 PERSON	88.5	91.7	90.8	93.5	76.9	82.5	73.9	80.3
2 - 3	94.6	95.8	95.4	96.5	87.5	90.3	85.7	88.5
4 - 5	95.2	96.0	95.8	96.4	91.7	93.5	84.8	86.2
6 +	93.4	95.8	94.0	96.4	88.8	92.7	88.0	91.0

TABLE 1.5

PERCENTAGE OF FAMILIES WITH A TELEPHONE BY FAMILY INCOME

	ALL RACES		WHITE		BLACK		HISPANIC ORIGIN	
	Unit	Avail	Unit	Avail	Unit	Avail	Unit	Avail
NOVEMBER 83								
TOTAL	91.4	93.7	93.1	95.0	78.8	83.9	80.7	84.6
UNDER \$5,000	71.7	78.4	75.7	81.9	62.7	70.4	58.3	64.6
\$5,000 - \$7,499	82.7	87.2	84.5	88.5	74.7	82.0	71.1	76.5
\$7,500 - \$9,999	88.2	90.9	89.6	92.2	80.5	83.9	72.6	77.9
\$10,000 - \$12,499	89.7	92.7	91.2	93.9	82.0	86.2	76.8	82.1
\$12,500 - \$14,999	92.1	94.6	93.4	95.2	82.5	90.7	89.8	91.7
\$15,000 - \$17,499	94.6	96.2	94.9	96.4	91.7	95.1	86.9	90.8
\$17,500 - \$19,999	95.7	97.4	96.1	97.7	91.4	95.0	88.4	91.5
\$20,000 - \$24,999	96.9	97.8	97.4	98.2	91.2	93.2	93.1	94.3
\$25,000 - \$29,999	98.0	98.9	98.2	99.0	96.1	97.2	98.3	99.0
\$30,000 - \$34,999	98.8	99.1	99.0	99.2	95.1	97.7	97.7	98.9
\$35,000 - \$39,999	99.0	99.5	99.1	99.5	98.4	98.4	92.1	98.2
\$40,000 - \$49,999	99.2	99.5	99.4	99.7	97.3	97.3	100.0	100.0
\$50,000 - \$74,999	99.4	99.7	99.5	99.7	98.5	100.0	99.6	100.0
\$75,000 +	99.4	99.6	99.4	99.6	100.0	100.0	100.0	100.0
MARCH 84								
TOTAL	91.8	93.6	93.3	94.9	80.1	84.1	80.7	83.6
UNDER \$5,000	71.4	77.0	74.7	79.8	62.8	69.7	53.6	60.2
\$5,000 - \$7,499	83.6	86.8	85.8	88.7	74.6	79.1	70.0	73.9
\$7,500 - \$9,999	85.8	89.3	87.7	90.8	75.9	81.1	72.2	76.3
\$10,000 - \$12,499	90.0	92.4	91.3	93.5	82.5	86.3	81.8	86.2
\$12,500 - \$14,999	92.7	94.3	93.6	95.2	84.6	86.7	88.5	89.7
\$15,000 - \$17,499	93.6	95.6	94.3	95.9	87.6	92.7	89.4	91.2
\$17,500 - \$19,999	95.3	96.3	95.4	96.3	94.8	96.4	87.1	88.0
\$20,000 - \$24,999	97.1	98.0	97.3	98.1	94.6	97.4	90.0	92.8
\$25,000 - \$29,999	98.1	98.6	98.5	98.9	93.5	94.8	96.2	97.6
\$30,000 - \$34,999	98.8	99.2	98.8	99.3	97.5	97.5	99.2	99.2
\$35,000 - \$39,999	99.4	99.6	99.5	99.7	96.3	97.2	100.0	100.0
\$40,000 - \$49,999	99.4	99.6	99.5	99.7	98.0	98.3	100.0	100.0
\$50,000 - \$74,999	99.2	99.6	99.3	99.7	97.0	97.0	100.0	100.0
\$75,000 +	98.9	99.6	99.0	99.6	94.0	100.0	95.1	100.0
JULY 84								
TOTAL	91.6	93.8	93.2	95.0	80.5	85.3	81.1	84.6
UNDER \$5,000	71.8	77.9	74.5	80.1	65.4	72.4	53.2	60.6
\$5,000 - \$7,499	82.6	86.9	84.8	88.8	74.4	80.3	71.7	76.1
\$7,500 - \$9,999	86.5	89.8	88.6	91.3	75.6	82.4	76.4	83.3
\$10,000 - \$12,499	89.7	92.7	90.7	93.3	83.4	88.9	80.7	84.1
\$12,500 - \$14,999	91.7	94.6	92.8	95.3	85.0	90.0	87.0	93.0
\$15,000 - \$17,499	94.1	95.9	94.5	96.3	89.4	91.1	87.6	88.0
\$17,500 - \$19,999	95.6	97.0	96.1	97.2	92.4	95.7	94.4	95.3
\$20,000 - \$24,999	96.8	97.8	97.2	98.0	92.9	95.7	96.7	97.3
\$25,000 - \$29,999	97.9	98.6	98.1	98.6	95.8	98.4	96.3	97.4
\$30,000 - \$34,999	98.8	99.1	98.8	99.2	97.7	97.7	100.0	100.0
\$35,000 - \$39,999	99.2	99.6	99.3	99.6	98.1	99.1	98.0	98.0
\$40,000 - \$49,999	99.3	99.5	99.5	99.7	96.1	96.1	100.0	100.0
\$50,000 - \$74,999	99.7	99.8	99.7	99.8	98.8	100.0	100.0	100.0
\$75,000 +	99.1	99.6	99.1	99.6	100.0	100.0	100.0	100.0

TABLE 1.5

PERCENTAGE OF FAMILIES WITH A TELEPHONE BY FAMILY INCOME

	ALL RACES		WHITE		BLACK		HISPANIC ORIGIN	
	Unit	Avail	Unit	Avail	Unit	Avail	Unit	Avail
NOVEMBER 84								
TOTAL	91.4	93.6	93.1	95.0	78.9	84.0	81.1	84.5
UNDER \$5,000	70.3	77.5	74.4	81.3	61.4	69.4	58.5	66.1
\$5,000 - \$7,499	83.7	87.1	85.8	88.8	75.3	81.2	67.7	70.8
\$7,500 - \$9,999	87.0	89.8	88.7	90.9	80.2	84.7	76.3	79.5
\$10,000 - \$12,499	89.4	92.6	91.4	94.1	77.4	83.6	76.8	83.5
\$12,500 - \$14,999	92.0	94.2	92.5	94.5	86.6	91.6	86.5	88.9
\$15,000 - \$17,499	93.3	95.6	93.8	95.8	88.6	93.0	88.3	91.0
\$17,500 - \$19,999	94.3	95.9	95.2	96.5	88.0	91.0	91.5	95.2
\$20,000 - \$24,999	96.5	97.6	96.8	97.9	92.3	94.3	90.7	93.3
\$25,000 - \$29,999	98.4	99.1	98.6	99.2	96.0	98.3	96.7	96.7
\$30,000 - \$34,999	98.6	99.1	98.9	99.3	95.3	96.6	97.1	98.0
\$35,000 - \$39,999	99.1	99.4	99.1	99.4	98.7	98.7	96.5	97.6
\$40,000 - \$49,999	99.2	99.6	99.3	99.7	95.7	96.4	96.8	97.8
\$50,000 - \$74,999	99.5	99.9	99.6	99.9	98.3	98.3	100.0	100.0
\$75,000 +	98.7	99.5	98.8	99.5	95.6	100.0	99.0	100.0
1984 ANNUAL AVERAGE								
TOTAL	91.6	93.7	93.2	94.9	79.8	84.5	80.9	84.3
UNDER \$5,000	71.2	77.5	74.5	80.4	63.2	70.5	55.1	62.3
\$5,000 - \$7,499	83.3	86.9	85.5	88.7	74.8	80.2	69.8	73.6
\$7,500 - \$9,999	86.5	89.6	88.3	91.0	77.2	82.7	75.0	79.7
\$10,000 - \$12,499	89.7	92.6	91.1	93.6	81.1	86.3	79.7	84.6
\$12,500 - \$14,999	92.1	94.4	93.0	95.0	85.4	89.5	87.3	90.5
\$15,000 - \$17,499	93.7	95.7	94.2	96.0	88.5	92.2	88.4	90.0
\$17,500 - \$19,999	95.1	96.4	95.6	96.7	91.7	94.4	91.0	92.8
\$20,000 - \$24,999	96.8	97.8	97.1	98.0	93.3	95.8	92.5	94.5
\$25,000 - \$29,999	98.1	98.8	98.4	98.9	95.1	97.2	96.4	97.2
\$30,000 - \$34,999	98.7	99.1	98.8	99.3	96.8	97.2	98.8	99.1
\$35,000 - \$39,999	99.2	99.5	99.3	99.6	97.7	98.3	98.2	98.5
\$40,000 - \$49,999	99.3	99.6	99.4	99.7	96.6	96.9	98.9	99.3
\$50,000 - \$74,999	99.4	99.8	99.5	99.8	98.0	98.4	100.0	100.0
\$75,000 +	98.9	99.6	98.9	99.6	96.5	100.0	98.0	100.0
MARCH 85								
TOTAL	91.8	93.7	93.3	95.0	80.1	84.4	81.2	84.1
UNDER \$5,000	71.1	77.5	75.1	81.0	62.1	69.7	57.9	64.1
\$5,000 - \$7,499	82.5	86.1	85.0	88.1	72.0	77.6	65.9	70.8
\$7,500 - \$9,999	86.3	89.2	87.6	90.3	79.9	83.9	72.2	77.1
\$10,000 - \$12,499	89.5	92.2	90.7	93.1	81.5	86.0	85.1	86.6
\$12,500 - \$14,999	91.4	93.9	92.6	94.7	83.3	87.8	86.9	90.0
\$15,000 - \$17,499	93.7	95.8	94.6	96.3	88.1	92.0	85.8	88.5
\$17,500 - \$19,999	94.1	95.5	94.7	96.0	89.1	92.0	93.6	94.2
\$20,000 - \$24,999	96.2	97.2	96.4	97.3	93.3	95.5	88.8	91.0
\$25,000 - \$29,999	97.8	98.5	98.0	98.7	95.3	96.6	93.1	96.2
\$30,000 - \$34,999	98.6	99.0	98.8	99.0	97.3	98.3	97.8	97.8
\$35,000 - \$39,999	99.0	99.4	99.1	99.4	96.7	98.2	99.5	99.5
\$40,000 - \$49,999	98.9	99.2	99.0	99.3	97.0	98.0	97.4	97.4
\$50,000 - \$74,999	99.5	99.6	99.5	99.7	98.4	98.7	98.4	98.4
\$75,000 +	99.5	99.6	99.5	99.6	100.0	100.0	100.0	100.0

TABLE 1.5

PERCENTAGE OF FAMILIES WITH A TELEPHONE BY FAMILY INCOME

	ALL RACES		WHITE		BLACK		HISPANIC ORIGIN	
	Unit	Avail	Unit	Avail	Unit	Avail	Unit	Avail
JULY 85								
TOTAL	91.8	93.9	93.2	95.0	81.6	85.8	80.3	83.3
UNDER \$5,000	72.0	77.9	74.9	80.7	64.5	71.1	60.7	65.8
\$5,000 - \$7,499	83.2	87.0	84.6	87.9	76.7	83.2	67.9	71.2
\$7,500 - \$9,999	86.9	90.8	87.7	91.1	82.3	88.1	76.0	78.1
\$10,000 - \$12,499	89.7	92.5	91.1	93.6	82.1	86.8	76.7	79.5
\$12,500 - \$14,999	91.0	93.6	92.6	94.9	80.2	84.6	79.2	83.2
\$15,000 - \$17,499	93.4	95.5	94.2	96.2	88.6	91.2	86.1	88.4
\$17,500 - \$19,999	94.5	96.1	94.8	96.5	91.9	93.0	87.1	89.8
\$20,000 - \$24,999	96.7	97.8	96.8	98.0	94.7	96.5	92.9	95.7
\$25,000 - \$29,999	97.1	98.1	97.4	98.2	94.4	97.0	91.5	95.2
\$30,000 - \$34,999	98.4	98.9	98.5	99.0	96.5	97.9	96.9	96.9
\$35,000 - \$39,999	98.7	99.2	98.8	99.4	98.4	98.4	95.8	98.6
\$40,000 - \$49,999	99.3	99.6	99.3	99.6	99.3	99.3	98.8	98.8
\$50,000 - \$74,999	99.3	99.7	99.4	99.7	97.7	98.8	100.0	100.0
\$75,000 +	99.0	99.4	99.0	99.4	100.0	100.0	95.6	95.6
NOVEMBER 85								
TOTAL	91.9	94.0	93.3	95.2	81.5	85.3	82.5	85.7
UNDER \$5,000	72.7	79.0	75.9	82.2	65.2	71.1	66.4	71.0
\$5,000 - \$7,499	82.5	86.3	84.7	88.2	73.3	78.6	65.9	71.9
\$7,500 - \$9,999	87.1	89.9	88.9	91.4	78.7	82.9	76.8	82.8
\$10,000 - \$12,499	89.6	92.0	90.5	93.1	83.3	85.2	79.3	82.4
\$12,500 - \$14,999	90.6	93.6	91.6	93.9	84.7	90.9	82.4	84.2
\$15,000 - \$17,499	93.1	95.5	93.8	96.1	88.0	92.1	85.3	89.0
\$17,500 - \$19,999	95.4	96.9	95.8	97.3	93.5	95.3	90.7	94.4
\$20,000 - \$24,999	96.0	97.4	96.1	97.5	95.1	96.8	92.3	94.4
\$25,000 - \$29,999	98.0	98.8	98.1	98.8	97.5	98.3	94.3	96.3
\$30,000 - \$34,999	98.7	99.1	98.8	99.2	98.2	98.9	97.3	97.3
\$35,000 - \$39,999	98.6	99.1	98.8	99.3	95.5	96.7	99.2	100.0
\$40,000 - \$49,999	99.0	99.3	99.1	99.4	97.0	97.3	96.3	98.3
\$50,000 - \$74,999	99.2	99.7	99.3	99.7	97.5	98.8	100.0	100.0
\$75,000 +	99.2	99.3	99.3	99.4	92.7	92.7	100.0	100.0
1985 ANNUAL AVERAGE								
TOTAL	91.8	93.9	93.3	95.0	81.1	85.2	81.3	84.4
UNDER \$5,000	71.9	78.1	75.3	81.3	63.9	70.6	61.6	67.0
\$5,000 - \$7,499	82.7	86.5	84.8	88.1	74.0	79.8	66.6	71.3
\$7,500 - \$9,999	86.8	90.0	88.1	90.9	80.3	85.0	75.0	79.4
\$10,000 - \$12,499	89.6	92.2	90.8	93.2	82.3	86.0	80.4	82.8
\$12,500 - \$14,999	91.0	93.7	92.2	94.5	82.7	87.8	82.8	85.8
\$15,000 - \$17,499	93.4	95.6	94.2	96.2	88.2	91.8	85.7	88.6
\$17,500 - \$19,999	94.7	96.2	95.1	96.6	91.5	93.4	90.4	92.8
\$20,000 - \$24,999	96.3	97.5	96.5	97.6	94.4	96.3	91.3	93.7
\$25,000 - \$29,999	97.6	98.5	97.8	98.6	95.8	97.3	93.0	95.9
\$30,000 - \$34,999	98.6	99.0	98.7	99.1	97.3	98.4	97.3	97.3
\$35,000 - \$39,999	98.8	99.2	98.9	99.4	96.9	97.8	98.2	99.4
\$40,000 - \$49,999	99.1	99.4	99.1	99.4	97.8	98.2	97.5	98.2
\$50,000 - \$74,999	99.3	99.7	99.4	99.7	97.9	98.8	99.5	99.5
\$75,000 +	99.2	99.5	99.2	99.5	97.6	97.6	98.5	98.5

TABLE 1.5

PERCENTAGE OF FAMILIES WITH A TELEPHONE BY FAMILY INCOME

	ALL RACES		WHITE		BLACK		HISPANIC ORIGIN	
	Unit	Avail	Unit	Avail	Unit	Avail	Unit	Avail
MARCH 86								
TOTAL	92.2	93.9	93.6	95.0	82.0	85.8	81.5	83.9
UNDER \$5,000	71.1	76.9	74.0	79.3	63.8	71.1	56.7	61.3
\$5,000 - \$7,499	82.7	85.8	85.1	87.8	72.0	76.9	68.7	72.7
\$7,500 - \$9,999	87.6	90.0	88.8	90.8	82.1	86.4	72.1	73.9
\$10,000 - \$12,499	89.5	91.8	90.6	92.7	82.1	86.0	78.5	81.0
\$12,500 - \$14,999	91.3	94.1	92.0	94.7	87.6	90.9	84.6	90.0
\$15,000 - \$17,499	92.9	94.5	93.6	95.2	88.0	91.0	84.9	89.1
\$17,500 - \$19,999	94.6	96.0	95.2	96.4	90.1	92.8	86.1	88.8
\$20,000 - \$24,999	96.3	97.1	96.7	97.4	93.6	95.0	92.3	93.5
\$25,000 - \$29,999	97.2	98.0	97.7	98.3	91.6	94.0	92.5	92.5
\$30,000 - \$34,999	98.3	98.6	98.4	98.7	97.5	97.8	96.9	97.7
\$35,000 - \$39,999	98.9	99.2	99.1	99.3	98.1	98.1	100.0	100.0
\$40,000 - \$49,999	98.9	99.3	99.0	99.3	98.3	98.3	97.5	97.5
\$50,000 - \$74,999	99.5	99.7	99.5	99.7	99.3	99.3	100.0	100.0
\$75,000 +	99.3	99.4	99.3	99.4	100.0	100.0	98.5	100.0
JULY 86								
TOTAL	92.2	94.0	93.7	95.2	81.5	85.7	81.1	83.6
UNDER \$5,000	71.5	77.0	74.4	79.7	65.4	71.2	57.1	63.8
\$5,000 - \$7,499	82.6	86.1	85.0	87.9	73.8	79.2	64.9	68.6
\$7,500 - \$9,999	86.3	90.1	87.8	90.8	77.4	85.9	72.9	75.9
\$10,000 - \$12,499	89.6	92.4	90.8	93.2	82.9	87.3	80.9	81.9
\$12,500 - \$14,999	91.5	93.9	92.4	94.5	83.4	88.8	87.1	87.7
\$15,000 - \$17,499	93.1	95.2	94.3	95.8	84.2	90.6	86.9	88.9
\$17,500 - \$19,999	95.5	96.6	95.8	97.0	93.2	94.3	89.4	91.9
\$20,000 - \$24,999	96.6	97.6	97.0	98.0	92.1	94.0	94.5	95.0
\$25,000 - \$29,999	97.7	98.4	98.0	98.7	95.7	96.6	92.2	95.0
\$30,000 - \$34,999	98.3	98.8	98.5	99.0	96.6	97.8	98.0	98.7
\$35,000 - \$39,999	99.2	99.3	99.2	99.4	98.4	98.4	98.6	98.6
\$40,000 - \$49,999	99.1	99.4	99.1	99.4	99.0	99.0	98.1	98.9
\$50,000 - \$74,999	99.6	99.8	99.6	99.8	100.0	100.0	98.2	99.2
\$75,000 +	99.6	99.8	99.7	99.8	95.5	100.0	100.0	100.0
NOVEMBER 86								
TOTAL	92.4	94.4	93.8	95.5	81.3	86.1	81.6	84.7
UNDER \$5,000	72.3	78.3	76.3	81.3	62.6	70.9	58.9	63.7
\$5,000 - \$7,499	83.9	87.7	85.6	89.0	77.0	82.7	70.8	75.0
\$7,500 - \$9,999	86.8	90.4	88.7	91.6	76.3	83.2	73.8	77.7
\$10,000 - \$12,499	89.6	92.1	90.6	93.0	82.9	85.9	81.4	84.9
\$12,500 - \$14,999	90.8	93.6	91.3	94.0	88.1	91.3	80.0	85.7
\$15,000 - \$17,499	93.4	95.6	94.9	96.1	83.7	93.3	87.2	88.8
\$17,500 - \$19,999	94.6	96.4	94.9	96.6	93.4	95.6	86.0	89.7
\$20,000 - \$24,999	96.5	97.9	96.9	98.1	92.5	95.0	92.1	93.8
\$25,000 - \$29,999	98.2	98.9	98.4	99.0	96.2	97.1	97.0	98.1
\$30,000 - \$34,999	98.7	99.1	99.0	99.3	96.2	97.1	97.7	98.9
\$35,000 - \$39,999	98.6	99.3	98.8	99.4	96.5	97.2	95.8	99.2
\$40,000 - \$49,999	99.2	99.5	99.3	99.6	97.4	97.4	100.0	100.0
\$50,000 - \$74,999	99.5	99.7	99.6	99.8	99.0	99.0	100.0	100.0
\$75,000 +	99.3	99.7	99.3	99.7	98.6	98.6	93.9	100.0

TABLE 1.5

PERCENTAGE OF FAMILIES WITH A TELEPHONE BY FAMILY INCOME

	ALL RACES		WHITE		BLACK		HISPANIC ORIGIN	
	Unit	Avail	Unit	Avail	Unit	Avail	Unit	Avail
1986 ANNUAL AVERAGE								
TOTAL	92.3	94.1	93.7	95.2	81.6	85.9	81.4	84.1
UNDER \$5,000	71.6	77.4	74.9	80.1	63.9	71.0	57.5	62.9
\$5,000 - \$7,499	83.1	86.5	85.2	88.2	74.3	79.6	68.1	72.1
\$7,500 - \$9,999	86.9	90.2	88.4	91.1	78.6	85.2	72.9	75.8
\$10,000 - \$12,499	89.6	92.1	90.7	93.0	82.6	86.4	80.3	82.6
\$12,500 - \$14,999	91.2	93.8	91.9	94.4	86.4	90.3	83.9	87.8
\$15,000 - \$17,499	93.1	95.1	94.3	95.7	85.3	91.6	86.3	88.9
\$17,500 - \$19,999	94.9	96.3	95.3	96.7	92.2	94.2	87.2	90.1
\$20,000 - \$24,999	96.5	97.5	96.9	97.9	92.8	94.6	93.0	94.1
\$25,000 - \$29,999	97.7	98.4	98.0	98.7	94.5	95.9	93.9	95.2
\$30,000 - \$34,999	98.4	98.9	98.6	99.0	96.7	97.5	97.5	98.4
\$35,000 - \$39,999	98.9	99.3	99.0	99.4	97.6	97.9	98.1	99.3
\$40,000 - \$49,999	99.1	99.4	99.1	99.4	98.2	98.2	98.5	98.8
\$50,000 - \$74,999	99.5	99.8	99.6	99.8	99.4	99.4	99.4	99.7
\$75,000 +	99.4	99.6	99.4	99.6	98.0	99.5	97.5	100.0
MARCH 87								
TOTAL	92.5	94.3	93.9	95.4	82.2	85.7	84.1	86.5
UNDER \$5,000	71.9	78.0	75.1	80.9	63.8	70.5	63.8	67.6
\$5,000 - \$7,499	83.6	86.7	85.3	87.9	76.8	81.9	69.5	73.0
\$7,500 - \$9,999	87.7	89.9	88.5	90.6	83.6	86.2	78.1	81.0
\$10,000 - \$12,499	89.4	92.0	90.5	93.1	81.4	85.2	78.9	82.1
\$12,500 - \$14,999	90.5	92.9	91.7	93.9	84.2	86.3	83.6	85.0
\$15,000 - \$17,499	92.4	94.7	93.3	95.6	85.8	88.6	83.7	88.9
\$17,500 - \$19,999	94.2	95.9	95.0	96.3	88.1	92.4	91.0	93.0
\$20,000 - \$24,999	96.6	97.4	97.1	97.9	93.5	94.6	94.1	95.1
\$25,000 - \$29,999	97.3	98.4	97.8	98.7	92.8	95.0	96.6	97.8
\$30,000 - \$34,999	98.1	98.7	98.3	98.9	96.0	96.4	96.5	97.5
\$35,000 - \$39,999	98.6	99.0	98.9	99.1	94.7	97.1	96.9	96.9
\$40,000 - \$49,999	99.4	99.7	99.4	99.7	99.6	99.6	99.6	99.9
\$50,000 - \$74,999	99.4	99.6	99.5	99.7	98.1	98.8	98.6	99.5
\$75,000 +	99.7	99.8	99.7	99.8	97.2	100.0	100.0	100.0
JULY 87								
TOTAL	92.3	94.2	93.7	95.3	82.0	86.0	83.1	85.2
UNDER \$5,000	70.7	75.9	74.1	78.7	63.8	70.5	58.0	62.7
\$5,000 - \$7,499	83.6	87.0	85.8	88.8	75.5	80.7	71.6	73.1
\$7,500 - \$9,999	86.5	89.6	88.1	90.8	78.8	83.7	76.6	79.0
\$10,000 - \$12,499	89.6	92.6	90.6	93.4	82.9	87.8	84.2	86.6
\$12,500 - \$14,999	91.2	93.7	92.3	94.4	83.6	88.8	86.3	88.4
\$15,000 - \$17,499	92.2	94.4	92.7	94.6	89.0	93.2	87.0	88.9
\$17,500 - \$19,999	94.8	96.2	95.8	97.0	88.1	91.0	87.7	87.7
\$20,000 - \$24,999	96.0	97.4	96.4	97.8	92.0	93.9	93.4	95.6
\$25,000 - \$29,999	97.6	98.4	98.1	98.8	93.7	95.2	98.7	98.7
\$30,000 - \$34,999	98.0	98.9	98.1	98.8	97.5	98.9	96.9	98.2
\$35,000 - \$39,999	98.8	99.2	98.8	99.2	97.8	98.9	96.8	96.8
\$40,000 - \$49,999	99.3	99.6	99.4	99.7	98.3	98.6	100.0	100.0
\$50,000 - \$74,999	99.4	99.8	99.4	99.9	99.4	99.4	97.6	99.1
\$75,000 +	99.4	99.8	99.4	99.7	100.0	100.0	97.2	100.0

TABLE 1.5

PERCENTAGE OF FAMILIES WITH A TELEPHONE BY FAMILY INCOME

	ALL RACES		WHITE		BLACK		HISPANIC ORIGIN	
	Unit	Avail	Unit	Avail	Unit	Avail	Unit	Avail
NOVEMBER 87								
TOTAL	92.3	94.3	93.8	95.4	81.2	85.9	81.9	84.6
UNDER \$5,000	71.8	78.2	75.7	81.3	63.5	72.0	60.3	66.9
\$5,000 - \$7,499	82.9	86.5	85.6	88.7	72.2	78.0	68.5	71.0
\$7,500 - \$9,999	85.8	89.2	87.6	90.4	75.7	82.2	72.9	76.7
\$10,000 - \$12,499	89.4	92.3	90.1	92.9	85.5	89.4	80.0	83.7
\$12,500 - \$14,999	90.5	93.1	91.6	93.9	83.7	88.1	85.6	87.5
\$15,000 - \$17,499	93.3	95.5	94.5	96.2	85.8	90.6	86.1	88.4
\$17,500 - \$19,999	94.1	95.8	94.5	96.0	90.9	94.8	89.2	91.2
\$20,000 - \$24,999	96.8	98.0	97.0	98.1	95.1	96.7	92.0	94.0
\$25,000 - \$29,999	97.6	98.4	98.1	98.6	93.8	95.7	93.8	94.7
\$30,000 - \$34,999	98.1	99.0	98.5	99.2	94.8	96.4	97.4	97.4
\$35,000 - \$39,999	98.9	99.4	99.1	99.4	96.9	99.7	98.4	99.3
\$40,000 - \$49,999	99.5	99.6	99.6	99.7	98.0	98.0	99.4	99.4
\$50,000 - \$74,999	99.7	99.8	99.7	99.9	99.7	100.0	99.8	100.0
\$75,000 +	99.4	99.8	99.4	99.8	98.2	98.7	98.4	100.0
1987 ANNUAL AVERAGE								
TOTAL	92.4	94.2	93.8	95.4	81.8	85.9	83.0	85.4
UNDER \$5,000	71.5	77.4	75.0	80.3	63.7	71.0	60.7	65.7
\$5,000 - \$7,499	83.4	86.7	85.5	88.4	74.8	80.2	69.9	72.4
\$7,500 - \$9,999	86.7	89.6	88.1	90.6	79.3	84.0	75.8	78.9
\$10,000 - \$12,499	89.5	92.3	90.4	93.1	83.2	87.5	81.0	84.1
\$12,500 - \$14,999	90.8	93.2	91.9	94.1	83.8	87.7	85.2	86.9
\$15,000 - \$17,499	92.6	94.9	93.5	95.5	86.9	90.8	85.6	88.7
\$17,500 - \$19,999	94.4	96.0	95.1	96.4	89.0	92.7	89.3	90.6
\$20,000 - \$24,999	96.4	97.6	96.8	97.9	93.5	95.1	93.1	94.9
\$25,000 - \$29,999	97.5	98.4	98.0	98.7	93.4	95.3	96.4	97.1
\$30,000 - \$34,999	98.1	98.9	98.3	99.0	96.1	97.2	96.9	97.7
\$35,000 - \$39,999	98.8	99.2	98.9	99.3	96.5	98.6	97.4	97.7
\$40,000 - \$49,999	99.4	99.7	99.5	99.7	98.7	98.7	99.7	99.8
\$50,000 - \$74,999	99.5	99.8	99.5	99.8	99.1	99.4	98.7	99.6
\$75,000 +	99.5	99.8	99.5	99.8	98.5	99.6	98.6	100.0
MARCH 88								
TOTAL	92.9	94.6	94.2	95.7	82.7	86.3	82.6	85.7
UNDER \$5,000	72.3	78.1	75.2	81.1	65.5	71.6	59.4	67.0
\$5,000 - \$7,499	84.0	87.4	86.1	89.1	75.6	80.5	71.6	76.9
\$7,500 - \$9,999	85.8	89.0	86.8	90.1	79.9	83.1	63.0	69.0
\$10,000 - \$12,499	89.4	92.2	90.7	92.9	82.3	88.4	78.7	82.2
\$12,500 - \$14,999	91.2	93.1	92.2	94.0	83.7	86.5	82.7	83.6
\$15,000 - \$19,999	93.4	94.8	94.2	95.4	87.3	89.7	87.3	89.0
\$20,000 - \$24,999	96.4	97.7	96.6	97.9	94.3	95.9	91.6	95.1
\$25,000 - \$29,999	97.7	98.3	97.8	98.4	95.5	97.1	94.1	95.3
\$30,000 - \$34,999	98.1	98.7	98.6	99.1	92.6	94.9	97.5	97.5
\$35,000 - \$39,999	98.9	99.3	99.0	99.3	97.5	98.0	98.7	98.7
\$40,000 - \$49,999	99.2	99.7	99.2	99.6	97.6	100.0	99.1	99.1
\$50,000 - \$74,999	99.5	99.8	99.6	99.9	99.1	99.1	99.3	99.4
\$75,000 +	99.6	99.9	99.5	99.9	100.0	100.0	96.7	100.0

TABLE 1.5

PERCENTAGE OF FAMILIES WITH A TELEPHONE BY FAMILY INCOME

	ALL RACES		WHITE		BLACK		HISPANIC ORIGIN	
	Unit	Avail	Unit	Avail	Unit	Avail	Unit	Avail
JULY 88								
TOTAL	92.8	94.6	94.1	95.6	83.8	87.6	83.0	86.4
UNDER \$5,000	72.3	78.6	75.2	80.9	65.9	73.8	59.2	64.3
\$5,000 - \$7,499	84.4	87.8	85.7	89.0	80.0	84.5	68.2	74.9
\$7,500 - \$9,999	86.0	89.2	87.7	90.8	80.2	83.3	71.8	78.8
\$10,000 - \$12,499	88.4	91.2	89.6	92.1	81.9	86.2	79.2	81.4
\$12,500 - \$14,999	91.2	94.1	91.6	94.3	88.1	92.1	80.4	86.8
\$15,000 - \$19,999	93.8	95.6	94.4	96.1	89.1	92.2	91.1	93.2
\$20,000 - \$24,999	95.8	97.0	96.2	97.2	91.8	95.1	88.7	90.1
\$25,000 - \$29,999	97.3	98.0	97.8	98.4	92.7	94.7	95.6	97.8
\$30,000 - \$34,999	98.5	99.0	98.8	99.2	95.6	97.2	98.7	99.4
\$35,000 - \$39,999	98.5	98.9	98.6	99.0	97.7	98.3	93.9	95.3
\$40,000 - \$49,999	99.4	99.7	99.5	99.8	97.3	98.1	98.0	100.0
\$50,000 - \$59,999	99.5	99.8	99.6	99.8	98.0	98.5	100.0	100.0
\$60,000 - \$74,999	99.6	99.9	99.6	99.8	100.0	100.0	97.9	99.8
\$75,000 +	99.4	99.9	99.4	99.9	100.0	100.0	97.2	100.0

TABLE 1.6

PERCENTAGE OF PERSONS WITH A TELEPHONE BY LABOR FORCE STATUS

	TOTAL		WHITE		BLACK		HISPANIC ORIGIN	
	Unit	Avail	Unit	Avail	Unit	Avail	Unit	Avail
NOVEMBER 83								
TOTAL CNP	92.8	94.5	94.1	95.6	82.7	86.6	83.4	86.5
EMPLOYED	94.1	95.9	95.0	96.6	85.7	89.8	86.3	89.6
UNEMPLOYED	82.5	86.5	84.8	88.1	74.6	81.2	76.6	79.9
NOT IN LABOR FORCE	92.1	93.4	93.8	94.9	80.8	83.7	80.4	83.0
MARCH 84								
TOTAL CNP	93.0	94.5	94.2	95.5	83.5	86.7	83.3	85.7
EMPLOYED	94.5	95.9	95.3	96.5	87.6	90.8	87.1	89.3
UNEMPLOYED	82.0	85.7	83.8	87.1	75.5	80.3	73.3	76.1
NOT IN LABOR FORCE	92.0	93.3	93.8	94.9	80.2	82.7	79.6	82.1
JULY 84								
TOTAL CNP	92.8	94.5	94.1	95.5	83.1	87.1	82.7	85.7
EMPLOYED	93.9	95.6	94.9	96.3	85.6	89.6	84.8	87.8
UNEMPLOYED	81.2	84.8	83.7	86.6	73.9	79.7	74.0	78.2
NOT IN LABOR FORCE	92.4	93.8	93.9	95.1	82.1	85.7	80.8	83.5
NOVEMBER 84								
TOTAL CNP	92.6	94.4	94.1	95.5	82.0	86.2	82.9	85.5
EMPLOYED	93.8	95.6	94.8	96.4	84.7	89.1	85.1	87.8
UNEMPLOYED	81.8	85.6	84.3	87.3	74.7	80.8	74.7	77.8
NOT IN LABOR FORCE	92.0	93.4	93.8	95.0	79.8	83.2	80.6	82.9
1984 ANNUAL AVERAGE								
TOTAL CNP	92.8	94.5	94.1	95.5	82.9	86.7	83.0	85.6
EMPLOYED	94.0	95.7	95.0	96.4	85.9	89.8	85.7	88.3
UNEMPLOYED	81.7	85.3	84.0	87.0	74.7	80.2	74.0	77.4
NOT IN LABOR FORCE	92.1	93.5	93.8	95.0	80.7	83.9	80.3	82.8
MARCH 85								
TOTAL CNP	93.0	94.5	94.2	95.5	83.5	86.8	83.3	85.4
EMPLOYED	94.3	95.8	95.1	96.4	87.1	90.2	85.1	87.4
UNEMPLOYED	82.9	86.0	84.6	87.1	76.1	81.3	72.6	75.1
NOT IN LABOR FORCE	92.1	93.5	93.8	94.9	80.2	83.4	82.5	84.3

TABLE 1.6

PERCENTAGE OF PERSONS WITH A TELEPHONE BY LABOR FORCE STATUS

	TOTAL		WHITE		BLACK		HISPANIC ORIGIN	
	Unit	Avail	Unit	Avail	Unit	Avail	Unit	Avail
JULY 85								
TOTAL CNP	92.9	94.6	94.0	95.5	84.5	87.9	82.9	85.0
EMPLOYED	94.0	95.8	94.8	96.4	87.4	90.6	84.5	86.5
UNEMPLOYED	83.6	87.3	85.5	88.7	78.0	83.0	77.9	80.7
NOT IN LABOR FORCE	92.2	93.6	93.6	94.8	82.0	85.1	81.1	83.5
NOVEMBER 85								
TOTAL CNP	93.1	94.7	94.3	95.7	84.4	87.4	84.2	86.9
EMPLOYED	94.4	96.0	95.2	96.6	87.5	90.5	85.8	88.7
UNEMPLOYED	80.5	84.3	82.4	86.0	74.9	79.0	70.9	74.9
NOT IN LABOR FORCE	92.3	93.7	93.9	95.1	82.2	85.1	84.2	86.0
1985 ANNUAL AVERAGE								
TOTAL CNP	93.0	94.6	94.2	95.6	84.1	87.4	83.5	85.8
EMPLOYED	94.2	95.8	95.0	96.5	87.3	90.4	85.1	87.5
UNEMPLOYED	82.3	85.8	84.2	87.3	76.3	81.1	73.8	76.9
NOT IN LABOR FORCE	92.2	93.6	93.8	94.9	81.5	84.5	82.6	84.6
MARCH 86								
TOTAL CNP	93.4	94.7	94.5	95.6	84.9	87.8	83.4	85.1
EMPLOYED	94.6	95.8	95.4	96.4	88.3	91.0	85.1	86.9
UNEMPLOYED	82.7	86.1	85.1	88.0	74.6	80.2	73.6	75.3
NOT IN LABOR FORCE	92.7	93.8	94.2	95.1	82.4	85.0	82.5	84.1
JULY 86								
TOTAL CNP	93.4	94.8	94.6	95.7	84.4	87.9	83.2	85.1
EMPLOYED	94.8	96.1	95.6	96.8	87.3	90.9	85.4	87.3
UNEMPLOYED	82.2	85.9	84.1	87.4	75.7	80.8	79.0	80.1
NOT IN LABOR FORCE	92.3	93.6	93.8	94.8	82.3	85.2	79.9	82.2
NOVEMBER 86								
TOTAL CNP	93.4	95.1	94.6	95.9	84.5	88.5	83.4	86.1
EMPLOYED	94.6	96.2	95.4	96.7	87.7	91.4	85.4	87.9
UNEMPLOYED	81.9	86.0	84.2	87.6	74.1	81.0	73.3	79.2
NOT IN LABOR FORCE	92.8	94.2	94.3	95.4	82.3	85.9	81.7	84.0
1986 ANNUAL AVERAGE								
TOTAL CNP	93.4	94.8	94.6	95.8	84.6	88.1	83.3	85.4
EMPLOYED	94.7	96.1	95.5	96.6	87.7	91.1	85.3	87.4
UNEMPLOYED	82.3	86.0	84.5	87.6	74.8	80.7	75.3	78.2
NOT IN LABOR FORCE	92.6	93.9	94.1	95.1	82.3	85.4	81.4	83.4

TABLE 1.6

PERCENTAGE OF PERSONS WITH A TELEPHONE BY LABOR FORCE STATUS

	TOTAL		WHITE		BLACK		HISPANIC ORIGIN	
	Unit	Avail	Unit	Avail	Unit	Avail	Unit	Avail
MARCH 87								
TOTAL CNP	93.6	95.0	94.8	95.9	85.0	87.9	85.5	87.3
EMPLOYED	94.8	96.1	95.6	96.7	88.6	91.1	86.7	88.6
UNEMPLOYED	84.1	87.1	86.7	89.3	75.5	80.1	82.8	84.9
NOT IN LABOR FORCE	92.8	94.0	94.3	95.2	82.0	85.2	83.9	85.5
JULY 87								
TOTAL CNP	93.4	94.9	94.6	95.8	85.2	88.4	84.5	86.3
EMPLOYED	94.4	96.0	95.3	96.6	87.4	90.7	86.4	88.2
UNEMPLOYED	83.9	87.3	85.9	89.1	77.5	82.1	77.1	80.5
NOT IN LABOR FORCE	92.7	93.7	94.1	94.9	83.3	86.1	82.1	83.6
NOVEMBER 87								
TOTAL CNP	93.4	94.9	94.6	95.9	84.1	87.9	83.5	85.7
EMPLOYED	94.6	96.1	95.4	96.7	87.8	91.2	85.8	88.1
UNEMPLOYED	80.0	83.8	83.3	86.3	69.2	75.6	71.2	73.5
NOT IN LABOR FORCE	92.6	94.0	94.3	95.3	81.2	85.1	81.6	83.3
1987 ANNUAL AVERAGE								
TOTAL CNP	93.5	94.9	94.7	95.9	84.7	88.1	84.5	86.4
EMPLOYED	94.6	96.1	95.4	96.7	87.9	91.0	86.3	88.3
UNEMPLOYED	82.7	86.1	85.3	88.2	74.0	79.3	77.0	79.6
NOT IN LABOR FORCE	92.7	93.9	94.2	95.2	82.2	85.5	82.5	84.1
MARCH 88								
TOTAL CNP	93.8	95.2	95.0	96.2	84.8	87.7	83.8	86.4
EMPLOYED	95.2	96.4	95.9	97.0	88.5	91.3	86.5	88.8
UNEMPLOYED	83.2	86.2	86.0	88.6	74.2	78.8	74.6	77.8
NOT IN LABOR FORCE	92.6	94.0	94.2	95.4	81.5	84.3	80.4	83.5
JULY 88								
TOTAL CNP	93.9	95.3	94.9	96.1	86.5	89.6	84.9	87.5
EMPLOYED	94.8	96.2	95.6	96.8	88.8	91.8	86.3	89.0
UNEMPLOYED	84.5	88.1	87.3	90.0	76.7	82.9	78.1	81.3
NOT IN LABOR FORCE	93.0	94.4	94.3	95.5	84.7	87.3	83.3	85.7

CHART 1.2

Telephone Penetration

Individuals

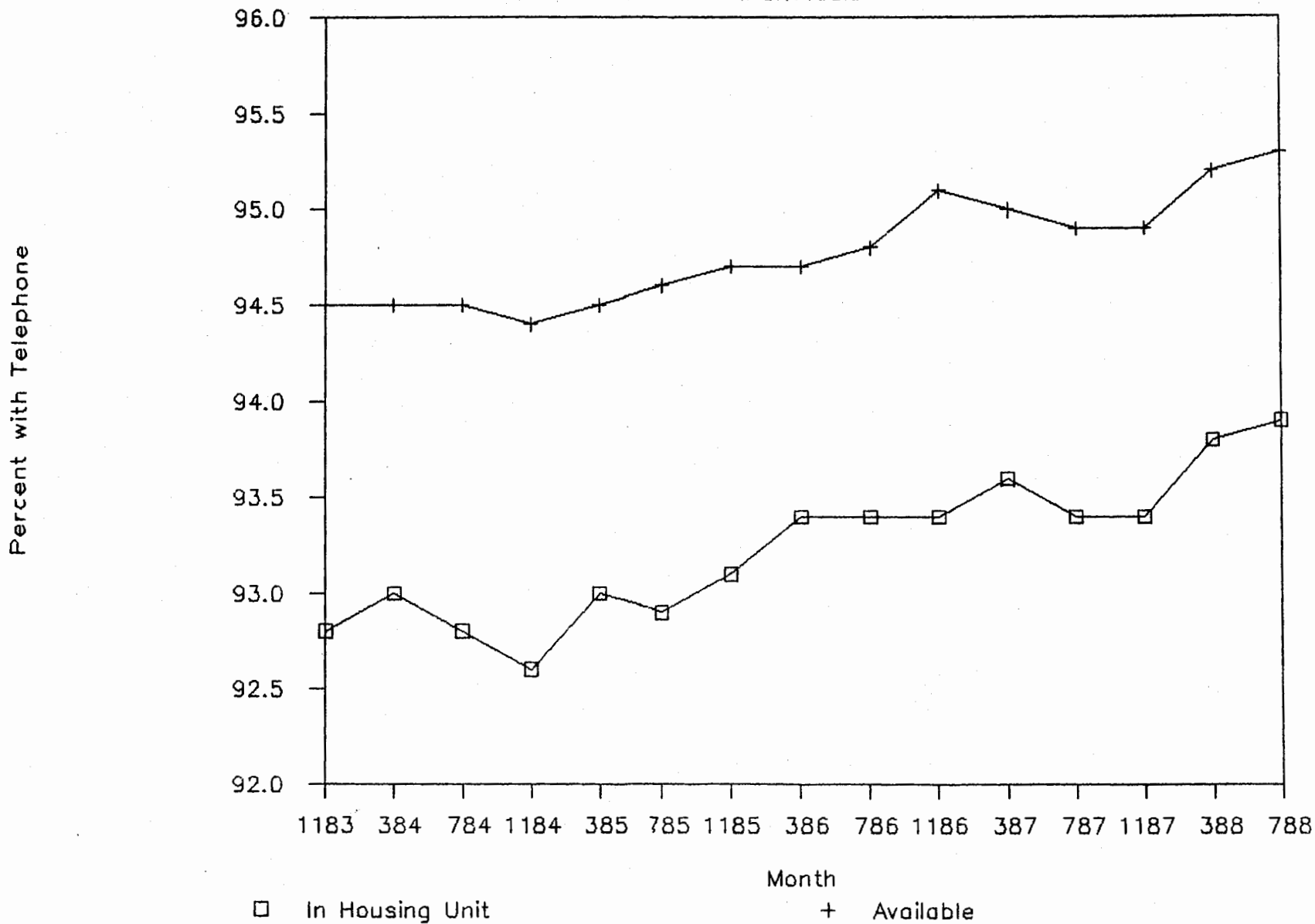


TABLE 1.7

Critical Values for Determining Significant Differences for States

<u>State</u>	<u>In Unit</u>	<u>Available</u>
Total US	0.5%	0.5%
Alabama	3.6	3.4
Alaska	5.3	4.5
Arizona	4.4	4.3
Arkansas	5.8	4.8
California	1.6	1.4
Colorado	3.3	3.0
Connecticut	2.9	1.8
Delaware	3.2	2.7
Dist. of Columbia	3.8	2.8
Florida	2.9	2.8
Georgia	4.9	4.5
Hawaii	2.7	2.1
Idaho	4.1	3.4
Illinois	2.1	1.8
Indiana	3.3	2.7
Iowa	3.0	2.3
Kansas	2.5	2.3
Kentucky	5.2	4.8
Louisiana	4.2	3.7
Maine	3.8	3.2
Maryland	3.2	2.7
Massachusetts	2.5	2.3
Michigan	2.6	2.2
Minnesota	2.6	2.4
Mississippi	4.9	4.5
Missouri	3.6	2.9
Montana	5.2	4.3
Nebraska	3.3	3.0
Nevada	5.0	4.3
New Hampshire	4.0	3.4
New Jersey	2.4	2.1
New Mexico	5.8	4.5
New York	2.1	1.9
North Carolina	3.9	3.4
North Dakota	3.9	3.5
Ohio	2.2	1.9
Oklahoma	3.8	3.6

TABLE 1.7 (cont.)

<u>State</u>	<u>In Unit</u>	<u>Available</u>
Oregon	3.5	3.0
Pennsylvania	1.6	1.3
Rhode Island	3.0	2.5
South Carolina	6.2	5.3
South Dakota	3.7	3.5
Tennessee	4.8	4.3
Texas	2.6	2.3
Utah	4.5	4.5
Vermont	5.4	4.6
Virginia	4.0	3.4
Washington	4.0	3.9
West Virginia	4.5	3.9
Wisconsin	3.2	3.0
Wyoming	4.6	3.9

TABLE 1.8

Critical Values for Determining Significant Differences for Age and Race

	ALL RACES		WHITE		BLACK		HISPANIC	
	<u>In Unit</u>	<u>Avail- able</u>	<u>In Unit</u>	<u>Avail- able</u>	<u>In Unit</u>	<u>Avail- able</u>	<u>In Unit</u>	<u>Avail- able</u>
Total Households	0.5%	0.5%	0.5%	0.5%	2.2%	1.9%	4.9%	4.4%
16 - 24 Yrs old	1.6%	1.4%	1.6%	1.5%	5.5%	5.5%	10.6%	10.2%
25 - 54 Yrs old	0.7%	0.6%	0.7%	0.6%	2.7%	2.4%	6.0%	5.4%
55 - 59 Yrs old	2.1%	1.8%	2.1%	1.8%	8.8%	7.6%	21.0%	19.0%
60 - 64 Yrs old	2.1%	1.8%	2.1%	1.8%	9.4%	8.1%	25.0%	22.4%
65 - 69 Yrs old	2.3%	2.0%	2.3%	1.9%	10.1%	8.8%	30.1%	26.7%
70 - 99 Yrs old	1.6%	1.4%	1.6%	1.4%	7.9%	6.7%	23.6%	21.2%

TABLE 1.9

Critical Values for Determining Significant Differences for Household Size

	ALL RACES		WHITE		BLACK		HISPANIC	
	<u>In Unit</u>	<u>Avail- able</u>	<u>In Unit</u>	<u>Avail- able</u>	<u>In Unit</u>	<u>Avail- able</u>	<u>In Unit</u>	<u>Avail- able</u>
Total	0.5%	0.5%	0.5%	0.5%	2.2%	1.9%	4.9%	4.4%
1 Person	1.1%	1.0%	1.1%	1.0%	4.1%	3.7%	11.9%	11.1%
2 - 3	0.8%	0.7%	0.8%	0.7%	3.4%	3.0%	7.5%	6.9%
4 - 5	1.1%	1.0%	1.2%	1.0%	4.6%	4.1%	8.8%	8.0%
6 +	2.5%	2.2%	2.8%	2.4%	7.7%	6.9%	13.9%	12.5%

TABLE 1.10

Critical Values for Determining Significant Differences for Income

		ALL RACES		WHITE		BLACK		HISPANIC	
		<u>In</u>	<u>Avail-</u>	<u>In</u>	<u>Avail-</u>	<u>In</u>	<u>Avail-</u>	<u>In</u>	<u>Avail-</u>
		<u>Unit</u>	<u>able</u>	<u>Unit</u>	<u>able</u>	<u>Unit</u>	<u>able</u>	<u>Unit</u>	<u>able</u>
	Total	0.5%	0.5%	0.5%	0.5%	2.2%	1.9%	4.8%	4.4%
	Under \$5,000	1.3%	1.2%	1.5%	1.4%	3.4%	3.2%	9.0%	8.7%
	\$5,000 - \$7,499	1.7%	1.5%	1.8%	1.6%	5.5%	5.0%	11.6%	10.7%
	\$7,500 - \$9,999	2.0%	1.7%	2.0%	1.8%	7.2%	6.5%	14.5%	13.4%
	\$10,000 - \$12,499	1.9%	1.6%	1.9%	1.7%	7.3%	6.5%	16.4%	15.1%
	\$12,500 - \$14,999	2.1%	1.8%	2.1%	1.8%	8.5%	7.5%	18.7%	16.9%
	\$15,000 - \$17,499	2.2%	1.9%	2.2%	2.0%	9.2%	8.1%	19.6%	18.0%
	\$17,500 - \$19,999	2.3%	2.0%	2.3%	2.0%	10.5%	9.2%	20.5%	18.4%
	\$20,000 - \$24,999	1.7%	1.5%	1.7%	1.5%	9.1%	7.8%	16.9%	15.3%
	\$25,000 - \$29,999	1.9%	1.7%	1.9%	1.6%	10.8%	9.3%	22.4%	20.0%
	\$30,000 - \$34,999	2.0%	1.8%	2.0%	1.7%	12.5%	10.7%	24.7%	22.1%
	\$35,000 - \$39,999	2.4%	2.1%	2.4%	2.0%	15.4%	13.3%	28.6%	25.5%
	\$40,000 - \$49,999	2.2%	1.9%	2.1%	1.8%	15.3%	12.9%	29.3%	26.0%
	\$50,000 - \$74,999	2.3%	1.9%	2.2%	1.9%	16.4%	13.9%	32.1%	28.7%
	\$75,000 +	3.5%	3.0%	3.3%	2.8%	44.6%	38.0%	54.5%	49.0%

TABLE 1.11

Critical Values for Determining Significant Differences for Employment Status

	ALL RACES		WHITE		BLACK		HISPANIC	
	<u>In</u> <u>Unit</u>	<u>Avail-</u> <u>able</u>	<u>In</u> <u>Unit</u>	<u>Avail-</u> <u>able</u>	<u>In</u> <u>Unit</u>	<u>Avail-</u> <u>able</u>	<u>In</u> <u>Unit</u>	<u>Avail-</u> <u>able</u>
Total CNP	0.8%	0.7%	0.8%	0.7%	3.2%	2.8%	7.4%	6.7%
Employed	1.0%	0.9%	1.0%	0.9%	4.0%	3.5%	9.9%	9.0%
Unemployed	3.1%	2.8%	3.4%	3.0%	9.1%	8.3%	25.4%	23.3%
Not in Labor Force	1.3%	1.1%	1.3%	1.1%	5.1%	4.4%	12.0%	10.9%

2. Lifeline Assistance Plans

To further the universal service objectives of the Communications Act, the Joint Board and the FCC established lifeline assistance programs to ensure that low income subscribers do not drop off the telephone network, and additionally to encourage new subscribers to obtain service. This section discusses the three federal lifeline plans and the various state programs implemented in response to those federal programs to date. This section does not discuss the many state programs that are unrelated to the federal lifeline programs. Attachment I is a report from NECA on projected costs on a state-by-state basis for implementing lifeline assistance in 1988. Attachment II provides a summary of the annual reports, required by the Commission to recertify existing lifeline and Link Up America programs, which have thus far been received. 1 The reports include eligibility, participation, and cost data reported by the states of Maryland, North Carolina, Vermont, Washington, and West Virginia, and by the Ameritech, Bell Atlantic, NYNEX, Southwestern Bell, and US West telephone companies.

Because participating states and telephone companies have wide latitude in selecting means tests and eligibility criteria and in shaping the benefits of the programs, and because no uniform reporting form has heretofore been required, existing reports do not fully describe the impact of these programs. To improve the evaluation measures required of certified states and telephone companies, a new annual reporting form has been developed. Attachment III is a copy of the annual cost report that will be filed by FCC certified local telephone companies and state commissions. Attachment IV provides summary data indicating the percentage of total residential service customers enrolled in lifeline programs which were in effect by the second quarter of 1987.

The FCC, in conjunction with the states and local telephone companies, has established lifeline programs which are designed to promote universal service by helping low income individuals afford telephone service. The programs are funded through charges ultimately paid by interstate ratepayers, are managed by the states, and may take the form of a reduction in monthly charges or a reduction in service connection and installation

1 MTS and WATS Market Structure and Amendment of Part 67 of the Commission's Rules and Establishment of a Joint Board, Decision and Order, CC Docket Nos. 78-72 and 80-286 (para 5) FCC 85-643, 51 Fed. Reg. 1371 (January 13, 1986); and Establishment of a Program to Monitor the Impact of Joint Board Decision, Order, CC Docket No. 87-339, 2 FCC Rcd 5266 (1987).

charges. After state programs are certified by the FCC, local exchange carriers are reimbursed through the National Exchange Carrier Association (NECA) revenue pool for program expenses. These revenues are not funded by federal tax dollars. Under these programs, lifeline benefits are only available to persons who pass a "means" test such as eligibility for food stamps or Medicaid. A second requirement for FCC certification is that each applicant's eligibility for benefits be verified. The state has considerable latitude in selecting means tests, shaping the benefits, and determining the geographic availability of the programs.

Based on the recommendation of the Federal-State Joint Board, the FCC has made available the following three federal lifeline assistance plans:

Plan 1- On December 19, 1984, the FCC adopted an optional plan which allows a reduction in fixed charges for telephone service equal to the federal subscriber line charge (SLC) for low income households satisfying a state determined means test subject to verification. This is accomplished by a 50% reduction in the SLC funded through the interstate carrier common line charge (CCLC). States wishing to take advantage of this assistance mechanism are required to implement an equal monetary reduction in the local exchange rate for those low income households to be funded from state sources. The assistance would be available for a single telephone line for the principal residence of eligible households.

Plan 2- On December 10, 1985, the FCC adopted broader lifeline assistance measures for low income households providing for a reduction in fixed charges for telephone service of twice the size of the SLC. This reduction would be achieved through a waiver of the full federal SLC up to the amount matched by state assistance, provided that the state plans meet the following federal requirements:

a) means test -- highly targeted assistance plan which focuses on those individuals on limited incomes;

b) subject to verification -- procedures must be established which routinely check to ensure that those individuals eligible under the plans are the individuals benefitting under the plan;

c) availability -- for a single telephone line for the principal residence of eligible households.

The state matching contribution can be in the form of reduced local telephone service rates, reduced connection charges or

reduced deposit requirements. No restrictions are imposed on the source of funding for the state assistance. The federal assistance is to be funded by the carriers through the interstate Common Carrier Line Charge (CCLC).

Plan 3- On April 16, 1987, the FCC adopted a two part plan, Link Up America, to connect low income households to the telephone network. Under the first part, sufficient federal assistance will be provided to pay one-half of the connection charges, up to a maximum of \$30.00 in benefits to cover charges assessed for commencing telephone service. Under the second part, when a local exchange company (LEC) offers a deferred payment plan not to exceed 12 months for service commencement charges and it does not assess the subscribers any interest charges, federal assistance will be available to that LEC to cover the interest on costs of up to \$200.

Connection assistance will be available for one telephone line per household, at a subscriber's principal place of residence. Before receiving federal assistance, a plan must meet the following criteria to ensure that the assistance is properly targeted: 1) the customer requesting assistance has lived at an address or addresses where there has been no telephone service for at least three months immediately prior to the request for assistance; 2) assistance is available, at most, once every two years; 3) the customer cannot be a dependent (as defined by the federal income tax code) under the age of 60; and 4) the customer must meet state-determined income criteria. The first two criteria are to be verified by using LEC records. The final two criteria may be self-certified. If a state determines, however, that verification of criteria #1 and #2 is administratively or economically impractical for a LEC, that the necessary information must be provided by a LEC or agency outside the state, or that other specified circumstances exist, then self-certification of these criteria will be allowed and criterion #4 must be verified by the state or LEC.

States are encouraged, but not required, to match the federal benefits and cover the remaining half of the connection charges. The states and LECs are encouraged to develop deferred payment plans for service commencement charges as well as to provide reductions in, or waivers of, security deposit requirements for low income customers who do not have poor credit histories.

Federal assistance is to be funded through the interstate CCLC until April 1989, at which time all three lifeline assistance

plans will be funded through direct billing of the interexchange carriers (IXCs) by NECA. IXCs will be responsible for paying lifeline assistance if they have at least 1) 1% of the "1+" or "presubscribed" common lines presubscribed to interexchange carriers in all study areas, or 2) 5% of the presubscribed lines in any study area and a minimum of 1,000 presubscribed lines in that study area.

On June 23, 1988, the FCC adopted a Notice of Proposed Rule Making in CC Docket No. 88-341 which proposed eliminating the requirement that consumers requesting to be included in the Link Up America program have lived at an address where there has not been telephone service for the last three months and have not received Link Up benefits in the last two years. This Notice was adopted in response to waiver requests from the States of Maine and New York. Some telephone companies have declined to participate in the program due to the existence of non-means-based eligibility criteria. The Commission is concerned that the three-month and two-year eligibility rules are discouraging participation in Link Up America. Data from a pilot program indicate that approximately 15 percent of Link Up applicants have been rejected for failure to meet the three-month rule. Therefore, the Commission proposed eliminating these rules for states and telephone companies that verify income eligibility but retaining these rules and requiring prior service verification in cases where income eligibility is not verified. Comments were filed in that docket on August 15, 1988, and reply comments were filed on September 12, 1988. Those comments will be summarized and discussed in the order that is forthcoming in that docket.

Two states, California and New York, began offering a lifeline assistance program pursuant to Plan 1 in 1985. New York switched to Plan 2 in November 1987. Twenty-four states and the District of Columbia have been certified to offer lifeline assistance pursuant to Plan 2. At this time, thirty-one states and the District of Columbia have been certified by the FCC to provide lifeline connection assistance under the Link Up America Program, Plan 3, which became effective July 1, 1987. Table 2.1 provides a complete listing of all approved state and local exchange company programs offering assistance, and the dates of FCC certification.

TABLE 2.1

Lifeline and Connection Assistance Programs:
Date of Approval

State	Lifeline	Link Up
Alabama		10/01/87
Arizona	11/14/86	1/15/88
Arkansas	5/22/86	10/01/87
California	1/01/85*	
Colorado	7/25/86	11/13/87
Connecticut		11/13/87
District of Columbia	3/18/86	8/19/87
Hawaii	10/27/86	
Idaho	7/24/87	
Indiana		4/25/88
Iowa		3/10/88
Kansas		1/27/88
Kentucky		12/24/87
Maine	8/11/87	8/11/87**
Maryland	5/22/86	10/01/87
Minnesota	1/27/88	1/27/88
Mississippi		4/27/88
Missouri	10/01/87	12/28/87
Montana	8/11/87	8/11/87
Nebraska		3/17/88
Nevada	4/28/87	
New Jersey		11/13/87
New Mexico	4/01/87	1/15/88
New York	11/02/87***	8/11/87
North Carolina	5/22/86	10/19/87
North Dakota		12/24/87
Ohio	7/01/87	10/01/87
Oregon	5/22/86	5/05/88
Pennsylvania		6/02/88
Rhode Island	9/21/87	9/21/87
South Carolina		12/24/87
South Dakota	3/25/88	3/25/88
Texas	7/12/88	10/01/87
Utah	12/31/86	3/17/88

Vermont	10/01/86	
Virginia	12/24/87	12/24/87
Washington	7/24/87	
West Virginia	7/25/86	9/11/87

- * California is the only state still offering a lifeline program under Plan 1 (the 50% waiver of the SLC).
- ** Approved but not implemented as of 9/1/88.
- *** From June 1985 until November 1987, the State of New York offered a lifeline program under Plan 1.

A brief summary of Plan 2 being offered in each of these states follows. It should be noted that Texas has been added to this listing since our June report. 2

-Arizona: established a three year telephone Assistance Pilot Program that targets individuals at or below 150% of federal poverty guidelines. State assistance includes coverage of all costs of flat-rate unlimited local calling, wire and line maintenance fee, and a one-time upgrade of service (not to exceed a value of \$27.50). A telephone rental for a monthly fee of \$2.25 is also offered. All applicants are state interviewed and certified annually. The program was approved on November 14, 1986.

-Arkansas: established a Lifeline Measured Rate service available to residential ratepayers who meet the criteria of the federal food stamp program. The local program has been in effect since September 1984 and provides an estimated average benefit of \$4.10 per month per subscriber, independent of the waiver of the subscriber line charge.

-Colorado: enacted legislation effective September 1, 1986, to establish the Colorado low-income Telephone Assistance Program through revised state statutes. The law provides single-line dial-tone and flat-rate service in a principal residence at the equivalent of a twenty-five percent discount. Eligible subscribers are state social service recipients of financial assistance programs for the elderly and low-income disabled persons who qualify for supplemental security income under federal programs.

-District of Columbia: established an Economy II service available to residential ratepayers who are over 65 years of age and qualify under federal statutory criteria for participation in the Low Income Home Energy Assistance Programs (LIHEAP) or the Complementary Energy Assistance Program in the District. The local program provides an average benefit of \$4.81 per month per subscriber, independent

2 Comments filed by Mountain States Telephone and Telegraph Company, Northwestern Bell Telephone Company and Pacific Northwest Bell Telephone Company provided corrections in the description of the lifeline programs in Arizona, Minnesota, Montana, New Mexico, Oregon, South Dakota and Washington. These have been incorporated herein.

of the waiver of the subscriber line charge. The program was approved on March 18, 1986.

-Hawaii: enacted legislation on April 30, 1986. The rate is \$2.70 less than the regular individual residence rate for eligible participants 60 years of age or older with total annual household income of \$10,000 or less. On October 15, 1986, the Hawaiian Telephone Company filed tariffs with the Public Utilities Commission setting verification and income eligibility standards, providing for installation of a single residence access line and associated equipment, a 50% reduction in service connection charges, elimination of nonrecurring charges and three-month payment leniency on reduced connection charges.

-Idaho: legislation passed in 1987 (H.B. No. 298) provides for Telecommunications Service Assistance which requires that recipients meet both age and income means tests. Applicants must be a head of household, sixty years of age or older, and participants in LIHEAP (130% of the federal poverty guidelines). The Idaho Public Utilities Commission will set a uniform monthly surcharge on each business and residential access line to reimburse telephone service providers. The program matches the subscriber line charge, and was approved on July 24, 1987.

-Maine: established a Lifeline Service Program for eligible households receiving AFDC, SSI, Medicaid, Food Stamps, or Energy Assistance. The program provides reduced service and equipment charges for installation, and a reduction in the monthly rate of basic exchange service. Maine estimates over 22,250 participating subscribers (40% of those qualified) and forecasts an annual installation program of 8,600. The program was approved on August 11, 1987.

-Maryland: established a Tel-Life service available to residential ratepayers who qualify under the state general public assistance program or under the federal Social Security Act. The Public Service Commission estimates that 39,750 people will qualify under the program and that the average benefit will be \$4.40 per month per subscriber, independent of the additional discount available on initial installation and connection services and of the waiver of the subscriber line charge. The program was approved May 22, 1986.

-Minnesota: In 1987, the state of Minnesota enacted a law to provide state assistance to low income subscribers. Approximately 40,000 households may be eligible for benefits.

Eligibility is certified by the Department of Human Service. The MPUC ordered all 94 local telephone companies to use the same tariff. The MPUC set a surcharge initially at 10 cents per local subscriber per month to generate approximately \$2.4 million annually. The Minnesota program was approved on January 27, 1988.

-Missouri: enacted a Lifeline Service Plan on October 1, 1987. The plan offers reduced rates of \$5.30 for one basic residential access line. Eligible subscribers must qualify for energy assistance, be at least 65 years of age or disabled, and have an annual income of no more than \$7,500. The Missouri Division of Family Services will provide Southwestern Bell with a list of residents eligible to participate. Continued eligibility will be certified by Southwestern Bell through a list provided by the Division of Family Services.

-Montana: established a program based on criteria in Montana S.B. No. 257. Assistance will be verified by the Montana Department of Social and Rehabilitation Services for subscribers receiving Medicaid (12,000 households). The state assistance for subscribers will equal the residential subscriber line charge. Reimbursement of the telephone company for discounts will be authorized by the Public Service Commission through a monthly rate surcharge. The program was approved on August 11, 1987.

-Nevada: established the Nevada Experimental Lifeline Program which has two sets of criteria for eligibility, each of which meets the federal criteria: (a) the applicant must be at least 60 years of age and the applicant's household gross income must be under 150% of the federal poverty level; (b) the applicant must be a recipient of government-funded public assistance, e.g., SSI or SSA, regardless of age, with household income under 150% of the poverty level. The Experimental Lifeline Program will be funded solely by the shareholders of Nevada Bell to provide a \$2.60 per month discount and the once-a-year 50% discount connection charge. Eligible subscribers will receive discounts without limitation to the grade of service or customer calling patterns. The program was approved on April 18, 1987.

-New Mexico: approved the Mountain Bell Low Income Telephone Assistance Program (LITAP), effective March 1, 1987. Under LITAP, Mountain Bell's customers in New Mexico who receive supplemental income under the Social Security Act, Aid for Dependent Children, and Community in-home care are eligible

for lifeline benefits. Customers receive a \$2.60 per month reduction in monthly bills for basic exchange service, and a 25% discount on the access line installation. Program eligibility is administered by the New Mexico Human Service Department.

-New York: beginning June 1, 1985, New York Telephone offered a basic lifeline plan to qualified subscribers that waived 50% of the Subscriber Line Charge. In September 1987 the Public Service Commission ordered the telephone company to expand the program. The expanded lifeline plan provides discounts on monthly service in excess of the \$2.60 Subscriber Line Charge. One option, the Basic Lifeline plan, provides eligible subscribers a message rate access line for \$1 per month plus a 10% discount on up to \$5 of monthly usage. A second option, the Expanded Lifeline Service, provides the same \$1 per month access line plus \$10 of monthly usage for a prepaid \$9 per month. Residents who qualify for AFDC, Food Stamps, Home Relief, Medicaid, SSI and the Home Energy Assistance Program will be eligible to participate. Eligibility will be certified by the New York State Department of Social Services.

-North Carolina: established a matching program in the state which is available to ratepayers who qualify under the federal AFDC and SSI programs. The program provides for a credit on the local service bill of 100% of the subscriber line charge. The program is funded through state tax credits given to the participating LECs. The program was approved on May 26, 1986.

-Ohio: approved the low-income "telephone assistance plans" (TAPS) of eight Ohio local exchange companies. Each TAP plan offers a waiver of the security deposit and a fifty percent reduction in service connection charges upon initiation or reestablishment of service to participant in the Home Energy Assistance Program or the Ohio Energy Credits Program. The requirements in both programs have annual income limits per household. Additionally, eligibility for Ohio Energy Credits requires that the head of the household and/or the spouse be age 65 or older, or permanently or totally disabled, with gross annual household income of no more than \$9,000. The TAP offerings are provided to eligible customers through the deposit waiver and connection discount only once in a one-year period. Participants in the TAP offerings receive a waiver of the full SLC for a period of months commensurate with the amount of nonrecurring state assistance provided. United Telephone Company of Ohio's TAP program went into effect on January 6, 1986, while the other seven participating LECs began offering TAP in the spring of 1987. The FCC approved

the provision of the SLC waivers in association with the TAP offerings on July 1, 1987.

-Oregon: the Oregon Telephone Assistance Program (TAP) was a trial program approved on May 22, 1986. A new program, effective May 1, 1988, is available to customers who are currently receiving food stamps and customers under Title 19 of the Oregon law who are 60 years of age or older and eligible to receive food stamps. Eligibility is determined by the Oregon Public Utility Commission. The program provides for a waiver of the \$2.60 subscriber line charge as well as a matching discount for the access line. There are 100,000 eligible customers for the program.

-Rhode Island: enacted legislation in October 1987 to provide a Lifeline Service Program. Eligible subscribers will receive a reduction of \$5.20 per month for a single telephone line, including one and two party unlimited local service, one-state-one-rate service, ocean state service, or enhanced Ocean State service. The program is available to residents who qualify for SSI, AFDC, GPA or Rhode Island Medical assistance. The Public Utilities Commission will monitor the program by requiring data from the telephone company within six months after the implementation. A monthly cross-check will be performed by the Department of Human Resources using computer tapes of participants provided by the telephone company.

-South Dakota: the statewide Low Income Telephone Assistance Plan, became effective April 1, 1988. At present, Northwestern Bell Telephone Company is the only company currently offering lifeline. The impetus for the PUC Order was "the Commission's dedication to the concept of Universal service and the concern that telephone installation charges, security deposits and gradually increasing local rates may represent a barrier preventing some individuals from obtaining telephone service." South Dakota Northwestern Bell customers who are 60 years of age or older and who receive benefits from either the Food Stamp Program or the Home Energy Assistance Program qualify. The South Dakota Department of Social Services will provide verification of continuing eligibility.

-Texas: the Texas Legislature in 1987 provided for the Tel-Assistance Service Program in Senate Bill 444. Tel-Assistance Service provides a 65 percent reduction in the monthly cost of residential local exchange service for a customer who is at or below the poverty level, is 65 years of age or older, is the head of a household, and is disabled.

The Texas Department of Human Service will identify eligible customers and verify the income of service applicants to determine eligibility.

-Utah: established a lifeline program which addresses the price of local service and the customer's cost of obtaining telephone service. Discounts are provided to eligible customers of telephone companies with rates for local service (not including extended area service, mileage charges for areas outside of the base rate areas, and optional features) above the state established standard needs budget for telephone service. Those companies include Mountain Bell, Continental Telephone Company of the West, and Beehive Telephone Company. Other telephone companies may apply to the Public Service Commission of Utah for a lifeline rate if they desire to offer one.

Customers who qualify by income or participate in any one of eight income-eligible welfare programs supervised by Utah's Department of Social Services may register themselves for lifeline services by filing a certification with their local exchange carrier, if the carrier offers lifeline telephone service.

The telephone companies, not less than annually, must verify their lists of lifeline rate participants with the eligibility lists maintained by Social Services of Utah. The program was approved on December 31, 1986.

-Vermont: enacted broad legislation on May 13, 1986 requiring the Public Service Board to adopt rates designed to implement a lifeline program, and provide a \$2.00 credit toward payment on monthly local telephone charges by eligible households. The legislation also required the department of Social Welfare to continue to administer the eligibility and verification provisions of the program. Two means of eligibility exist: the first, participation in either AFDC, Food Stamps, Fuel Assistance, Medicaid, or Supplemental Security Income programs; the second, participation in the Vermont Department of Taxes' state sales tax credit program for individuals over 65 years old having gross income of less than \$13,000 per annum.

-Virginia: asked all twenty Virginia local exchange telephone companies, on September 8, 1987, to submit "Virginia Universal Service Plan" tariffs to be effective no later than January 1, 1988. To be eligible, a subscriber must be a recipient of Medicaid assistance as administered by the Virginia Department

of Medical Assistance Service. The Commission approved the Virginia plan on December 24, 1987.

-Washington: effective July 26, 1987, eligible subscribers are verified by the State Department of Social and Health Services through participation in the following programs: AFDC, CHORE services, food stamps, SSI, refugee assistance, or the Community Options Program Entry System. Each of these programs is means-tested by the department. A 50 percent discount on the service connection fee is mandated, and the remaining portion is payable through installment payments. The local exchange deposit is also waived. The legislation creates a lifeline excise tax on all other switched access lines to support lifeline service.

-West Virginia: enacted legislation effective July 1, 1986, requiring telephone companies to provide Telephone Assistance Service to low-income residential customers. Subscribers must be either disabled or at least 60 years of age and be receiving Social Security supplemental security income benefits, aid to families with dependent children benefits, aid to dependent children-unemployed benefits, food stamps, or be a member of a household whose total income qualifies under Social Security supplemental income programs.

State Filings

In providing the Federal-State Joint Board and the Commission reports on the Lifeline and Link Up America programs, the following states have submitted materials in the monitoring docket: Arkansas, California, District of Columbia, Florida, Maine, Rhode Island, Washington, and Wisconsin. These are summarized below.

Arkansas Public Service Commission

Arkansas is a pilot state in the Link Up America program. All local exchange companies participate in the state certified program. Additionally, Southwestern Bell Telephone Company has been approved to offer statewide lifeline assistance.

California Public Utilities Commission

The Moore Universal Telephone Service Act in 1987 required the PUC to annually designate a class of universal service necessary to meet minimum residential communications needs and that the program be supported through a surcharge on telecommunication services. The PUC designated the initial surcharge rate at 4% applicable to intraLATA toll services beginning January 1, 1988, and intrastate interLATA services July 29, 1987. For the months

ending December 31, 1987, the program had a deficit of \$41.9 million, but it is projected to have a surplus of \$23.8 million for the six months ending June 30, 1988. A new surcharge rate will be set by the middle of June 1988. Participation is estimated at 1.25 million subscribers in June 1988.

District of Columbia Public Service Commission

The lifeline service (Economy II) provides a reduced monthly rate of \$3.93 and includes 60 free calls per month. The equivalent residential service is \$7.84. Initially, a new applicant received a 50% reduction in the service connection charge. With the implementation of Link Up America, a new Economy II customer receives a 75% discount on the service connection charges. The service is targeted to residents who are 65 years of age or older and who qualify for the D.C. Energy Assistance Program.

Florida Public Service Commission

The State of Florida Public Service Commission has filed staff memoranda in the monitoring docket which address its ongoing review of both the lifeline and Link Up programs. This assessment includes reports on twenty-five participating state programs, and provides costs, funding, eligibility, and legality data for the State of Florida to consider. Florida is not participating in the connection and installation assistance program.

Maine Public Utilities Commission

Maine reported a total of 29,757 residential customers receiving lifeline service through April 1988. The penetration ratio for all lifeline customers is 43.3% of statewide low income residences. The installation credit is offered to 2,525 customers. All telephone companies in the state have offered this program without the 50% federal assistance. The Maine PUC petitioned the FCC to review eligibility criteria, and requested changes eliminating the three-month and two-year exclusions.

Minnesota Department of Public Service

A report "A Minnesota Low-Income Telephone Assistance Program to Maintain Universal Service," dated December 16, 1986, was submitted. The report notes that while Minnesota has one of the highest telephone penetration rates in the U.S., rural and low-income areas have lower penetration rates. It thus urges participation in the FCC lifeline program.

New York Public Service Commission

The State of New York Department of Public Service filed a description of its lifeline and Link Up programs. The Commission's first Lifeline rate decision in June 1985 required New York Telephone and the other companies to

waive the FCC Subscriber Line (SLC) for individuals on any of five government assistance program. Until September 1987, only 73,000 of the 1.2 million eligible households had applied for the discounted service.

In 1987, there were two major changes in the Lifeline program in an attempt to encourage enrollment and meet the needs of poor people in the State. In April, the Commission added a sixth assistance program, extending Lifeline to recipients of the Home Energy Assistance Program (HEAP). In September, as part of the latest New York Telephone rate case, the program was expanded to offer discounts on service and installation charges in addition to the SLC waiver.

The Department of Public Service continues to stimulate and monitor New York Telephone's promotion of the revised Lifeline program, through a series of meetings with the company and the leading advocates: the New York State Department of Social Services; the Public Utility Law Project; the New York City Human Resources Administration; and the New York City Department of Energy and Telecommunications. The purpose of these meetings has been to monitor the progress of the promotional program which began in December 1987 and to revise and coordinate other planned promotional efforts. Special outreach efforts are described in the filing.

Rhode Island Public Utilities Commission

Rhode Island continues participation in the matching subscriber line charge waiver assistance to low income households. New England Telephone Company agreed to increase the special reduction contained in its lifeline service for eligible residential exchange service customers, matching any increase in the interstate subscriber line charge approved by the Joint Board and the FCC, up to a total charge of \$3.50 per line. New England Telephone also agreed to absorb the additional costs of this revision, up to \$200,000 annually.

Washington State Utilities and Transportation Commission

The Washington State UTC program was initiated in August 1987. A six month report indicated 31,611 lifeline program participants. The statewide program provides assistance that brings the cost of local service down to \$10 per month, a 50% discount on installation fees, and a waiver of the deposit on local service.

Wisconsin Public Service Commission

The Wisconsin PSC filed tariff materials which indicate special rate treatment for low income customers. The state commission authorized the waiver of non-recurring charges associated with moving or establishing new service. These benefits are available to customers of Wisconsin Bell and GTE North who are eligible for various assistance programs in Wisconsin.

Wisconsin is not participating in the Link Up program, but encouraged individual companies to apply for participation in the federal program.

ATTACHMENT I

LIFELINE ASSISTANCE PLANS
NECA BUDGET PROJECTIONS FOR STATE PLANS

The monitoring of Lifeline Assistance plans requires NECA to submit reports at the state and study area level of detail. Because the Lifeline Connection Assistance program is new, being introduced in July 1987, and the end user charge waiver has historically been netted in reporting for pooling purposes, no actual amounts flowed to each LEC are available. In lieu of actuals for the prior period, NECA has submitted the projection of Lifeline Assistance amounts that were included in the Annual Tariff filing made on October 2, 1987 for calendar year 1988.

Beginning in 1988, NECA is collecting actual data from the exchange carriers on a semiannual basis and will include this data in this docket as it becomes available.

LIFELINE ASSISTANCE BY STATE
(PROJECTED IN 1988 DOLLARS)

STATE	END USER CHARGES WAIVED	LCA CONNECTION CHARGES	LCA-DEFERRED INTEREST	TOTAL ASSISTANCE
AK	0	0	0	0
AL	0	60,071	0	60,071
AR	160,586	60,651	0	221,237
AZ	312,000	25,343	0	337,343
CA	19,688,452	0	0	19,688,452
CO	686,400	18,020	0	704,420
CT	0	0	0	0
DC	93,600	3,426	0	97,026
DE	81,214	1,100	0	82,314
FL	0	285,827	1,676	287,503
GA	0	74,407	0	74,407
HI	163,862	0	0	163,862
IA	0	22,950	0	22,950
ID	172,550	4,453	0	177,003
IL	0	0	0	0
IN	0	0	0	0
KS	0	2,296	0	2,296
KY	0	60,681	0	60,681
LA	0	161,257	0	161,257
MA	0	0	0	0
MD	99,840	48,000	0	147,840
ME	429,624	644	0	430,268
MI	27,540	3,400	0	30,940
MN	1,123,200	47,040	0	1,170,240
MO	830,481	21,140	0	851,621
MS	0	89,622	0	89,622
MT	374,400	11,393	0	385,793
NC	732,420	108,325	0	840,745
ND	0	2,310	0	2,310
NE	475,800	20,400	0	496,200
NH	0	0	0	0
NJ	500,697	215,670	0	716,367
NM	642,720	29,125	0	671,845
NV	35,053	120	3	35,176
NY	2,297,598	577,040	40,017	2,914,655
OH	1,183,018	18,640	0	1,201,658
OK	0	11,760	0	11,760
OR	468,425	19,880	0	488,305
PA	0	20,000	0	20,000
PR	0	0	0	0
RI	453,118	7,100	138	460,356
SC	0	72,705	0	72,705

LIFELINE ASSISTANCE BY STATE

SD	135,377	13,125	0	148,502
TN	0	129,929	0	129,929
TX	0	39,630	0	39,630
UT	701,376	21,994	0	723,370
VA	78,000	148,279	0	226,279
VI	0	0	0	0
VT	485,160	00	0	485,160
WA	727,212	139,830	26	867,068
WI	0	1,960	0	1,960
WV	190,289	8,108	0	198,397
WY	70,200	8,293	0	78,493
X 1/	936,963	0	0	936,963
	<u><u>34,357,173</u></u>	<u><u>2,615,944</u></u>	<u><u>41,860</u></u>	<u><u>37,014,977</u></u>

1/ X represents the national total for unsampled study areas.

**ATTACHMENT II
ANNUAL LIFELINE AND LINK UP REPORT**

STATE/ TELEPHONE CO. (implementation date)	PARTICIPATION / SUBSCRIBERS	COST DATA
Maryland Public Service Commission (7/1/86 to 10/31/87)	Participating households 4,382 New subscribers 1,624 Number of regrades 2,758	Implementation (C&P) \$ 97,000 Administrative (C&P) \$ 196,340 State verification \$ 15,000 costs Connection charges \$ 16,722 Monthly charges \$ 165,761
North Carolina Utilities Commission (12/31/87)	SLOW New subscribers 16,221 responding to SLOW 554	Implementation \$ 49,032 Administrative \$ 69,769 State tax credits \$ 210,545
Vermont Public Service Board (7/01/86 to 7/01/87)	Participation estimate 15,912 (Eligible households 40,000)	Administrative \$ 23,400 Benefits \$ 74,895
Washington State Utilities Commission (8/1/87)	SLOW 31,611	Start up costs \$ 240,000 Benefits \$1,075,800
West Virginia Public Service Commission (SLOW 1986 data)	SLOW 6,345 IIA 3,563	Customer discount \$ 75,951
Ameritech: Ohio Bell (SLOW 4/01/87)	SLOW 11/87 581	SLOW \$ 36,748
Bell Atlantic: C&P Telephone District of Columbia	SLOW 3/88 3,220	SLOW \$ 25,750 Customer survey \$ 8,000
NNEX: New York Telephone Co. (50% SLOW 6/85) (100% SLOW 9/87)	SLOW 12/01/87 92,193	(Tracking is being developed)

ATTACHMENT II
(Continued)

STATE/ TELEPHONE CO. (implementation date)	PARTICIPATION/ SUBSCRIBERS		COST DATA	
Southwestern Bell: Arkansas (SLOW 9/10/87)	SLOW (12/31/86) (50% new subscribers on network)	4,475	SLOW	\$ 12,464
US West: Arizona (1/0/86)	Participation 6/30/87 New customers (Estimated eligible)	1,195 185 3,000	SLOW	\$145,404
Colorado (9/01/86)	Participation 6/30/87 New connects (Estimated eligible)	18,338 276 35,000	SLOW (includes 25% discount on basic and mileage)	\$398,038
New Mexico (3/01/87)	Participation 6/30/87 New users (Estimated eligible)	10,500 255 40,000	SLOW (includes 25% discount on service)	\$ 49,215
Oregon (6/01/87 to 7/01/87)	Participation 6/30/87 New connects (Estimated eligible)	6,479 97 20,000	SLOW	\$155,446
Utah (1/01/87)	Participation 6/30/87 New connects (Estimated eligible)	14,547 1,915 60,000	SLOW	\$338,618

NOTE: The responses are not uniform in the definition of benefits provided. In some states, lifeline costs include rate discounts beyond the subscriber line charges waiver. The terminologies are those of the respondents and are also not uniform.

LUA = Link Up America: connection charges
SLOW = Subscriber line charge waiver

ATTACHMENT III

FCC 496

FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

APPROVED BY OMB
3060-0391
EXPIRES 09/30/90

STATE TELEPHONE ASSISTANCE REPORT

Estimated Average Burden
Hours Per Response: 4 Hours

READ ALL INSTRUCTIONS ON BACK BEFORE COMPLETING

1. NAME AND ADDRESS OF REPORTING ENTITY	2. FOR STATE OF:
	3. YEAR REPORT ENDING: DECEMBER 31, 19_____

4. REPORT REFLECTS THE FOLLOWING TELEPHONE COMPANY(IES)

5(a) PARTICULARS PERTAINING TO PROGRAM PARTICIPANTS AND COST	AT END OF YEAR	
	(b) Lifeline Program	(c) Link Up Program
1. Number of Households/Customers enrolled in program		
2. Number of enrolled households that are new customers (incl. in 1. above)		
3. Number of Households eligible		
4. Annual Administrative Costs - Recurring (See Instruction C)		
5. Administrative Costs - Start-up (See Instruction C)		

6. PARTICULARS PERTAINING TO SERVICE AREA AND CHARGES	AT END OF YEAR
1. Number of households in service area	
2. Number of households with telephone service	
3. Subscriber line charges waived (Per Subscriber Per Month (Average) \$ _____)	
4. Additional Reduction in Local Charges or Benefits Provided (Per Subscriber Per Month \$ _____)	

7. DESCRIPTION OF PROGRAM (See Instruction D)

a. Name of Program	b. Type of Program (Mark "X" One) 1. <input type="checkbox"/> Lifeline Program 2. <input type="checkbox"/> Link Up Program	c. Date of Most Recent FCC Certification
		d. Effective Date of Program

e. Eligibility Requirements. Describe eligibility requirements. Response should include income criteria and/or participation in other assistance programs such as Medicaid, Food Stamps, fuel assistance, etc. Also, include non-income criteria such as age and disability. Describe how the number of eligible households is developed.

f. Verification of Eligibility Requirements. Describe how the eligibility requirements, defined above, are verified.

g. Determination of Costs. Describe how the costs of the plan are determined.

h. Publicity Methodologies. Describe methodologies used to inform the public about the availability of the program.

8. CONTACT REPRESENTATIVE. Give name, address and telephone number of person preparing this report.

Name	Mailing Street Address or P.O. Box, City, State and ZIP Code	Area Code - Telephone No.
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9. CERTIFICATION: I certify that to the best of my knowledge and belief that this is a true and correct report.

Date	Typed Name of Person Signing	Title of Person Signing	Signature
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PERSONS MAKING WILLFUL FALSE STATEMENTS IN THIS REPORT CAN BE PUNISHED BY FINE OR IMPRISONMENT, U.S. CODE, TITLE 18, SECTION 1001.

INSTRUCTIONS

A. This report is prescribed under authority of Sections 4(i) and 4(j) of the Communications Act of 1934, as amended. FCC 496 shall be filed in duplicate with the Federal Communications Commission, Washington, D.C. 20554, not later than May 1, of the year following that for which the report is made.

B. The following entities that participate in Federal telephone assistance under Parts 69 and/or 36 of the FCC Rules are required to file this report:

1. All states that have obtained FCC certification to provide such assistance programs;
2. All telephone companies that have obtained FCC certification; and
3. All other telephone companies that participate in waivers or reductions of the end user subscriber line charge.

C. The cost of the program should include all costs specifically identifiable as related solely to the lifeline and Link Up America programs; no allocation of common or joint costs should be included. For states filing this report, the figures reported should include both state and local exchange carrier costs.

D. Item 7. Description of Program. Complete item 7 only once for each different program even if this report is being submitted by a state commission for more than one company.

If the state or company reporting has both a lifeline program and a Link Up program, please provide a separate descriptive sheet for each program.

If a description is already on file at the FCC, please indicate "No change since my submission of (include date)."

E. Any data that requires clarification should be footnoted and fully explained in the Remarks section below. If the space provided is insufficient for the required data or it is otherwise necessary or desirable to insert additional statements or schedules, the insert pages should include the name of the respondent and the time period covered, in a style conforming nearly as practicable to that appearing on the regular page.

F. All instructions shall be followed. All questions and statements must be completed. If proper answer is "none" or "not applicable," insert that answer. If exact data are not available, please estimate and label your response "estimate".

G. Notice. The FCC 496 Report is needed to provide the Commission with the data necessary to fulfill its regulatory responsibilities with respect to interstate telephone service under Title II of the Communications Act of 1934, as amended. Information from FCC 496 Report is used in analyzing requests for continuing certification of state telephone assistance programs and selected data are tabulated and released by the Commission. Your response is mandatory.

Public reporting burden for this collection of information is estimated to average 4 hours per response including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Federal Communications Commission, Office of Managing Director, Washington, DC 20554, and to the Office of Management and Budget, Office of Information and Regulatory Affairs, Washington, DC 20503.

This Notice is required by the Privacy Act of 1974, P.L. 93-579, December 31, 1974, 5 U.S.C. 552a(e)(3) and the Paperwork Reduction Act of 1980, P.L. 96-511, December 11, 1980, 44 U.S.C. 3504.

REMARKS

ATTACHMENT IV

PERCENT OF RESIDENCE C.P.T. WHICH ARE LIFELINE

QUARTER	AR	AZ	CA	CO	DC	HI	MD
87/1	0.78%	0.13%	10.05%	1.57%	0.90%	1.37%	0.17%
87/2	0.72%	0.15%	10.75%	1.54%	0.95%	1.46%	0.17%
	NC	NM	NY	OR	UT	VT	WV
87/1	0.02%	0.00%	0.89%	0.92%	2.85%	5.37%	0.98%
87/2	0.02%	1.53%	1.10%	1.00%	3.09%	6.62%	0.98%
	TBOC	TICO	TOTAL				
87/1	1.39%	1.58%	1.42%				
87/2	1.51%	1.72%	1.55%				

- NOTES: A. C.P.T. are customer premises terminations, a measure of the number of telephone customers. These data show the percentage of total residence customers enrolled in the Lifeline program.
- B. TBOC are total Bell Operating Company figures; TICO are total non-Bell Operating Company figures.
- C. Data are provided only for those states which had Lifeline programs in effect by the second quarter of 1987.

Source: Schedule DMD-5, 1988 Tariff Review Plan, Tier I Rollup

3. Costs and High Cost Assistance

On a nationwide average basis, approximately 28 percent of local exchange carrier (LEC) local loop costs are allocated to the interstate (federal) jurisdiction, and 72 percent are allocated to the state jurisdiction. The average cost per loop, however, varies significantly among LECs. The Commission's high cost assistance program requires LECs with very high per loop costs to allocate more of their loop costs to the interstate jurisdiction, thus recovering these costs from interexchange carriers and leaving less costs to be recovered through state rates. In this manner, the high cost assistance program operates to hold down local rates and thereby furthers one of the most important goals of federal and state regulation -- the preservation of universal telephone service. Acting on the recommendation of the Federal-State Joint Board in CC Docket No. 80-286, the Commission adopted rule changes that, effective January 1988, retargeted federal assistance provided to high cost LECs. This section of the report outlines the high cost assistance program and the changes adopted by the Commission, and discusses the high cost data included in the report.

The Commission regulates the recovery by LECs of that portion of their total costs associated with the provision of interstate services. The states regulate the recovery of costs associated with intrastate services (local service and state long distance services). The Commission's high cost assistance program relates to the allocation between the state and interstate jurisdictions of non-traffic sensitive (NTS) "local loop costs" -- a term that refers to the costs of outside telephone wires, poles, and other facilities that link each telephone customer's premises to the public switched telephone network. These costs are allocated between the state and interstate jurisdictions because all local loops can be used for making and receiving state and interstate telephone calls.

Pursuant to the changes recommended by the Joint Board and adopted by the Commission, high cost assistance has been retargeted to increase benefits to small and medium sized LECs beginning in January 1988. This retargeting takes the form of an additional interstate cost allocation for such LECs. The old and new high cost formulas are compared in Table 3.1. 1

The Commission's high cost assistance program is being implemented during a period in which the basic interstate allocation of loop costs is

1 Of course, the percentages shown in the table are in addition to the basic allocator of NTS costs allocated to the interstate jurisdiction under our rules.

being shifted from a level based on the Subscriber Plant Factor (SPF) to a gross allocation factor of 25%. Both of these changes are being phased in over the same eight-year period. Data permitting an analysis of the increasing cost support and the changing SPF based interstate allocation are included in this report.

The Commission's high cost assistance program is administered by the National Exchange Carrier Association (NECA). As part of the administration of the program, NECA collects certain cost data from LECs that provide service to approximately 98% of the nation's subscribers. Each year NECA collects NTS cost and loop data from the previous year, and uses it to distribute high cost assistance in the following year. State totals from NECA's 1987 report, covering high cost data for 1986, and using the 12.75% rate of return which was in effect in 1986 (rather than the 12% rate currently in effect) are presented in Table 3.2, labeled "support determination at 200,000 loops", which shows the universal service fund (USF) calculation for 1985 data based on the new high cost formula which took effect in 1988. 2 Table 3.3, labeled "support determination at 50,000 loops", shows the USF calculation based on the old high cost formula. 3 Table 3.4 shows the percentage change from 1985 to 1986 for each of the values in the preceding two tables. This table shows that for all telephone companies combined, the unseparated NTS revenue requirement increased by 7%, the number of loops increased by 2%, and the unseparated revenue requirement per loop rose by 5%. The retargeting of the universal service fund resulted in a 1% decline in the full expense adjustment, and an increase in the actual transitional amount of less than the 50% that would have occurred if there had been no retargeting and no cost changes. The number of study areas declined by 1% as a result of mergers and acquisitions.

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- 2 In the September 1987 monitoring report, we included a restatement of the high cost data for 1985, which was recast at a rate of return of 12% instead of the 12.75% used in NECA's filing, and we used the high cost formula then in place (not the new formula that became effective in January 1988).
 - 3 The introduction of the USF and the movement of the basic interstate allocation from frozen SPF to 25% is being accomplished over an eight-year transition period which began in 1986. Therefore, the "expense adjustment applicable to the specified year" is 3/8 of the full amount in Table 3.2, and is 2/8 of the full amount in Table 3.3.

The next two tables provide an estimate of the changes from 1987 to 1988 in the interstate allocation of NTS costs due to the combined effect of the phase-in of the high cost assistance from the USF and the transition of the basic interstate allocator from frozen SPF to 25%. 4 This estimate is shown in the last column of the tables. Table 3.5 provides estimates based on statewide totals, while Table 3.6 provides estimates for individual study areas. The information in both tables is for cost companies only. 5 The data in these tables are intended to provide a rough indication of the impact of transitional separations shifts and should be useful for analytical purposes. They do not, however, provide entirely accurate information because of data problems. 6 They do not allow for the two year difference between the year costs are incurred and the year USF funds are disbursed. 7 Unfortunately, information incorporating recent changes in costs and loops are not available at this time and more accurate representations of 1988 separations changes can not be produced until well after the fact. This deficiency is most important for states and companies

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- 4 These tables are updates of Tables 3.2 and 3.3 in the September 1987 monitoring reports.
 - 5 The differences between the values in Tables 3.2 and 3.5 are thus due to the inclusion of average schedule companies in Table 3.2 and the exclusion of those companies from Table 3.5.
 - 6 Also, in estimating the 1987 interstate high cost assistance, the new high cost formula was used, not the old one that was actually in effect then. Thus the estimates of the change in interstate allocation do not reflect the change in the high formula.
 - 7 The tables use values based on 1986 costs for both. In actuality, 1986 costs are being used to disburse USF funds in 1988, while the 1988 transitional SPF will be applied to 1988 costs. From a technical standpoint, the change in interstate revenue requirement per loop (CIRRPL) should be calculated as follows: CIRRPL equals [1988 unseparated costs per loop times 1988 SPF plus 3/8 of the high cost allocation based on 1986 costs] minus [1987 unseparated costs per loop times 1987 SPF plus 1/4 of the high cost allocation based on 1985 costs]. The use of 1986 costs throughout instead of 1985, 1987, and 1988 costs where appropriate is the major source of discrepancies between the estimates in the table and actual results.

where costs or loops are not growing at the same rate as the national average. The SPF values are generally the same as those reported in the June monitoring report, but in some cases they have been updated to reflect the availability for previously missing information, the impact of mergers, and the receipt of USF funds by study areas with a frozen SPF over .65.

Five state regulatory commissions filed information in this proceeding regarding costs and high cost assistance. California, Idaho, and Illinois provided descriptions of intrastate universal service funds and high cost allocation methods approved by or under consideration by their respective agencies. Ohio stated that there had been no intrastate high cost allocation method approved as yet, but one may have to be considered in view of the recent elimination of intrastate access and toll pooling. Texas indicated that proposed rules had been published for comment on the issue of a universal service fund. No specific comments were received regarding the effects of the current interstate high cost assistance program.

American Telephone and Telegraph Company (AT&T) filed data concerning the impact of the subscriber line charge on the recovery of interstate NTS costs. AT&T notes that the data indicate that the interexchange carriers will continue to pay for a major portion of the exchange carriers' interstate NTS costs.⁸ It further states that the implementation of the FCC's subscriber line charge plan and targeted support mechanisms such as the High Cost Fund, Lifeline, and Link-Up America have resulted in significant reductions in interstate long distance charges (34% for AT&T) while maintaining the universal service goal.

⁸ Using the aggregate data provided by AT&T, the estimated proportion to be paid by the interexchange carriers is 55% for 1988, 47% for 1989, and 46% for 1990 and 1991.

TABLE 3.1

HIGH COST FORMULAS

Cost Range As % of National Average % Expense Adjustment Within Range

Old Formula, Study Areas with Over 50,000 Loops

0% - 115%	0%
115% - 150%	25%
150% and above	75%

Old Formula, Study Areas with 50,000 Loops or Less

0% - 115%	0%
115% - 150%	50%
150% and above	75%

New Formula, Study Areas with Over 200,000 Loops

0% - 115%	0%
115% - 160%	10%
160% - 200%	30%
200% - 250%	60%
250% and above	75%

New Formula, Study Areas with 200,000 Loops or Less

0% - 115%	0%
115% - 150%	65%
150% and above	75%

NATIONAL EXCHANGE CARRIERS ASSOCIATION
UNIVERSAL SERVICE FUND
EXPENSE ADJUSTMENT
STATE SUMMARY
SUPPORT DETERMINATION AT 200,000 LOOPS

STATE	UNSEPARATED REVENUE REQUIREMENT	LOOPS	UNSEPARATED REVENUE REQUIREMENT PER LOOP	UNIVERSAL SERVICE FUND FULL EXPENSE ADJUSTMENT	UNIVERSAL SERVICE FUND EXPENSE ADJUSTMENT APPLICABLE TO 1988	PERCENT OF TOTAL
ALABAMA	417,632,162	1,577,841	264.69	13,547,468	5,080,301	2.83
ALASKA	94,930,486	246,353	385.34	29,621,860	11,108,198	6.19
ARIZONA	442,938,160	1,609,130	275.27	13,459,169	5,047,188	2.81
ARKANSAS	292,247,796	921,662	317.09	15,906,792	5,965,047	3.32
CALIFORNIA	3,366,496,750	14,418,836	233.48	39,633,172	14,862,440	8.28
COLORADO	359,532,276	1,671,532	215.09	2,879,278	1,079,729	0.60
CONNECTICUT	343,494,608	1,686,842	203.63	0	0	0.00
DELAWARE	65,659,079	348,315	188.50	0	0	0.00
DISTRICT OF COLUMBIA	86,402,458	767,536	112.57	0	0	0.00
FLORIDA	1,899,816,661	6,166,648	308.08	32,384,721	12,144,270	6.77
GEORGIA	756,739,454	2,739,265	276.26	13,687,670	5,132,876	2.86
HAWAII	83,488,176	483,933	172.52	0	0	0.00
IDAHO	126,688,465	419,610	301.92	11,735,527	4,400,823	2.45
ILLINOIS	957,258,178	5,774,341	165.78	1,488,667	558,250	0.31
INDIANA	480,417,959	2,367,727	202.90	1,448,499	543,187	0.30
IOWA	262,807,104	1,280,788	205.19	2,339,627	877,360	0.49
KANSAS	289,620,562	1,182,565	244.91	11,924,858	4,471,822	2.49
KENTUCKY	380,826,956	1,391,084	273.76	6,705,695	2,514,636	1.40
LOUISIANA	540,869,118	1,792,119	301.80	13,803,556	5,176,334	2.89
MAINE	152,757,546	559,667	272.94	3,256,315	1,221,118	0.68
MARYLAND	436,526,593	2,419,800	180.40	0	0	0.00
MASSACHUSETTS	509,544,887	3,262,486	156.18	0	0	0.00
MICHIGAN	891,200,104	4,404,137	202.36	2,619,551	982,332	0.55
MINNESOTA	431,307,856	2,090,627	206.31	4,615,687	1,730,883	0.96
MISSISSIPPI	299,711,688	881,325	340.07	8,836,177	3,313,566	1.85
MISSOURI	562,197,793	2,358,163	238.40	25,743,491	9,653,809	5.38
MONTANA	120,357,719	359,651	334.65	8,678,763	3,254,536	1.81
NEBRASKA	155,876,911	781,046	199.57	3,889,737	1,458,651	0.81
NEVADA	121,535,669	544,558	223.18	7,918,291	2,969,359	1.66
NEW HAMPSHIRE	141,773,537	542,779	261.20	470,762	176,536	0.10
NEW JERSEY	806,259,897	4,369,685	184.51	212,255	79,596	0.04
NEW MEXICO	175,986,175	601,538	292.56	18,601,800	6,975,675	3.89
NEW YORK	2,127,827,382	9,732,897	218.62	8,577,061	3,216,398	1.79
NORTH CAROLINA	720,988,658	2,825,224	255.20	11,024,349	4,134,131	2.30
NORTH DAKOTA	89,068,532	332,497	267.88	2,822,503	1,058,439	0.59
OHIO	920,450,939	4,835,553	190.35	789,106	295,915	0.16
OKLAHOMA	439,868,358	1,482,439	296.72	21,399,545	8,024,829	4.47
OREGON	310,103,682	1,289,115	240.56	12,097,306	4,536,490	2.53
PENNSYLVANIA	1,082,069,044	5,811,015	186.21	1,488,319	558,120	0.31
PUERTO RICO	170,816,921	703,621	242.77	0	0	0.00
RHODE ISLAND	94,845,437	482,269	196.67	0	0	0.00
SOUTH CAROLINA	422,054,061	1,358,935	310.58	9,109,050	3,415,894	1.90
SOUTH DAKOTA	82,645,152	306,166	269.94	2,833,093	1,062,410	0.59

NATIONAL EXCHANGE CARRIERS ASSOCIATION
 UNIVERSAL SERVICE FUND
 EXPENSE ADJUSTMENT
 STATE SUMMARY
 SUPPORT DETERMINATION AT 200,000 LOOPS

STATE	UNSEPARATED REVENUE REQUIREMENT	LOOPS	UNSEPARATED REVENUE REQUIREMENT PER LOOP	UNIVERSAL SERVICE FUND FULL EXPENSE ADJUSTMENT	UNIVERSAL SERVICE FUND EXPENSE ADJUSTMENT APPLICABLE TO 1988	PERCENT OF TOTAL
TENNESSEE	477,758,685	2,072,194	230.56	1,807,756	677,909	0.38
TEXAS	2,158,278,555	7,842,869	275.19	61,953,030	23,232,386	12.95
UTAH	140,959,580	669,509	210.54	2,633,726	987,647	0.55
VERMONT	83,903,757	271,109	309.48	3,254,435	1,220,413	0.68
VIRGIN ISLANDS	17,092,504	39,232	435.68	4,665,701	1,749,638	0.98
VIRGINIA	682,438,913	2,795,122	244.15	4,744,815	1,779,306	0.99
WASHINGTON	488,016,701	2,273,171	214.69	12,885,353	4,832,007	2.69
WEST VIRGINIA	254,148,137	733,341	346.56	10,962,489	4,110,933	2.29
WISCONSIN	484,658,587	2,189,622	221.34	3,582,276	1,343,354	0.75
WYOMING	92,366,847	221,632	416.76	6,363,319	2,386,245	1.33
INDUSTRY TOTAL	27,393,263,217	118,289,121	231.58	478,402,620	179,400,983	100.00

TOTAL NUMBER OF STUDY AREA CODES: 1485

NATIONAL EXCHANGE CARRIERS ASSOCIATION
 UNIVERSAL SERVICE FUND
 EXPENSE ADJUSTMENT
 STATE SUMMARY
 SUPPORT DETERMINATION AT 50,000 LOOPS

STATE	UNSEPARATED REVENUE REQUIREMENT	LOOPS	UNSEPARATED REVENUE REQUIREMENT PER LOOP	UNIVERSAL SERVICE FUND FULL EXPENSE ADJUSTMENT	UNIVERSAL SERVICE FUND EXPENSE ADJUSTMENT APPLICABLE TO 1987	PERCENT OF TOTAL
ALABAMA	403,177,045	1,541,330	261.58	5,596,529	1,399,132	1.16
ALASKA	83,069,417	243,355	341.35	23,455,100	5,863,775	4.86
ARIZONA	389,916,290	1,541,449	252.95	11,871,979	2,967,995	2.46
ARKANSAS	278,714,897	882,859	315.70	18,422,811	4,605,703	3.81
CALIFORNIA	3,236,141,075	14,281,301	226.60	35,630,104	8,907,526	7.38
COLORADO	339,615,979	1,686,315	201.40	2,447,228	611,807	0.51
CONNECTICUT	313,933,137	1,653,182	189.90	0	0	0.00
DELAWARE	61,480,806	333,039	184.61	0	0	0.00
DISTRICT OF COLUMBIA	76,744,291	779,688	98.43	0	0	0.00
FLORIDA	1,654,810,461	5,753,924	287.60	54,102,932	13,525,733	11.20
GEORGIA	667,208,406	2,619,232	254.73	7,616,201	1,904,050	1.58
HAWAII	81,459,526	467,493	174.25	0	0	0.00
IDAHO	119,093,033	423,829	280.99	6,530,959	1,632,740	1.35
ILLINOIS	938,965,996	5,756,619	163.11	220,925	55,231	0.05
INDIANA	454,931,957	2,357,250	192.99	748,689	187,172	0.15
IOWA	269,120,232	1,291,065	208.45	810,226	202,557	0.17
KANSAS	279,704,669	1,156,405	241.87	9,558,086	2,389,522	1.98
KENTUCKY	348,878,708	1,365,202	255.55	6,271,842	1,567,961	1.30
LOUISIANA	562,854,338	1,831,402	307.34	27,805,111	6,951,278	5.76
MAINE	141,249,725	531,172	265.92	3,320,667	830,167	0.69
MARYLAND	417,249,418	2,347,608	177.73	0	0	0.00
MASSACHUSETTS	464,654,383	3,157,269	147.17	0	0	0.00
MICHIGAN	865,975,542	4,373,901	197.99	2,112,590	528,148	0.44
MINNESOTA	413,773,025	2,069,414	199.95	2,802,156	700,539	0.58
MISSISSIPPI	296,145,029	868,335	341.05	26,220,266	6,555,067	5.43
MISSOURI	510,733,322	2,293,510	222.69	16,717,220	4,179,305	3.46
MONTANA	114,145,421	367,519	310.58	9,723,417	2,430,854	2.01
NEBRASKA	150,646,152	782,309	192.57	2,692,532	673,133	0.56
NEVADA	113,657,207	493,590	230.27	5,855,551	1,463,888	1.21
NEW HAMPSHIRE	128,324,265	515,959	248.71	189,961	47,490	0.04
NEW JERSEY	768,009,488	4,345,774	176.73	501,125	125,281	0.10
NEW MEXICO	165,865,365	591,043	280.63	17,504,617	4,376,154	3.62
NEW YORK	1,998,318,067	9,558,230	209.07	4,556,072	1,139,018	0.94
NORTH CAROLINA	653,690,228	2,707,458	241.44	11,000,264	2,750,066	2.28
NORTH DAKOTA	90,406,395	333,357	271.20	3,591,273	897,818	0.74
OHIO	842,457,520	4,753,438	177.23	1,143,891	285,973	0.24
OKLAHOMA	410,055,334	1,480,944	276.89	15,754,974	3,938,744	3.26
OREGON	288,030,314	1,298,062	221.89	8,742,011	2,185,503	1.81
PENNSYLVANIA	960,228,404	5,734,493	167.45	867,160	216,790	0.18
PUERTO RICO	150,154,077	647,100	232.04	0	0	0.00
RHODE ISLAND	93,407,084	465,782	200.54	0	0	0.00
SOUTH CAROLINA	374,739,261	1,309,356	286.20	13,999,069	3,499,767	2.90
SOUTH DAKOTA	83,606,377	303,508	275.47	3,514,191	878,548	0.73

NATIONAL EXCHANGE CARRIERS ASSOCIATION
 UNIVERSAL SERVICE FUND
 EXPENSE ADJUSTMENT
 STATE SUMMARY
 SUPPORT DETERMINATION AT 50,000 LOOPS

STATE	UNSEPARATED REVENUE REQUIREMENT	LOOPS	UNSEPARATED REVENUE REQUIREMENT PER LOOP	UNIVERSAL SERVICE FUND FULL EXPENSE ADJUSTMENT	UNIVERSAL SERVICE FUND EXPENSE ADJUSTMENT APPLICABLE TO 1987	PERCENT OF TOTAL
TENNESSEE	452,153,193	2,033,849	222.31	2,172,147	543,037	0.45
TEXAS	1,965,793,885	7,666,965	256.40	52,185,556	13,046,389	10.80
UTAH	123,230,772	658,919	187.02	2,538,179	634,545	0.53
VERMONT	74,662,675	262,174	284.78	3,134,837	783,709	0.65
VIRGIN ISLANDS	12,990,607	35,289	368.12	2,359,070	589,768	0.49
VIRGINIA	632,007,598	2,690,060	234.94	3,296,054	824,014	0.68
WASHINGTON	437,425,029	2,237,544	195.49	10,084,043	2,521,011	2.09
WEST VIRGINIA	243,423,139	715,666	340.14	22,167,530	5,541,883	4.59
WISCONSIN	455,026,997	2,157,197	210.93	5,613,789	1,403,447	1.16
WYOMING	94,046,539	234,080	401.77	17,656,150	4,414,038	3.65
INDUSTRY TOTAL	25,546,102,097	115,985,813	220.25	483,105,084	120,776,271	100.00

TOTAL NUMBER OF STUDY AREA CODES: 1502

TABLE 3.4

% CHANGES

PAGE 1

NATIONAL EXCHANGE CARRIERS ASSOCIATION
 UNIVERSAL SERVICE FUND
 EXPENSE ADJUSTMENT
 STATE SUMMARY
 PERCENTAGE CHANGES FROM 1985 TO 1986

STATE	UNSEPARATED REVENUE REQUIREMENT	LOOPS	UNSEPARATED REVENUE REQUIREMENT PER LOOP	UNIVERSAL SERVICE FUND FULL EXPENSE ADJUSTMENT	UNIVERSAL SERVICE FUND EXPENSE ADJUSTMENT APPLICABLE TO SPECIFIED YEAR	PERCENT OF TOTAL
ALABAMA	3.59%	2.37%	1.19%	142.07%	263.10%	144.45%
ALASKA	14.28%	1.23%	12.89%	26.29%	89.44%	27.53%
ARIZONA	13.60%	4.39%	8.82%	13.37%	70.05%	14.48%
ARKANSAS	4.86%	4.40%	0.44%	-13.66%	29.51%	-12.81%
CALIFORNIA	4.03%	0.96%	3.04%	11.24%	66.85%	12.33%
COLORADO	5.86%	-0.88%	6.80%	17.65%	76.48%	18.81%
CONNECTICUT	9.42%	2.04%	7.23%	0.00%	0.00%	0.00%
DELAWARE	6.80%	4.59%	2.11%	0.00%	0.00%	0.00%
DISTRICT OF COLUMBIA	12.58%	-1.56%	14.37%	0.00%	0.00%	0.00%
FLORIDA	14.81%	7.17%	7.12%	-40.14%	-10.21%	-39.55%
GEORGIA	13.42%	4.58%	8.45%	79.72%	169.58%	81.48%
HAWAII	2.49%	3.52%	-0.99%	0.00%	0.00%	0.00%
IDAHO	6.38%	-1.00%	7.45%	79.69%	169.54%	81.46%
ILLINOIS	1.95%	0.31%	1.64%	573.83%	910.75%	580.46%
INDIANA	5.60%	0.44%	5.13%	93.47%	190.21%	95.37%
IOWA	-2.35%	-0.80%	-1.56%	188.76%	333.14%	191.60%
KANSAS	3.55%	2.26%	1.25%	24.76%	87.14%	25.99%
KENTUCKY	9.16%	1.90%	7.13%	6.92%	60.38%	7.97%
LOUISIANA	-3.91%	-2.14%	-1.80%	-50.36%	-25.53%	-49.87%
MAINE	8.15%	5.36%	2.64%	-1.94%	47.09%	-0.97%
MARYLAND	4.62%	3.08%	1.50%	0.00%	0.00%	0.00%
MASSACHUSETTS	9.66%	3.33%	6.12%	0.00%	0.00%	0.00%
MICHIGAN	2.91%	0.69%	2.21%	24.00%	86.00%	25.22%
MINNESOTA	4.24%	1.03%	3.18%	64.72%	147.08%	66.34%
MISSISSIPPI	1.20%	1.50%	-0.29%	-66.30%	-49.45%	-65.97%
MISSOURI	10.08%	2.82%	7.06%	53.99%	130.99%	55.51%
MONTANA	5.44%	-2.14%	7.75%	-10.74%	33.88%	-9.87%
NEBRASKA	3.47%	-0.16%	3.64%	44.46%	116.70%	45.88%
NEVADA	6.93%	10.33%	-3.08%	35.23%	102.84%	36.56%
NEW HAMPSHIRE	10.48%	5.20%	5.02%	147.82%	271.73%	150.26%
NEW JERSEY	4.98%	0.55%	4.41%	-57.64%	-36.47%	-57.23%
NEW MEXICO	6.10%	1.78%	4.25%	6.27%	59.40%	7.31%
NEW YORK	6.48%	1.83%	4.57%	88.26%	182.38%	90.11%
NORTH CAROLINA	10.30%	4.35%	5.70%	0.22%	50.33%	1.20%
NORTH DAKOTA	-1.48%	-0.26%	-1.23%	-21.41%	17.89%	-20.63%
OHIO	9.26%	1.73%	7.40%	-31.02%	3.48%	-30.34%
OKLAHOMA	7.27%	0.10%	7.16%	35.83%	103.74%	37.16%
OREGON	7.66%	-0.69%	8.41%	38.38%	107.57%	39.74%
PENNSYLVANIA	12.69%	1.33%	11.20%	71.63%	157.45%	73.32%
PUERTO RICO	13.76%	8.73%	4.62%	0.00%	0.00%	0.00%
RHODE ISLAND	1.54%	3.54%	-1.93%	0.00%	0.00%	0.00%
SOUTH CAROLINA	12.63%	3.79%	8.52%	-34.93%	-2.40%	-34.29%
SOUTH DAKOTA	-1.15%	0.88%	-2.01%	-19.38%	20.93%	-18.59%

NATIONAL EXCHANGE CARRIERS ASSOCIATION
 UNIVERSAL SERVICE FUND
 EXPENSE ADJUSTMENT
 STATE SUMMARY
 PERCENTAGE CHANGES FROM 1985 TO 1986

STATE	UNSEPARATED REVENUE REQUIREMENT	LOOPS	UNSEPARATED REVENUE REQUIREMENT PER LOOP	UNIVERSAL SERVICE FUND FULL EXPENSE ADJUSTMENT	UNIVERSAL SERVICE FUND EXPENSE ADJUSTMENT APPLICABLE TO SPECIFIED YEAR	PERCENT OF TOTAL
TENNESSEE	5.66%	1.89%	3.71%	-16.78%	24.84%	-15.96%
TEXAS	9.79%	2.29%	7.33%	18.72%	78.08%	19.88%
UTAH	14.39%	1.61%	12.58%	3.76%	55.65%	4.78%
VERMONT	12.38%	3.41%	8.67%	3.82%	55.72%	4.84%
VIRGIN ISLANDS	31.58%	11.17%	18.35%	97.78%	196.67%	99.72%
VIRGINIA	7.98%	3.91%	3.92%	43.95%	115.93%	45.37%
WASHINGTON	11.57%	1.59%	9.82%	27.78%	91.67%	29.04%
WEST VIRGINIA	4.41%	2.47%	1.89%	-50.55%	-25.82%	-50.06%
WISCONSIN	6.51%	1.50%	4.93%	-36.19%	-4.28%	-35.56%
WYOMING	-1.79%	-5.32%	3.73%	-63.96%	-45.94%	-63.61%
INDUSTRY TOTAL	7.23%	1.99%	5.14%	-0.97%	48.54%	0.00%

TOTAL NUMBER OF STUDY AREA CODES: -1.13%

TABLE 3.5

NECA NTS COST DATA FOR 1986

ST NUMBER	LOOPS	URRPL	RTNA	HCA	HCAPL	SPF	OIRRPL	NIRRPL	CIRRPL	
AL	15	1514029.	265.90	1.15	5080622.	3.36	0.2288	63.07	65.12	2.04
AK	20	245128.	385.27	1.66	11066075.	45.14	0.4992	222.42	221.50	-0.92
AZ	8	1607296.	275.31	1.19	5047348.	3.14	0.4037	113.25	107.24	-6.01
AR	22	908477.	318.00	1.37	5944479.	6.54	0.2843	94.76	95.13	0.37
CA	22	14418836.	233.48	1.01	14863274.	1.03	0.2498	59.01	59.37	0.36
CO	21	1670691.	215.03	0.93	1057939.	0.63	0.3865	83.52	78.84	-4.68
CT	1	1673272.	203.37	0.88	0.	0.	0.3166	64.39	62.13	-2.26
DE	1	348315.	188.51	0.81	0.	0.	0.3214	60.59	58.34	-2.24
DC	1	767536.	112.57	0.49	0.	0.	0.3907	43.98	41.35	-2.63
FL	13	6166648.	308.08	1.33	12145379.	1.97	0.3571	111.31	106.47	-4.84
GA	19	2639471.	277.78	1.20	5134011.	1.95	0.2734	77.24	76.80	-0.44
HI	1	483933.	172.52	0.75	0.	0.	0.2789	48.12	47.29	-0.83
ID	16	415116.	302.25	1.31	4372792.	10.53	0.3718	119.39	116.78	-2.61
IL	16	5701684.	164.71	0.71	455856.	0.08	0.2643	43.58	43.22	-0.36
IN	13	2278236.	201.60	0.87	543482.	0.24	0.2615	52.88	52.56	-0.31
IA	15	1090424.	197.37	0.85	570956.	0.52	0.2707	53.77	53.26	-0.51
KS	34	1167544.	244.97	1.06	4460658.	3.82	0.2986	75.70	74.98	-0.72
KY	4	1273066.	277.27	1.20	2514881.	1.98	0.2183	61.86	63.98	2.13
LA	18	1777219.	302.36	1.31	5176933.	2.91	0.2185	68.01	70.58	2.57
ME	12	541382.	274.16	1.18	1218021.	2.25	0.2929	81.79	80.58	-1.21
MD	2	2419800.	180.40	0.78	0.	0.	0.2235	40.32	41.10	0.79
MA	1	3259555.	156.11	0.67	0.	0.	0.2721	42.48	41.90	-0.58
MI	22	4358302.	201.98	0.87	972960.	0.22	0.1952	39.58	41.51	1.92
MN	32	1960327.	203.81	0.88	1607381.	0.82	0.2562	52.77	52.83	0.06
MS	9	855647.	343.13	1.48	3305469.	3.86	0.2482	87.75	89.14	1.39
MO	25	2292139.	237.98	1.03	9514988.	4.15	0.2726	67.64	68.13	0.49
MT	15	357556.	335.17	1.45	3251358.	9.09	0.3993	139.91	134.60	-5.32
NE	32	766532.	198.41	0.86	1397665.	1.82	0.3190	64.51	62.84	-1.67
NV	11	544263.	223.12	0.96	2964001.	5.45	0.5340	122.78	114.07	-8.71
NH	9	540979.	261.25	1.13	171451.	0.32	0.3944	103.24	97.14	-6.10
NJ	7	4369685.	184.51	0.80	79598.	0.02	0.3039	56.09	54.44	-1.66
NM	14	601538.	292.56	1.26	6975743.	11.60	0.3575	112.33	110.96	-1.37
NY	36	9706795.	218.58	0.94	3216404.	0.33	0.2709	59.44	58.79	-0.65
NC	13	2657812.	256.41	1.11	4134228.	1.56	0.2442	63.64	64.40	0.76
ND	14	307031.	269.43	1.16	993359.	3.24	0.3049	84.30	82.91	-1.39
OH	11	4613910.	188.13	0.81	284341.	0.06	0.2154	40.56	41.66	1.11
OK	28	1455171.	297.68	1.29	7976565.	5.48	0.3043	94.24	93.38	-0.86
OR	27	1284965.	240.55	1.04	4533553.	3.53	0.3240	80.30	78.50	-1.79
PA	11	5310331.	181.52	0.78	555055.	0.10	0.2259	41.07	41.84	0.77
PR	2	703621.	242.77	1.05	0.	0.	0.3250	78.90	75.87	-3.03
RI	1	482269.	196.67	0.85	0.	0.	0.2776	54.59	53.69	-0.90
SC	11	1214942.	319.42	1.38	3416165.	2.81	0.2477	80.99	82.06	1.07
SD	11	270516.	271.93	1.17	966033.	3.57	0.3315	92.52	90.02	-2.50
TN	7	1935087.	230.17	0.99	677921.	0.35	0.2300	53.17	54.05	0.89
TX	52	7812776.	275.32	1.19	23198146.	2.97	0.2417	68.53	69.90	1.37
UT	10	667311.	210.35	0.91	972366.	1.46	0.3052	65.18	63.72	-1.45
VT	7	268660.	309.80	1.34	1210904.	4.51	0.4107	130.24	123.46	-6.78
VI	1	39232.	435.68	1.88	1749644.	44.60	0.4101	208.40	211.64	3.23
VA	7	2733918.	244.27	1.05	1749342.	0.64	0.2681	65.93	65.40	-0.52
WA	22	2271406.	214.67	0.93	4832258.	2.13	0.3019	66.22	65.08	-1.14
WV	5	723526.	348.07	1.50	4111079.	5.68	0.2275	82.96	86.18	3.22
WI	58	2095535.	220.63	0.95	1327477.	0.63	0.2388	53.10	53.72	0.62
WY	9	220297.	417.25	1.80	2363110.	10.73	0.4940	213.28	199.97	-13.31
US	794	115789737.	231.40	1.00	178161268.	1.54	0.2743	64.49	64.07	-0.42

TABLE 3.5

NECA NTS COST DATA FOR 1986

EXPLANATION OF COLUMN HEADINGS

ST	STATE (POSTAL ABBREVIATION)
NUMBER	NUMBER OF STUDY AREAS IN SAMPLE
LOOPS	NUMBER OF OSP CAT 1.33 WORKING LOOPS
URRPL	UNSEPARATED NTS REVENUE REQUIREMENT PER LOOP
RTNA	RATIO OF URRPL TO NATIONAL AVERAGE
HCA	HIGH COST ASSISTANCE (AT 3/8 TRANSITION)
HCAPL	HIGH COST ASSISTANCE PER LOOP
SPF	1987 TRANSITIONAL SUBSCRIBER PLANT FACTOR
OIRRPL	OLD (1987 SPF + 1/4 HCA) INTERSTATE NTS REVENUE REQUIREMENT PER LOOP
NIRRPL	NEW (1988 SPF + 3/8 HCA) INTERSTATE NTS REVENUE REQUIREMENT PER LOOP
CIRRPL	CHANGE IN INTERSTATE REVENUE REQUIREMENT PER LOOP

NECA NTS COST DATA FOR 1986

SUMMARY OF OPTIONS

PLANT CATEGORIES EXCLUDED ARE:

NONE

EXPENSE CATEGORIES EXCLUDED ARE:

NONE

RATE OF RETURN IS 12.75%

HIGH COST SUPPORT RELATIVE TO THE NATIONAL AVERAGE COST/LOOP

	BAND WIDTH	% RECOVERY
BAND 1	0.% TO 115.%	0.%
BAND 2	115.% TO 160.%	10.%
BAND 3	160.% TO 200.%	30.%
BAND 4	200.% TO 250.%	60.%
BAND 5	250.% AND ABOVE	75.%

BELOW LOOP LIMIT OF 200000.:

HIGH COST SUPPORT RELATIVE TO THE NATIONAL AVERAGE COST/LOOP

	BAND WIDTH	% RECOVERY
BAND 1	0.% TO 115.%	0.%
BAND 2	115.% TO 150.%	65.%
BAND 3	150.% AND ABOVE	75.%

TABLE 3.6

NECA NTS COST DATA FOR 1986 - INDIVIDUAL STUDY AREAS

NAME	ST	LOOPS	URRPL	RTNA	HCA	HCAPL	SPF	OIRRPL	NIRRPL	CIRRPL
CONTINENTAL TEL CO OF THE SOUTH - AL	AL	69898.	409.44	1.77	2601328.	37.22	0.2242	116.61	130.77	14.17
BUTLER TELEPHONE CO. INC.	AL	3199.	332.62	1.44	51711.	16.16	0.2831	104.94	108.50	3.56
GTC OF THE SE - ALABAMA	AL	108094.	318.45	1.38	1373795.	12.71	0.2967	102.96	104.71	1.75
GRACEBA TOTAL COMMUNICATIONS	AL	3315.	280.86	1.21	11761.	3.55	0.2808	81.23	80.95	-0.28
GROVE HILL TEL. CORP.	AL	1589.	287.77	1.24	8314.	5.23	0.2216	67.26	70.36	3.10
GULF TELEPHONE COMPANY - ALABAMA	AL	20940.	311.57	1.35	231057.	11.03	0.3495	116.25	114.76	-1.49
HOPPER TEL. COMPANY INC.	AL	2548.	389.67	1.68	80660.	31.66	0.1656	85.63	101.68	16.05
MILLRY TELEPHONE CO. INC	AL	4356.	463.80	2.00	228717.	52.51	0.3108	179.15	191.92	12.77
MONROEVILLE TELEPHONE COMPANY	AL	8928.	310.61	1.34	96420.	10.80	0.2431	82.71	86.68	3.97
PEOPLES TELEPHONE COMPANY	AL	8951.	371.71	1.61	238155.	26.61	0.2073	94.79	106.30	11.51
PINE BELT TELEPHONE COMPANY	AL	1742.	301.56	1.30	14967.	8.59	0.1645	55.33	62.51	7.18
RAGLAND TEL. CO.	AL	877.	298.24	1.29	6826.	7.78	0.2040	66.03	70.89	4.86
SOUTHLAND TEL. CO.-AL	AL	8728.	298.29	1.29	68044.	7.80	0.2625	83.50	85.47	1.97
MISSISSIPPI TEL. CORP.	AL	687.	633.53	2.74	68867.	100.24	0.4292	338.74	353.28	14.54
SOUTH CENTRAL BELL-AL	AL	1270177.	250.06	1.08	0.	0.	0.2184	54.61	55.91	1.30
ANCHORAGE TELEPHONE UTILITY	AK	117934.	179.69	0.78	0.	0.	0.4752	85.39	78.63	-6.76
ARCTIC SLOPE TEL. ASSOCIATION COOP. INC.	AK	1091.	1432.02	6.18	354377.	324.82	0.7000	1218.96	1219.83	0.87
BRISTOL BAY TELEPHONE COOP. INC.	AK	834.	869.02	3.75	138840.	166.47	0.7000	719.30	709.61	-9.69
BUSH-TELL INC.	AK	442.	709.68	3.06	53774.	121.66	0.4284	385.13	404.61	19.48
COPPER VALLEY TEL. COOP. INC.	AK	3211.	500.93	2.16	202126.	62.95	0.5457	315.32	311.61	-3.71
CORDOVA TELEPHONE COOPERATIVE, INC.	AK	1171.	459.37	1.98	60026.	51.26	0.6925	352.29	335.52	-16.77
FAIRBANKS MUNICIPAL UTILITIES SYSTEM	AK	22445.	479.56	2.07	1277953.	56.94	0.4401	249.01	252.79	3.78
GENERAL TELEPHONE COMPANY OF ALASKA	AK	11122.	182.63	0.79	0.	0.	0.4997	91.26	83.66	-7.60
GLACIER STATE TELEPHONE COMPANY	AK	22386.	920.58	3.98	4051329.	180.98	0.5783	653.02	662.99	9.97
INTERIOR TELEPHONE COMPANY INC.	AK	1845.	867.52	3.75	306368.	166.05	0.7000	717.97	708.25	-9.71
JUNEAU & DOUGLAS TELEPHONE COMPANY	AK	14684.	388.46	1.68	459861.	31.32	0.5489	234.10	225.20	-8.91
KETCHIKAN PUBLIC UTILITIES	AK	6119.	550.12	2.38	469845.	76.78	0.5563	357.22	354.76	-2.46
MATANUSKA TELEPHONE ASSOC., INC.	AK	26276.	612.19	2.64	2476266.	94.24	0.3969	305.81	322.22	16.41
MUKLUK TEL. COMPANY, INC.	AK	558.	1169.33	5.05	140022.	250.94	0.2728	486.28	565.48	79.20
NUSHAGAK TELEPHONE COOPERATIVE, INC.	AK	1169.	646.16	2.79	121336.	103.80	0.5652	434.41	435.02	0.61
OTZ TELEPHONE COOPERATIVE, INC.	AK	1658.	402.72	1.74	58573.	35.33	0.3409	160.84	166.53	5.69
SITKA TELEPHONE COMPANY	AK	6616.	582.18	2.51	567649.	85.80	0.5724	390.44	387.77	-2.66
TELEPHONE UTILITIES OF ALASKA	AK	2029.	132.92	0.57	0.	0.	0.7500	99.69	93.05	-6.65
UNITED UTILITIES INC.	AK	3201.	595.26	2.57	286420.	89.48	0.3030	240.01	264.60	24.59
YUKON TELEPHONE COMPANY, INC.	AK	337.	712.97	3.08	41311.	122.59	0.3887	358.86	383.25	24.39
ARIZONA TEL. CO.	AZ	1542.	559.57	2.42	122499.	79.44	0.7000	444.66	429.17	-15.49
CITIZENS UTILITIES RURAL COMPANY INC.	AZ	39718.	411.99	1.78	1506649.	37.93	0.6063	275.08	263.25	-11.83
UNIVERSAL TEL CO OF SOUTHWEST - AZ	AZ	930.	335.03	1.45	15578.	16.75	0.4947	176.90	168.82	-8.09
VALLEY TELEPHONE COOPERATIVE INC-AZ	AZ	1660.	751.49	3.25	221476.	133.42	0.6099	547.28	546.67	-0.62
CONTEL OF THE WEST - ARIZONA	AZ	21119.	543.58	2.35	1582719.	74.94	0.3771	254.94	268.40	13.46
NAVAJO COMMUNICATIONS CO. INC.- AZ	AZ	6777.	967.10	4.18	1315131.	194.06	0.6780	785.06	780.70	-4.36
CONTEL OF CALIFORNIA - ARIZONA	AZ	4565.	497.76	2.15	283296.	62.06	0.5271	303.74	301.43	-2.31
MOUNTAIN BELL-ARIZONA	AZ	1530985.	263.50	1.14	0.	0.	0.3898	102.71	96.57	-6.14
ALLTEL ARKANSAS, INC.	AR	52803.	326.27	1.41	771780.	14.62	0.2972	106.71	109.01	2.29
ARKANSAS TELEPHONE COMPANY	AR	5187.	293.08	1.27	33855.	6.53	0.2727	84.27	85.34	1.06
CENTRAL ARKANSAS TEL. COOP INC.	AR	1877.	332.62	1.44	30338.	16.16	0.2479	93.23	98.75	5.52
CLEVELAND COUNTY TEL. CO.	AR	1360.	350.37	1.51	28021.	20.60	0.3176	125.01	127.92	2.91
DECATUR TELEPHONE CO. INC. - ARKANSAS	AR	654.	332.66	1.44	10577.	16.17	0.4603	163.90	157.65	-6.25
SOUTH ARKANSAS TEL. CO., INC.	AR	3052.	314.82	1.36	36095.	11.83	0.2754	94.59	97.21	2.62
LIBERTY TEL. & COMMUNICATIONS INC.	AR	9630.	323.93	1.40	135272.	14.05	0.3402	119.57	119.36	-0.21
MADISON COUNTY TEL. CO. INC.	AR	1821.	339.70	1.47	32578.	17.89	0.2897	110.34	114.06	3.72
MOUNTAIN HOME TELEPHONE COMPANY INC.	AR	12794.	267.81	1.16	4704.	0.37	0.4303	115.49	107.57	-7.91
NORTHERN ARKANSAS TEL. CO., INC.	AR	3628.	347.97	1.50	72306.	19.93	0.4734	178.02	171.68	-6.34
REDFIELD TELEPHONE COMPANY INC.	AR	1237.	387.14	1.67	38279.	30.95	0.2855	131.16	139.19	8.03
E. RITTER TELEPHONE COMPANY	AR	3830.	167.97	0.73	0.	0.	0.3183	53.47	51.55	-1.91
SOUTHWEST ARKANSAS TEL. COOP. INC.	AR	4237.	340.47	1.47	76592.	18.08	0.2955	112.66	116.10	3.44
TRI-COUNTY TEL. CO. INC.-AR	AR	3275.	408.81	1.77	121308.	37.04	0.2560	129.35	141.29	11.94

TABLE 3.6

NECA NTS COST DATA FOR 1986 - INDIVIDUAL STUDY AREAS

NAME	ST	LOOPS	URRPL	RTNA	HCA	HCAPL	SPF	OIRRPL	NIRRPL	CIRRPL
UNION TELEPHONE COMPANY INC.	AR	797.	424.57	1.83	33053.	41.47	0.3623	181.47	187.35	5.88
UNITED TELEPHONE CO. OF ARK. INC.	AR	14817.	268.86	1.16	9236.	0.62	0.3218	86.94	83.92	-3.02
WALNUT HILL TELEPHONE COMPANY	AR	4136.	477.28	2.06	232849.	56.30	0.4114	233.89	239.81	5.93
CONTEL OF ARKANSAS	AR	59621.	376.38	1.63	1664627.	27.92	0.2880	127.01	133.91	6.90
YELCOT TEL. CO., INC.	AR	2357.	325.92	1.41	34248.	14.53	0.3481	123.14	122.67	-0.47
YELL COUNTY TELEPHONE COMPANY	AR	3838.	223.97	0.97	0.	0.	0.2346	52.54	53.13	0.58
GTC OF THE SW - ARKANSAS	AR	56901.	372.53	1.61	1527001.	26.84	0.2797	122.09	129.21	7.12
SOUTHWESTERN BELL-ARKANSAS	AR	660625.	308.76	1.33	1051759.	1.59	0.2766	86.46	85.64	-0.83
CALAVERAS TELEPHONE COMPANY	CA	1364.	544.42	2.35	102547.	75.18	0.2488	185.57	210.74	25.17
CONTEL OF CALIFORNIA - CALIFORNIA	CA	226745.	446.24	1.93	2817733.	12.43	0.2699	128.72	131.39	2.67
C P NATIONAL CORP. - CALIFORNIA	CA	10655.	433.45	1.87	468503.	43.97	0.2772	149.47	162.17	12.71
CAPAY VALLEY TELEPHONE SYSTEM INC.	CA	400.	467.96	2.02	21470.	53.68	0.2748	164.38	180.35	15.97
CITIZENS UTILITIES CO. OF CALIF.	CA	46485.	542.79	2.34	3473460.	74.72	0.2319	175.69	202.22	26.54
CALIFORNIA-OREGON TELEPHONE CO	CA	2009.	510.06	2.20	131625.	65.52	0.4166	256.17	263.83	7.66
DUCOR TELEPHONE COMPANY	CA	534.	502.95	2.17	33918.	63.52	0.2156	150.78	174.82	24.04
EVANS TELEPHONE COMPANY	CA	6097.	351.90	1.52	128242.	21.03	0.1941	82.33	92.61	10.28
FORESTHILL TELEPHONE COMPANY	CA	1511.	363.74	1.57	36815.	24.36	0.2610	111.18	118.61	7.43
GENERAL TEL CO OF CALIFORNIA	CA	2757888.	311.64	1.35	4688034.	1.70	0.2492	78.79	79.39	0.60
HAPPY VALLEY TELEPHONE COMPANY	CA	2238.	585.43	2.53	194065.	86.71	0.1812	163.89	199.47	35.58
HORNITOS TELEPHONE COMPANY	CA	394.	959.37	4.14	75603.	191.89	0.2538	371.41	434.70	63.29
KERMAN TELEPHONE COMPANY	CA	3706.	297.70	1.29	28359.	7.65	0.1489	49.43	57.01	7.58
THE PONDEROSA TELEPHONE COMPANY	CA	5044.	752.29	3.25	674093.	133.64	0.1972	237.45	288.61	51.17
ROSEVILLE TELEPHONE COMPANY	CA	56047.	227.07	0.98	0.	0.	0.1991	45.21	47.14	1.93
SIERRA TELEPHONE COMPANY, INC.	CA	10186.	498.80	2.15	635082.	62.35	0.1945	138.58	164.00	25.42
THE SISKIYOU TELEPHONE CO.	CA	2881.	579.63	2.50	245126.	85.08	0.3105	236.70	259.21	22.51
TUOLUMNE TELEPHONE COMPANY	CA	3862.	1004.50	4.34	790084.	204.58	0.2634	400.97	466.85	65.88
THE VOLCANO TELEPHONE COMPANY	CA	6756.	404.56	1.75	242172.	35.85	0.2036	106.27	121.33	15.06
WEST COAST TEL. CO. OF CALIFORNIA	CA	8338.	298.60	1.29	65630.	7.87	0.3615	113.19	110.26	-2.93
PINNACLES TELEPHONE COMPANY	CA	107.	633.04	2.73	10711.	100.10	0.4069	324.32	341.16	16.85
PACIFIC BELL	CA	11265589.	207.35	0.90	0.	0.	0.2497	51.77	51.80	0.02
SUNFLOWER TELEPHONE CO., INC. - CO	CO	308.	492.98	2.13	18700.	60.71	0.4267	250.83	256.57	5.74
BIJOU TEL COOPERATIVE ASSOC. INC	CO	938.	301.39	1.30	8022.	8.55	0.3657	115.92	112.95	-2.97
BLANCA TELEPHONE CO.	CO	429.	584.57	2.52	37097.	86.47	0.6286	425.11	417.05	-8.06
DELTA COUNTY TELE-COMM INC.	CO	5747.	230.29	0.99	0.	0.	0.2890	66.55	65.06	-1.50
EAGLE TELECOMMUNICATIONS INC.	CO	4303.	613.68	2.65	407326.	94.66	0.5373	392.84	395.00	2.16
EASTERN SLOPE RURAL TEL ASSN INC	CO	3831.	302.44	1.31	33742.	8.81	0.3531	112.66	110.40	-2.27
EL PASO COUNTY MUTUAL TEL CO	CO	1634.	493.38	2.13	99388.	60.83	0.3408	208.69	221.47	12.78
FARMERS MUTUAL TEL CO - COLORADO	CO	271.	615.49	2.66	25791.	95.17	0.4374	332.66	345.12	12.46
HAXTUN TELEPHONE COMPANY	CO	1099.	274.48	1.19	2191.	1.99	0.3216	89.60	86.97	-2.63
BIG SANDY TELECOM INC.	CO	652.	690.57	2.98	75819.	116.29	0.3209	299.13	329.74	30.61
NUCLA-NATURITA TEL. CO.	CO	1091.	505.74	2.18	70154.	64.30	0.4296	260.14	266.45	6.31
NUNN TEL. COMPANY	CO	253.	594.96	2.57	22617.	89.40	0.5217	369.99	372.83	2.85
PEETZ COOP. TEL. CO.	CO	182.	506.92	2.19	11763.	64.63	0.4080	249.91	258.07	8.16
PHILLIPS COUNTY TEL. CO.	CO	1609.	158.57	0.68	0.	0.	0.3666	58.13	55.05	-3.08
PLAINS COOPERATIVE TEL. ASSOC. INC.	CO	1434.	333.48	1.44	23480.	16.37	0.2600	97.62	102.51	4.89
THE RYE TELEPHONE CO. INC.	CO	1208.	501.02	2.16	76072.	62.97	0.4162	250.51	257.62	7.11
COLUMBINE TELEPHONE COMPANY	CO	583.	615.56	2.66	55495.	95.19	0.5963	430.52	426.73	-3.79
STRASBURG TEL. CO.	CO	846.	269.98	1.17	759.	0.90	0.3728	101.25	96.01	-5.24
UNIVERSAL TEL. CO. OF COLORADO	CO	3618.	327.80	1.42	54230.	14.99	0.6363	218.57	202.46	-16.11
WIGGINS TEL. ASSOC.	CO	1038.	398.00	1.72	35293.	34.00	0.2832	135.38	144.49	9.10
MOUNTAIN BELL-COLORADO	CO	1639617.	211.87	0.91	0.	0.	0.3849	81.55	76.78	-4.77
SOUTHERN NEW ENGLAND TEL.	CT	1673272.	203.37	0.88	0.	0.	0.3166	64.39	62.13	-2.26
DIAMOND STATE TEL. CO.	DE	348315.	188.51	0.81	0.	0.	0.3214	60.59	58.34	-2.24
C & P TELEPHONE COMPANY OF WA D.C.	DC	767536.	112.57	0.49	0.	0.	0.3907	43.98	41.35	-2.63
FLORALA TELEPHONE COMPANY-FLORIDA	FL	2483.	396.12	1.71	83105.	33.47	0.3253	151.17	157.37	6.21
SOUTHLAND TELEPHONE COMPANY-FL	FL	2727.	333.02	1.44	44346.	16.26	0.2774	103.22	107.11	3.89
GENERAL TEL CO OF FLORIDA	FL	1415170.	263.44	1.14	0.	0.	0.3876	102.11	96.08	-6.03

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NAME	ST	LOOPS	URRPL	RTNA	HCA	HCAPL	SPF	OIRRPL	NIRRPL	CIRRPL
GULF TEL. CO. - FL	FL	6496.	267.30	1.15	1576.	0.24	0.2728	73.08	72.15	-0.93
VISTA-UNITED TELECOMMUNICATIONS SYSTEMS	FL	2221.	614.89	2.66	210998.	95.00	0.5769	418.07	416.22	-1.84
INDIANTOWN TELEPHONE SYSTEM	FL	1726.	613.81	2.65	163446.	94.70	0.3906	302.89	320.03	17.14
NORTHEAST FLORIDA TEL. CO., INC.	FL	4254.	444.10	1.92	199787.	46.96	0.2169	127.63	145.73	18.10
ALLTEL FLORIDA INC.	FL	40782.	404.51	1.75	1461243.	35.83	0.2587	128.53	139.91	11.38
QUINCY TELEPHONE CO-FL DIV.	FL	7002.	323.04	1.40	96839.	13.83	0.2198	80.23	86.45	6.23
ST. JOSEPH TEL. AND TELE. CO.	FL	18877.	301.56	1.30	162197.	8.59	0.3275	104.49	103.46	-1.03
CENTRAL TELEPHONE COMPANY OF FLORIDA	FL	206235.	232.79	1.01	0.	0.	0.3320	77.29	74.10	-3.19
UNITED TELEPHONE CO. OF FLORIDA	FL	788130.	283.39	1.22	504866.	0.64	0.4386	124.72	116.04	-8.68
SOUTHERN BELL-FLORIDA	FL	3670545.	333.27	1.44	9216976.	2.51	0.3357	113.55	109.62	-3.93
CONTINENTAL TEL CO OF THE SOUTH-GA	GA	47595.	339.88	1.47	853525.	17.93	0.2143	84.79	92.81	8.02
VALLEY TEL. CO.-GA	GA	3873.	157.77	0.68	0.	0.	0.3459	54.57	52.05	-2.52
QUINCY TELEPHONE CO-GA DIV.	GA	517.	355.38	1.53	11381.	22.01	0.2728	111.62	117.61	5.99
ALMA TELEPHONE CO INC	GA	4856.	382.91	1.65	144488.	29.75	0.1883	91.94	105.80	13.86
BRANTLEY TELEPHONE COMPANY INC.	GA	2302.	401.44	1.73	80496.	34.97	0.2004	103.76	118.75	14.99
CAMDEN TEL & TEL CO INC - GEORGIA	GA	7611.	399.16	1.72	261264.	34.33	0.5067	225.14	219.50	-5.64
CITIZENS TELEPHONE CO INC - GEORGIA	GA	3639.	330.11	1.43	56595.	15.55	0.2100	79.69	87.05	7.36
COASTAL UTILITIES INC	GA	17711.	278.38	1.20	52109.	2.94	0.4869	137.50	127.49	-10.02
DARIEN TELEPHONE CO. INC.	GA	3075.	287.63	1.24	15981.	5.20	0.2624	78.94	80.07	1.13
ELLIJAY TEL. CO.	GA	5635.	258.77	1.12	0.	0.	0.1854	47.98	50.77	2.79
INTERSTATE TELEPHONE COMPANY	GA	8793.	122.33	0.53	0.	0.	0.2484	30.39	30.41	0.02
PINELAND TELEPHONE COOP	GA	8274.	272.14	1.18	11764.	1.42	0.1766	49.01	52.80	3.79
PLANT TEL. & POWER CO. INC.	GA	6526.	426.74	1.84	274632.	42.08	0.2271	124.97	140.62	15.65
PUBLIC SERVICE TELEPHONE CO.	GA	6827.	419.51	1.81	273411.	40.05	0.1827	103.34	121.39	18.05
STANDARD TEL. CO.	GA	28481.	355.33	1.53	626567.	22.00	0.2019	86.41	96.58	10.18
WAVERLY HALL TEL. CO., INC.	GA	824.	283.51	1.22	3455.	4.19	0.2404	70.95	72.80	1.85
WILKES TEL & ELECTRIC CO.	GA	8146.	177.60	0.77	0.	0.	0.1971	35.01	36.57	1.56
GTC OF THE SE - GEORGIA	GA	176772.	311.26	1.34	1937203.	10.96	0.2253	77.43	82.36	4.93
SOUTHERN BELL-GEORGIA	GA	2298014.	272.47	1.18	531141.	0.23	0.2793	76.25	75.00	-1.26
HAWAIIAN TELEPHONE COMPANY	HI	483933.	172.52	0.75	0.	0.	0.2789	48.12	47.29	-0.83
CONTEL OF THE WEST - IDAHO	ID	11426.	595.91	2.57	1024486.	89.66	0.4309	316.55	328.50	11.95
ALBION TEL. CO. INC.	ID	825.	832.78	3.60	128932.	156.28	0.3769	418.06	452.58	34.52
CAMBRIDGE TEL. CO., INC.-ID	ID	811.	530.23	2.29	57735.	71.19	0.3790	248.42	260.75	12.33
CUSTER TEL. COOPERATIVE INC.	ID	1367.	362.34	1.56	32768.	23.97	0.7059	271.76	253.62	-18.13
GEM STATE UTILITIES CORP-ID	ID	818.	1102.31	4.76	189848.	232.09	0.4527	653.74	693.85	40.10
CENTURY TELEPHONE OF IDAHO	ID	2225.	543.69	2.35	166817.	74.97	0.3558	243.43	258.85	15.42
MIDVALE TEL. EXCH. INC.	ID	303.	654.18	2.82	32133.	106.05	0.3018	268.13	297.79	29.66
PROJECT MUTUAL TEL. COOP. ASSN.	ID	5872.	190.19	0.82	0.	0.	0.2970	56.49	54.98	-1.50
ROCKLAND TEL. CO., INC.	ID	356.	717.37	3.10	44081.	123.82	0.3220	313.54	346.21	32.67
RURAL TEL. CO.	ID	184.	1544.66	6.67	65596.	356.50	0.3558	787.26	878.90	91.65
TROY TELEPHONE COMPANY	ID	637.	421.86	1.82	25933.	40.71	0.4437	214.32	214.27	-0.06
SILVER STAR TEL. CO. INC.-ID	ID	318.	529.10	2.28	22537.	70.87	0.5588	342.91	339.28	-3.62
GTC OF THE NW, INC - IDAHO	ID	61925.	423.31	1.83	2546238.	41.12	0.4918	235.60	232.24	-3.35
INLAND TELEPHONE COMPANY - ID	ID	170.	1023.55	4.42	35689.	209.94	0.3588	507.21	558.56	51.35
MOUNTAIN BELL-IDAHO	ID	306632.	264.11	1.14	0.	0.	0.3276	86.52	83.12	-3.41
PACIFIC NORTHWEST BELL-IDAHO	ID	21247.	248.15	1.07	0.	0.	0.3465	85.98	81.99	-4.00
CENTRAL TEL. CO. OF IL	IL	153667.	169.87	0.73	0.	0.	0.3001	50.98	49.57	-1.41
ALLTEL ILLINOIS INC.	IL	38370.	155.67	0.67	0.	0.	0.3233	50.33	48.43	-1.90
EGYPTIAN TELEPHONE COOPERATIVE ASSN.	IL	2445.	283.78	1.23	10417.	4.26	0.2360	69.81	71.89	2.07
EL PASO TELEPHONE COMPANY	IL	1488.	227.78	0.98	0.	0.	0.2471	56.28	56.40	0.11
C-R TELEPHONE COMPANY	IL	869.	248.25	1.07	0.	0.	0.1874	46.52	49.10	2.58
LAKESIDE TEL. CO.	IL	723.	318.92	1.38	9272.	12.82	0.2010	72.65	79.51	6.86
GENERAL TEL CO OF ILLINOIS	IL	491281.	235.71	1.02	0.	0.	0.2553	60.18	59.96	-0.21
GRIDLEY TELEPHONE COMPANY	IL	1101.	223.68	0.97	0.	0.	0.2547	56.97	56.79	-0.18
CONTINENTAL TELEPHONE CO OF ILLINOIS	IL	154241.	275.73	1.19	354283.	2.30	0.2646	74.49	74.59	0.10
ILLINOIS CONSOLIDATED TELEPHONE COMPANY	IL	72657.	247.90	1.07	0.	0.	0.2297	56.94	57.78	0.84
INLAND TEL. CO.	IL	4021.	270.01	1.17	3632.	0.90	0.2038	55.63	58.01	2.38

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NAME	ST	LOOPS	URRPL	RTNA	HCA	HCAPL	SPF	OIRRPL	NIRRPL	CIRRPL
LEAF RIVER VALLEY TELEPHONE COMPANY	IL	561.	311.52	1.35	6182.	11.02	0.2193	75.66	80.92	5.26
MIDLAND TELEPHONE COMPANY	IL	3897.	342.18	1.48	72070.	18.49	0.2049	82.44	91.17	8.73
MOULTRIE INDEPENDENT TELEPHONE COMPANY	IL	670.	175.90	0.76	0.	0.	0.1797	31.61	33.67	2.06
PRAIRIE TEL. CO.	IL	941.	201.83	0.87	0.	0.	0.2172	43.84	44.95	1.11
ILLINOIS BELL TEL CO	IL	4774752.	152.07	0.66	0.	0.	0.2651	40.31	39.93	-0.38
CLAY CTY RURAL TEL. COOP. INC.	IN	5363.	226.85	0.98	0.	0.	0.2097	47.57	49.09	1.52
ELNORA TELEPHONE COMPANY INC.	IN	414.	178.72	0.77	0.	0.	0.1610	28.77	31.42	2.65
GARRETT TELEPHONE CO. INC.	IN	2250.	163.52	0.71	0.	0.	0.2727	44.59	43.97	-0.62
GENERAL TEL CO OF IN INC	IN	536233.	218.24	0.94	0.	0.	0.3009	65.67	63.81	-1.86
HOME TELEPHONE COMPANY INC.	IN	1765.	344.08	1.49	33461.	18.96	0.1489	63.87	76.01	12.13
CONTINENTAL TELEPHONE CO OF IN, INC.	IN	123858.	278.73	1.20	375193.	3.03	0.2622	75.10	75.53	0.42
NEW PARIS TELEPHONE INC.	IN	1404.	246.19	1.06	0.	0.	0.2509	61.77	61.74	-0.02
PERRY-SPENCER RURAL TEL. COOP. INC.	IN	3749.	302.02	1.30	32633.	8.70	0.2142	70.49	75.18	4.68
PULASKI-WHITE RURAL TEL. COOP. INC.	IN	1550.	276.32	1.19	3783.	2.44	0.2256	63.96	65.91	1.95
TRI-COUNTY TEL. CO. INC.-IN	IN	2638.	187.91	0.81	0.	0.	0.1783	33.50	35.76	2.25
UNITED TELEPHONE CO. OF INDIANA INC.	IN	160887.	268.81	1.16	98411.	0.61	0.2946	79.60	77.79	-1.81
YEOMAN TELEPHONE COMPANY INC.	IN	970.	245.86	1.06	0.	0.	0.2325	57.16	57.88	0.71
INDIANA BELL TEL CO	IN	1437155.	180.63	0.78	0.	0.	0.2391	43.19	43.51	0.33
AYRSHIRE FMRS. MUT. TEL. CO.	IA	359.	228.82	0.99	0.	0.	0.2347	53.70	54.30	0.59
BERNARD TELEPHONE COMPANY INC.	IA	439.	444.41	1.92	20656.	47.05	0.1998	120.16	139.53	19.37
BROOKLYN MUTUAL TELEPHONE COMPANY	IA	1323.	146.64	0.63	0.	0.	0.2043	29.96	31.07	1.11
DUNKERTON TELEPHONE COOP., INC.	IA	628.	184.73	0.80	0.	0.	0.1814	33.51	35.62	2.11
GTC OF THE MW - IOWA	IA	100500.	225.50	0.97	0.	0.	0.2767	62.40	61.40	-0.99
CONTINENTAL TELEPHONE CO. OF IOWA	IA	67665.	296.08	1.28	491021.	7.26	0.2377	75.22	78.26	3.04
KALONA COOP TELEPHONE COMPANY	IA	1474.	123.12	0.53	0.	0.	0.2520	31.03	30.99	-0.04
LOST NATION - ELWOOD TEL. CO.	IA	613.	284.27	1.23	2684.	4.38	0.1788	53.75	58.56	4.81
UNITED FARMERS TELEPHONE COMPANY	IA	524.	339.18	1.46	9308.	17.76	0.2830	107.83	111.89	4.06
UNITED TELEPHONE CO. OF IOWA	IA	59698.	239.63	1.03	0.	0.	0.2562	61.39	61.15	-0.24
WEBB-DICKENS TELEPHONE CORPORATION	IA	457.	266.14	1.15	0.	0.	0.2658	70.74	70.02	-0.72
WELLMAN COOP TELEPHONE ASSN.	IA	1093.	198.68	0.86	0.	0.	0.1923	38.21	40.11	1.91
ACE TELEPHONE ASSOCIATION- IOWA	IA	2966.	275.43	1.19	6599.	2.23	0.2046	57.84	60.64	2.81
GRAND RIVER MUTUAL TEL CORP - IA	IA	5535.	296.46	1.28	40687.	7.35	0.2728	85.78	87.10	1.32
NORTHWESTERN BELL-IOWA	IA	847150.	182.14	0.79	0.	0.	0.2762	50.31	49.51	-0.80
ASSARIA TELEPHONE EXCHANGE INC.	KS	426.	312.57	1.35	4804.	11.28	0.3011	101.63	102.73	1.10
BLUE VALLEY TELEPHONE COMPANY	KS	2617.	301.49	1.30	22442.	8.58	0.2745	88.48	90.10	1.62
CUNNINGHAM TELEPHONE CO. INC.	KS	1523.	393.55	1.70	49877.	32.75	0.2868	134.70	143.18	8.48
ELKHART TELEPHONE COMPANY INC.	KS	1366.	204.76	0.88	0.	0.	0.4786	98.00	90.20	-7.80
GOLDEN BELT TELEPHONE ASSN. INC.	KS	3592.	376.89	1.63	100803.	28.06	0.4216	177.61	176.18	-1.42
HAVILAND TELEPHONE COMPANY INC.	KS	3543.	283.29	1.22	14668.	4.14	0.2790	81.80	81.82	0.02
H & B COMMUNICATIONS INC.	KS	960.	388.70	1.68	30130.	31.39	0.3135	142.78	149.12	6.34
HOME TELEPHONE COMPANY INC.	KS	1194.	390.60	1.69	38109.	31.92	0.2866	133.22	141.48	8.26
J. B. N. TELEPHONE COMPANY INC.	KS	2092.	322.64	1.39	28724.	13.73	0.2803	99.59	102.55	2.96
KANOKLA TEL. ASSOC. INC.- KS	KS	2157.	392.40	1.69	69939.	32.42	0.3456	157.23	161.76	4.53
KANSAS STATE TELEPHONE COMPANY	KS	5082.	222.18	0.96	0.	0.	0.2728	60.61	59.77	-0.84
CONTINENTAL TELEPHONE CO OF KS, INC.	KS	42783.	476.03	2.06	2393548.	55.95	0.3024	181.25	195.76	14.51
MADISON TEL. CO. INC.- KS	KS	744.	479.59	2.07	42368.	56.95	0.2897	176.90	192.72	15.82
MOKAN DIAL, INC.- KS	KS	1780.	283.63	1.22	7518.	4.22	0.3133	91.68	90.11	-1.57
MOUNDRIDGE TEL. CO.	KS	2042.	446.60	1.93	97337.	47.67	0.2912	161.83	174.63	12.81
PEOPLES MUTUAL TEL. CO.-KS	KS	995.	371.10	1.60	26303.	26.43	0.4002	166.14	165.64	-0.50
CRAW-KAN TELEPHONE COOP INC- KS	KS	11350.	269.34	1.16	8393.	0.74	0.2925	79.27	77.61	-1.67
RAINBOW TEL COOPERATIVE ASSN INC.	KS	1780.	253.55	1.09	0.	0.	0.2336	59.23	59.91	0.68
RURAL TEL. SERVICE CO., INC.	KS	6321.	477.92	2.06	356995.	56.48	0.2710	167.17	184.32	17.15
S & T TEL. COOP. ASSN.	KS	1600.	698.92	3.02	189811.	118.63	0.3699	337.62	363.18	25.57
S & A TEL. CO., INC.	KS	680.	299.52	1.29	5505.	8.10	0.2354	75.90	79.32	3.42
SOUTH CENTRAL TEL. ASSN. INC.-KS	KS	1126.	265.40	1.15	0.	0.	0.2973	78.90	76.81	-2.10
SOUTHERN KANSAS TEL. CO., INC.	KS	3282.	291.58	1.26	20217.	6.16	0.2930	89.54	89.49	-0.05
SUNFLOWER TEL. CO., INC.	KS	3914.	487.72	2.11	231840.	59.23	0.3781	223.90	233.20	9.31

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NECA NTS COST DATA FOR 1986 - INDIVIDUAL STUDY AREAS

NAME	ST	LOOPS	URRPL	RTNA	HCA	HCAPL	SPF	OIRRPL	NIRRPL	CIRRPL
TRI-COUNTY TEL. ASSN. INC.-KS	KS	3197.	286.03	1.24	15370.	4.81	0.2256	67.73	70.48	2.75
TWIN VALLEY TEL. INC.-KS	KS	2109.	464.47	2.01	111131.	52.69	0.2520	152.17	169.60	17.43
UNITED TELEPHONE ASSN. INC.	KS	4247.	288.98	1.25	23477.	5.53	0.4108	122.40	116.50	-5.90
UNITED TELEPHONE CO OF KS	KS	61793.	286.55	1.24	304850.	4.93	0.4122	121.40	115.31	-6.09
WAMEGO TELEPHONE COMPANY INC.	KS	3605.	253.20	1.09	0.	0.	0.2720	68.87	67.93	-0.94
THE WHEAT STATE TEL. CO. INC.	KS	1836.	409.37	1.77	68294.	37.20	0.2853	141.59	151.58	9.98
WILSON TELEPHONE COMPANY INC.	KS	2130.	345.12	1.49	40918.	19.21	0.2499	99.05	105.46	6.40
ZENDA TELEPHONE COMPANY INC.	KS	238.	504.47	2.18	15219.	63.95	0.2114	149.28	173.82	24.54
TOTAH TELEPHONE CO. INC.	KS	1317.	660.66	2.85	142068.	107.87	0.4273	354.21	370.68	16.47
SOUTHWESTERN BELL-KANSAS	KS	984123.	224.18	0.97	0.	0.	0.2876	64.47	63.06	-1.41
GENERAL TEL CO OF KENTUCKY	KY	280874.	286.50	1.24	212707.	0.76	0.2528	72.93	73.04	0.11
CONTINENTAL TELEPHONE CO OF KENTUCKY	KY	49728.	429.17	1.85	2126671.	42.77	0.1911	110.52	128.99	18.46
CINCINNATI BELL-KENTUCKY	KY	124947.	230.34	0.99	0.	0.	0.1603	36.92	40.38	3.46
SOUTH CENTRAL BELL-KENTUCKY	KY	817517.	272.03	1.17	175503.	0.21	0.2160	58.90	60.52	1.62
ATHENS TELEPHONE COMPANY	LA	279.	638.08	2.76	28324.	101.52	0.2883	251.64	281.39	29.76
CENTRAL LOUISIANA TELEPHONE COMPANY	LA	12121.	428.48	1.85	516022.	42.57	0.2728	145.27	157.83	12.56
COASTAL TELEPHONE & ELECTRONICS CORP.	LA	9123.	286.41	1.24	44697.	4.90	0.1766	53.85	58.97	5.13
CAMERON TEL. CO.- LA	LA	5513.	573.67	2.48	459829.	83.41	0.3368	248.82	268.30	19.48
CHATHAM TELEPHONE COMPANY, INC.	LA	1203.	336.01	1.45	20439.	16.99	0.1764	70.60	80.40	9.80
EAST ASCENSION TELEPHONE COMPANY	LA	19182.	315.71	1.36	230986.	12.04	0.1962	69.97	76.83	6.86
ELIZABETH TELEPHONE COMPANY INC	LA	2262.	733.49	3.17	290341.	128.36	0.2061	236.74	284.88	48.14
CADDOAN TELEPHONE COMPANY	LA	7669.	328.11	1.42	115539.	15.07	0.3250	116.68	117.60	0.92
LAFOURCHE TEL. CO.	LA	10785.	387.84	1.67	335856.	31.14	0.2490	117.33	127.75	10.42
EVANGELINE TELEPHONE COMPANY	LA	24561.	339.94	1.47	440804.	17.95	0.3250	122.44	124.18	1.73
NORTHEAST LOUISIANA TEL. CO.INC.	LA	794.	597.46	2.58	71537.	90.10	0.2650	218.39	246.93	28.54
NORTHWEST LOUISIANA TEL. CO.INC.	LA	980.	326.65	1.41	14414.	14.71	0.2944	105.97	108.46	2.49
PLAIN DEALING TELEPHONE COMPANY	LA	1448.	390.28	1.69	46090.	31.83	0.2041	100.88	114.49	13.62
RINGGOLD TEL. CO.,INC.	LA	1465.	226.07	0.98	0.	0.	0.2728	61.67	60.81	-0.86
CENTURY TELEPHONE COMPANY INC.	LA	1346.	606.27	2.62	124607.	92.58	0.3250	258.76	282.04	23.28
LOUISIANA WESTERN TELEPHONE COMPANY	LA	2815.	626.98	2.71	277001.	98.40	0.3250	269.37	294.33	24.96
UNITED TELEPHONE COMPANY OF LOUISIANNA	LA	2217.	631.72	2.73	221108.	99.73	0.3250	271.80	297.14	25.35
SOUTH CENTRAL BELL-LOUISIANA	LA	1673456.	297.21	1.28	1939339.	1.16	0.2142	64.43	66.60	2.17
LINCOLNVILLE TEL. CO.	ME	1097.	296.31	1.28	8022.	7.31	0.5243	160.23	149.12	-11.10
CHINA TEL. CO.	ME	2185.	269.09	1.16	1485.	0.68	0.2880	77.95	76.48	-1.47
HAMPDEN TEL. CO.	ME	1809.	299.55	1.29	14661.	8.10	0.2594	83.11	85.33	2.22
HARTLAND & ST. ALBANS TEL. CO.	ME	1769.	446.05	1.93	84052.	47.51	0.3000	165.49	177.58	12.09
CONTINENTAL TEL. CO OF MAINE	ME	29530.	399.54	1.73	1016772.	34.43	0.3456	161.03	166.16	5.12
SOMERSET TEL. CO.	ME	7391.	256.89	1.11	0.	0.	0.3149	80.90	78.12	-2.77
STANDISH TEL. CO.	ME	4789.	274.21	1.18	9230.	1.93	0.3192	88.81	86.28	-2.54
UNION RIVER TEL. CO.	ME	660.	470.18	2.03	35837.	54.30	0.4158	231.70	236.77	5.08
UNITY TEL. CO.	ME	2782.	326.71	1.41	40960.	14.72	0.3332	118.67	119.04	0.37
WARREN TEL. CO.	ME	983.	203.76	0.88	0.	0.	0.3274	66.71	64.08	-2.63
WEST PENOBSCOT TEL. & TEL. CO.	ME	1422.	286.51	1.24	7002.	4.92	0.2538	76.00	77.47	1.47
NEW ENGLAND TEL.-MAINE	ME	486965.	265.61	1.15	0.	0.	0.2865	76.10	74.48	-1.62
ARMSTRONG TELEPHONE COMPANY OF MD	MD	3604.	246.04	1.06	0.	0.	0.3664	90.15	85.38	-4.77
C & P TELEPHONE COMPANY OF MARYLAND	MD	2416196.	180.30	0.78	0.	0.	0.2232	40.24	41.04	0.79
NEW ENGLAND TEL.-MA	MA	3259555.	156.11	0.67	0.	0.	0.2721	42.48	41.90	-0.58
BLANCHARD TELEPHONE ASSOC. INC.	MI	930.	304.74	1.32	8713.	9.37	0.1599	54.97	62.67	7.69
BLOOMINGDALE TELEPHONE COMPANY	MI	1447.	315.88	1.36	17487.	12.08	0.2581	89.59	93.20	3.62
CHIPPEWA COUNTY TELEPHONE COMPANY	MI	834.	300.03	1.30	6856.	8.22	0.2639	84.66	86.71	2.05
ALLTEL MICHIGAN INC.	MI	34944.	226.31	0.98	0.	0.	0.2414	54.63	54.95	0.32
C,C & S TELCO, INC. - MICHIGAN	MI	15957.	164.51	0.71	0.	0.	0.2122	34.91	35.95	1.04
CARR TELEPHONE COMPANY	MI	1188.	249.32	1.08	0.	0.	0.3648	90.95	86.17	-4.79
CHATHAM TELEPHONE COMPANY - MI	MI	2114.	251.44	1.09	0.	0.	0.2395	60.22	60.67	0.45
CLAYTON TELEPHONE COMPANY	MI	541.	366.43	1.58	13591.	25.12	0.2279	100.26	109.99	9.73
GENERAL TEL CO OF MICHIGAN	MI	445736.	262.77	1.13	0.	0.	0.2065	54.26	56.18	1.92
HICKORY TELEPHONE COMPANY	MI	1119.	214.74	0.93	0.	0.	0.2025	43.48	45.18	1.70

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NAME	ST	LOOPS	URRPL	RTNA	HCA	HCAPL	SPF	JIRRPL	NIRRPL	CIRRPL
CENTURY TELEPHONE OF MICHIGAN, INC.	MI	32714.	335.61	1.45	552617.	16.89	0.2145	83.25	90.86	7.61
ACE TELEPHONE CO. OF MI INC.	MI	2942.	450.51	1.95	143472.	48.77	0.2184	130.90	149.54	18.64
MIDWAY TELEPHONE COMPANY	MI	713.	455.04	1.97	35680.	50.04	0.2761	159.00	173.72	14.72
HIAWATHA TELEPHONE COMPANY	MI	2994.	335.87	1.45	50768.	16.96	0.2882	108.10	111.61	3.50
ONTONAGON COUNTY TELEPHONE CO.	MI	3653.	218.95	0.95	0.	0.	0.2943	64.44	62.82	-1.62
PIGEON TELEPHONE COMPANY	MI	2395.	309.45	1.34	25188.	10.52	0.1877	65.10	71.82	6.72
SPRINGPORT TEL. CO.	MI	1482.	265.15	1.15	0.	0.	0.2103	55.76	57.51	1.75
UPPER PENINSULA TEL. CO.	MI	2766.	426.59	1.84	116286.	42.04	0.3417	173.79	181.28	7.49
WALDRON TELEPHONE COMPANY	MI	542.	267.80	1.16	197.	0.36	0.3801	102.03	96.34	-5.69
WESTPHALIA TELEPHONE COMPANY	MI	739.	278.00	1.20	2106.	2.85	0.1137	33.51	40.77	7.26
WOLVERINE TELEPHONE COMPANY	MI	6777.	186.35	0.80	0.	0.	0.1738	32.39	34.75	2.37
MICHIGAN BELL TEL CO	MI	3795775.	192.85	0.83	0.	0.	0.1919	37.01	38.88	1.87
CONTINENTAL TEL CO OF MN, INC.	MN	88448.	307.78	1.33	894061.	10.11	0.2187	74.05	79.02	4.97
GTC OF THE MW - MINNESOTA	MN	3235.	213.13	0.92	0.	0.	0.2578	54.94	54.67	-0.28
ACE TELEPHONE ASSOCIATION - MN	MN	8264.	193.57	0.84	0.	0.	0.2571	49.77	49.53	-0.23
ARVIG TELEPHONE COMPANY	MN	8309.	213.97	0.92	0.	0.	0.3031	64.85	62.97	-1.88
BLACKDUCK TELEPHONE COMPANY	MN	985.	291.31	1.26	6003.	6.09	0.2307	71.27	74.23	2.96
BRIDGEWATER TELEPHONE COMPANY	MN	3846.	280.95	1.21	13729.	3.57	0.2865	82.87	82.35	-0.52
CENTRAL TELEPHONE COMPANY - MN	MN	65015.	199.67	0.86	0.	0.	0.2383	47.58	47.98	0.40
CLARA CITY TELEPHONE EXCH. CO.	MN	1447.	365.81	1.58	36095.	24.95	0.2760	117.59	124.33	6.74
CONSOLIDATED TELEPHONE COMPANY- MN	MN	5662.	197.74	0.85	0.	0.	0.2196	43.42	44.41	0.99
ARROWHEAD COMMUNICATIONS CORP.	MN	531.	422.55	1.82	21720.	40.90	0.2702	141.44	153.64	12.20
DEER RIVER TELEPHONE CO.	MN	1588.	281.31	1.21	5807.	3.66	0.2217	64.80	67.35	2.54
EAGLE VALLEY TELEPHONE COMPANY	MN	624.	268.81	1.16	381.	0.61	0.1677	45.49	49.37	3.89
EAST OTTER TAIL TELEPHONE CO.	MN	12200.	248.07	1.07	0.	0.	0.2667	66.16	65.47	-0.69
EMILY COOPERATIVE TELEPHONE CO.	MN	942.	206.63	0.89	0.	0.	0.2232	46.12	47.03	0.91
GARDEN VALLEY TELEPHONE COMPANY	MN	12551.	257.31	1.11	0.	0.	0.2383	61.32	61.83	0.51
GRANADA TEL. CO.	MN	256.	265.30	1.15	0.	0.	0.1765	46.83	50.09	3.26
HALSTAD TELEPHONE COMPANY	MN	1454.	180.68	0.78	0.	0.	0.2685	48.51	47.95	-0.56
JOHNSON TELEPHONE COMPANY	MN	1257.	584.86	2.53	108799.	86.55	0.3105	239.30	262.25	22.94
LAKEDALE TELEPHONE COMPANY	MN	8912.	210.71	0.91	0.	0.	0.1866	39.32	41.55	2.23
MADELIA TELEPHONE COMPANY	MN	1493.	176.71	0.76	0.	0.	0.2090	36.93	38.13	1.20
MID STATE TELEPHONE COMPANY	MN	5186.	205.63	0.89	0.	0.	0.2049	42.13	43.68	1.54
NEW ULM TELECOM, INC.	MN	7632.	210.33	0.91	0.	0.	0.2579	54.24	53.97	-0.27
NORMAN COUNTY TELEPHONE CO. INC.	MN	3558.	294.05	1.27	24058.	6.76	0.2453	76.64	79.13	2.49
NORTHLAND TELEPHONE COMPANY	MN	584.	245.42	1.06	0.	0.	0.2106	51.69	53.28	1.60
PAUL BUNYAN RURAL TEL. COOP.	MN	4847.	343.46	1.48	91149.	18.81	0.2380	94.28	101.23	6.96
UNITED TELEPHONE CO OF MINN	MN	86373.	285.05	1.23	394618.	4.57	0.2060	61.77	65.37	3.60
SHERBURNE COUNTY RURAL TEL. CO.	MN	5000.	219.41	0.95	0.	0.	0.1879	41.23	43.51	2.28
SLEEPY EYE TEL. CO.	MN	5081.	246.84	1.07	0.	0.	0.1823	45.00	47.79	2.79
STARBUCK TEL. CO.	MN	1271.	301.68	1.30	10960.	8.62	0.2528	82.01	84.74	2.72
TWIN VALLEY-ULEN TEL CO INC.	MN	2721.	237.90	1.03	0.	0.	0.2181	51.89	53.15	1.26
CROSSLAKE TELEPHONE COMPANY	MN	1245.	169.09	0.73	0.	0.	0.3207	54.23	52.23	-2.00
NORTHWESTERN BELL-MINNESOTA	MN	1609810.	191.33	0.83	0.	0.	0.2655	50.80	50.30	-0.50
BAY SPRINGS TELEPHONE COMPANY INC.	MS	7832.	442.40	1.91	364092.	46.49	0.2098	123.81	142.27	18.46
DECATUR TELEPHONE CO INC- MS	MS	1455.	205.24	0.89	0.	0.	0.1555	31.91	35.16	3.24
DELTA TELEPHONE COMPANY INC.	MS	2779.	254.87	1.10	0.	0.	0.2424	61.78	62.11	0.33
FRANKLIN TELEPHONE COMPANY INC - MS	MS	5859.	383.97	1.66	176088.	30.05	0.2181	103.78	115.83	12.05
HOME TELEPHONE COMPANY - OLIVE BRANCH	MS	5425.	475.49	2.05	302679.	55.79	0.2500	156.07	174.67	18.60
HUGHES TELEPHONE COMPANY	MS	4821.	369.47	1.60	125225.	25.97	0.1983	90.58	102.42	11.84
NOXAPATER TEL. CO., INC.	MS	916.	294.39	1.27	6271.	6.85	0.1954	62.09	67.05	4.96
SLEDGE TEL. CO., INC.	MS	390.	281.77	1.22	1470.	3.77	0.2628	76.56	77.23	0.66
SOUTH CENTRAL BELL-MISSISSIPPI	MS	826170.	341.50	1.47	2329645.	2.82	0.2494	87.05	88.02	0.97
GTC OF THE MW - MISSOURI	MO	90939.	267.97	1.16	36823.	0.40	0.2961	79.61	77.69	-1.93
MOKAN DIAL, INC.- MO	MO	542.	323.87	1.40	7605.	14.03	0.2417	87.63	92.76	5.13
BOURBEUSE TELEPHONE COMPANY	MO	1481.	237.77	1.03	0.	0.	0.2728	64.86	63.96	-0.90
CITIZENS TELEPHONE CO - MISSOURI	MO	3364.	234.13	1.01	0.	0.	0.2392	56.00	56.43	0.42

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EASTERN MISSOURI TELEPHONE CO.	MO	2483.	407.49	1.76	91050.	36.67	0.2012	106.43	121.96	15.52
FIDELITY TELEPHONE COMPANY	MO	9180.	246.98	1.07	0.	0.	0.2226	54.98	56.11	1.14
ALLTEL MISSOURI INC.	MO	18765.	341.95	1.48	345976.	18.44	0.2430	95.38	101.91	6.52
GOODMAN TEL. CO.	MO	1275.	305.50	1.32	12182.	9.55	0.4007	128.79	124.30	-4.48
GRAND RIVER MUTUAL TEL CORP - MO	MO	12278.	254.08	1.10	0.	0.	0.2461	62.53	62.71	0.18
KINGDOM TELEPHONE COMPANY	MO	2403.	381.39	1.65	70478.	29.33	0.3711	161.09	163.16	2.07
MISSOURI TELEPHONE COMPANY	MO	14897.	328.75	1.42	226751.	15.22	0.2317	86.32	92.41	6.09
LE-RU TELEPHONE COMPANY	MO	904.	657.52	2.84	96720.	106.99	0.2727	250.63	283.80	33.17
MID-MISSOURI TELEPHONE CO.	MO	3269.	342.83	1.48	60973.	18.65	0.1954	79.42	88.76	9.34
MILLER TELEPHONE COMPANY - MO	MO	857.	267.31	1.15	209.	0.24	0.2733	73.22	72.26	-0.96
CONTINENTAL TELEPHONE CO OF MISSOURI	MO	121017.	474.91	2.05	6732379.	55.63	0.2758	168.07	184.57	16.50
HOLWAY TELEPHONE COMPANY	MO	600.	432.03	1.87	26142.	43.57	0.3034	160.12	170.80	10.68
NORTHEAST MISSOURI RURAL TEL. CO.	MO	3290.	533.47	2.30	237215.	72.10	0.2811	198.03	219.29	21.26
LATHROP TELEPHONE COMPANY	MO	1014.	218.86	0.95	0.	0.	0.2009	43.97	45.76	1.79
ORCHARD FARM TELEPHONE COMPANY	MO	634.	414.20	1.79	24444.	38.56	0.2669	136.25	147.95	11.69
SENECA TEL. CO.	MO	2152.	298.53	1.29	16901.	7.85	0.3408	106.97	105.05	-1.92
STOUTLAND TELEPHONE COMPANY	MO	824.	822.39	3.55	126368.	153.36	0.2774	330.37	377.71	47.34
UNITED TELEPHONE CO. OF MISSOURI	MO	155093.	296.24	1.28	1131751.	7.30	0.3255	101.29	99.99	-1.30
WEBSTER COUNTY TELEPHONE COMPANY	MO	3629.	529.72	2.29	257830.	71.05	0.3176	215.61	233.35	17.75
WHEELING TELEPHONE COMPANY	MO	314.	426.46	1.84	13190.	42.01	0.1824	105.79	124.61	18.82
SOUTHWESTERN BELL-MISSOURI	MO	1840935.	211.60	0.91	0.	0.	0.2657	56.22	55.67	-0.55
BLACKFOOT TEL. COOPERATIVE INC.	MT	4425.	489.16	2.11	263895.	59.64	0.4764	272.79	274.18	1.39
INTERBEL TEL. COOPERATIVE INC.	MT	830.	500.75	2.16	52206.	62.90	0.5215	303.07	301.41	-1.67
LINCOLN TEL. CO. INC.	MT	681.	509.66	2.20	44540.	65.40	0.4757	286.05	288.69	2.64
MID-RIVERS TEL. COOPERATIVE INC.	MT	6108.	623.04	2.69	594260.	97.29	0.3168	262.24	287.69	25.45
NEMONT TELEPHONE COOP.- MONTANA	MT	2194.	603.05	2.60	201123.	91.67	0.3731	286.11	304.30	18.19
NORTHERN TEL. COOP INC.- MT	MT	1347.	590.98	2.55	118908.	88.28	0.4831	344.36	350.85	6.50
NORTHWESTERN TELEPHONE SYSTEMS, INC.	MT	26551.	293.12	1.27	173535.	6.54	0.4158	126.24	120.32	-5.91
PROJECT TEL. CO.	MT	2430.	418.19	1.81	96415.	39.68	0.3663	179.63	184.75	5.11
RANGE TEL. COOP INC.-MT	MT	2883.	671.52	2.90	319802.	110.93	0.4388	368.61	384.44	15.82
SOUTHERN MONTANA TEL. CO.	MT	636.	771.29	3.33	88396.	138.99	0.6572	599.55	593.51	-6.04
3-RIVERS TEL. COOPERATIVE INC.	MT	7969.	358.50	1.55	182423.	22.89	0.4287	168.95	165.90	-3.05
TRIANGLE TEL. COOPERATIVE ASSN. INC.	MT	8007.	423.75	1.83	330219.	41.24	0.3254	165.38	173.79	8.41
VALLEY RURAL TEL. COOP. ASSN.-MT	MT	682.	859.14	3.71	111641.	163.70	0.6726	686.99	681.07	-5.92
GTC OF THE NW, INC - MONTANA	MT	5622.	361.42	1.56	133311.	23.71	0.4115	164.53	162.72	-1.82
MOUNTAIN BELL-MONTANA	MT	287191.	316.51	1.37	540684.	1.88	0.3963	126.69	119.59	-7.10
GTC OF THE MW - NEBRASKA	NE	41001.	253.40	1.09	0.	0.	0.2664	67.51	66.80	-0.71
ARAPAHOE TELEPHONE COMPANY	NE	1037.	400.49	1.73	35984.	34.70	0.3093	147.00	154.61	7.60
ARLINGTON TELEPHONE COMPANY	NE	906.	438.95	1.90	41239.	45.52	0.2887	157.07	169.39	12.32
BLAIR TELEPHONE COMPANY	NE	5117.	245.80	1.06	0.	0.	0.3052	75.02	72.76	-2.26
THREE RIVER TELCO	NE	1206.	410.20	1.77	45142.	37.43	0.3630	173.86	178.58	4.72
CONSOLIDATED TELCO, INC.	NE	1426.	333.09	1.44	23212.	16.28	0.2397	90.69	96.68	5.99
CLARKS TELEPHONE COMPANY	NE	954.	302.30	1.31	8371.	8.77	0.1992	66.07	71.53	5.46
COZAD TELEPHONE COMPANY	NE	2517.	236.62	1.02	0.	0.	0.2728	64.55	63.65	-0.90
CURTIS TELEPHONE COMPANY	NE	783.	408.88	1.77	29017.	37.06	0.1944	104.19	120.35	16.16
DALTON TEL. CO., INC.	NE	1265.	571.20	2.47	104632.	82.71	0.4367	304.59	314.39	9.81
DILLER TELEPHONE COMPANY	NE	895.	309.69	1.34	9465.	10.58	0.2728	91.53	93.88	2.35
EASTERN NEBRASKA TELEPHONE COMPANY	NE	2428.	376.84	1.63	68105.	28.05	0.3365	145.51	149.43	3.92
GLENWOOD TELEPHONE MEMBERSHIP CORP.	NE	2501.	270.05	1.17	2285.	0.91	0.2008	54.84	57.35	2.52
HARTMAN TELEPHONE EXCHANGES INC.	NE	451.	694.26	3.00	52913.	117.32	0.2728	267.61	304.08	36.47
HEMINGFORD COOP. TELEPHONE COMPANY	NE	829.	346.39	1.50	16182.	19.52	0.2817	110.59	115.26	4.67
HERSHEY COOPERATIVE TELEPHONE CO	NE	649.	232.37	1.00	0.	0.	0.2922	67.90	66.27	-1.63
K & M TELEPHONE COMPANY INC.	NE	649.	263.64	1.14	0.	0.	0.2016	53.15	55.29	2.14
KEYSTONE-ARTHUR TELEPHONE COMPANY	NE	501.	565.23	2.44	40597.	81.03	0.5049	339.41	342.39	2.99
LINCOLN TEL. & TELE. CO.	NE	215851.	188.68	0.81	0.	0.	0.3000	56.60	55.04	-1.57
NEBRASKA CENTRAL TELEPHONE COMPANY	NE	3451.	305.73	1.32	33160.	9.61	0.2571	85.01	87.84	2.84
NORTHEAST NEBRASKA TELEPHONE COMPANY	NE	3884.	215.81	0.93	0.	0.	0.2405	51.90	52.25	0.35

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NAME	ST	LOOPS	URRPL	RTNA	HCA	HCAPL	SPF	OIRRPL	NIRRPL	CIRRPL
GREAT PLAINS COMMUNICATIONS, INC.	NE	24489.	311.51	1.35	269819.	11.02	0.2772	93.70	95.93	2.24
PETERSBURG TELEPHONE COMPANY	NE	429.	503.74	2.18	27344.	63.74	0.2284	157.55	180.61	23.06
PIERCE TELEPHONE COMPANY	NE	1621.	229.68	0.99	0.	0.	0.1839	42.24	44.76	2.53
ROCK COUNTY TEL. CO.	NE	1011.	686.48	2.96	116401.	115.13	0.2824	270.62	305.29	34.67
RODEO TELEPHONE INC.	NE	2416.	268.92	1.16	1539.	0.64	0.1842	49.96	53.10	3.14
SOUTHEAST NEBRASKA TEL. CO.	NE	3608.	509.74	2.20	236062.	65.43	0.3061	199.65	216.72	17.07
STANTON TEL. CO., INC.	NE	984.	463.84	2.00	51677.	52.52	0.1965	126.16	147.79	21.63
UNITED TELEPHONE CO. OF THE WEST-NE	NE	22757.	267.71	1.16	7812.	0.34	0.3516	94.36	89.92	-4.44
WAUNETA TEL. CO.	NE	618.	831.60	3.59	96377.	155.95	0.2728	330.83	379.65	48.82
BENKELMAN TELEPHONE COMPANY INC.	NE	1176.	519.99	2.25	80332.	68.31	0.3731	239.55	251.66	12.11
NORTHWESTERN BELL-NEBRASKA	NE	419122.	171.69	0.74	0.	0.	0.3463	59.46	56.71	-2.75
GEM STATE UTILITIES CORP-NV	NV	267.	935.14	4.04	49414.	185.07	0.5710	657.34	669.00	11.66
RURAL TEL. CO.	NV	75.	469.79	2.03	4064.	54.19	0.7000	364.98	347.81	-17.17
CONTEL OF CALIFORNIA - NEVADA	NV	15334.	407.45	1.76	562116.	36.66	0.6850	303.54	286.22	-17.32
C P NATIONAL CORP. - NEVADA	NV	8980.	420.41	1.82	361919.	40.30	0.6775	311.70	295.20	-16.50
CENTRAL TELEPHONE COMPANY - NEVADA	NV	326396.	157.88	0.68	0.	0.	0.5040	79.57	72.88	-6.69
CHURCHILL CO. TEL. & TEL. SYSTEM	NV	7149.	271.34	1.17	8774.	1.23	0.5470	149.24	136.22	-13.02
LINCOLN COUNTY TELEPHONE SYSTEM INC.	NV	1397.	287.37	1.24	7171.	5.13	0.5657	165.98	152.58	-13.40
MOAPA VALLEY TELEPHONE COMPANY	NV	1675.	280.65	1.21	5857.	3.50	0.6117	174.01	159.96	-14.05
NEVADA TELEPHONE-TELEGRAPH COMPANY	NV	2247.	293.91	1.27	15121.	6.73	0.7347	220.42	205.74	-14.69
RIO VIRGIN TELEPHONE COMPANY	NV	825.	383.17	1.65	24609.	29.83	0.3250	144.42	149.57	5.15
NEVADA BELL	NV	179918.	310.20	1.34	1924956.	10.70	0.5323	172.25	161.24	-11.01
BRETTON WOODS TEL. CO.	NH	90.	558.74	2.41	7129.	79.21	0.7000	443.92	428.42	-15.50
GRANITE STATE TEL. CO.	NH	5456.	325.29	1.40	78441.	14.38	0.4173	145.33	141.04	-4.28
CONTINENTAL TEL. CO. OF NH, INC.	NH	8211.	302.63	1.31	72691.	8.85	0.5532	173.31	160.95	-12.36
KEARSARGE TEL. CO.	NH	4203.	276.96	1.20	10916.	2.60	0.5915	165.55	151.71	-13.84
MERRIMACK COUNTY TEL. CO.	NH	4781.	241.69	1.04	0.	0.	0.4968	120.07	110.14	-9.93
UNION TEL. CO.	NH	4429.	170.61	0.74	0.	0.	0.7400	126.25	117.72	-8.53
WILTON TEL. CO. - NH	NH	1987.	271.00	1.17	2273.	1.14	0.7172	195.12	181.57	-13.55
NEW ENGLAND TEL.-NH	NH	511442.	260.68	1.13	0.	0.	0.3849	100.33	94.47	-5.87
WARWICK VALLEY TEL. CO.-NJ	NJ	6030.	122.30	0.53	0.	0.	0.3603	44.06	41.81	-2.25
UNITED-SUSSEX TELEPHONE COMPANY	NJ	9442.	300.89	1.30	79598.	8.43	0.3190	101.60	100.95	-0.65
HILLSBOROUGH & MONTGOMERY TEL CO	NJ	13125.	198.45	0.86	0.	0.	0.4395	87.22	80.95	-6.27
NEW JERSEY TELEPHONE COMPANY	NJ	51364.	227.02	0.98	0.	0.	0.3903	88.60	83.29	-5.31
UNITED TELEPHONE COMPANY OF NJ	NJ	33716.	222.09	0.96	0.	0.	0.3426	76.09	72.67	-3.42
WEST JERSEY TELEPHONE COMPANY	NJ	11111.	216.66	0.94	0.	0.	0.3691	79.97	75.68	-4.29
NEW JERSEY BELL	NJ	4244897.	183.40	0.79	0.	0.	0.3015	55.30	53.72	-1.58
DELL TELEPHONE CO-OP. INC.-NM	NM	237.	1848.80	7.98	104763.	442.04	0.2728	799.04	939.36	140.32
GTC OF THE SW - NEW MEXICO	NM	36090.	296.26	1.28	263482.	7.30	0.4026	124.14	119.02	-5.12
VALLEY TELEPHONE COOPERATIVE INC-NM	NM	1055.	726.15	3.14	133238.	126.29	0.5413	477.26	484.14	6.88
CONTEL OF THE WEST - NEW MEXICO	NM	25907.	526.65	2.27	1818253.	70.18	0.3936	254.08	264.84	10.75
BACA VALLEY TEL. CO.	NM	554.	1222.82	5.28	147353.	265.98	0.5708	875.31	898.55	23.24
E.N.M.R. TEL COOP. INC.-NM	NM	8490.	922.29	3.98	1540564.	181.46	0.3774	469.04	509.98	40.93
LA JICARITA RURAL TEL. COOP. INC.	NM	1399.	645.59	2.79	144985.	103.63	0.2565	234.68	268.52	33.83
LEACO RURAL TEL. COOPERATIVE INC.	NM	795.	878.63	3.79	134495.	169.18	0.5157	565.89	583.36	17.47
WESTERN NEW MEXICO TEL. CO., INC.	NM	3844.	1558.62	6.73	1385472.	360.42	0.4133	884.46	962.21	77.75
PENASCO VALLEY TEL. COOPERATIVE INC.	NM	1935.	1098.31	4.74	446910.	230.96	0.5233	728.72	755.73	27.01
ROOSEVELT COUNTY RURAL TEL. COOP., INC.	NM	1466.	551.26	2.38	113033.	77.10	0.3346	235.85	253.78	17.93
UNIVERSAL TEL CO OF SOUTHWEST- NM	NM	2849.	319.29	1.38	36795.	12.91	0.4301	145.94	140.66	-5.27
NAVAJO COMMUNICATIONS CO INC.-NM	NM	2968.	1123.35	4.85	706400.	238.01	0.6540	893.34	897.08	3.73
MOUNTAIN BELL-NEW MEXICO	NM	513949.	247.44	1.07	0.	0.	0.3330	82.40	78.98	-3.41
ADDISON HOME TEL. CO.	NY	2725.	205.99	0.89	0.	0.	0.2457	50.61	50.76	0.14
AU SABLE VALLEY TEL. CO. INC.	NY	5024.	273.84	1.18	9233.	1.84	0.3096	86.01	83.88	-2.13
BERKSHIRE TEL. CORP.	NY	4137.	170.12	0.73	0.	0.	0.2544	43.28	43.14	-0.14
CHAMPLAIN TEL. CO.	NY	3534.	261.57	1.13	0.	0.	0.4678	122.36	112.87	-9.49
CHAUTAUQUA & ERIE TEL. CORP.	NY	8005.	212.19	0.92	0.	0.	0.3891	82.57	77.64	-4.92

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CHAZY & WESTPORT TEL. CORP.	NY	2419.	234.67	1.01	0.	0.	0.3178	74.58	71.93	-2.65
CITIZENS TEL. COOF HAMMOND, NY	NY	1153.	410.16	1.77	43144.	37.42	0.2305	119.49	133.31	13.83
CLYMER TEL. CO.	NY	685.	303.72	1.31	6247.	9.12	0.4821	152.50	143.79	-8.71
TACONIC TEL. CORP.	NY	16154.	205.43	0.89	0.	0.	0.3441	70.69	67.46	-3.23
CROWN POINT TELEPHONE CORPORATION	NY	682.	492.37	2.13	41290.	60.54	0.2632	169.95	189.05	19.10
DELHI TELEPHONE COMPANY	NY	3334.	235.11	1.02	0.	0.	0.2602	61.18	60.78	-0.40
DUNKIRK AND FREDONIA TEL. CO.	NY	7407.	127.45	0.55	0.	0.	0.2409	30.70	30.89	0.19
EDWARDS TELEPHONE CO. INC.	NY	1328.	460.96	1.99	68666.	51.71	0.1980	125.74	146.99	21.25
EMPIRE TELEPHONE CORP - NEW YORK	NY	5290.	311.55	1.35	58344.	11.03	0.2604	88.48	91.60	3.12
CONTINENTAL TEL CO OF NY, INC.	NY	164551.	319.27	1.38	2124333.	12.91	0.2340	83.32	88.45	5.13
GERMANTOWN TELEPHONE CO INC.	NY	1415.	391.45	1.69	45504.	32.16	0.2791	130.69	139.53	8.84
HANCOCK TELEPHONE COMPANY - NY	NY	1138.	296.95	1.28	8501.	7.47	0.2925	91.84	92.22	0.38
HIGHLAND TELEPHONE CO.	NY	40304.	175.87	0.76	0.	0.	0.2910	51.18	49.98	-1.20
MARGARETVILLE TEL. CO. INC.	NY	2256.	263.90	1.14	0.	0.	0.2369	62.52	63.10	0.58
MIDDLEBURGH TELEPHONE CO.	NY	3517.	363.24	1.57	85193.	24.22	0.2160	94.61	104.72	10.11
ALLTEL NEW YORK INC. - FULTON	NY	32671.	223.27	0.96	0.	0.	0.1996	44.56	46.44	1.88
NEWPORT TELEPHONE CO. INC.	NY	1970.	331.32	1.43	31217.	15.85	0.1728	67.82	77.37	9.56
NICHOLVILLE TEL. CO. INC.	NY	1193.	373.00	1.61	32175.	26.97	0.2133	97.54	108.81	11.27
ALLTEL NEW YORK INC. - JAMESTOWN	NY	37059.	146.73	0.63	0.	0.	0.2494	36.59	36.61	0.01
OGDEN TELEPHONE COMPANY - NY	NY	15235.	137.21	0.59	0.	0.	0.2009	27.57	28.69	1.13
ONEIDA COUNTY RURAL TEL. CO.	NY	2815.	231.42	1.00	0.	0.	0.1668	38.60	41.79	3.19
ALLTEL NY INC. - RED JACKET	NY	2215.	162.11	0.70	0.	0.	0.2195	35.58	36.41	0.83
PORT BYRON TELEPHONE COMPANY	NY	2609.	259.26	1.12	0.	0.	0.1768	45.84	49.00	3.16
RED HOOK TELEPHONE COMPANY	NY	9774.	304.24	1.31	90370.	9.25	0.2853	92.96	94.25	1.29
ROCHESTER TELEPHONE CORPORATION	NY	410548.	199.50	0.86	0.	0.	0.2230	44.49	45.39	0.90
SENECA-GORHAM TEL. CORP.	NY	6489.	179.35	0.77	0.	0.	0.2139	38.36	39.44	1.08
SYLVAN LAKE TELEPHONE COMPANY	NY	11028.	178.06	0.77	0.	0.	0.2788	49.64	48.79	-0.85
VERNON TELEPHONE COMPANY INC.	NY	1750.	265.04	1.14	0.	0.	0.2571	68.14	67.82	-0.32
WARWICK VALLEY TEL. CO. - NY	NY	9071.	126.81	0.55	0.	0.	0.3534	44.82	42.63	-2.18
WESTERN COUNTIES TELEPHONE CO.	NY	16690.	399.01	1.72	572188.	34.28	0.2385	118.02	130.20	12.19
NEW YORK TELEPHONE	NY	8870620.	217.72	0.94	0.	0.	0.2742	59.70	58.83	-0.87
ATLANTIC TELEPHONE MEMB. CORP.	NC	16325.	203.54	0.88	0.	0.	0.2271	46.22	47.00	0.77
BARNARDSVILLE TELEPHONE COMPANY	NC	786.	252.30	1.09	0.	0.	0.2080	52.48	54.24	1.77
CAROLINA TELEPHONE & TEL. CO.	NC	687094.	225.96	0.98	0.	0.	0.2432	54.95	55.20	0.25
CENTRAL TEL. CO. - NORTH CAROLINA	NC	172303.	179.01	0.77	0.	0.	0.2132	38.16	39.26	1.09
CITIZENS TELEPHONE COMPANY - NC	NC	11775.	295.07	1.27	82558.	7.01	0.2487	78.06	80.45	2.40
THE CONCORD TELEPHONE COMPANY	NC	66903.	121.39	0.52	0.	0.	0.1714	20.81	22.40	1.59
ALLTEL CAROLINA INC. - NORTH	NC	78858.	237.20	1.02	0.	0.	0.2142	50.81	52.23	1.42
GTC OF THE SE - NORTH CAROLINA	NC	119232.	220.76	0.95	0.	0.	0.2952	65.17	63.49	-1.68
HEINS TELEPHONE COMPANY	NC	20769.	207.42	0.90	0.	0.	0.2156	44.72	45.90	1.18
STAR TEL. MEMB. CORP.	NC	11411.	246.41	1.06	0.	0.	0.1543	38.02	41.96	3.94
CONTINENTAL TELEPHONE CO OF N.C.	NC	69779.	431.81	1.86	3036019.	43.51	0.2783	149.18	161.65	12.47
WILKES TELEPHONE MEMB. CORP.	NC	6710.	336.62	1.45	115008.	17.14	0.1258	53.77	66.45	12.68
SOUTHERN BELL-NORTH CAROLINA	NC	1395867.	283.51	1.22	900643.	0.65	0.2456	70.06	70.47	0.41
NORTH DAKOTA TELEPHONE COMPANY	ND	9340.	337.38	1.46	161807.	17.32	0.2807	106.25	110.31	4.05
BEK TELEPHONE MUTUAL AID CORP.	ND	3738.	309.60	1.34	39448.	10.55	0.1998	68.89	75.01	6.12
CONSOLIDATED TELEPHONE COOPERATIVE	ND	4174.	537.61	2.32	305809.	73.27	0.3192	220.45	238.69	18.24
DAKOTA CENTRAL RURAL TEL COOP ASSN	ND	2230.	460.22	1.99	114842.	51.50	0.2295	139.95	158.68	18.73
DICKEY RURAL TEL COOP.	ND	2695.	403.11	1.74	95505.	35.44	0.2460	122.79	134.89	12.09
INTER-COMMUNITY TELEPHONE COMPANY	ND	1253.	491.88	2.12	75686.	60.40	0.2230	149.96	172.31	22.35
MIDSTATE TELEPHONE COMPANY	ND	1421.	319.49	1.38	18423.	12.96	0.3912	133.63	130.41	-3.22
NORTHWEST MUTUAL AID TELEPHONE CORP.	ND	3524.	325.85	1.41	51149.	14.51	0.3465	122.58	122.18	-0.41
POLAR COMMUNICATIONS MUTUAL AID CORP	ND	8418.	217.92	0.94	0.	0.	0.2470	53.83	53.93	0.11
RESERVATION TELEPHONE COOPERATIVE	ND	4486.	380.70	1.64	130690.	29.13	0.3241	142.81	147.83	5.03
SOURIS RIVER TEL. MUTUAL AID CORP.	ND	11938.	237.63	1.03	0.	0.	0.4029	95.74	89.68	-6.06
UNITED TELEPHONE MUTUAL AID CORP.	ND	4353.	181.87	0.79	0.	0.	0.2355	42.83	43.27	0.44
WEST RIVER MUTUAL AID TELEPHONE CORP	ND	8634.	211.46	0.91	0.	0.	0.3463	73.23	69.85	-3.38

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NORTHWESTERN BELL-NORTH DAKOTA	ND	240827.	260.95	1.13	0.	0.	0.3056	79.75	77.32	-2.43
CHILLICOTHE TELEPHONE COMPANY	OH	23097.	231.33	1.00	0.	0.	0.1647	38.10	41.39	3.28
CONTINENTAL TELEPHONE CO OF OHIO	OH	1862.	390.76	1.69	59515.	31.96	0.1820	92.43	107.50	15.07
FAYETTEVILLE TELEPHONE COMPANY	OH	1109.	467.95	2.02	59525.	53.67	0.1752	117.77	141.51	23.74
GENERAL TEL OF OHIO	OH	580580.	242.39	1.05	0.	0.	0.2319	56.21	56.94	0.73
CENTRAL TELEPHONE COMPANY OF OHIO	OH	55827.	155.59	0.67	0.	0.	0.2003	31.17	32.46	1.29
ORWELL TELEPHONE COMPANY	OH	4883.	185.85	0.80	0.	0.	0.2195	40.79	41.74	0.95
UNITED TELEPHONE CO. OF OHIO	OH	394578.	277.48	1.20	165302.	0.42	0.2251	62.74	64.04	1.31
ALLTEL OHIO INC - WESTERN OHIO	OH	17179.	229.61	0.99	0.	0.	0.2139	49.11	50.49	1.38
C C & S TELCO INC.- OHIO	OH	428.	150.16	0.65	0.	0.	0.2728	40.96	40.39	-0.57
CINCINNATI BELL-OHIO	OH	590736.	163.65	0.71	0.	0.	0.2105	34.45	35.53	1.08
OHIO BELL TEL CO	OH	2943631.	170.18	0.73	0.	0.	0.2104	35.81	36.93	1.12
KANOKLA TELEPHONE ASSN. INC. - OK	OK	1226.	394.91	1.71	40617.	33.13	0.3325	153.39	159.03	5.63
SOUTH CENTRAL TEL. ASSN., INC.-OK	OK	399.	332.90	1.44	6477.	16.23	0.3873	139.75	137.54	-2.21
ALLTEL OKLAHOMA, INC.	OK	10349.	485.13	2.09	605475.	58.51	0.3213	194.88	208.61	13.73
CANADIAN VALLEY TELEPHONE CO.	OK	803.	455.71	1.97	40334.	50.23	0.3490	192.53	201.75	9.22
CARNEGIE TELEPHONE CO. INC.	OK	1568.	278.08	1.20	4501.	2.87	0.2655	75.74	75.98	0.23
CENTRAL OKLAHOMA TELEPHONE CO.	OK	2116.	404.53	1.75	75827.	35.84	0.2048	106.74	121.72	14.98
CHEROKEE TELEPHONE CO.	OK	4031.	207.70	0.90	0.	0.	0.3830	79.55	74.94	-4.61
CHICKASAW TELEPHONE CO.	OK	6933.	322.74	1.39	95361.	13.75	0.3080	108.57	110.03	1.45
CHOUTEAU TELEPHONE CO.	OK	2635.	450.41	1.95	128431.	48.74	0.3012	168.16	180.58	12.42
OKLAHOMA COMMUNICATION SYSTEMS INC.	OK	12341.	523.09	2.26	853778.	69.18	0.2400	171.66	195.61	23.95
CROSS TELEPHONE CO.	OK	6891.	364.80	1.58	170105.	24.69	0.2718	115.63	122.51	6.80
DOBSON TELEPHONE CO.	OK	4163.	561.93	2.43	333475.	80.10	0.3685	260.47	276.10	15.63
GRAND TELEPHONE CO. INC.	OK	1982.	366.63	1.58	49900.	25.18	0.4319	175.13	172.41	-2.72
HINTON TELEPHONE CO.	OK	3117.	363.61	1.57	75830.	24.33	0.2253	98.14	107.74	9.60
M CLOUD TELEPHONE CO.	OK	5697.	305.69	1.32	54693.	9.60	0.2113	70.99	76.18	5.19
MID-AMERICA TEL., INC.	OK	1389.	255.52	1.10	0.	0.	0.3144	80.34	77.60	-2.73
OKLAHOMA ALLIED TELEPHONE COMPANY	OK	9177.	425.10	1.84	381963.	41.62	0.3070	158.25	168.09	9.84
OKLAHOMA TELEPHONE & TELEGRAPH INC.	OK	1756.	594.61	2.57	156807.	89.30	0.2753	223.23	250.50	27.27
OKLAHOMA WESTERN TELEPHONE CO.	OK	2450.	416.04	1.80	95728.	39.07	0.3107	155.31	164.13	8.82
PANHANDLE TELEPHONE COOPERATIVE INC.	OK	4335.	557.49	2.41	341840.	78.86	0.5262	345.92	346.56	0.64
PIONEER TEL. COOP. INC.	OK	35951.	299.21	1.29	288359.	8.02	0.2859	90.89	91.77	0.88
POTTAWATOMIE TELEPHONE CO.	OK	1826.	930.56	4.02	335586.	183.78	0.2559	360.65	420.98	60.33
TOTAH TELEPHONE CO. INC.	OK	1710.	617.99	2.67	163940.	95.87	0.3230	263.52	287.94	24.42
VALLIANT TELEPHONE COMPANY	OK	1731.	440.65	1.90	79618.	46.00	0.2728	150.87	164.53	13.66
WYANDOTTE TELEPHONE COMPANY	OK	331.	455.96	1.97	16650.	50.30	0.2500	147.53	164.29	16.77
GTC OF THE SW - OKLAHOMA	OK	92484.	388.27	1.68	2891348.	31.26	0.3102	141.28	147.78	6.50
SANTA ROSA TELEPHONE COOP. INC.	OK	630.	373.40	1.61	17061.	27.08	0.3192	137.24	141.98	4.73
SOUTHWESTERN BELL-OKLAHOMA	OK	1237150.	280.81	1.21	672859.	0.54	0.3042	85.78	83.44	-2.35
MIDVALE TEL. EXCH. - OR	OR	200.	628.00	2.71	19737.	98.69	0.4690	360.32	370.29	9.97
C P NATIONAL CORP. - OREGON	OR	9723.	423.09	1.83	399204.	41.06	0.4449	215.61	215.54	-0.06
BEAVER CREEK COOPERATIVE TEL. CO.	OR	2964.	346.19	1.49	57718.	19.47	0.2550	101.26	107.44	6.18
TELEPHONE UTILITIES OF OREGON INC.	OR	32334.	453.41	1.96	1603235.	49.58	0.3522	192.75	201.57	8.82
CANBY TELEPHONE ASSOCIATION	OR	6533.	243.54	1.05	0.	0.	0.2872	69.94	68.43	-1.51
CLEAR CREEK MUTUAL TELEPHONE CO.	OR	2510.	348.88	1.51	50666.	20.19	0.2526	101.58	108.17	6.59
COLTON TELEPHONE COMPANY	OR	847.	391.09	1.69	27152.	32.06	0.3132	143.86	150.44	6.58
CASCADE UTILITIES INC.	OR	6738.	257.82	1.11	0.	0.	0.3035	78.25	75.95	-2.29
RTI/HALSEY TEL. CO.	OR	636.	383.86	1.66	19095.	30.02	0.3856	168.03	169.37	1.33
HELIX TELEPHONE COMPANY	OR	233.	568.35	2.45	19085.	81.91	0.4147	290.30	302.03	11.73
HOME TELEPHONE COMPANY	OR	510.	708.70	3.06	61906.	121.39	0.3162	305.02	337.61	32.60
TRANS-CASCADES TELEPHONE COMPANY	OR	89.	2538.39	10.96	56603.	635.98	0.4460	1556.11	1685.10	128.99
MOLALLA TELEPHONE COMPANY	OR	4130.	354.17	1.53	89511.	21.67	0.2576	105.68	112.45	6.76
MONROE TELEPHONE COMPANY	OR	586.	321.87	1.39	7937.	13.54	0.3825	132.14	129.55	-2.60
NEHALEM TELEPHONE AND TELEGRAPH	OR	1498.	320.04	1.38	19620.	13.10	0.4131	140.94	136.60	-4.34
NORTH STATE TELEPHONE COMPANY - OR	OR	351.	438.57	1.89	15939.	45.41	0.3291	174.61	183.95	9.35
OREGON TELEPHONE CORPORATION	OR	1265.	354.94	1.53	27691.	21.89	0.3782	148.83	148.53	-0.30

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NAME	ST	LOOPS	URRPL	RTNA	HCA	HCAPL	SPF	OIRRPL	NIRRPL	CIRRPL
PINE TELEPHONE SYSTEM INC. - OR	OR	602.	441.27	1.91	27793.	46.17	0.2838	156.01	168.93	12.92
PIONEER TELEPHONE COOPERATIVE	OR	9294.	233.12	1.01	0.	0.	0.3740	87.19	82.36	-4.83
SCIO MUTUAL TEL. ASSOCIATION	OR	1271.	330.10	1.43	19764.	15.55	0.2451	91.27	96.72	5.45
STAYTON COOP. TEL CO	OR	4282.	249.60	1.08	0.	0.	0.3024	75.48	73.31	-2.17
UNITED TELEPHONE CO OF THE NW - OR	OR	41980.	392.11	1.69	1357717.	32.34	0.3782	169.86	172.25	2.39
ASO'IN TELEPHONE COMPANY - OREGON	OR	45.	858.03	3.71	7352.	163.38	0.7000	709.54	699.65	-9.89
GTC OF THE NW, INC - OREGON	OR	232553.	241.81	1.04	0.	0.	0.3516	85.02	80.91	-4.11
CONTEL OF THE NORTHWEST INC.- OR	OR	19403.	395.18	1.71	644333.	33.21	0.2949	138.68	146.78	8.11
MALHEUR HOME TELEPHONE COMPANY	OR	9578.	266.95	1.15	1494.	0.16	0.3484	93.11	88.78	-4.33
PACIFIC NORTHWEST BELL-OREGON	OR	894810.	216.88	0.94	0.	0.	0.3082	66.84	64.74	-2.10
GENERAL TEL CO OF PENNSYLVANIA	PA	365349.	224.06	0.97	0.	0.	0.2277	51.02	51.85	0.83
CONTINENTAL TELEPHONE CO OF PA	PA	40771.	243.51	1.05	0.	0.	0.2589	63.05	62.68	-0.37
LACKAWAXEN TELEPHONE COMPANY	PA	1133.	524.03	2.26	78682.	69.45	0.6464	385.03	373.54	-11.49
MURDOCKSVILLE IND. TEL. CO.	PA	1239.	327.67	1.42	18533.	14.96	0.2235	83.21	89.63	6.43
NORTH PENN TELEPHONE COMPANY	PA	3679.	274.54	1.19	7388.	2.01	0.3168	88.31	85.94	-2.38
OSWAYO RIVER TELEPHONE COMPANY	PA	1766.	246.38	1.06	0.	0.	0.4129	101.73	95.03	-6.70
QUAKER STATE TELEPHONE COMPANY	PA	24754.	338.28	1.46	434252.	17.54	0.2993	112.94	116.01	3.07
SUGAR VALLEY TELEPHONE COMPANY	PA	692.	360.35	1.56	16200.	23.41	0.2527	106.67	114.33	7.66
UNITED TELEPHONE COMPANY OF PA	PA	255524.	211.55	0.91	0.	0.	0.2277	48.17	48.95	0.78
VENUS TELEPHONE CORPORATION	PA	998.	245.49	1.06	0.	0.	0.1382	33.93	38.49	4.57
BELL OF PENNSYLVANIA	PA	4614426.	174.84	0.76	0.	0.	0.2239	39.15	39.92	0.77
PUERTO RICO COMMUNICATION AUTHORITY	PR	78779.	236.52	1.02	0.	0.	0.3250	76.87	73.91	-2.96
PUERTO RICO TEL. CO.	PR	624842.	243.56	1.05	0.	0.	0.3250	79.16	76.11	-3.04
NEW ENGLAND TEL.-RI	RI	482269.	196.67	0.85	0.	0.	0.2776	54.59	53.69	-0.90
GTC OF THE SE - SOUTH CAROLINA	SC	122008.	253.87	1.10	0.	0.	0.3093	78.52	76.01	-2.51
UNITED TELEPHONE CO. OF THE CAROLINAS	SC	60846.	254.76	1.10	0.	0.	0.2812	71.64	70.31	-1.32
BLUFFTON TEL. & APPL. CO. INC.	SC	2129.	275.38	1.19	4709.	2.21	0.5334	148.36	136.07	-12.29
FARMERS TEL COOP INC - SC	SC	30933.	317.75	1.37	387872.	12.54	0.2720	94.79	97.79	3.00
HARGRAY TEL. CO. INC.	SC	25289.	339.74	1.47	452688.	17.90	0.5823	209.77	196.91	-12.85
CONTINENTAL TELEPHONE CO OF S.C.	SC	12034.	277.89	1.20	33992.	2.82	0.2778	79.08	78.72	-0.36
HORRY TEL. COOP. INC.	SC	30933.	282.25	1.22	120219.	3.89	0.2853	83.12	82.75	-0.37
MCLELLANVILLE TEL. CO. INC.	SC	922.	336.26	1.45	15721.	17.05	0.3036	113.46	116.11	2.66
POND BRANCH TEL. CO. INC.	SC	6843.	270.49	1.17	6976.	1.02	0.2061	56.43	58.74	2.31
WILLISTON TELEPHONE COMPANY	SC	3270.	337.26	1.46	56553.	17.29	0.2157	84.28	91.96	7.69
SOUTHERN BELL-SOUTH CAROLINA	SC	919735.	334.08	1.44	2337436.	2.54	0.2280	77.86	79.95	2.08
BISON STATE TELEPHONE COMPANY	SD	7309.	337.01	1.46	125966.	17.23	0.3723	136.96	135.83	-1.13
BROOKINGS-LAKE TELEPHONE COMPANY	SD	2528.	306.39	1.32	24703.	9.77	0.2817	92.83	94.46	1.63
CHEYENNE RIVER SIOUX TRIBAL TEL AUTH	SD	1693.	534.90	2.31	122746.	72.50	0.2820	199.18	220.45	21.28
GOLDEN WEST TEL. COOP. INC	SD	10463.	421.81	1.82	425805.	40.70	0.3665	181.72	187.11	5.38
KENNEBEC TELEPHONE COMPANY	SD	276.	559.93	2.42	21954.	79.54	0.2901	215.46	238.23	22.76
MCCOOK COOPERATIVE TELEPHONE CO.	SD	791.	297.86	1.29	6083.	7.69	0.2412	76.97	79.95	2.98
MIDSTATE TELEPHONE COMPANY	SD	2390.	330.44	1.43	37364.	15.63	0.2245	84.61	91.24	6.63
SANBORN TEL. COOP.	SD	2402.	248.54	1.07	0.	0.	0.2232	55.47	56.57	1.09
SULLY BUTTES TELEPHONE COOP. INC.	SD	3962.	330.74	1.43	62231.	15.71	0.2329	87.50	93.70	6.19
WEST RIVER COOPERATIVE TEL. CO.	SD	1478.	611.93	2.64	139181.	94.17	0.3115	253.40	278.54	25.15
NORTHWESTERN BELL-SOUTH DAKOTA	SD	237224.	257.19	1.11	0.	0.	0.3340	85.90	82.30	-3.60
GTC OF THE SE - TENNESSEE	TN	44672.	284.12	1.23	193988.	4.34	0.2376	70.40	72.45	2.04
ADAMSVILLE TELEPHONE COMPANY INC.	TN	5247.	334.78	1.45	87578.	16.69	0.3034	112.70	115.28	2.58
UNITED INTER-MOUNTAIN TEL. COMPANY-TN	TN	153290.	226.92	0.98	0.	0.	0.2269	51.49	52.37	0.88
MILLINGTON TELEPHONE COMPANY INC.	TN	15236.	164.70	0.71	0.	0.	0.3556	58.57	55.67	-2.90
TENNESSEE TELEPHONE COMPANY	TN	29191.	322.01	1.39	396355.	13.58	0.1931	71.23	78.82	7.59
TWIN LAKES TEL. COOP. CORP.	TN	20905.	226.05	0.98	0.	0.	0.1938	43.81	45.93	2.12
SOUTH CENTRAL BELL-TENNESSEE	TN	1666546.	227.74	0.98	0.	0.	0.2302	52.43	53.18	0.75
CAMERON TELEPHONE COMPANY - TEXAS	TX	969.	434.22	1.88	42817.	44.19	0.2353	131.63	147.44	15.81
BIG BEND TELEPHONE COMPANY INC.	TX	2299.	964.45	4.16	444430.	193.31	0.3711	486.78	531.74	44.96
BRAZORIA TEL. CO.	TX	4659.	379.17	1.64	133737.	28.71	0.1702	83.67	98.28	14.61
BRAZOS TELEPHONE COOPERATIVE INC.	TX	1141.	726.63	3.14	144253.	126.43	0.1854	219.00	268.99	49.99

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NAME	ST	LOOPS	URRPL	RTNA	HCA	HCAPL	SPF	OIRRPL	NIRRPL	CIRRPL
CAP ROCK TELEPHONE COMPANY INC.	TX	2339.	498.32	2.15	145523.	62.22	0.1884	135.36	161.23	25.87
CENTRAL TEXAS TELEPHONE CO-OP. INC.	TX	3374.	915.64	3.95	605924.	179.59	0.1703	275.66	347.70	72.04
COLEMAN COUNTY TELEPHONE CO-OP. INC.	TX	1800.	330.20	1.43	28035.	15.58	0.2136	80.92	88.09	7.17
COLORADO VALLEY TELEPHONE CO-OP. INC.	TX	4801.	437.04	1.89	215953.	44.98	0.1676	103.24	124.22	20.98
COMANCHE COUNTY TEL COMPANY INC.	TX	4673.	245.65	1.06	0.	0.	0.1512	37.14	41.17	4.03
DELL TELEPHONE CO-OP. INC.	TX	324.	3181.12	13.74	264628.	816.75	0.5664	2346.29	2450.89	104.61
EASSTEX TELEPHONE COOPERATIVE INC.	TX	20080.	390.69	1.69	641451.	31.94	0.2144	105.06	118.01	12.95
ETEX TELEPHONE COOPERATIVE INC.	TX	8905.	283.63	1.22	37609.	4.22	0.1882	56.20	60.52	4.33
FIVE AREA TELEPHONE CO-OP. INC.	TX	1460.	1012.08	4.37	301795.	206.71	0.2616	402.57	469.44	66.88
FORT BEND TELEPHONE COMPANY	TX	15879.	352.15	1.52	335107.	21.10	0.2726	110.06	115.76	5.70
GANADO TELEPHONE COMPANY INC.	TX	1272.	361.28	1.56	30109.	23.67	0.1329	63.79	78.73	14.94
GTC OF THE SW - TEXAS	TX	970179.	337.08	1.46	2574776.	2.65	0.2503	86.14	87.02	0.88
GUADALUPE VALLEY TEL CO-OP. INC.	TX	14003.	352.70	1.52	297700.	21.26	0.2341	96.74	104.78	8.04
UNITED TELEPHONE CO. OF TEXAS INC.	TX	93923.	383.31	1.66	2805243.	29.87	0.1975	95.61	108.94	13.33
HILL COUNTRY TELEPHONE CO-OP. INC.	TX	8657.	576.01	2.49	727743.	84.06	0.2502	200.16	228.18	28.02
INDUSTRY TELEPHONE COMPANY	TX	1461.	742.51	3.21	191235.	130.89	0.1672	211.41	265.29	53.88
KERRVILLE TELEPHONE COMPANY	TX	13811.	208.53	0.90	0.	0.	0.3175	66.21	63.87	-2.34
LAKE DALLAS TELEPHONE COMPANY, INC.	TX	4142.	339.24	1.46	73636.	17.78	0.3123	117.80	120.19	2.40
LA WARD TELEPHONE EXCHANGE INC.	TX	848.	553.85	2.39	66002.	77.83	0.1872	155.57	187.33	31.76
LAKE TELEPHONE COMPANY	TX	921.	461.12	1.99	47664.	51.75	0.3116	178.19	190.69	12.50
LUFKIN TELEPHONE EXCHANGE INC.	TX	56998.	252.19	1.09	0.	0.	0.2482	62.59	62.67	0.08
MID-PLAINS RURAL TEL. CO-OP. INC.	TX	2112.	567.90	2.45	172727.	81.78	0.2096	173.55	204.62	31.07
CENTRAL TELEPHONE COMPANY OF TEXAS	TX	113682.	306.37	1.32	1110293.	9.77	0.3918	126.55	122.54	-4.01
MUENSTER TELEPHONE CORP. OF TEXAS	TX	1689.	251.22	1.08	0.	0.	0.1989	49.97	52.10	2.14
MUSTANG TELEPHONE COMPANY	TX	2210.	432.90	1.87	96831.	43.82	0.3034	160.55	171.30	10.75
ALLTEL TEXAS INC.	TX	2669.	257.68	1.11	0.	0.	0.2545	65.58	65.40	-0.18
PEEPLS TELEPHONE COMPANY	TX	888.	566.25	2.45	72212.	81.32	0.1731	152.23	186.59	34.35
PEOPLES TELEPHONE COOPERATIVE - TX	TX	6658.	313.59	1.35	76735.	11.53	0.1841	65.42	72.71	7.29
POKA-LAMBRO RURAL TEL. CO-OP. INC.	TX	3209.	564.36	2.44	259248.	80.79	0.1668	147.99	182.77	34.77
RIVIERA TELEPHONE COMPANY INC.	TX	729.	691.47	2.99	84955.	116.54	0.2345	239.84	280.48	40.64
SOUTHWEST TEXAS TELEPHONE COMPANY	TX	1935.	832.05	3.59	302009.	156.08	0.2029	272.88	331.47	58.60
ROMAIN TELEPHONE COMPANY	TX	930.	597.15	2.58	83710.	90.01	0.2788	226.49	253.63	27.14
SANTA ROSA TEL. COOP., INC.	TX	1571.	579.47	2.50	133596.	85.04	0.1911	167.43	201.45	34.02
SOUTH PLAINS TEL. COOP., INC.	TX	3462.	415.30	1.79	134549.	38.86	0.1796	100.50	118.31	17.81
SUGAR LAND TEL. CO.	TX	22051.	300.82	1.30	185538.	8.41	0.2930	93.75	94.39	0.64
SWEENEY-OLD OCEAN TEL. CO.	TX	2607.	458.81	1.98	133224.	51.10	0.2271	138.26	157.04	18.78
TAYLOR TEL. CO-OP., INC.	TX	5249.	337.39	1.46	90949.	17.33	0.1815	72.79	82.41	9.62
TEXAS-MIDLAND TELEPHONE COMPANY	TX	9430.	509.60	2.20	616605.	65.39	0.1955	143.22	169.65	26.43
CONTINENTAL TELEPHONE CO OF TEXAS	TX	144341.	473.23	2.04	7961625.	55.16	0.2271	144.24	164.43	20.18
TRINITY VALLEY TELEPHONE COMPANY INC.	TX	5005.	540.72	2.34	371070.	74.14	0.2454	182.12	207.27	25.15
VALLEY TELEPHONE CO-OP. INC. - TX	TX	4154.	797.20	3.44	607623.	146.27	0.2013	257.99	313.21	55.22
VALLEY VIEW TEL. CO. - TX	TX	851.	356.60	1.54	19025.	22.36	0.2333	98.10	106.55	8.45
WATERWOOD COMMUNICATIONS INC.	TX	442.	377.80	1.63	12517.	28.32	0.4819	200.94	195.76	-5.18
WEST TEXAS RURAL TEL. CO-OP. INC.	TX	1793.	665.52	2.87	195868.	109.24	0.3218	286.99	315.42	28.43
WES-TEX TELEPHONE CO-OP.	TX	3017.	445.16	1.92	142591.	47.26	0.1734	108.70	130.11	21.41
XIT RURAL TELEPHONE CO-OP. INC.	TX	992.	919.67	3.97	179274.	180.72	0.4209	507.57	541.60	34.03
E.N.M.R. TEL. COOP., INC.-TX	TX	726.	205.31	0.89	0.	0.	0.4150	85.20	79.56	-5.65
SOUTHWESTERN BELL-TEXAS	TX	6231456.	254.32	1.10	0.	0.	0.2385	60.66	61.14	0.48
CONTEL OF THE WEST - UTAH	UT	13683.	466.67	2.02	729492.	53.31	0.3575	202.38	211.80	9.42
NAVAJO COMMUNICATIONS COMPANY - UT	UT	265.	930.53	4.02	48700.	183.77	0.7000	773.89	765.35	-8.53
CENTRAL UTAH TEL. INC.	UT	737.	257.41	1.11	0.	0.	0.2089	53.77	55.55	1.78
EMERY COUNTY FARMERS UNION TEL ASSN	UT	2451.	238.95	1.03	0.	0.	0.2625	62.72	62.22	-0.50
KAMAS-WOODLAND TEL. CO.	UT	1414.	420.28	1.81	56936.	40.27	0.2474	130.82	144.41	13.59
SKYLINE TELECOM	UT	522.	221.34	0.96	0.	0.	0.1707	37.78	40.71	2.92
SOUTH CENTRAL UTAH TEL. ASSN. INC.	UT	1925.	292.21	1.26	12155.	6.31	0.4022	121.74	116.42	-5.32
UINTAH BASIN TEL. ASSN. INC.	UT	2494.	441.48	1.91	115293.	46.23	0.2907	159.16	171.56	12.41
UTAH-WYOMING TELECOM - UT	UT	447.	354.99	1.53	9791.	21.90	0.5146	197.28	188.93	-8.35

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NAME	ST	LOOPS	URRPL	RTNA	HCA	HCAPL	SPF	OIRRPL	NIRRPL	CIRRPL
MOUNTAIN BELL-UTAH	UT	643373.	202.73	0.88	0.	0.	0.3021	61.24	59.48	-1.76
LUDLOW TEL. CO.	VT	3119.	211.80	0.91	0.	0.	0.4470	94.67	87.73	-6.95
NORTHFIELD TEL. CO.	VT	2383.	173.28	0.75	0.	0.	0.6143	106.45	97.78	-8.66
PERKINSVILLE TEL. CO.	VT	640.	278.45	1.20	1895.	2.96	0.4708	133.07	123.81	-9.26
TOPSHAM TEL. CO., INC.	VT	816.	274.54	1.19	1639.	2.01	0.3607	100.37	95.98	-4.38
WAITSFIELD/FAYSTON TEL. CO.	VT	3958.	381.37	1.65	116056.	29.32	0.6792	278.57	261.04	-17.53
CONTINENTAL TEL CO OF VT, INC.	VT	26897.	378.84	1.64	769585.	28.61	0.4884	204.10	198.60	-5.50
NEW ENGLAND TEL. -VT	VT	230847.	303.47	1.31	321730.	1.39	0.3921	119.92	113.19	-6.73
VIRGIN ISLANDS TELEPHONE CORPORATION	VI	39232.	435.68	1.88	1749644.	44.60	0.4101	208.40	211.64	3.23
AMELIA TEL. CORP.	VA	2072.	443.10	1.91	96730.	46.68	0.1844	112.83	133.22	20.39
CONTINENTAL TELEPHONE CO OF VA	VA	263512.	285.07	1.23	185446.	0.70	0.3061	87.73	85.31	-2.42
ROANOKE & BOTETFOURT TEL. CO.	VA	4851.	435.61	1.88	216243.	44.58	0.2359	132.48	148.38	15.90
CENTRAL TELEPHONE COMPANY OF VA	VA	175947.	271.47	1.17	221536.	1.26	0.2814	77.23	76.21	-1.02
GTC OF THE SE - VIRGINIA	VA	27464.	339.72	1.47	491463.	17.89	0.2129	84.26	92.33	8.07
UNITED INTER-MOUNTAIN TELEPHONE CO-VA	VA	66580.	299.45	1.29	537924.	8.08	0.2202	71.33	75.49	4.16
C & P TELEPHONE COMPANY OF VIRGINIA	VA	2193492.	233.71	1.01	0.	0.	0.2645	61.82	61.25	-0.56
UNITED TELEPHONE CO OF THE NW - WA	WA	44630.	363.55	1.57	1085039.	24.31	0.3672	149.71	150.72	1.01
ASOTIN TELEPHONE COMPANY - WA	WA	749.	551.84	2.38	57874.	77.27	0.2682	199.52	223.62	24.10
TELEPHONE UTILITIES OF WA INC.	WA	62949.	323.10	1.40	871501.	13.84	0.3914	135.69	132.68	-3.01
COWICHE TELEPHONE CO. INC.	WA	1318.	271.62	1.17	1708.	1.30	0.2912	79.96	78.52	-1.44
ELENSBURG TELEPHONE COMPANY	WA	12851.	211.74	0.91	0.	0.	0.2855	60.45	59.20	-1.25
GTC OF THE NW, INC - WASHINGTON	WA	440306.	269.45	1.16	52002.	0.12	0.3081	83.10	80.52	-2.57
HAT ISLAND TELEPHONE COMPANY	WA	42.	321.99	1.39	570.	13.57	0.2728	96.89	100.19	3.30
HOOD CANAL TELEPHONE COMPANY	WA	643.	370.76	1.60	16936.	26.34	0.4136	170.91	169.57	-1.34
INLAND TELEPHONE COMPANY - WA	WA	1286.	506.85	2.19	83095.	64.61	0.3978	244.70	253.77	9.07
KALAMA TELEPHONE COMPANY	WA	1436.	327.31	1.41	21351.	14.87	0.4248	148.95	144.38	-4.57
LEWIS RIVER TELEPHONE COMPANY INC.	WA	2046.	363.78	1.57	49869.	24.37	0.3929	159.18	158.64	-0.53
MASHELL TELEPHONE COMPANY INC.	WA	1649.	422.15	1.82	67264.	40.79	0.2755	143.49	155.32	11.82
PENINSULA TELECOMMUNICATIONS, INC.	WA	3879.	309.63	1.34	40964.	10.56	0.3241	107.39	107.10	-0.29
PIONEER TELEPHONE COMPANY	WA	745.	652.19	2.82	78590.	105.49	0.2919	260.70	291.30	30.60
ST. JOHN TELEPHONE CO.	WA	529.	346.83	1.50	10383.	19.63	0.2418	96.95	103.94	6.99
TENINO TEL. CO.	WA	1820.	391.21	1.69	58404.	32.09	0.2390	114.89	126.29	11.40
TOLEDO TELEPHONE COMPANY INC.	WA	1228.	412.04	1.78	46602.	37.95	0.2373	123.08	136.59	13.52
CONTEL OF THE NORTHWEST INC. - WA	WA	41179.	467.75	2.02	2207927.	53.62	0.3104	180.94	194.08	13.15
WESTERN WAHIAKUM COUNTY TEL COMPANY	WA	820.	411.57	1.78	31010.	37.82	0.2934	145.97	155.61	9.64
WHIDBEY TEL. CO.	WA	5531.	293.93	1.27	37236.	6.73	0.2728	84.67	85.80	1.13
YELM TELEPHONE COMPANY	WA	4546.	278.88	1.20	13932.	3.06	0.2769	79.26	79.03	-0.23
PACIFIC NORTHWEST BELL-WASHINGTON	WA	1641224.	183.10	0.79	0.	0.	0.2893	52.97	51.78	-1.19
HARDY TELEPHONE COMPANY	WV	1727.	544.63	2.35	129937.	75.24	0.2520	187.40	212.27	24.86
MOUNTAIN STATE TELEPHONE CO.	WV	14467.	456.62	1.97	730392.	50.49	0.1914	121.06	142.36	21.30
CONTINENTAL TEL CO OF WEST VIRGINIA	WV	20713.	432.30	1.87	904042.	43.65	0.2309	128.92	144.85	15.93
GTC OF THE SE - WEST VIRGINIA	WV	58818.	297.51	1.28	447380.	7.61	0.2825	89.12	90.05	0.93
C & P TELEPHONE COMPANY OF W VA	WV	627801.	346.98	1.50	1899328.	3.03	0.2239	79.71	82.24	2.54
CENCOM OF WISCONSIN INC.	WI	20463.	276.77	1.20	52206.	2.55	0.2427	68.87	70.06	1.18
AMERY TELEPHONE COMPANY	WI	4576.	217.52	0.94	0.	0.	0.2825	61.45	60.27	-1.17
AMHERST TELEPHONE COMPANY	WI	3158.	266.97	1.15	508.	0.16	0.2058	55.05	57.05	2.00
BADGER STATE TELEPHONE CO INC.	WI	3650.	270.93	1.17	4110.	1.13	0.1707	47.00	50.95	3.95
BONDUEL TELEPHONE COMPANY	WI	1344.	272.80	1.18	2128.	1.58	0.1363	38.24	43.95	5.71
BRUCE TELEPHONE COMPANY, INC.	WI	1322.	314.58	1.36	15555.	11.77	0.2748	94.29	96.89	2.60
BURLINGTON BRIGHTON & WHEATLAND TEL	WI	2607.	174.05	0.75	0.	0.	0.2925	50.91	49.67	-1.24
CASCO TELEPHONE COMPANY	WI	992.	256.26	1.11	0.	0.	0.1245	31.90	37.26	5.36
LAKESHORE TELEPHONE COMPANY	WI	1482.	207.75	0.90	0.	0.	0.1940	40.30	42.24	1.93
CENTRAL STATE TELEPHONE COMPANY	WI	6500.	307.56	1.33	65361.	10.06	0.2142	72.58	77.75	5.17
CHEQUAMEGON TELEPHONE COOP INC.	WI	5200.	261.74	1.13	0.	0.	0.3825	100.12	94.33	-5.78
CHIBARDUN TELEPHONE COOP INC.	WI	4292.	219.11	0.95	0.	0.	0.2108	46.19	47.61	1.42
CRANDON TELEPHONE COMPANY	WI	1889.	391.66	1.69	60856.	32.22	0.1943	97.58	111.96	14.38
DODGE COUNTY TELEPHONE COMPANY	WI	856.	208.56	0.90	0.	0.	0.1375	28.68	32.60	3.92

TABLE 3.6

NECA NTS COST DATA FOR 1986 - INDIVIDUAL STUDY AREAS

NAME	ST	LOOPS	URRPL	RTNA	HCA	HCAPL	SPF	OIRRPL	NIRRPL	CIRRPL
FENNIMORE TELEPHONE COMPANY	WI	1490.	188.75	0.82	0.	0.	0.2362	44.58	45.02	0.43
FOOTVILLE TELEPHONE COMPANY	WI	778.	259.11	1.12	0.	0.	0.1805	46.77	49.77	3.01
GENERAL TEL CO OF WISCONSIN	WI	261269.	356.82	1.54	886810.	3.39	0.2583	94.43	95.06	0.63
GREENWOOD TELEPHONE CO INC.	WI	1257.	240.93	1.04	0.	0.	0.1788	43.08	45.92	2.84
HAGER CITY TELEPHONE COMPANY	WI	1532.	277.27	1.20	4094.	2.67	0.2728	77.42	77.26	-0.16
HEADWATERS TEL. CO.	WI	3156.	343.90	1.49	59695.	18.91	0.3058	117.78	120.88	3.11
HILLSBORO TELEPHONE COMPANY INC.	WI	1366.	193.08	0.83	0.	0.	0.1628	31.43	34.23	2.80
CENTURY TELEPHONE OF WISCONSIN INC.	WI	38344.	139.03	0.60	0.	0.	0.2593	36.05	35.84	-0.21
LARSEN-READFIELD TEL. CO.	WI	1862.	203.87	0.88	0.	0.	0.1653	33.70	36.57	2.87
LEMONWEIR VALLEY TEL. CO.	WI	2254.	291.08	1.26	13611.	6.04	0.3297	99.99	98.14	-1.86
MANAWA TELEPHONE COMPANY	WI	1803.	227.56	0.98	0.	0.	0.1887	42.94	45.26	2.32
MARQUETTE-ADAMS TEL. COOP. INC.	WI	2543.	196.89	0.85	0.	0.	0.4874	95.96	88.17	-7.80
MIDWAY TELEPHONE COMPANY	WI	5653.	232.94	1.01	0.	0.	0.2140	49.85	51.25	1.40
MILLTOWN MUTUAL TELEPHONE COMPANY	WI	1734.	207.82	0.90	0.	0.	0.2782	57.82	56.84	-0.98
MONROE COUNTY TELEPHONE COMPANY	WI	7971.	214.12	0.92	0.	0.	0.2965	63.49	61.84	-1.65
MOSEL & CENTERVILLE TELEPHONE CO	WI	2617.	219.69	0.95	0.	0.	0.2088	45.87	47.39	1.52
MOUNT HOREB TELEPHONE COMPANY	WI	2667.	278.92	1.20	8198.	3.07	0.2728	78.14	78.10	-0.04
MOUNT VERNON TELEPHONE COMPANY	WI	4565.	183.83	0.79	0.	0.	0.2254	41.44	42.19	0.75
NIAGARA TELEPHONE COMPANY	WI	2999.	241.27	1.04	0.	0.	0.3330	80.34	77.01	-3.33
NORTH-WEST TELEPHONE COMPANY	WI	49774.	254.85	1.10	0.	0.	0.2481	63.23	63.30	0.08
BAYLAND TELEPHONE INC.	WI	1198.	233.43	1.01	0.	0.	0.1566	36.56	40.20	3.64
PEOPLES TELEPHONE CO OF RANDOLPH	WI	5180.	271.38	1.17	6410.	1.24	0.2021	55.67	58.25	2.58
PLATTEVILLE TELEPHONE COMPANY	WI	7162.	169.96	0.73	0.	0.	0.3118	52.99	51.24	-1.75
INDIANHEAD TEL. CO.	WI	1550.	445.84	1.93	73554.	47.45	0.3296	178.58	188.47	9.89
PRICE COUNTY TELEPHONE COMPANY	WI	3074.	292.13	1.26	19348.	6.29	0.2806	86.17	86.77	0.61
RHINELANDER TEL. CO.	WI	8851.	181.83	0.79	0.	0.	0.2352	42.77	43.20	0.44
RIB LAKE TELEPHONE COMPANY	WI	1049.	255.47	1.10	0.	0.	0.2728	69.69	68.72	-0.97
ROCK RIVER TELEPHONE COMPANY	WI	1310.	263.25	1.14	0.	0.	0.2166	57.02	58.47	1.45
SCANDINAVIA TELEPHONE COMPANY	WI	1742.	251.34	1.09	0.	0.	0.2560	64.34	64.09	-0.25
SHELL LAKE TEL. CO.	WI	1793.	165.15	0.71	0.	0.	0.2411	39.82	40.07	0.25
SIREN TELEPHONE CO., INC.	WI	1663.	190.85	0.82	0.	0.	0.3959	75.56	70.92	-4.64
SOLOM SPRINGS TEL. CO.	WI	12805.	251.71	1.09	0.	0.	0.3881	97.69	91.90	-5.79
SOUTHEAST TEL. CO. OF WIS., INC.	WI	5137.	267.09	1.15	976.	0.19	0.2016	53.97	56.20	2.23
STOCKBRIDGE & SHERWOOD TEL. CO.	WI	2095.	273.62	1.18	3735.	1.78	0.1488	41.90	47.12	5.22
UNIVERSAL TEL. CO. OF NORTHERN WIS. INC	WI	8784.	287.44	1.24	45255.	5.15	0.4758	140.20	131.11	-9.09
THORP TELEPHONE COMPANY	WI	1845.	263.91	1.14	0.	0.	0.2202	58.11	59.43	1.32
TURTLE LAKE TELEPHONE CO INC.	WI	1101.	210.69	0.91	0.	0.	0.2982	62.83	61.12	-1.71
UNITED TELEQUIPMENT CORP.	WI	11932.	151.87	0.66	0.	0.	0.2697	40.96	40.46	-0.50
URBAN TELEPHONE CORPORATION	WI	16049.	175.01	0.76	0.	0.	0.2144	37.52	38.55	1.03
VALDERS TELEPHONE COMPANY	WI	1744.	195.64	0.84	0.	0.	0.1684	32.95	35.61	2.66
VIROQUA TELEPHONE COMPANY	WI	2972.	201.26	0.87	0.	0.	0.1991	40.07	41.78	1.71
WITTENBERG TELEPHONE COMPANY	WI	1676.	278.71	1.20	5067.	3.02	0.1398	40.98	47.09	6.11
WOOD COUNTY TELEPHONE COMPANY	WI	19608.	139.02	0.60	0.	0.	0.2150	29.89	30.70	0.81
WISCONSIN BELL	WI	1521250.	197.13	0.85	0.	0.	0.2276	44.87	45.60	0.73
UNITED TELEPHONE CO. OF THE WEST-WY	WY	5487.	258.82	1.12	0.	0.	0.4378	113.31	105.21	-8.10
RANGE TEL. COOPERATIVE INC.	WY	1356.	606.78	2.62	125726.	92.72	0.5439	391.84	393.01	1.17
UTAH-WYOMING TELECOM - WY	WY	304.	274.87	1.19	634.	2.09	0.7249	200.64	186.91	-13.73
DUBOIS TELEPHONE EXCHANGE INC.	WY	1549.	623.09	2.69	150726.	97.31	0.6808	489.07	476.77	-12.30
MEDICINE BOW TEL. CO. INC.	WY	225.	304.35	1.31	2086.	9.27	0.6744	211.43	196.20	-15.23
SILVER STAR TEL. CO. - WY	WY	947.	279.92	1.21	3144.	3.32	0.7121	201.55	187.54	-14.01
UNION TELEPHONE CO.	WY	2734.	393.21	1.70	89272.	32.65	0.6583	280.62	264.76	-15.85
WYOMING TELEPHONE CO. INC.	WY	2727.	253.98	1.10	0.	0.	0.6820	173.21	160.51	-12.70
MOUNTAIN BELL-WYOMING	WY	204968.	422.14	1.82	1991522.	9.72	0.4878	212.40	198.88	-13.52

TABLE 3.6

NECA NTS COST DATA FOR 1986 - INDIVIDUAL STUDY AREAS

EXPLANATION OF COLUMN HEADINGS

NAME	NAME OF STUDY AREA
ST	STATE (POSTAL ABBREVIATION)
LOOPS	NUMBER OF OSP CAT 1.33 WORKING LOOPS
URRPL	UNSEPARATED NTS REVENUE REQUIREMENT PER LOOP
RTNA	RATIO OF URRPL TO NATIONAL AVERAGE
HCA	HIGH COST ASSISTANCE (AT 3/8 TRANSITION)
HCAPL	HIGH COST ASSISTANCE PER LOOP
SPF	1987 TRANSITIONAL SUBSCRIBER PLANT FACTOR
OIRRPL	OLD (1987 SPF + 1/4 HCA) INTERSTATE NTS REVENUE REQUIREMENT PER LOOP
NIRRPL	NEW (1988 SPF + 3/8 HCA) INTERSTATE NTS REVENUE REQUIREMENT PER LOOP
CIRRPL	CHANGE IN INTERSTATE REVENUE REQUIREMENT PER LOOP

4. Network Usage and Growth

The amount of traffic carried on the public switched network is a vital concern to the Joint Board and the Commission, since the interstate toll rate decreases that have accompanied the subscriber line charge increase were designed to make usage of the network more efficient and to stimulate its growth. To monitor use of this network, the National Exchange Carrier Association (NECA) provides monthly reports to the Commission on the volumes of switched interstate usage. These data are included in this report. To supplement this information, the Joint Board recommended that the larger local telephone companies also provide, on an annual basis, their total switched minutes of use, their interstate switched minutes of use, and their Subscriber Plant Factor (SPF), Subscriber Line Usage (SLU), and Dial Equipment Minutes (DEM) factors. The Joint Board recognized that much of these data were not previously collected by any single entity and that reports could be received and consolidated by some other entity (such as NECA). These data for 1980 through 1986 were included in our June monitoring report. Since that information has not been updated since then, it is not repeated here.

This report includes data on switched telephone traffic as reflected in the NECA calculations of carrier common line (CCL) minutes of use from June 1984 through May 1988. Our June report included this cumulative data through February 1988. Table 4.1 shows the latest available figures on total minutes of use for interstate traffic as reported by NECA, derived from the Common Line Pool earned revenues. Tables 4.2 and 4.3 show the figures for large (Tier 1) and small (non-Tier 1) companies, respectively. Since June 1986, these figures do not count the minutes from the closed end of WATS.

TABLE 4.1

NATIONAL EXCHANGE CARRIER ASSOCIATION, INC.

SUPPLEMENTAL REPORT OF COMMON LINE POOL RESULTS

PAGE 1 OF 2

REPORTED AS OF APRIL, 1988

MINUTES OF USE DERIVED FROM N E C A CCL EARNED REVENUES

TOTAL COMMON LINE POOL

(MOU REPORTED IN MILLIONS)

MONTH/YR	PREMIUM CCL MOUS			NONPREMIUM CCL MOUS		
	ORIGINATING	TERMINATING	TOTAL	ORIGINATING	TERMINATING	TOTAL
JUN 84	N/A	N/A	14,545.271	N/A	N/A	1,827.007
JUL 84	N/A	N/A	12,566.294	N/A	N/A	1,886.240
AUG 84	N/A	N/A	13,135.947	N/A	N/A	1,911.089
SEP 84	N/A	N/A	12,319.793	N/A	N/A	1,720.966
OCT 84	N/A	N/A	13,161.263	N/A	N/A	2,018.484
NOV 84	N/A	N/A	13,090.910	N/A	N/A	2,010.440
DEC 84	N/A	N/A	13,378.258	N/A	N/A	1,990.827
JAN 85	N/A	N/A	13,115.551	N/A	N/A	2,176.491
FEB 85	N/A	N/A	12,998.244	N/A	N/A	2,182.451
MAR 85	N/A	N/A	13,418.828	N/A	N/A	2,283.537
APR 85	N/A	N/A	13,755.632	N/A	N/A	2,270.295
MAY 85	N/A	N/A	13,810.066	N/A	N/A	2,028.473
JUN 85	N/A	N/A	13,905.208	N/A	N/A	2,295.878
JUL 85	N/A	N/A	14,146.095	N/A	N/A	2,190.388
AUG 85	N/A	N/A	14,586.024	N/A	N/A	1,994.763
SEP 85	N/A	N/A	14,456.980	N/A	N/A	1,974.874
OCT 85	N/A	N/A	15,206.389	N/A	N/A	1,781.234
NOV 85	N/A	N/A	14,285.850	N/A	N/A	1,780.633
DEC 85	N/A	N/A	15,002.159	N/A	N/A	1,767.382
JAN 86	N/A	N/A	15,291.015	N/A	N/A	1,522.729
FEB 86	N/A	N/A	14,691.467	N/A	N/A	1,397.703
MAR 86	N/A	N/A	15,861.035	N/A	N/A	1,348.922
APR 86	N/A	N/A	15,905.442	N/A	N/A	1,300.394
MAY 86	N/A	N/A	16,039.848	N/A	N/A	1,208.236

TABLE 4.1

NATIONAL EXCHANGE CARRIER ASSOCIATION, INC.

SUPPLEMENTAL REPORT OF COMMON LINE POOL RESULTS

PAGE 2 OF 2

REPORTED AS OF APRIL, 1988

MINUTES OF USE DERIVED FROM N E C A CCL EARNED REVENUES

TOTAL COMMON LINE POOL

(MOU REPORTED IN MILLIONS)

MONTH/YR	PREMIUM CCL MOUS			NONPREMIUM CCL MOUS		
	ORIGINATING	TERMINATING	TOTAL	ORIGINATING	TERMINATING	TOTAL
JUN 86	5,706.256	8,104.051	13,810.308	485.227	817.323	1,302.550
JUL 86	6,309.790	8,133.097	14,442.888	513.799	777.371	1,291.171
AUG 86	6,140.762	8,194.044	14,334.807	437.017	714.251	1,151.269
SEP 86	6,268.893	8,163.042	14,431.936	367.342	700.373	1,067.716
OCT 86	6,635.035	8,536.637	15,171.674	315.477	685.406	1,000.883
NOV 86	6,383.606	8,151.682	14,535.289	333.009	702.207	1,035.217
DEC 86	7,006.740	8,832.626	15,839.367	290.101	670.372	960.473
JAN 87	7,045.010	8,600.041	15,645.051	347.585	652.158	999.744
FEB 87	6,792.772	8,641.786	15,434.559	359.804	694.430	1,054.235
MAR 87	7,451.669	9,511.283	16,962.953	375.003	780.478	1,155.482
APR 87	7,176.128	9,227.668	16,403.798	362.167	722.818	1,084.987
MAY 87	7,089.117	8,984.493	16,073.611	321.414	690.400	1,011.815
JUN 87	7,512.329	9,377.389	16,889.719	286.268	723.593	1,009.861
JUL 87	8,306.359	9,477.467	17,783.828	349.713	695.786	1,045.501
AUG 87	7,596.504	9,537.840	17,134.345	262.040	700.456	962.497
SEP 87	7,546.894	9,734.333	17,281.228	255.457	687.280	942.738
OCT 87	7,904.164	10,225.182	18,129.346	239.104	654.749	893.855
NOV 87	7,682.321	9,727.735	17,410.057	223.869	616.730	840.600
DEC 87	8,563.235	10,565.694	19,128.929	257.800	604.356	862.158
JAN 88	7,926.703	10,268.836	18,195.540	178.429	563.785	742.215
FEB 88	7,886.774	10,369.317	18,256.092	177.912	603.256	781.169
MAR 88	8,533.304	11,295.773	19,829.077	190.267	609.032	799.300
APR 88	8,144.340	10,540.910	18,685.251	177.979	590.310	768.290
MAY 88	8,372.044	10,797.608	19,169.654	192.424	631.185	823.610

TABLE 4.2

NATIONAL EXCHANGE CARRIER ASSOCIATION, INC.

SUPPLEMENTAL REPORT OF COMMON LINE POOL RESULTS

PAGE 1 OF 2

REPORTED AS OF APRIL, 1988

MINUTES OF USE DERIVED FROM N E C A CCL EARNED REVENUES

TIER 1

(MOU REPORTED IN MILLIONS)

MONTH/YR	PREMIUM CCL MOUS			NONPREMIUM CCL MOUS		
	ORIGINATING	TERMINATING	TOTAL	ORIGINATING	TERMINATING	TOTAL
JUN 84	N/A	N/A	13,685.597	N/A	N/A	1,813.710
JUL 84	N/A	N/A	11,795.348	N/A	N/A	1,875.077
AUG 84	N/A	N/A	12,345.332	N/A	N/A	1,898.366
SEP 84	N/A	N/A	11,542.403	N/A	N/A	1,707.373
OCT 84	N/A	N/A	12,347.081	N/A	N/A	2,001.905
NOV 84	N/A	N/A	12,291.952	N/A	N/A	1,994.562
DEC 84	N/A	N/A	12,562.210	N/A	N/A	1,971.868
JAN 85	N/A	N/A	12,302.152	N/A	N/A	2,158.260
FEB 85	N/A	N/A	12,201.878	N/A	N/A	2,164.499
MAR 85	N/A	N/A	12,600.320	N/A	N/A	2,264.289
APR 85	N/A	N/A	12,915.205	N/A	N/A	2,249.389
MAY 85	N/A	N/A	12,959.438	N/A	N/A	2,007.246
JUN 85	N/A	N/A	13,003.811	N/A	N/A	2,271.726
JUL 85	N/A	N/A	13,262.800	N/A	N/A	2,165.717
AUG 85	N/A	N/A	13,658.918	N/A	N/A	1,970.276
SEP 85	N/A	N/A	13,553.502	N/A	N/A	1,950.462
OCT 85	N/A	N/A	14,303.096	N/A	N/A	1,757.488
NOV 85	N/A	N/A	13,386.365	N/A	N/A	1,757.072
DEC 85	N/A	N/A	14,083.511	N/A	N/A	1,743.455
JAN 86	N/A	N/A	14,389.693	N/A	N/A	1,500.785
FEB 86	N/A	N/A	13,824.567	N/A	N/A	1,370.954
MAR 86	N/A	N/A	14,935.645	N/A	N/A	1,322.737
APR 86	N/A	N/A	14,978.971	N/A	N/A	1,273.609
MAY 86	N/A	N/A	15,088.685	N/A	N/A	1,179.820

TABLE 4.2

NATIONAL EXCHANGE CARRIER ASSOCIATION, INC.

SUPPLEMENTAL REPORT OF COMMON LINE POOL RESULTS

PAGE 2 OF 2

REPORTED AS OF APRIL, 1988

MINUTES OF USE DERIVED FROM N E C A CCL EARNED REVENUES

TIER 1

(MOU REPORTED IN MILLIONS)

MONTH/YR	PREMIUM CCL MOUS			NONPREMIUM CCL MOUS		
	ORIGINATING	TERMINATING	TOTAL	ORIGINATING	TERMINATING	TOTAL
JUN 86	5,330.518	7,570.611	12,901.130	475.630	801.154	1,276.785
JUL 86	5,918.206	7,628.361	13,546.568	503.527	761.831	1,265.359
AUG 86	5,741.164	7,660.833	13,401.998	425.275	695.060	1,120.336
SEP 86	5,877.882	7,653.890	13,531.773	354.490	675.867	1,030.358
OCT 86	6,233.765	8,020.356	14,254.122	303.464	659.308	962.774
NOV 86	5,989.395	7,648.288	13,637.684	320.845	676.556	997.401
DEC 86	6,593.570	8,311.787	14,905.358	278.632	643.870	922.503
JAN 87	6,600.692	8,057.650	14,658.342	333.622	625.957	959.580
FEB 87	6,392.146	8,132.112	14,524.259	346.621	668.972	1,015.594
MAR 87	7,028.204	8,970.778	15,998.983	363.216	755.942	1,119.159
APR 87	6,754.097	8,685.110	15,439.208	349.876	698.278	1,048.155
MAY 87	6,655.759	8,435.262	15,091.022	308.165	661.923	970.089
JUN 87	7,068.433	8,823.299	15,891.733	275.076	695.306	970.384
JUL 87	7,796.536	8,895.753	16,692.290	336.919	670.328	1,007.249
AUG 87	7,119.915	8,939.464	16,059.379	250.928	670.764	921.693
SEP 87	7,097.676	9,154.919	16,252.596	244.824	658.654	903.478
OCT 87	7,444.550	9,630.592	17,075.144	229.005	627.106	856.112
NOV 87	7,217.027	9,138.547	16,355.575	212.385	585.087	797.473
DEC 87	8,079.865	9,969.400	18,049.266	245.414	575.319	820.734
JAN 88	7,436.400	9,633.760	17,070.161	169.820	536.597	706.417
FEB 88	7,437.633	9,778.669	17,216.303	169.303	573.956	743.260
MAR 88	8,083.183	10,701.693	18,784.877	180.818	579.443	760.262
APR 88	7,690.478	9,953.407	17,643.887	169.284	561.463	730.748
MAY 88	7,899.448	10,188.184	18,087.633	183.188	600.921	784.110

TABLE 4.3

NATIONAL EXCHANGE CARRIER ASSOCIATION, INC.

SUPPLEMENTAL REPORT OF COMMON LINE POOL RESULTS

PAGE 1 OF 2

REPORTED AS OF APRIL, 1988

MINUTES OF USE DERIVED FROM N E C A CCL EARNED REVENUES

NON-TIER 1

(MOU REPORTED IN MILLIONS)

MONTH/YR	PREMIUM CCL MOUS			NONPREMIUM CCL MOUS		
	ORIGINATING	TERMINATING	TOTAL	ORIGINATING	TERMINATING	TOTAL
JUN 84	N/A	N/A	859.674	N/A	N/A	13.297
JUL 84	N/A	N/A	770.946	N/A	N/A	11.163
AUG 84	N/A	N/A	790.615	N/A	N/A	12.723
SEP 84	N/A	N/A	777.390	N/A	N/A	13.593
OCT 84	N/A	N/A	814.183	N/A	N/A	16.579
NOV 84	N/A	N/A	798.958	N/A	N/A	15.879
DEC 84	N/A	N/A	816.048	N/A	N/A	18.959
JAN 85	N/A	N/A	813.399	N/A	N/A	18.231
FEB 85	N/A	N/A	796.366	N/A	N/A	17.952
MAR 85	N/A	N/A	818.509	N/A	N/A	19.248
APR 85	N/A	N/A	840.427	N/A	N/A	20.906
MAY 85	N/A	N/A	850.629	N/A	N/A	21.227
JUN 85	N/A	N/A	901.397	N/A	N/A	24.152
JUL 85	N/A	N/A	883.295	N/A	N/A	24.671
AUG 85	N/A	N/A	927.105	N/A	N/A	24.488
SEP 85	N/A	N/A	903.478	N/A	N/A	24.412
OCT 85	N/A	N/A	903.293	N/A	N/A	23.746
NOV 85	N/A	N/A	899.485	N/A	N/A	23.561
DEC 85	N/A	N/A	918.649	N/A	N/A	23.927
JAN 86	N/A	N/A	901.322	N/A	N/A	21.944
FEB 86	N/A	N/A	866.900	N/A	N/A	26.749
MAR 86	N/A	N/A	925.390	N/A	N/A	26.186
APR 86	N/A	N/A	926.472	N/A	N/A	26.785
MAY 86	N/A	N/A	951.164	N/A	N/A	28.416

TABLE 4.3

NATIONAL EXCHANGE CARRIER ASSOCIATION, INC.

SUPPLEMENTAL REPORT OF COMMON LINE POOL RESULTS
 REPORTED AS OF APRIL, 1988

PAGE 2 OF 2

MINUTES OF USE DERIVED FROM N E C A CCL EARNED REVENUES

NON-TIER 1

(MOU REPORTED IN MILLIONS)

MONTH/YR	PREMIUM CCL MOUS			NONPREMIUM CCL MOUS		
	ORIGINATING	TERMINATING	TOTAL	ORIGINATING	TERMINATING	TOTAL
JUN 86	375.738	533.439	909.178	9.596	16.168	25.765
JUL 86	391.583	504.736	896.321	10.271	15.540	25.812
AUG 86	399.598	533.210	932.809	11.742	19.191	30.933
SEP 86	391.010	509.151	900.162	12.852	24.505	37.358
OCT 86	401.270	516.280	917.551	12.012	26.097	38.110
NOV 86	394.210	503.394	897.605	12.164	25.651	37.816
DEC 86	413.170	520.838	934.009	11.468	26.501	37.971
JAN 87	444.317	542.391	986.709	13.963	26.201	40.164
FEB 87	400.625	509.674	910.300	13.183	25.457	38.641
MAR 87	423.464	540.504	963.970	11.786	24.536	36.323
APR 87	422.031	542.558	964.590	12.290	24.540	36.831
MAY 87	433.357	549.230	982.588	13.249	28.476	41.726
JUN 87	443.896	554.089	997.986	11.191	28.286	39.478
JUL 87	509.823	581.714	1,091.538	12.793	25.458	38.252
AUG 87	476.589	598.375	1,074.966	11.111	29.691	40.803
SEP 87	449.218	579.413	1,028.632	10.633	28.625	39.259
OCT 87	459.613	594.589	1,054.203	10.098	27.643	37.743
NOV 87	465.293	589.187	1,054.482	11.484	31.642	43.127
DEC 87	483.369	596.293	1,079.663	12.386	29.036	41.424
JAN 88	490.302	635.076	1,125.379	8.608	27.188	35.798
FEB 88	449.140	590.647	1,039.789	8.608	29.300	37.909
MAR 88	450.120	594.080	1,044.200	9.448	29.589	39.039
APR 88	453.861	587.502	1,041.364	8.695	28.846	37.542
MAY 88	472.596	609.424	1,082.021	9.235	30.264	39.500

5. Rates and Revenues

This section contains a variety of information on telephone price indexes and rate levels. First, it describes and presents a series of price indexes maintained by the Bureau of Labor Statistics. Second, it discusses rate levels and changes in average rate levels. Third, it summarizes rate cases pending before state regulatory commissions. These cases are an important indicator of future local rate changes.

CHANGES IN THE PRICE OF TELEPHONE SERVICES:

The Bureau of Labor Statistics (BLS) collects a variety of information on telephone service as part of three separate programs -- the Consumer Price Index (CPI), the Producer Price Index (PPI), and the Consumer Expenditure Survey. The monthly price indexes represent prices sampled in the middle of the month.

A. Long Term Trends in the Overall Price of Telephone Service:

A price index for telephone services was first published in 1935. Since that time, telephone prices have tended to increase at a slower pace than most other prices. Table 5.1 shows long run changes in the Consumer Price Indexes for all items, all services, telephone services, each of the seven major categories that currently constitute the overall CPI, and several services that are often characterized as public utilities. The price of telephone service has increased less rapidly than almost any other category when viewed over a long period of time. 1

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1. For a description of the methodologies used by the BLS in calculating price indexes, see Primer and Sourcebook on Telephone Price Indexes and Rate Levels, published by the FCC in April 1987. In early 1987, the Bureau of Labor Statistics revised its telephone-related PPI indexes and published revised index numbers for the period back to January 1984. The BLS has also made revisions to the CPI telephone service sample. The PPI and CPI revisions are described in Local Rates Update, published by the FCC in September 1987 and Telephone Rates Update, published by the FCC in December 1987. In January 1988, the BLS published revised CPI indexes which, in most cases, have an average value of 100 for the period 1982 through 1984.

Table 5.1
Annual Rate of Change For Various Price Indexes*

	1937 to 1987	1977 to 1987
CPI all goods and services	4.2%	6.5%
CPI all services	4.7	8.0
CPI telephone service	2.4	4.5
CPI major categories		
- food & beverages	**	5.9
- housing	**	7.1
- apparel & upkeep	3.3	3.5
- transportation	4.0	6.0
- medical care	5.2	8.6
- entertainment	**	5.4
- other goods & services	**	7.8
CPI public transportation	5.3	9.2
CPI piped gas	4.1	8.2
CPI electricity	2.6	6.9
CPI sewer & water maintenance	**	7.8

* Exponential rates calculated using "year average" index values the first and last years of each comparison period.

** Series not established until after 1937.

B. Recent Annual Changes in the Overall Price of Telephone Service:

The CPI index of telephone services is based on a "market basket" intended to represent the telephone-related expenditures of a typical urban household. It includes both local and long distance services. Changes in telephone prices tend to lag behind other price changes. Overall inflation in the American economy peaked in 1979 and 1980. In contrast, the price of telephone services rose most rapidly during the years 1981 through 1984, with the rate of increase declining in 1985 and again in 1986. The cost of telephone service fell slightly in 1987 and has remained basically unchanged during the first half of 1988. The annual rate of change during each of the last ten years is shown in Table 5.2 for the Gross National Product fixed weight price index (which reflects inflation throughout the economy), the overall CPI (which measures the impact of inflation on consumers), and the CPI for telephone services.

Table 5.2
Annual Rate of Change in Price Indexes

	GNP Fixed Weight Price Index	CPI: All Items	CPI: Telephone Services
1978	7.2	9.0%	0.9%
1979	8.8	13.3	0.7
1980	9.8	12.5	4.6
1981	8.5	8.9	11.7
1982	5.0	3.8	7.2
1983	3.9	3.8	3.6
1984	3.7	3.9	9.2
1985	3.6	3.8	4.7
1986	2.3	1.1	2.7
1987	4.0	4.4	-1.3
1988*	4.0	4.6	0.1

* For 1988, the annual rate of change is the annualized change based on 7 months of data through July 1988, except the GNP index, which is based on 6 months of data through June.

C. Price Indexes for Local Service:

The Bureau of Labor Statistics publishes a number of price indexes related to local telephone service, two of which are important to the monitoring program. The CPI index of local telephone charges is based on a broadly defined "market basket" of local services that includes monthly service charges, message unit charges, equipment, installation, additional services (such as Touch-Tone and Call Waiting), taxes, subscriber line charges, and all other consumer expenditures associated with local telephone services except long distance charges. In contrast, the PPI index of monthly residential rates is much more narrowly defined. It is based only on monthly service charges for residential service, optional Touch-Tone service, and subscriber line charges. It excludes taxes and all other telephone service charges. The annual rates of change for these two indexes are presented in Table 5.3. In the CPI index, about half of the 1984 increase occurred during January, reflecting adjustments made at the time of AT&T's divestiture of its operating companies. In January 1987, The PPI index was revised to include subscriber line charges. Revised index numbers for 1985 and 1986 were issued based on the new methodology.

Table 5.3
Annual Rate of Change in Price Indexes
For Local Telephone Service

	CPI: All Local Charges	PPI: Monthly Service Charges For Residential Service
1978	1.4%	3.1%
1979	1.7	1.6
1980	7.0	7.1
1981	12.6	15.6
1982	10.8	9.0
1983	3.1	0.2
1984	17.2	10.4
1985	8.9	12.4
1986	7.1	8.9
1987	3.3	2.6
1988*	3.1	-1.1

* For 1988, the annual rate of change is the annualized change based on 7 months of data through July 1988.

D. Price Indexes for Long Distance Service:

CPI data are available for intrastate toll and interstate toll services since December 1977. Table 5.4 presents the annual changes in these series for recent years. The high inflation of the late 1970's is reflected in the long distance price increases beginning in 1980. Interstate toll rates have steadily fallen since 1983, and intrastate toll rates have fallen in the last two years.

Table 5.4
Annual Rate of Change in Price Indexes
For Long Distance Service

	CPI: Interstate Toll calls	CPI: Intrastate Toll calls
1978	-0.8%	1.3%
1979	-0.7	0.1
1980	3.4	- 0.6
1981	14.6	6.2
1982	2.6	4.2
1983	1.5	7.4
1984	-4.3	3.6
1985	-3.7	0.6
1986	-9.5	0.3
1987	-12.4	-3.0
1988*	-4.4	-5.5

* For 1988, the annual rate of change is the annualized change based on 7 months of data through July 1988.

E. Monthly Price Index Data:

Monthly data for the CPI telephone indexes are shown in Table 5.5. Monthly data for four PPI indexes (local residential service, local business service, intrastate toll and interstate toll) are shown in Table 5.6.

U.S. Department of Labor
Bureau of Labor Statistics
Washington, D.C. 20212

Consumer Price Index

All Urban Consumers - (CPI-U)

U.S. city average

All items

1982-84=100

YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	SEMIANNUAL		PERCENT CHANGE		
													1ST HALF	2ND HALF	AVG.	DEC-DEC	AVG-AVG
1913	9.8	9.8	9.8	9.8	9.7	9.8	9.9	9.9	10.0	10.0	10.1	10.0			9.9		
1914	10.0	9.9	9.9	9.8	9.9	9.9	10.0	10.2	10.2	10.1	10.2	10.1			10.0	1.0	1.0
1915	10.1	10.0	9.9	10.0	10.1	10.1	10.1	10.1	10.1	10.2	10.3	10.3			10.1	2.0	1.0
1916	10.4	10.4	10.5	10.6	10.7	10.8	10.8	10.9	11.1	11.3	11.5	11.6			10.9	12.6	7.9
1917	11.7	12.0	12.0	12.6	12.8	13.0	12.8	13.0	13.3	13.5	13.5	13.7			12.8	18.1	17.4
1918	14.0	14.1	14.0	14.2	14.5	14.7	15.1	15.4	15.7	16.0	16.3	16.5			15.1	20.4	18.0
1919	16.5	16.2	16.4	16.7	16.9	16.9	17.4	17.7	17.8	18.1	18.5	18.9			17.3	14.5	14.6
1920	19.3	19.5	19.7	20.3	20.6	20.9	20.8	20.3	20.0	19.9	19.8	19.4			20.0	2.6	15.6
1921	19.0	18.4	18.3	18.1	17.7	17.6	17.7	17.7	17.5	17.5	17.4	17.3			17.9	-10.8	-10.5
1922	16.9	16.9	16.7	16.7	16.7	16.7	16.8	16.6	16.6	16.7	16.8	16.9			16.8	-2.3	-6.1
1923	16.8	16.8	16.8	16.9	16.9	17.0	17.2	17.1	17.2	17.3	17.3	17.3			17.1	2.4	1.8
1924	17.3	17.2	17.1	17.0	17.0	17.0	17.1	17.0	17.1	17.2	17.2	17.3			17.1	0.0	0.0
1925	17.3	17.2	17.3	17.2	17.3	17.5	17.7	17.7	17.7	17.7	18.0	17.9			17.5	3.5	2.3
1926	17.9	17.9	17.8	17.9	17.8	17.7	17.5	17.4	17.5	17.6	17.7	17.7			17.7	-1.1	1.1
1927	17.5	17.4	17.3	17.3	17.4	17.6	17.3	17.2	17.3	17.4	17.3	17.3			17.4	-2.3	-1.7
1928	17.3	17.1	17.1	17.1	17.2	17.1	17.1	17.1	17.3	17.2	17.2	17.1			17.1	-1.2	-1.7
1929	17.1	17.1	17.0	16.9	17.0	17.1	17.3	17.3	17.3	17.3	17.3	17.2			17.1	0.6	0.0
1930	17.1	17.0	16.9	17.0	16.9	16.8	16.6	16.5	16.6	16.5	16.4	16.1			16.7	-6.4	-2.3
1931	15.9	15.7	15.6	15.5	15.3	15.1	15.1	15.1	15.0	14.9	14.7	14.6			15.2	-9.3	-9.0
1932	14.3	14.1	14.0	13.9	13.7	13.6	13.6	13.5	13.4	13.3	13.2	13.1			13.7	-10.3	-9.9
1933	12.9	12.7	12.6	12.6	12.6	12.7	13.1	13.2	13.2	13.2	13.2	13.2			13.0	0.8	-5.1
1934	13.2	13.3	13.3	13.3	13.3	13.4	13.4	13.4	13.6	13.5	13.5	13.4			13.4	1.5	3.1
1935	13.6	13.7	13.7	13.8	13.8	13.7	13.7	13.7	13.7	13.7	13.8	13.8			13.7	3.0	2.2
1936	13.8	13.8	13.7	13.7	13.7	13.8	13.9	14.0	14.0	14.0	14.0	14.0			13.9	1.4	1.5
1937	14.1	14.1	14.2	14.3	14.4	14.4	14.5	14.5	14.6	14.6	14.5	14.4			14.4	2.9	3.6
1938	14.2	14.1	14.1	14.2	14.1	14.1	14.1	14.1	14.1	14.0	14.0	14.0			14.1	-2.8	-2.1
1939	14.0	13.9	13.9	13.8	13.8	13.8	13.8	13.8	14.1	14.0	14.0	14.0			13.9	0.0	-1.4
1940	13.9	14.0	14.0	14.0	14.0	14.1	14.0	14.0	14.0	14.0	14.0	14.1			14.0	0.7	0.7

U.S. Department of Labor
Bureau of Labor Statistics
Washington, D.C. 20212

Consumer Price Index

All Urban Consumers - (CPI-U)

U.S. city average

All items

1982-84=100

YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	SEMIANNUAL		PERCENT CHANGE	
													1ST HALF	2ND HALF	AVG.	DEC-DEC
1941	14.1	14.1	14.2	14.3	14.4	14.7	14.7	14.9	15.1	15.3	15.4	15.5		14.7	9.9	5.0
1942	15.7	15.8	16.0	16.1	16.3	16.3	16.4	16.5	16.5	16.7	16.8	16.9		16.3	9.0	10.9
1943	16.9	16.9	17.2	17.4	17.5	17.5	17.4	17.3	17.4	17.4	17.4	17.4		17.3	3.0	6.1
1944	17.4	17.4	17.4	17.5	17.5	17.6	17.7	17.7	17.7	17.7	17.7	17.8		17.6	2.3	1.7
1945	17.8	17.8	17.8	17.8	17.9	18.1	18.1	18.1	18.1	18.1	18.1	18.2		18.0	2.2	2.3
1946	18.2	18.1	18.3	18.4	18.5	18.7	19.8	20.2	20.4	20.8	21.3	21.5		19.5	18.1	8.3
1947	21.5	21.5	21.9	21.9	21.9	22.0	22.2	22.5	23.0	23.0	23.1	23.4		22.3	8.8	14.4
1948	23.7	23.5	23.4	23.8	23.9	24.1	24.4	24.5	24.5	24.4	24.2	24.1		24.1	3.0	8.1
1949	24.0	23.8	23.8	23.9	23.8	23.9	23.7	23.8	23.9	23.7	23.8	23.6		23.8	-2.1	-1.2
1950	23.5	23.5	23.6	23.6	23.7	23.8	24.1	24.3	24.4	24.6	24.7	25.0		24.1	5.9	1.3
1951	25.4	25.7	25.8	25.8	25.9	25.9	25.9	25.9	26.1	26.2	26.4	26.5		26.0	6.0	7.9
1952	26.5	26.3	26.3	26.4	26.4	26.5	26.7	26.7	26.7	26.7	26.7	26.7		26.5	0.8	1.9
1953	26.6	26.5	26.6	26.6	26.7	26.8	26.8	26.9	26.9	27.0	26.9	26.9		26.7	0.7	0.8
1954	26.9	26.9	26.9	26.8	26.9	26.9	26.9	26.9	26.8	26.8	26.8	26.7		26.9	-0.7	0.7
1955	26.7	26.7	26.7	26.7	26.7	26.7	26.8	26.8	26.9	26.9	26.9	26.8		26.8	0.4	-0.4
1956	26.8	26.8	26.8	26.9	27.0	27.2	27.4	27.3	27.4	27.5	27.5	27.6		27.2	3.0	1.5
1957	27.6	27.7	27.8	27.9	28.0	28.1	28.3	28.3	28.3	28.3	28.4	28.4		28.1	2.9	3.3
1958	28.6	28.6	28.8	28.9	28.9	28.9	29.0	28.9	28.9	28.9	29.0	28.9		28.9	1.8	2.8
1959	29.0	28.9	28.9	29.0	29.0	29.1	29.2	29.2	29.3	29.4	29.4	29.4		29.1	1.7	0.7
1960	29.3	29.4	29.4	29.5	29.5	29.6	29.6	29.6	29.6	29.8	29.8	29.8		29.6	1.4	1.7
1961	29.8	29.8	29.8	29.8	29.8	29.8	30.0	29.9	30.0	30.0	30.0	30.0		29.9	0.7	1.0
1962	30.0	30.1	30.1	30.2	30.2	30.2	30.3	30.3	30.4	30.4	30.4	30.4		30.2	1.3	1.0
1963	30.4	30.4	30.5	30.5	30.5	30.6	30.7	30.7	30.7	30.8	30.8	30.9		30.6	1.6	1.3
1964	30.9	30.9	30.9	30.9	30.9	31.0	31.1	31.0	31.1	31.1	31.2	31.2		31.0	1.0	1.3
1965	31.2	31.2	31.3	31.4	31.4	31.6	31.6	31.6	31.6	31.7	31.7	31.8		31.5	1.9	1.6
1966	31.8	32.0	32.1	32.3	32.3	32.4	32.5	32.7	32.7	32.9	32.9	32.9		32.4	3.5	2.9
1967	32.9	32.9	33.0	33.1	33.2	33.3	33.4	33.5	33.6	33.7	33.8	33.9		33.4	3.0	3.1
1968	34.1	34.2	34.3	34.4	34.5	34.7	34.9	35.0	35.1	35.3	35.4	35.5		34.8	4.7	4.2
1969	35.6	35.8	36.1	36.3	36.4	36.6	36.8	37.0	37.1	37.3	37.5	37.7		36.7	6.2	5.5

Table 5.5
 U.S. Department of Labor
 Bureau of Labor Statistics
 Washington, D.C. 20212

Consumer Price Index
 All Urban Consumers - (CPI-U)
 U.S. city average
 All items
 1982-84=100

YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	SEMIANNUAL		PERCENT CHANGE		
													1ST HALF	2ND HALF	AVG.	DEC-DEC	AVG-AVG
1970	37.8	38.0	38.2	38.5	38.6	38.8	39.0	39.0	39.2	39.4	39.6	39.8			38.8	5.6	5.7
1971	39.8	39.9	40.0	40.1	40.3	40.6	40.7	40.8	40.8	40.9	40.9	41.1			40.5	3.3	4.4
1972	41.1	41.3	41.4	41.5	41.6	41.7	41.9	42.0	42.1	42.3	42.4	42.5			41.8	3.4	3.2
1973	42.6	42.9	43.3	43.6	43.9	44.2	44.3	45.1	45.2	45.6	45.9	46.2			44.4	8.7	6.2
1974	46.6	47.2	47.8	48.0	48.6	49.0	49.4	50.0	50.6	51.1	51.5	51.9			49.3	12.3	11.0
1975	52.1	52.5	52.7	52.9	53.2	53.6	54.2	54.3	54.6	54.9	55.3	55.5			53.8	6.9	9.1
1976	55.6	55.8	55.9	56.1	56.5	56.8	57.1	57.4	57.6	57.9	58.0	58.2			56.9	4.9	5.8
1977	58.5	59.1	59.5	60.0	60.3	60.7	61.0	61.2	61.4	61.6	61.9	62.1			60.6	6.7	6.5
1978	62.5	62.9	63.4	63.9	64.5	65.2	65.7	66.0	66.5	67.1	67.4	67.7			65.2	9.0	7.6
1979	68.3	69.1	69.8	70.6	71.5	72.3	73.1	73.8	74.6	75.2	75.9	76.7			72.6	13.3	11.3
1980	77.8	78.9	80.1	81.0	81.8	82.7	82.7	83.3	84.0	84.8	85.5	86.3			82.4	12.5	13.5
1981	87.0	87.9	88.5	89.1	89.8	90.6	91.6	92.3	93.2	93.4	93.7	94.0			90.9	8.9	10.3
1982	94.3	94.6	94.5	94.9	95.8	97.0	97.5	97.7	97.9	98.2	98.0	97.6			96.5	3.8	6.2
1983	97.8	97.9	97.9	98.6	99.2	99.5	99.9	100.2	100.7	101.0	101.2	101.3			99.6	3.8	3.2
1984	101.9	102.4	102.6	103.1	103.4	103.7	104.1	104.5	105.0	105.3	105.3	105.3	102.9	104.9	103.9	3.9	4.3
1985	105.5	106.0	106.4	106.9	107.3	107.6	107.8	108.0	108.3	108.7	109.0	109.3	106.6	108.5	107.6	3.8	3.6
1986	109.6	109.3	108.8	108.6	108.9	109.5	109.5	109.7	110.2	110.3	110.4	110.5	109.1	110.1	109.6	1.1	1.9
1987	111.2	111.6	112.1	112.7	113.1	113.5	113.8	114.4	115.0	115.3	115.4	115.4	112.4	114.9	113.6	4.4	3.6
1988	115.7	116.0	116.5	117.1	117.5	118.0	118.5										

U.S. Department of Labor
Bureau of Labor Statistics
Washington, D.C. 20212

Consumer Price Index

All Urban Consumers - (CPI-U)

U.S. city average

Telephone services

1982-84=100

YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVG.	PERCENT CHANGE	
														DEC-DEC	AVG-AVG
1935													36.8		
1936													36.6		-0.5
1937													36.1		-1.4
1938													36.1		0.0
1939													36.1		0.0
1940													36.1		0.0
1941													36.3		0.6
1942													38.3		5.5
1943													39.5		3.1
1944													40.7		3.0
1945													41.3		1.5
1946													41.3		0.0
1947			41.4			41.5			42.8			42.8	42.0		1.7
1948			43.7			43.9			44.6			44.9	44.1	4.9	5.0
1949			44.9			45.0			46.7			48.8	46.0	8.7	4.3
1950			48.9			49.2			50.0			50.6	49.5	3.7	7.6
1951			50.5			50.6			50.6			51.1	50.6	1.0	2.2
1952			52.4			52.4			52.6			53.1	52.5	3.9	3.8
1953			53.3			54.3			55.3			55.3	54.3	4.1	3.4
1954			55.3			52.6			52.6			52.7	53.4	-4.7	-1.7
1955			52.7			52.7			53.0			53.0	52.9	0.6	-0.9
1956			53.2			53.2			53.9			54.3	53.5	2.5	1.1
1957			54.3			54.3			54.5			55.5	54.5	2.2	1.9
1958			55.9			56.1			56.3			56.3	56.1	1.4	2.9
1959			57.3			57.4			57.7			57.7	57.4	2.5	2.3
1960			58.1			58.1			58.8			58.5	58.3	1.4	1.6
1961			58.5			58.5			58.5			58.5	58.5	0.0	0.3
1962			58.5			58.5			58.5			58.5	58.5	0.0	0.0

U.S. Department of Labor
Bureau of Labor Statistics
Washington, D.C. 20212

Consumer Price Index

All Urban Consumers - (CPI-U)

U.S. city average

Telephone services

1982-84=100

YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVG.	PERCENT CHANGE	
														DEC-DEC	AVG-AVG
1963			58.5			58.6			58.6			58.6	58.6	0.2	0.2
1964						58.6						58.5	58.6	-0.2	0.0
1965						57.7						57.5	57.7	-1.7	-1.5
1966			53.8			57.4			57.4			57.4	56.5	-0.2	-2.1
1967			57.3			57.3			57.4			56.7	57.3	-1.2	1.4
1968			56.9			57.3			57.4			57.7	57.3	1.8	0.0
1969	57.7	57.8	57.8	57.9	57.9	58.1	58.1	58.1	58.1	58.1	58.1	58.2	58.0	0.9	1.2
1970	57.7	57.5	58.2	58.6	58.7	58.7	58.9	58.9	59.0	59.1	59.6	59.6	58.7	2.4	1.2
1971	60.0	60.6	60.6	60.8	60.8	60.9	62.4	62.5	62.5	62.5	62.5	62.7	61.6	5.2	4.9
1972	63.3	64.4	64.4	64.5	64.6	65.1	65.2	65.3	65.6	65.8	65.8	65.9	65.0	5.1	5.5
1973	65.6	65.9	66.0	66.1	66.2	66.4	66.4	67.0	67.1	67.3	67.3	69.0	66.7	4.7	2.6
1974	69.2	69.3	69.3	69.3	69.3	69.3	69.4	69.4	69.9	69.9	69.9	69.9	69.5	1.3	4.2
1975	69.7	70.1	70.7	70.9	71.2	71.7	71.9	72.2	72.4	72.6	73.6	73.8	71.7	5.6	3.2
1976	73.3	73.4	73.8	73.8	73.9	74.0	74.0	75.0	74.9	75.0	75.3	75.3	74.3	2.0	3.6
1977	74.7	74.7	74.8	75.0	75.0	75.1	75.1	75.2	75.4	75.5	75.6	75.7	75.2	0.5	1.2
1978	75.6	75.8	75.8	76.0	76.0	76.0	76.1	76.3	76.3	76.2	76.2	76.3	76.0	0.8	1.1
1979	75.9	75.7	75.6	75.6	75.7	75.6	75.6	75.9	75.8	75.1	76.3	76.9	75.8	0.8	-0.3
1980	76.4	76.0	76.3	76.4	76.7	77.6	78.0	78.2	78.4	78.7	79.4	80.3	77.7	4.4	2.5
1981	80.8	81.5	81.6	82.1	82.5	82.2	84.3	85.4	87.3	88.4	89.1	89.8	84.6	11.8	8.9
1982	90.0	90.4	90.8	92.1	92.5	93.5	93.8	94.0	94.8	95.2	95.4	96.3	93.2	7.2	10.2
1983	98.1	98.3	98.5	98.4	98.9	99.3	99.5	99.6	99.9	99.7	100.4	99.8	99.2	3.6	6.4
1984	105.0	107.0	106.4	106.7	106.9	107.1	107.7	107.9	108.7	108.8	109.4	109.0	107.5	9.2	8.4
1985	109.3	108.3	109.5	109.4	109.6	112.1	112.9	113.6	113.7	113.8	114.2	114.1	111.7	4.7	3.9
1986	114.6	114.8	115.3	116.5	116.5	118.7	118.7	118.8	118.3	118.9	117.6	117.2	117.2	2.7	4.9
1987	116.6	116.4	116.4	116.7	116.4	115.6	116.7	117.1	116.6	117.0	116.9	115.7	116.5	-1.3	-0.6
1988	115.8	116.6	116.2	116.6	116.6	115.8	115.8								

U.S. Department of Labor
Bureau of Labor Statistics
Washington, D.C. 20212

Consumer Price Index

All Urban Consumers - (CPI-U)

U.S. city average

Telephone, local charges

1982-84=100

YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVG.	PERCENT CHANGE	
														DEC-DEC	AVG-AVG
1977												69.2			
1978	69.2	69.8	69.7	70.0	69.9	69.9	70.1	70.4	70.5	70.1	70.2	70.2	70.0	1.4	
1979	69.6	69.5	69.4	69.4	69.6	69.2	69.2	69.5	69.4	68.3	70.4	71.4	69.6	1.7	-0.6
1980	71.0	71.0	71.4	71.6	72.1	72.8	72.9	72.9	73.3	73.7	74.9	76.4	72.8	7.0	4.6
1981	77.2	78.5	78.6	79.4	79.9	79.5	80.7	81.1	83.3	84.0	85.4	86.0	81.1	12.6	11.4
1982	85.8	86.7	86.9	88.5	89.2	90.7	91.2	91.6	92.9	93.5	93.6	95.3	90.5	10.8	11.6
1983	97.2	96.8	97.0	96.8	97.5	98.1	98.1	98.3	98.6	98.3	99.5	98.3	97.9	3.1	8.2
1984	106.7	110.0	109.1	109.1	109.5	110.7	112.3	112.9	114.3	114.5	115.4	115.2	111.6	17.2	14.0
1985	115.6	113.8	116.0	115.8	116.0	121.3	123.0	123.9	124.2	124.3	125.2	125.5	120.4	8.9	7.9
1986	126.2	126.4	127.2	129.5	129.5	135.6	137.0	137.2	136.5	137.5	135.1	134.4	132.7	7.1	10.2
1987	137.6	137.5	137.4	138.2	138.1	137.5	141.0	141.9	140.9	141.3	141.4	138.9	139.3	3.3	5.0
1988	139.9	141.6	141.1	142.0	142.0	140.8	141.4								

U.S. Department of Labor
Bureau of Labor Statistics
Washington, D.C. 20212

Consumer Price Index

All Urban Consumers - (CPI-U)

U.S. city average

Telephone, interstate toll calls

1982-84=100

YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVG.	PERCENT CHANGE	
														DEC-DEC	AVG-AVG
1977												83.4			
1978	82.9	82.7	82.8	82.6	82.6	82.7	82.7	82.7	82.7	82.7	82.8	82.8	82.7	-0.7	
1979	82.3	82.1	82.0	82.0	82.0	82.1	82.1	82.2	82.1	82.1	82.1	82.1	82.1	-0.8	-0.7
1980	81.5	81.2	81.2	81.2	81.2	83.0	84.8	85.0	85.2	85.2	84.8	84.9	83.3	3.4	1.5
1981	84.9	84.9	84.9	84.9	84.9	84.9	91.0	94.6	95.8	97.3	97.3	97.3	90.3	14.6	8.4
1982	97.4	97.3	98.2	100.0	100.1	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.4	2.7	10.1
1983	100.9	101.6	101.6	101.6	101.6	101.6	101.7	101.7	101.7	101.4	101.4	101.3	101.5	1.4	2.1
1984	101.3	102.1	102.1	102.0	102.3	98.9	96.9	96.8	96.8	97.0	96.9	96.9	99.2	-4.3	-2.3
1985	96.9	96.9	96.9	96.9	97.4	94.7	93.1	93.3	93.3	93.3	93.3	93.3	94.9	-3.7	-4.3
1986	93.3	93.3	93.3	93.3	93.3	88.0	84.7	84.4	84.4	84.4	84.4	84.5	88.4	-9.4	-6.8
1987	77.1	77.1	77.1	77.0	76.7	76.7	73.4	73.4	73.7	73.7	73.7	74.0	75.3	-12.4	-14.8
1988	72.2	72.2	72.0	72.1	72.1	72.1	72.1								

Table 5.5

U.S. Department of Labor
Bureau of Labor Statistics
Washington, D.C. 20212

Consumer Price Index

All Urban Consumers - (CPI-U)

U.S. city average

Telephone, intrastate toll calls

1982-84=100

YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVG.	PERCENT CHANGE	
														DEC-DEC	AVG-AVG
1977												85.4			
1978	85.5	84.9	85.1	85.6	85.5	85.5	85.5	85.6	85.7	85.6	85.6	86.5	85.5	1.3	
1979	86.1	86.0	86.0	86.0	86.0	86.4	86.5	86.6	86.6	86.8	86.6	86.6	86.4	0.1	1.1
1980	86.1	84.3	84.3	84.5	84.9	85.0	84.9	85.3	85.5	85.5	85.9	86.1	85.2	-0.6	-1.4
1981	86.2	86.4	86.4	86.6	86.8	86.6	86.6	86.9	88.7	90.1	89.9	91.4	87.8	6.2	3.1
1982	93.2	93.1	93.1	93.0	93.3	93.7	93.9	93.9	94.0	94.2	94.8	95.2	93.8	4.2	6.8
1983	97.3	98.9	99.3	99.5	100.0	100.2	100.9	101.0	101.2	101.6	102.3	102.2	100.4	7.4	7.0
1984	104.2	104.2	104.1	105.6	105.1	106.5	107.5	106.6	106.5	106.5	107.1	105.9	105.9	3.6	5.5
1985	105.9	105.8	106.1	106.0	105.8	106.2	107.5	107.8	107.8	108.0	107.9	106.5	106.8	0.6	0.8
1986	106.7	107.0	107.1	106.8	106.9	106.7	106.7	107.0	106.5	106.8	106.5	106.8	106.8	0.3	0.0
1987	107.0	106.4	106.4	106.3	105.2	102.7	104.0	103.8	103.5	104.1	103.6	103.6	104.7	-3.0	-2.0
1988	104.1	103.6	103.2	102.9	102.8	102.3	100.3								

Table 5.6

Price indexes for selected telephone services, January 1972-July 1988
(1972 = 100)

4811-1 Local service

	Avg.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1972	100.0	98.1	99.1	99.1	99.7	100.6	100.8	100.8	99.6	100.5	100.5	100.5	100.5
1973	102.7	100.8	101.3	101.5	101.9	101.9	101.9	101.9	102.9	102.9	104.8	104.8	105.9
1974	108.4	107.4	107.7	107.7	107.7	107.7	107.7	107.7	109.2	109.2	109.6	109.6	109.6
1975	112.8	109.8	111.4	111.6	111.6	111.9	112.0	112.8	113.1	114.1	114.1	115.4	115.4
1976	118.4	117.0	117.7	117.7	117.9	118.3	118.9	118.8	118.9	118.9	118.9	119.1	119.1
1977	118.5	119.1	117.6	118.2	118.4	118.4	118.5	118.4	118.4	118.4	118.4	119.1	119.5
1978	121.9	120.2	120.9	120.9	120.9	120.9	120.9	120.9	122.0	123.7	123.7	123.7	124.3
1979	123.8	124.3	123.9	123.0	123.0	123.0	123.0	123.0	123.3	123.9	124.4	124.4	126.1
1980	127.5	125.3	125.4	125.4	126.0	126.2	126.2	126.2	126.2	127.2	130.4	132.5	133.0
1981	141.2	133.4	135.3	135.6	136.3	138.0	138.0	138.0	141.5	142.6	144.3	146.9	151.0
1982	154.6	149.5	149.5	149.5	151.2	152.3	153.3	153.3	153.7	158.8	160.4	160.9	162.3
1983	163.7	162.6	162.9	163.4	163.1	162.6	163.3	163.8	163.9	164.3	164.7	164.8	164.8
1984	179.5	171.2	171.2	171.2	171.9	172.1	177.9	182.2	185.7	187.6	187.7	187.5	187.6
1985	197.4	188.9	190.7	190.6	190.6	191.0	200.6	200.8	201.6	202.2	202.3	204.8	204.8
1986	212.7	206.5	206.7	206.7	206.7	206.7	216.6	216.6	216.9	217.5	217.5	216.8	216.8
1987	218.0	216.7	216.6	216.8	216.1	216.1	216.1	220.1	219.9	219.3	219.3	219.3	219.3
1988		218.7	218.2	218.4	218.4	218.4	218.4	217.9					

4811-111 Local service, residential

	Avg.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1972	100.0	97.7	98.9	98.9	99.5	100.7	100.9	100.9	99.7	100.7	100.7	100.7	100.7
1973	102.9	101.0	101.5	101.6	102.0	102.0	102.0	102.0	103.0	103.0	105.2	105.2	106.7
1974	108.8	108.1	108.3	108.3	108.3	108.3	108.3	108.3	109.4	109.3	109.7	109.7	109.7
1975	113.3	109.9	112.0	112.2	112.2	112.4	112.5	113.4	113.6	114.8	114.8	116.2	116.2
1976	118.9	118.0	118.0	118.0	118.2	118.6	119.2	119.2	119.3	119.3	119.3	119.6	119.6
1977	119.3	119.6	118.3	119.0	119.3	119.3	119.3	119.1	119.1	119.1	119.1	120.1	120.5
1978	122.1	120.2	121.0	121.0	121.0	121.0	121.0	121.0	122.2	124.2	124.2	124.2	124.2
1979	123.4	124.0	123.6	122.5	122.5	122.5	122.5	122.5	122.8	123.5	124.0	124.0	126.2
1980	128.0	125.3	125.3	125.4	125.9	126.3	126.3	126.3	126.3	127.4	131.6	134.5	135.1
1981	144.1	135.6	137.0	137.3	138.2	140.0	140.0	144.5	145.1	147.4	151.2	156.2	156.2
1982	160.6	154.9	154.9	154.9	156.7	157.3	158.4	158.4	159.0	165.8	167.8	168.4	170.2
1983	169.6	168.7	169.0	169.5	169.2	168.4	169.1	169.6	169.7	170.2	170.5	170.6	170.6
1984	182.4	177.8	177.8	177.7	177.7	178.1	178.6	181.4	186.0	188.7	188.7	188.3	188.4
1985	202.6	189.8	191.9	191.9	191.9	192.3	208.8	209.2	210.4	211.0	211.0	211.7	211.7
1986	223.6	213.4	213.6	213.6	213.6	213.6	230.3	230.3	230.8	231.3	231.3	230.5	230.5
1987	233.1	230.1	230.0	230.3	229.2	229.2	229.2	236.6	236.6	236.6	236.6	236.6	236.6
1988		236.1	235.5	235.7	235.7	235.7	235.6	235.1					

Table 5.6

4811-112	Local service, business												
	Avg.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1972	100.0	97.8	98.7	98.7	99.8	100.7	100.8	100.8	99.3	100.8	100.9	100.9	100.9
1973	104.0	101.2	102.0	102.6	103.4	103.4	103.4	103.4	104.2	104.3	106.5	106.5	107.3
1974	111.1	109.2	109.8	109.8	109.8	109.8	109.8	109.9	112.2	112.4	113.4	113.4	113.4
1975	117.1	113.6	115.2	115.3	115.3	115.6	115.9	117.3	117.8	119.1	119.1	120.4	120.5
1976	123.9	122.9	122.9	122.9	123.4	123.8	124.3	124.3	124.4	124.4	124.4	124.5	124.5
1977	122.4	124.5	121.0	121.9	122.1	122.1	122.2	122.1	122.1	122.1	122.1	122.9	123.4
1978	126.0	123.4	124.5	124.5	124.5	124.5	124.5	124.5	126.2	128.8	128.8	128.8	128.8
1979	128.5	128.8	128.2	127.5	127.5	127.5	127.5	127.5	127.8	128.8	129.5	129.5	131.6
1980	132.9	130.4	130.4	130.5	130.9	131.3	131.3	131.3	131.4	133.0	136.7	138.2	139.2
1981	148.8	139.6	141.4	141.6	142.8	144.1	144.1	148.6	152.2	153.8	155.4	161.0	161.0
1982	162.7	157.7	157.7	157.7	159.7	160.1	161.4	161.4	162.0	167.2	168.4	169.0	170.3
1983	172.7	170.8	171.2	172.2	172.0	171.5	172.3	173.1	173.2	173.6	174.0	174.1	174.1
1984	200.4	180.3	180.3	180.5	183.7	183.7	208.1	211.0	213.7	215.8	215.9	215.9	216.0
1985	222.7	218.2	220.7	220.7	220.7	220.9	222.2	222.2	222.9	223.9	224.6	228.0	228.0
1986	232.9	230.8	231.3	231.3	231.3	231.3	234.0	234.0	234.1	234.6	234.6	233.6	233.6
1987	232.9	234.0	234.0	234.1	233.5	233.5	233.5	232.7	232.0	231.9	231.8	231.8	231.8
1988		230.7	230.5	230.7	230.7	230.7	230.7	230.1					

4811-113	Local service, optional additional usage												
	Avg.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1972	100.0	99.5	100.4	100.4	100.4	100.4	100.9	100.9	99.4	99.4	99.4	99.4	99.4
1973	100.3	99.7	99.8	99.8	99.9	99.9	99.9	99.9	101.0	101.0	101.1	101.1	101.1
1974	104.6	103.3	103.6	103.6	103.6	103.6	103.6	103.6	106.0	106.0	106.0	106.0	106.0
1975	107.5	106.1	106.1	107.4	107.4	107.4	107.4	107.5	107.5	107.9	107.9	109.0	109.0
1976	110.3	109.0	109.4	109.4	109.4	110.2	110.8	110.8	110.8	110.8	110.8	110.8	110.9
1977	111.0	110.9	110.9	110.9	110.9	110.9	111.1	111.1	111.1	111.1	111.1	111.1	111.2
1978	117.6	117.6	117.6	117.6	117.6	117.6	117.6	117.6	117.6	117.6	117.7	117.7	117.7
1979	117.7	117.7	117.7	117.7	117.7	117.7	117.7	117.7	117.7	117.7	117.7	117.7	117.7
1980	118.2	117.7	117.7	117.7	119.4	118.3	118.3	118.3	118.3	118.3	118.3	118.3	118.3
1981	123.2	118.5	123.1	123.1	123.1	123.8	123.8	123.8	123.8	123.8	123.8	124.1	124.1
1982	124.6	124.1	124.1	124.1	124.1	124.2	124.2	124.2	124.2	124.2	125.6	125.9	125.9
1983	126.2	125.9	125.9	125.9	125.7	125.7	126.2	126.2	126.2	126.2	127.0	127.0	127.0
1984	123.4	124.3	124.3	124.3	124.3	124.3	124.3	122.5	122.5	122.5	122.5	122.5	122.5
1985	123.8	122.5	122.5	122.5	122.5	122.5	122.5	122.5	122.5	122.5	130.2	130.2	130.2
1986	130.7	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	131.5	131.5	131.5	131.5
1987	130.3	131.5	131.5	131.5	131.5	131.5	131.5	131.5	131.5	127.8	127.8	127.8	127.7
1988		127.7	127.7	127.7	127.7	127.7	127.7	127.7					

Table 5.6

4811-114 Local service, coin

	Avg.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1972	100.0	99.8	100.0	100.0	100.0	100.0	100.0	100.0	99.9	100.1	100.1	100.1	100.1
1973	101.2	100.1	100.1	100.1	100.1	100.1	100.1	100.1	101.5	101.5	103.4	103.4	103.7
1974	103.8	103.8	103.8	103.8	103.8	103.8	103.8	103.8	103.9	103.9	103.9	103.9	103.9
1975	104.3	103.9	103.9	103.9	103.9	103.9	103.9	103.9	103.9	104.6	104.9	105.2	105.2
1976	113.9	105.7	114.6	114.6	114.6	114.6	114.6	114.6	114.7	114.7	114.7	114.7	114.7
1977	114.7	114.7	114.7	114.7	114.7	114.7	114.7	114.7	114.7	114.7	114.7	114.8	114.9
1978	116.2	115.0	115.0	115.4	115.4	115.4	115.4	115.4	115.5	115.6	115.6	115.6	124.7
1979	124.3	124.7	124.5	124.2	124.2	124.2	124.2	124.2	124.2	124.2	124.3	124.3	124.5
1980	124.6	124.5	124.5	124.5	124.5	124.5	124.5	124.5	124.5	124.8	124.8	124.8	125.1
1981	128.2	125.1	125.3	125.9	126.0	129.1	129.1	129.1	129.3	129.5	130.0	130.0	130.0
1982	139.4	130.0	130.0	130.0	132.8	143.2	143.6	143.6	143.1	144.0	144.0	144.0	144.0
1983	162.6	161.0	161.0	161.0	160.9	161.8	162.9	163.2	163.2	163.4	164.3	164.5	164.5
1984	205.8	184.2	184.2	184.4	184.6	184.6	189.0	222.3	227.2	227.2	227.2	227.5	227.5
1985	230.6	228.2	228.9	228.9	228.9	230.5	230.7	230.8	230.8	231.2	231.3	233.8	233.8
1986	234.6	234.3	234.3	234.3	234.3	234.3	234.6	234.6	234.7	234.9	234.9	234.9	234.9
1987	234.7	235.0	234.9	234.9	234.9	234.9	234.9	234.9	234.6	234.5	234.5	234.5	234.5
1988		234.2	233.1	233.1	233.1	233.1	233.1	233.1					

4811-2 Toll service

	Avg.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1972	100.0	98.7	99.3	99.3	99.3	99.8	100.2	100.2	100.5	100.7	100.7	100.7	100.7
1973	102.9	100.7	102.4	102.5	102.5	102.5	102.5	102.5	103.4	103.4	103.8	103.8	104.3
1974	104.7	104.6	104.6	104.6	104.6	104.6	104.5	104.4	104.4	104.4	105.1	105.1	105.1
1975	111.6	105.4	105.4	111.6	111.6	111.6	111.6	112.3	113.1	113.1	113.5	114.7	114.8
1976	120.2	115.4	115.6	119.6	119.6	120.4	120.8	120.8	122.0	122.0	122.0	122.0	122.0
1977	123.5	123.3	123.1	123.1	123.2	123.2	123.3	123.1	123.1	124.2	124.3	124.3	124.3
1978	124.2	124.3	124.2	124.3	124.3	124.3	124.3	124.3	124.3	124.3	124.3	123.8	123.9
1979	123.2	123.3	123.2	123.2	123.3	123.2	123.1	123.1	123.1	123.1	123.4	123.3	123.3
1980	125.9	123.4	123.2	123.2	123.4	123.6	127.5	127.5	127.5	127.5	127.9	128.3	128.3
1981	134.8	129.1	129.0	129.0	129.0	128.7	128.7	139.2	139.2	141.0	141.3	141.3	142.1
1982	145.9	143.1	143.1	143.1	146.4	146.4	146.7	146.7	146.8	146.8	147.1	147.1	147.5
1983	149.3	148.8	148.8	149.0	148.9	149.0	149.3	149.4	149.4	149.4	149.8	149.8	149.8
1984	148.5	150.7	150.6	150.7	150.8	150.5	146.2	146.6	147.1	147.3	147.3	146.8	147.4
1985	147.2	147.6	147.7	147.7	148.1	149.9	146.3	146.3	146.6	146.5	146.5	146.7	146.2
1986	139.8	146.2	146.2	146.2	144.1	144.1	135.9	135.9	135.8	135.8	136.0	136.0	136.0
1987	126.8	128.8	128.5	128.5	128.4	128.1	128.0	125.4	125.4	124.9	124.9	125.2	125.2
1988		123.5	123.1	123.1	123.1	123.0	123.0	121.3					

Table 5.6

4811-211 Toll service, intrastate MTS		Avg.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1972		100.0	96.6	98.1	98.1	98.1	99.6	100.4	100.4	101.3	101.8	101.8	101.8	101.8
1973		103.3	101.9	102.1	102.1	102.1	102.1	102.1	102.1	104.2	104.2	105.4	105.4	106.3
1974		107.7	107.2	107.2	107.2	107.2	107.2	107.2	107.2	107.2	107.2	109.1	109.1	109.1
1975		113.8	109.8	109.8	111.6	111.6	111.6	111.6	113.5	115.4	115.4	116.4	119.3	119.3
1976		125.6	121.0	121.4	122.6	122.6	124.7	125.7	125.7	128.6	128.6	128.6	128.6	128.6
1977		131.9	132.2	131.5	131.5	131.8	131.8	132.0	132.0	132.0	132.0	132.0	132.0	132.0
1978		132.0	132.1	132.0	132.0	132.0	132.0	132.0	132.0	132.0	132.0	132.0	132.0	132.1
1979		131.6	132.1	131.9	131.9	131.9	131.9	131.5	131.5	131.5	131.5	131.5	131.2	131.2
1980		132.3	131.5	131.1	131.1	131.3	132.1	132.2	132.2	132.2	132.2	133.2	134.1	134.2
1981		137.3	136.0	136.0	136.0	136.0	135.1	135.1	135.1	135.1	139.5	140.4	140.4	142.4
1982		145.6	144.9	144.9	144.9	145.2	145.3	145.5	145.5	145.5	145.6	146.4	146.4	147.4
1983		152.1	151.1	151.1	151.7	151.5	151.5	152.2	152.2	152.3	152.3	153.2	153.2	153.2
1984		157.0	155.9	155.9	155.9	156.1	155.3	155.9	157.0	158.3	158.9	158.9	157.5	159.0
1985		162.0	159.8	159.8	159.8	161.0	162.6	162.8	162.8	163.4	163.2	163.2	163.7	162.4
1986		158.0	162.4	162.5	162.6	156.9	156.9	156.1	156.1	156.1	156.2	156.8	156.7	156.7
1987		153.5	156.1	155.4	155.4	155.2	154.4	154.2	152.4	152.4	151.3	151.3	152.0	152.0
1988			152.4	151.4	151.4	151.4	151.2	151.2	146.8					

4811-212 Toll service, interstate MTS		Avg.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1972		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1973		102.9	100.0	103.2	103.2	103.2	103.2	103.2	103.1	103.1	103.1	103.1	103.1	103.1
1974		103.0	103.1	103.1	103.1	103.1	103.1	102.9	102.9	102.9	102.9	102.9	102.9	102.9
1975		111.7	102.9	102.9	113.5	113.5	113.5	113.5	113.5	113.5	113.5	113.5	113.5	113.5
1976		118.9	113.5	113.5	120.2	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
1977		120.6	120.0	120.0	120.0	120.0	120.0	120.0	119.7	119.7	121.9	121.9	121.9	121.9
1978		121.9	121.9	121.9	121.9	121.9	121.9	121.9	121.9	121.9	121.9	121.9	121.9	121.9
1979		120.8	120.9	120.8	120.8	120.8	120.8	120.8	120.8	120.8	120.8	120.8	120.8	120.8
1980		124.6	120.8	120.8	120.8	120.8	120.8	127.4	127.4	127.4	127.4	127.4	127.4	127.4
1981		137.5	127.4	127.4	127.4	127.4	127.4	127.4	147.7	147.7	147.7	147.7	147.7	147.7
1982		152.0	147.7	147.7	147.7	153.4	153.4	153.4	153.4	153.4	153.4	153.4	153.4	153.4
1983		153.4	153.4	153.4	153.4	153.4	153.4	153.4	153.4	153.4	153.4	153.4	153.4	153.4
1984		148.8	153.4	153.4	153.4	153.4	153.4	145.6	145.6	145.6	145.6	145.6	145.6	145.6
1985		143.3	145.6	145.6	145.6	145.6	147.9	141.3	141.3	141.3	141.3	141.3	141.3	141.3
1986		133.0	141.3	141.3	141.3	141.3	141.3	127.2	127.1	127.1	127.1	127.1	127.1	127.1
1987		111.9	113.8	113.8	113.8	113.8	113.8	113.8	110.0	110.0	110.0	110.0	110.0	110.0
1988			107.0	107.0	107.0	107.0	107.0	107.0	107.0					

Table 5.6

4811-213 Toll service, international MTS

	Avg.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1972	100.0	100.1	100.1	100.1	100.1	100.1	100.1	100.1	100.1	100.1	100.1	100.1	99.4
1973	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
1974	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
1975	98.7	99.4	99.4	99.4	99.4	99.4	98.3	98.3	98.3	98.3	98.3	98.3	98.3
1976	100.0	98.3	98.3	99.0	100.5	100.5	100.5	100.5	100.5	100.5	100.5	100.5	100.5
1977	99.6	100.5	100.5	100.5	100.5	100.5	100.5	98.7	98.7	98.7	98.7	98.7	98.7
1978	94.9	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1
1979	85.5	84.0	84.0	84.0	84.0	83.3	83.3	83.3	82.7	82.7	91.4	91.4	91.4
1980	94.0	90.9	90.9	90.9	90.9	90.9	96.6	96.2	96.2	96.2	96.2	96.2	96.2
1981	89.4	96.2	95.2	95.2	95.2	95.2	95.2	83.5	83.5	83.5	83.5	83.5	83.5
1982	88.5	83.5	83.5	83.5	83.5	83.5	91.4	91.4	92.3	92.3	92.3	92.3	92.3
1983	92.4	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.7	92.7
1984	89.2	92.7	92.5	92.5	92.5	92.5	87.3	86.8	86.8	86.8	86.8	86.8	86.8
1985	86.6	86.8	86.8	86.8	86.8	86.8	86.5	86.5	86.5	86.5	86.5	86.5	86.5
1986	84.2	84.2	84.2	84.2	84.3	84.3	84.1	84.1	84.1	84.1	84.1	84.1	84.1
1987	84.0	84.1	84.1	84.1	84.1	84.1	84.1	84.0	84.0	84.0	84.0	83.8	83.8
1988		83.8	83.8	83.8	83.8	83.8	83.8	83.8					

4811-214 Toll service, WATS

	Avg.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1972	100.0	99.8	99.8	99.8	99.8	99.8	99.8	99.8	100.3	100.3	100.3	100.3	100.0
1973	101.8	100.1	100.1	101.5	101.5	101.5	101.5	101.5	102.6	102.6	102.6	102.8	103.5
1974	103.1	103.7	103.7	103.7	103.7	103.7	103.7	102.5	102.5	102.7	102.6	102.6	102.6
1975	105.3	102.7	102.7	104.5	105.2	105.2	105.2	105.2	105.5	106.4	106.4	106.8	108.0
1976	109.8	108.0	108.0	109.6	109.6	109.6	109.6	109.6	110.8	110.8	110.8	110.8	110.8
1977	111.6	111.1	111.3	111.3	111.4	111.4	111.4	111.4	111.6	111.6	112.3	112.3	112.4
1978	112.9	112.4	112.4	113.0	112.7	112.7	112.7	113.2	113.2	113.2	113.2	113.2	113.2
1979	113.8	113.2	113.2	113.2	113.6	113.6	113.6	113.6	114.3	114.3	114.3	114.3	114.4
1980	116.9	114.4	114.4	114.4	114.6	114.6	118.4	118.4	118.4	118.4	118.8	118.8	118.8
1981	124.9	120.2	120.2	120.2	120.2	120.2	120.5	128.9	128.9	129.8	129.8	129.8	129.9
1982	132.5	129.9	129.9	129.9	133.5	133.4	133.4	133.4	133.5	133.5	133.1	133.1	133.1
1983	132.9	131.8	131.8	131.8	131.8	132.4	132.7	133.7	133.7	133.7	133.7	133.7	133.7
1984	129.6	132.2	132.2	132.7	132.6	132.8	127.2	127.6	127.5	127.5	127.6	127.6	127.8
1985	125.3	127.6	127.6	127.8	127.8	128.2	123.5	123.5	123.5	123.7	123.6	123.5	123.3
1986	118.4	124.2	124.2	124.2	124.4	124.9	115.4	115.3	114.2	113.8	113.8	113.7	113.3
1987	110.5	111.0	110.9	110.9	110.9	110.9	110.3	110.3	110.1	110.1	110.1	110.1	110.1
1988		106.3	105.8	105.8	104.8	104.8	104.7	104.7					

Table 5.6

4811-214-11 Toll service, interstate WATS

	Avg.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1972	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1973	101.7	100.0	100.0	102.0	102.0	102.0	102.0	102.0	102.0	102.0	102.0	102.0	102.0
1974	101.1	102.0	102.0	102.0	102.0	102.0	102.0	100.3	100.3	100.3	100.3	100.3	100.3
1975	102.5	100.3	100.3	102.9	102.9	102.9	102.9	102.9	102.9	102.9	102.9	102.9	102.9
1976	104.7	102.9	102.9	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1
1977	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1
1978	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1
1979	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1
1980	108.2	105.1	105.1	105.1	105.1	105.1	110.5	110.5	110.5	110.5	110.5	110.5	110.5
1981	116.3	110.5	110.5	110.5	110.5	110.5	110.5	122.1	122.1	122.1	122.1	122.1	122.1
1982	125.8	122.1	122.1	122.1	127.1	127.1	127.1	127.1	127.1	127.1	127.1	127.1	127.1
1983	127.1	127.1	127.1	127.1	127.1	127.1	127.1	127.1	127.1	127.1	127.1	127.1	127.1
1984	122.7	127.1	127.1	127.1	127.1	127.1	119.6	119.6	119.6	119.6	119.6	119.6	119.6
1985	115.8	119.6	119.6	119.6	119.6	119.6	113.1	113.1	113.1	113.1	113.1	113.1	113.1
1986	105.9	113.1	113.1	113.1	113.1	113.9	100.8	100.6	100.6	100.6	100.6	100.6	100.6
1987	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5
1988		93.1	93.1	93.1	93.1	93.1	93.1	93.1					

4811-214-12 Toll service, intrastate WATS

	Avg.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1972	100.0	99.1	99.3	99.3	99.3	99.3	99.3	99.3	101.3	101.3	101.3	101.3	100.1
1973	102.2	100.2	100.2	100.2	100.2	100.2	100.2	100.2	104.0	104.0	104.0	104.9	107.6
1974	108.4	108.1	108.1	108.1	108.1	108.1	108.1	108.1	108.1	109.1	108.8	108.8	108.8
1975	112.8	108.8	108.8	108.5	111.2	111.2	111.2	111.2	112.4	115.7	115.7	117.0	121.6
1976	123.4	121.6	121.6	121.6	121.6	121.6	121.6	121.6	126.0	126.0	126.0	126.0	126.0
1977	128.8	126.7	127.5	127.5	127.9	127.9	127.9	127.9	128.8	128.8	131.4	131.4	131.7
1978	133.6	131.7	131.5	133.8	132.7	132.7	132.7	134.4	134.7	134.7	134.7	134.7	134.7
1979	136.8	134.7	134.7	134.7	136.0	136.0	136.0	136.0	138.5	138.5	138.5	138.5	139.0
1980	139.6	139.0	138.8	138.8	139.7	139.7	139.3	139.3	139.3	139.3	140.7	140.7	140.7
1981	147.6	145.9	145.8	145.8	145.8	146.9	146.9	146.9	146.9	150.1	150.1	150.1	150.5
1982	149.9	150.5	150.5	150.5	150.5	149.9	149.9	149.9	150.4	150.4	148.9	148.9	148.9
1983	148.2	144.1	144.3	144.3	144.3	146.3	147.6	151.2	151.2	151.2	151.2	151.2	151.1
1984	147.8	145.6	145.9	147.3	147.1	147.8	147.4	148.8	148.5	148.5	148.7	148.7	149.6
1985	150.4	148.8	148.8	149.7	149.5	150.9	151.0	151.0	151.0	151.6	151.3	150.9	150.3
1986	151.7	153.6	153.6	153.6	154.2	154.1	154.3	154.3	150.2	148.9	148.7	148.6	146.9
1987	144.9	146.9	146.4	146.4	146.4	146.4	146.4	144.1	143.7	143.6	143.4	143.4	143.4
1988		141.1	139.5	139.5	135.9	135.9	135.3	135.3					

Table 5.6

4811-311		Private lines, interstate											
	Avg.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1972	100.0	98.5	100.1	100.1	100.1	100.1	100.1	100.1	100.1	100.1	100.1	100.1	100.1
1973	100.1	100.1	100.1	100.1	100.1	100.1	100.1	100.1	100.1	100.1	100.1	100.1	99.6
1974	99.5	99.6	99.6	99.6	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
1975	103.4	99.5	99.5	99.5	102.2	103.6	103.8	103.8	103.8	103.8	107.0	107.0	107.0
1976	108.2	107.0	107.0	108.7	109.0	109.0	108.3	108.3	108.3	108.3	108.3	108.3	108.3
1977	108.4	108.3	108.3	108.3	108.3	108.3	108.4	108.4	108.4	108.4	108.4	108.7	108.6
1978	108.6	108.6	108.6	108.6	108.6	108.6	108.6	108.6	108.6	108.6	108.6	108.6	108.6
1979	108.5	108.6	108.6	108.6	108.7	108.7	108.7	108.7	108.7	108.3	108.3	108.3	108.3
1980	109.7	108.3	108.3	108.3	108.3	108.3	110.7	110.7	110.7	110.8	110.8	110.8	110.8
1981	133.5	110.8	110.8	110.8	110.8	117.2	117.2	153.3	153.3	154.5	154.5	154.5	154.5
1982	156.3	154.5	154.5	154.5	156.9	156.9	156.9	156.9	156.9	156.9	156.9	156.9	156.9
1983	157.0	156.9	156.9	156.9	156.9	156.9	156.9	156.9	156.9	156.9	156.9	156.9	158.4
1984	159.2	158.4	158.4	158.4	158.4	158.4	158.4	158.4	158.4	158.4	158.4	163.1	163.1
1985	165.9	163.1	163.1	159.2	159.2	168.3	168.3	168.3	168.3	168.3	168.3	168.3	168.3
1986	168.3	168.3	168.3	168.3	168.3	168.3	168.3	168.3	168.3	168.3	168.3	168.3	168.3
1987	168.3	168.3	168.3	168.3	168.3	168.3	168.3	168.3	168.3	168.3	168.3	168.3	168.3
1988		168.3	168.3	168.3	168.3	168.3	168.3	168.3	168.3	168.3	168.3	168.3	168.3

4811-911		Directory advertising											
	Avg.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1973	98.4	99.9	99.4	98.4	98.8	98.2	98.3	98.2	98.3	98.0	98.0	97.8	97.8
1974	104.3	97.5	97.8	99.1	101.0	103.0	105.0	105.4	105.9	107.3	109.1	109.9	110.6
1975	117.2	112.1	113.3	115.3	115.7	115.8	116.6	117.0	118.3	119.3	120.5	121.1	121.6
1976	125.1	122.6	122.3	122.9	123.5	125.1	125.6	125.7	125.9	126.4	126.8	127.1	127.4
1977	131.5	128.6	128.9	129.8	130.5	130.0	131.1	131.4	131.6	132.9	134.0	134.3	134.7
1978	139.3	134.9	135.6	136.1	137.0	139.2	140.7	141.1	140.7	140.2	141.3	142.2	143.2
1979	148.0	144.0	143.9	145.4	145.9	146.4	147.4	148.2	149.9	152.0	151.2	151.4	150.7
1980	155.4	151.6	152.8	153.0	153.3	153.8	154.6	155.3	156.2	157.0	158.5	159.2	159.5
1981	159.4	159.9	158.2	159.1	160.0	160.7	160.6	160.1	157.0	157.3	159.2	159.5	160.7
1982	172.0	164.7	166.4	166.4	168.5	170.4	170.2	171.2	173.4	175.6	177.5	179.3	180.2
1983	193.5	182.6	184.5	185.2	188.1	190.6	192.4	194.0	196.3	198.8	201.0	203.7	204.9
1984	216.9	207.9	208.9	209.9	212.4	214.8	219.0	220.0	222.0	219.5	221.5	222.8	224.4
1985	240.5	228.2	230.9	233.2	236.1	238.7	243.3	243.8	244.0	244.9	246.5	248.0	248.2
1986	258.5	249.6	251.6	253.0	254.6	257.8	260.2	260.7	261.7	262.3	262.9	263.8	264.3
1987	270.7	265.8	266.9	267.7	269.6	268.1	270.7	270.1	270.4	271.6	274.5	276.4	276.2
1988		280.1	282.4	283.4	284.1	284.1	284.3	283.4					

INFORMATION ON RATE LEVELS:

This section describes the level of local and long distance rates and access charges in dollar terms.

Local Rates

Local rates are regulated by state regulatory agencies and vary greatly from area to area. Characterization of any rate as "typical" is therefore difficult. In most states, the Bell Operating Companies and larger independent telephone companies charge higher rates in metropolitan areas than in rural areas -- a pricing practice that dates back to the turn of the century and is traditionally justified by the belief that the value of the service provided is higher for subscribers with more populous local calling areas. This also reflects the fact that the operating companies forego toll revenue when exchange calling areas increase in size. California differs from most states in that rates are averaged throughout the state. There, the basic local rate is \$8.25 for areas served by Pacific Bell and \$9.75 for areas served by General of California.

Table 5.7 presents average local residential rates in October 1986, April 1987, October 1987 and April 1988. The price indexes published by the BLS indicate percentage changes in the price of the telephone services. The BLS does not publish the actual level of rates. The averages shown in Table 5.7 are based on a FCC survey using the same sampling areas and weights used by the Bureau of Labor Statistics (BLS) in constructing the Consumer Price Index. In April 1988, the national average for flat rate residential service was \$12.22 monthly. In April 1987 this average rate was \$12.51, and in October 1987 this average rate was \$12.19. Lower-priced service alternatives are frequently available, at an average monthly charge of \$5.69. 2

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- 2 The methodology used in conducting the survey is contained in the Primer and Sourcebook on Telephone Price Indexes and Rate Levels. The city specific data from the October 1986 survey is contained in Appendix 6 of the Primer. The city specific data from the April 1987 survey is contained in Local Rates Update, Mimeo No. 4768, released September 14, 1987. The city specific data from the October 1987 survey is contained in Telephone Rates Update, released December 8, 1987. Comparisons made in that report show that changes in the survey averages are roughly consistent with changes in the CPI and PPI local residential service indexes when adjustments are made for different sample definitions.

Table 5.7
Average Monthly Residential Telephone Rates*

	October 1986	April 1987	October 1987	April 1988
Unlimited Local Calling	\$12.55	\$12.51	\$12.41	\$12.22
Subscriber Line Charges	2.07	2.08	2.69	2.67
<u>Taxes</u>	<u>1.52</u>	<u>1.50</u>	<u>1.56</u>	<u>1.71</u>
Total	16.13	16.09	16.66	16.61
Lowest Generally				
Available Monthly Rate	\$ 6.00	\$ 6.08	\$ 6.11	\$ 5.69
Subscriber Line Charges	2.07	2.08	2.69	2.67
<u>Taxes</u>	<u>.80</u>	<u>.81</u>	<u>.92</u>	<u>.99</u>
Total	8.87	8.97	9.72	9.35
Minimum Connection Charge				
	\$45.63	\$45.12	\$43.59	\$42.81
<u>Taxes</u>	<u>n.a</u>	<u>2.50</u>	<u>2.66</u>	<u>2.56</u>
Total	n.a	47.61	46.25	45.35

* Monthly Rates and connection charges do not include lifeline rates.

The local rate averages shown in Table 5.7 are based on rates that are available to all customers. Many states have programs that subsidize monthly service charges or connection fees paid by needy households. These programs are further described in Section 2 above. Most of these programs are part of the FCC sponsored Lifeline and Link Up programs. The most recent local rate survey, reflecting data as of April 15, 1988, indicated that assistance for monthly service charges was offered in 48 of the 95 sample cities, representing 52% of urban consumers. Connection assistance was offered in 56 of the 95 sample cities representing 59% of urban consumers. Approved Link Up programs covered 3 additional cities, but had not been implemented as of April 15, 1988.

In the 48 cities where lifeline-type services were available, data were collected for the subsidized monthly rate for the service most similar to a private rotary line with unlimited local calling. In cities where the only subsidized service was a measured or message rate service, the charge includes 100 five minute day time calls. The average cost was \$11.01 for subsidized monthly service, including \$.31 for subscriber line charges and \$1.30 for tax. The average cost for comparable non-subsidized service was \$17.22 (including taxes and subscriber line charges) in those 48 cities. Thus, Lifeline and similar assistance programs provide an average benefit of \$6 per month.

Data also were collected for subsidized connection charges. The average subsidized connection cost was \$21.89, including \$1.42 tax, in the 56 cities where subsidized connection was available. The average charge for non-subsidized connection was \$46.67 in these cities. Thus, Link Up and similar connection assistance programs reduce connection costs by an average of \$24.

Long Distance Rates

Table 5.8 compares the prices of interstate long distance calls in all mileage bands and rate periods based on AT&T's tariffed rates in effect during January 1984 and June 1988. These rates are the basic message toll service rates and do not reflect discounts available in special calling plans. They also do not reflect taxes and surcharges imposed by some states. During this period, AT&T's per minute charges for interstate calls have been reduced about 34% for the average residential customer. This presentation of interstate toll levels was requested by the D.C. Public Service Commission.

Table 5.8
Changes in the Price of Directly Dialed Long Distance Calls
(AT&T Interstate Rates)

Calling Distance (in miles)		Five minute calls			Ten minute calls		
		Jan. 1984	June 1988	Percentage change	Jan. 1984	June 1988	Percentage change
1 - 10	Day	\$0.96	\$0.77	-19.8%	\$1.76	\$1.47	-16.5%
	Evening	0.57	0.50	-12.3	1.05	0.95	- 9.5
	Night	0.38	0.38	0.0	0.70	0.73	4.3
11 - 22	Day	1.28	0.94	-26.6	2.38	1.79	-24.8
	Evening	0.76	0.61	-19.7	1.42	1.16	-18.3
	Night	0.51	0.47	- 7.8	0.95	0.89	- 6.3
23 - 55	Day	1.60	1.04	-35.0	3.00	1.99	-33.7
	Evening	0.96	0.67	-30.2	1.80	1.29	-28.3
	Night	0.64	0.52	-18.8	1.20	0.99	-17.5
56 - 124	Day	2.05	1.13	-44.9	3.90	2.18	-44.1
	Evening	1.22	0.73	-40.2	2.34	1.41	-39.7
	Night	0.82	0.56	-31.7	1.56	1.08	-30.8
125 - 292	Day	2.14	1.25	-41.6	4.09	2.45	-40.1
	Evening	1.28	0.81	-36.7	2.45	1.59	-35.1
	Night	0.85	0.62	-27.1	1.63	1.22	-25.2
293 - 430	Day	2.27	1.30	-42.7	4.37	2.55	-41.6
	Evening	1.36	0.84	-38.2	2.62	1.65	-37.0
	Night	0.90	0.65	-27.8	1.74	1.27	-27.0
431 - 925	Day	2.34	1.39	-40.6	4.49	2.74	-39.0
	Evening	1.40	0.90	-35.7	2.69	1.78	-33.8
	Night	0.93	0.69	-25.8	1.79	1.37	-23.5
926 - 1910	Day	2.40	1.41	-41.2	4.60	2.76	-40.0
	Evening	1.44	0.91	-36.8	2.75	1.79	-34.9
	Night	0.96	0.70	-27.1	1.84	1.38	-25.0
1911 - 3000	Day	2.70	1.48	-45.2	5.15	2.88	-44.1
	Evening	1.62	0.96	-40.7	3.09	1.87	-39.5
	Night	1.08	0.74	-31.5	2.06	1.44	-30.1
3001 - 4250	Day	2.80	1.69	-39.6	5.35	3.29	-38.5
	Evening	1.68	1.09	-35.1	3.21	2.13	-33.6
	Night	1.12	0.84	-25.0	2.14	1.64	-23.4

4251 - 5750	Day	2.91	1.79	-38.5	5.56	3.49	-37.2
	Evening	1.74	1.16	-33.3	3.33	2.26	-32.1
	Night	1.16	0.89	-23.3	2.22	1.74	-21.6

Subscriber Line and Access Charges

Monthly interstate subscriber line charges (or "end user" charges) were first imposed on multiline business customers in 1984 and were charged to residential customers beginning in 1985. Table 5.9 presents the level of these charges over time.

Table 5.9

Interstate Subscriber Line Charges
by Local Telephone Companies to End Users
(In Dollars per Month per Line)

	Residential and Single Line Business	Multiline Business *	Centrex**
5/26/84 to 5/31/85	\$0.00	\$4.99	\$2.00
6/1/85 to 9/30/85	1.00	4.99	2.00
10/1/85 to 5/31/86	1.00	4.97	2.00
6/1/86 to 12/31/86	2.00	4.97	3.00
1/1/87 to 6/30/87	2.00	5.12	3.00
7/1/87 to Present	2.60	5.12	4.00

* The monthly subscriber line charge for multiline business customers is capped at a maximum rate of \$6.00 monthly. Local companies are not permitted to charge the full amount unless justified by their underlying costs. As a result, some companies do not charge the full \$6.00. This column represents a national average calculated by NECA.

** These rates apply to "embedded" centrex lines - that is, centrex lines in place or on order as of July 27, 1983. Customers with new centrex lines pay the multiline business subscriber line charge.

Access charges by local telephone companies to long distance carriers are an important component of the overall cost of providing long distance service. Changes in the average level of these charges are shown in Table 5.10.

Table 5.10

Interstate Charges by Local Telephone Companies to Long Distance Carriers
(National Average for "Premium" Service in Cents per Minute)

	Carrier Common Line Charge Per Originating Access Minute <u>1/</u>	Carrier Common Line Charge Per Terminating Access Minute <u>1/</u>	Total Traffic Sensitive Charge Per Access Minute <u>2/</u>	Total Charges Per Conversation Minute <u>3/</u>
5/26/84 to 12/31/84	5.24	5.24	3.1	17.3
1/1/85 to 5/31/85	5.43	5.43	3.1	17.7
6/1/85 to 9/30/85	4.71	4.71	3.1	16.2
10/1/85 to 5/31/86	4.33	4.33	3.1	15.4
6/1/86 to 12/31/86	3.04	4.33	3.1	14.0
1/1/87 to 6/30/87	1.55	4.33	3.1	12.4
7/1/87 to 12/31/87	0.69	4.33	3.1	11.5
1/1/88 to Present	0.00	4.14	3.1	10.6

1/ These are nationally uniform "premium" rates specified in tariffs filed by the National Exchange Carrier Association (NECA). Where equal access is not available, carriers other than AT&T pay discounted "non-premium" rates.

2/ Traffic sensitive switched access rates are not subject to mandatory pooling and are thus not nationally uniform. The rate shown in this column has been estimated by the FCC staff as a weighted average that includes both switching and transport charges.

3/ Long distance carriers are billed originating access charges for the time that the local network is tied up with calls that are not completed and for the time involved in setting up calls. As a result, the number of originating access minutes exceeds the number of conversation minutes. Using the ratio of access minutes to conversation minutes presented by AT&T for its domestic interstate service, the charges in this column have been calculated as follows: 107% of the originating carrier common line rate + 100% of the terminating carrier common line rate + 107% of the traffic sensitive rate (for originating access) + 100% of the traffic sensitive access rate (for terminating access).

STATE TELEPHONE RATE CASES:

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

At the time of divestiture, rate cases pending before state public utility commissions totaled nearly \$7 billion. During the first half of 1984, state commissions completed action on a number of extraordinarily large rate cases. After the first half of 1984, however, the level of activity in state cases diminished substantially. At the end of June 1988, the amount of rate increases requested and pending before state commissions totaled only about \$300 million. During 1987 and the first half of 1988, the dollar amount of rate reductions and refunds ordered by state commissions exceeded the dollar amount of rate increases authorized. Since it typically takes more than a year for a rate case to be completed, the low level of pending cases -- viewed in conjunction with the recent reductions ordered by state commissions -- should indicate a low level of state and local increases during at least the next year. The data on state rate cases are shown in Table 5.11.

The information in Table 5.11 reflects data we have received from the Bell Operating Companies, Contel, GTE, and United Telephone on pending state rate cases. In addition to this, we also include information from smaller companies which is submitted by state utility commissions, information published by the National Regulatory Research Institute, and any additional information brought to our attention or appearing in a telecommunications publication.

TABLE 5.11

State Telephone Rate Cases
(Millions of Dollars)

	<u>Revenue Increases Requested During Quarter</u>	<u>Revenue Changes Ordered During Quarter</u>	<u>Requests Pending at End of Quarter</u>
1984 First quarter	\$ 627.7	\$ 1,175.6	\$ 4,851.9
Second quarter	93.7	2,054.2	1,675.6
Third quarter	2,242.9	284.5	3,387.5
Fourth quarter	<u>1,059.4</u>	<u>361.2</u>	3,672.3
Total	4,023.7	3,875.5	
1985 First quarter	976.6	246.3	3,779.0
Second quarter	172.4	314.8	3,316.3
Third quarter	108.3	286.5	2,664.2
Fourth quarter	<u>369.9</u>	<u>307.3</u>	1,437.3
Total	1,627.2	1,154.9	
1986 First quarter	155.1	58.0	766.2
Second quarter	249.9	57.9	362.0
Third quarter	230.0	173.3	315.7
Fourth quarter	<u>8.7</u>	<u>.8</u>	322.6
Total	643.7	290.0	
1987 First quarter	7.0	-33.1	67.1
Second quarter	19.4	-112.0	47.7
Third quarter	62.0	-94.0	94.0
Fourth quarter	<u>57.9</u>	<u>-279.9</u>	124.7
Total	146.3	-519.0	
1988 First quarter	66.6	-214.4	171.7
Second quarter	137.9	-83.9	307.5

ADDITIONAL DATA RECEIVED

Several state utility commissions have filed rate and tariff information in our monitoring docket. As of the cutoff date for this report, tariff data have been submitted in the monitoring docket by the following states: Arkansas, California, Colorado, District of Columbia, Florida, Idaho, Indiana, Iowa, Maine, Massachusetts, Michigan, Minnesota, Nebraska, New Jersey, New York, North Carolina, North Dakota, Ohio, Rhode Island, Virginia, Washington, and Wisconsin. We have not included the data in this report because the data are voluminous. However, the data are available for research and reference in the Public Reference Room maintained by the FCC's Industry Analysis Division. A summary of the rate information that has been filed is in Table 5.12.

Table 5.12
Rate Information Provided by States

	No. of carriers for which R-1 and B-1 rates are provided*	No. of carriers for which intrastate toll rates are provided	Status for state rate cases **
Alaska	16	1	x
Arkansas	28	17	x
California	22	3	x
Colorado ***	31	3	x
District of Col.***	1	N/A	x
Florida	14	1	x
Idaho	21	1	x
Indiana	42	4	x
Iowa	152	10	x
Maine	20	1	x
Massachusetts	1	1	
Michigan	45	3	
Minnesota	4	24	x
Nebraska	42	1	
New Jersey	3	3	x
New York	41	7	x
North Carolina	19	16	x
North Dakota	10	1	
Ohio	44	33	x
Rhode Island	1	1	x
Texas	66	2	x
Virginia	20	9	x
Washington	3	0	x
Wisconsin***	100	4	x

* Most states provided tariff pages.

** x indicates information has been filed.

*** Indicates updated information has been filed since the last report.

6. Bypass

The first monitoring report, September 1987, emphasized the need for a uniform and periodic bypass reporting system. That monitoring report requested proposals for a bypass reporting system, and included substantial excerpts from the Common Carrier Bureau's Third Report on Bypass of the Public Switched Network (May 26, 1987).

The second monitoring report, December 1987, contained an analysis by the Joint Board staff of the comments and proposals received in response to the request made in the first report. As a result of the analysis of the proposals, the staff suggested three part bypass monitoring data forms, which were published in the December report. The three reporting forms are Form I, Actual New Bypass Experienced Since Last Report; Form II, Bypass Abandoned/Discontinued Since Last Report; Form III, Estimated Revenue Loss --(including all bypass annualized). The periodic bypass reports would be supplied by the major carriers, the Regional Bell Operating Companies (RBOCs) and GTE. In order to establish a historical baseline for bypass data, the initial reports were to include all bypass experienced to date. Successive reports will only include new bypass related activity.

On December 24, 1987, the Chief of the Common Carrier Bureau sent the three-part bypass data forms to the seven Regional Bell Operating Companies and GTE. The Bureau Chief requested that the first set of completed forms be filed by April 29, 1988, in time to be incorporated in the June 1988 monitoring report. Thereafter, reports will be filed on a semi-annual basis. The Joint Board staff also encouraged other local exchange companies to file bypass data and reports.

On April 29, 1988 the RBOCs and GTE submitted their first bypass reports based on the Joint Board forms. The June 1988 monitoring report summarized the data submitted the Joint Board. The initial data submissions were not as consistent as we might have hoped. Since this initial data collection can be viewed as a pilot effort, and since the data gathering and calculating are complex processes, it is not surprising that some inconsistencies arose. For example, some of the carriers reported their results annualized on 1987 rates while others annualized on 1988 rates. Some carriers completed all the forms and others did not. Therefore, the data must be read with these inconsistencies in mind. Despite the various problems, we have compiled the data presented to us and this compilation is shown in Table 6.1.

Table 6.1

Bypass Data Summary

Estimated Revenue Loss

Company:	Ameritech	Bell Atlantic	Bell South	GTE	NYNEX	Pacific Telesis	Southwestern Bell	US West	TOTAL
Facility Bypass - Switched									
MOU (Billion)	7.6	7.2	0.2	2.6	1.6	1.7	2.9	0.4	24.1
Rev. Factor (\$/Min.)	0.044	0.048	0.049	0.033	0.055	0.056	0.045	0.055	0.046
Revenue (\$ Million)	333.6	347.5	8.8	86.2	88.0	93.1	130.9	22.8	1110.9
Facility Bypass - Private Line									
No. lines (Thousand)	112.1	*	0.1	17.0	*	7.3	79.3	7.8	223.6
Revenue (\$ Million)	113.0	*	1.5	32.9	*	10.6	109.4	14.3	281.6
Service Bypass									
MOU (Billion)	13.5	15.7	8.3	3.2	13.4	6.6	11.5	12.0	84.1
Revenue (\$ Million)	393.1	510.8	272.9	95.1	330.0	226.3	203.3	336.6	2368.1
Total MOU (Billion)	21.0	22.9	8.5	5.8	15.0	8.2	14.5	12.4	108.2
Total Revenue (\$ Million)	839.7	858.3	283.1	214.2	418.0	330.0	443.6	373.6	3760.7

* Data insignificant or not available

The reported total estimated revenue loss amounted to \$3.8 billion. The total estimated minutes lost were 108 billion. However, given the problems surfacing in the first set of reports, these numbers must be viewed as subject to potentially large corrections.

To eliminate future inconsistencies the Joint Board staff requested that the following dates be used in compiling future reports. For bypass reports due in October, rates in effect on June 30 should be used to quantify "Revenue Lost". Estimates of minutes lost should be developed using data from the month of June (or the second quarter) as the basis for annualized estimates. For bypass reports due in April, rates in effect on December 31 should be used to quantify "Revenue Lost." Estimates of minutes lost should be developed using data from the month of December (or the fourth quarter) as the basis for annualized estimates.

Compilation of Data on First Occurrence of New Bypass

Many companies provided bypass data going back to 1975. The data was coded by the year in which bypass began. The staff has compiled and graphed data for five companies: Pacific Telesis, GTE, Ameritech, BellSouth and the C&P companies of Bell Atlantic. A review of the graph reveals some interesting observations. First, there is an unusual drop in new bypass activity in 1982-83 and 1985. The 1987-88 data also reveal another sharp drop in bypass activity. (It should be noted, however, that the data for 1988 cover only a partial year.) Secondly, the graph reveals a substantial amount of bypass prior to divestiture, thus indicating that some amount of bypass should be removed.

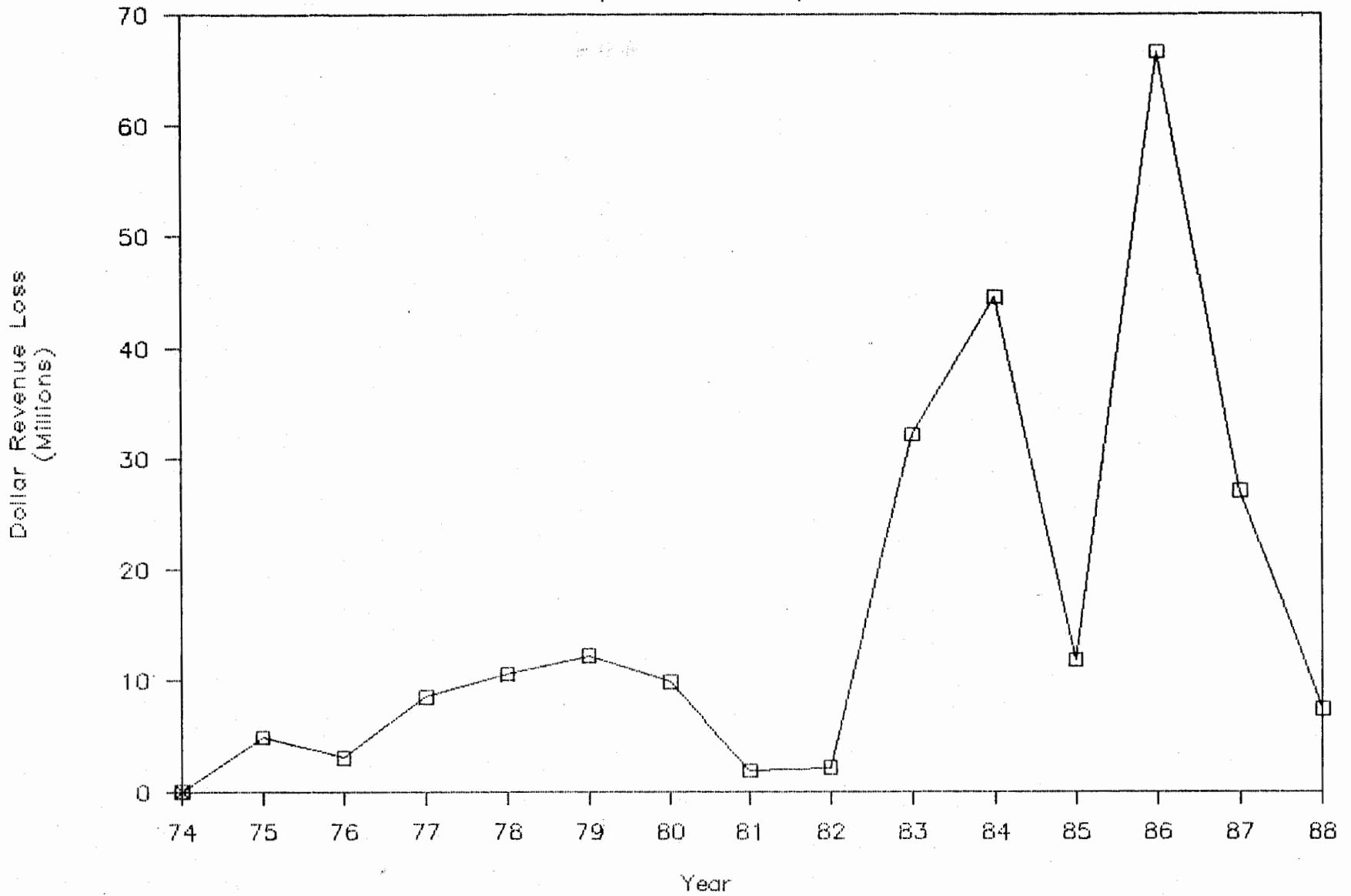
On August 24, 1988, the Common Carrier Bureau staff met with a representative of Ameritech to discuss both the Ameritech report of April 29, 1988, and the graph of New Bypass (see Chart 6.1). These questions were addressed to the Ameritech representative:

1. What accounts for the sharp dips in new bypass in the 1982 and 1985 time frames?
2. Can any traffic stimulated by bypass be measured or estimated?
3. Were the microwave channels devoted to stand-by accounted for in the calculation of estimated bypass traffic using microwave facilities?

Chart 6.1

New Bypass in Year of First Occurrence

Composite of 5 Companies



Comments

In the June monitoring report, the comments submitted on bypass by the these states were included: Rhode Island, Washington, Indiana, Massachusetts, New Jersey, North Carolina, Ohio, Wisconsin, Colorado and Florida. Comments by the District of Columbia and Teleport were also included. Since the June report, the following comments have been received.¹

Minnesota Public Utilities Commission

The following comments on bypass were submitted on July 22, 1988 by the Minnesota Public Utilities Commission as part of the monitoring data.

1. "The Commission finds that the only bypass that should be prevented is uneconomic bypass."

2. "The ALJ found that the evidence of bypass presented in this proceeding did not justify a pronounced shift in NTS cost assignment from toll to local service. However, the ALJ stated that the increasing concern about bypass must be recognized. The ALJ recommended that a limited NTS shift for both NBECS and NWB would recognize the countercalling concerns of bypass and universal service and the limited factual record in this proceeding."

3. "In reviewing the other concerns about bypass raised by parties, the Commission finds that recent actions it has taken, as well as action by the FCC, have reduced the threat of bypass."

4. "Based on the ... findings and the record of this proceeding, the Commission concludes that the threat of bypass has not been proven significant enough to justify a shift of NTS costs from toll to local service."

5. "The issue of bypass was... reviewed by the Minnesota Public Utilities Commission in its Final Order in Docket No. P999/CI-85-582 dated November 2, 1987.... Another recent study dealing with the issue of bypass is included. This study is entitled Telephone Usage by Large Employers: A Benchmark Study." It is summarized as follows:

a. "The Minnesota Department of Public Service commissioned the study in order to obtain accurate data about telephone usage and

¹ Comments addressing the issue of subscriber line charge increases will be discussed in the Joint Board report for the 90-day study and review concerning that issue. Accordingly, only those portions of the

purchasing patterns by large Minnesota employers."

b. "Two hundred and thirteen large Minnesota business, government and non-profit establishments were interviewed. Fifty-three have between 500 and 3,000 employees and 160 have from 100 to 499 employees."

c. "To manage intra-establishment calling, most large businesses have selected private branch exchange (PBX) over centrex service. The largest governmental organizations are the most notable exceptions. They are split equally between PBX and centrex service."

d. "Northwestern Bell (NWB) is the LEC for virtually all of the 500 + employee establishments in this study. In the Twin Cities, it serves all of these establishments. Three-fourths of the largest establishments located outside the Twin Cities metropolitan area are NWB customers."

e. "NWB also dominates local service for 100-499 employee establishments, serving 94% of those located in the Twin Cities and 73% of those located in other parts of Minnesota."

f. "A small, but measurable portion of Minnesota's largest businesses use one or more alternative telecommunications networks to complete local calls. They use these systems in addition to (and not instead of) their LEC. Use of alternative networks is most common among the largest Twin Cities-based establishments, especially service and government organizations."

g. "Virtually all intraLATA long distance, data and private line service are purchased from LECs. IntraLATA service is a small part of most total long distance bills. However, intraLATA services account for a large portion of total bills for both data and private lines."

h. "Of five telephone service categories surveyed for this report, intra-firm and some aspects of long distance telephone service appear the most competitive. The long distance picture is quite mixed. There appears to be relatively little competition over access service (i.e. moving telephone traffic to and from interexchange carriers) and for intraLATA long distance service. By contrast, there are many interLATA long distance vendors and there is strong competition for large business customers."

comments which provide new information on bypass are summarized herein.

i. "There appears to be little competition for intraLATA data and private line services. LECs dominate both services. These services represent about 15% of average monthly telecommunications charges."

j. "While alternative local networks have been identified (e.g. cellular telephone), it is impossible to say if they are making local exchange service competitive. The data necessary to measure alternative network usage and compare it with that for the LEC's network were not collected in the survey for this report."

Institutional Communications Company (ICC)

The ICC submitted the following comments on bypass in its August 19, 1988, comments on the Monitoring Program:

1. "The Monitoring Report contains faulty or unsupported information based on assumptions by individual local exchange carriers on what is or is not bypass."

2. "What it boils down to is that the LECs are being challenged for those services WHICH THEY THEMSELVES HAVE ALREADY MOVED OFF OF THE PUBLIC SWITCHED NETWORK."

3. "The services of the emerging competitive entrepreneurial firms in this country, including ICC, for the most part, are not bypass according to the Commission's own definition."

4. "Use of non-LEC facilities for high-capacity service offerings is clearly not bypass of 'Facilities... available to the general public' since such traffic would not have used such facilities; therefore, it does not compete with switched access service."

5. "RBOC policies are a large part of 'bypass' existence. Currently, RBOCs do not permit alternative access providers to interconnect networks using, for example, ICC facilities to delivery an IXC's traffic to a central office. This policy encourages the carrier to construct facilities which may 'bypass' the telephone company central office...."

6. "The existence of alternative access providers allows businesses and government the duplication of facilities to avoid having all communications channels shut off as in Hindsdale."

7. "ICC customers have often indicated the selection of ICC facilities was for technological reasons, customer service reasons, of the lack of availability of a service by C & P."

8. "Bell Atlantic should have used revenues from DS-3 and DS-3 like services such as fiber to calculate special access revenue 'gained' in their tables."

9. "... the 5,000 MOU assumption greatly exceeds 'actual' private network usage and should be reduced to approximately 3,000 to 4,000 minutes maximum."

Public Service Commission of the District of Columbia

1. "... the June 1988 report contains a summary of data that purports to serve as basis for analysis of the rate of telephone bypass. These data, however, are unreliable and do not permit a useful analysis of bypass activity."

2. "After reviewing the monitoring reports, the D.C. PSC contends that reliance should not be placed on any conclusion derived from these reports. These appear to be a number of errors associated with these reports in addition to the problems that are stated in the June 1988 report...There also could be overstatements of bypass."

3. "The RHCs have relied on flawed methodologies to estimate facilities bypass. For example, NYNEX calculates the revenue loss due to bypass as "cost plus 20 percent of replacement facilities." Assuming that NYNEX's calculation is based on the cost of the fiber facilities plus 20 percent, this method appears highly suspect. This method ignores that the capacity of fiber is function of electronics of the system rather than the average cost of placing and maintaining fiber cables. In addition, the NYNEX method does not account for capacity or usage."

4. "If bypass is occurring as rapidly as Bell Atlantic contends,... the 1985 study which is used as a basis for the multiplier is likely to be in error. If the microwave study is inaccurate, then the bypass potential of other technologies also would be inaccurate."

5. "In addition, only Ameritech and Southwestern Bell indicate that they deduct unused capacity in developing the impact of microwave voice equivalent channels. In the absence of this deduction, there would be an overstatement of bypass."

6. "There also appear to be inconsistencies in BellSouth's analysis of facilities bypass. For example, the actual bypass activity noted in Exhibit II of BellSouth's monitoring report does not correspond to estimated revenue loss from bypass that is indicated in Exhibit I."

7. "Finally, the data attempts to determine the effects of bypass by revenue loss. While revenue loss, if accurately computed, provides some general indicator of a problem, it is not an accurate measure of the effect

of bypass. For example, revenue loss does not indicate whether the current and projected levels of bypass will lead to stranded investment. Since the call volumes serviced by the LECs through MIS-like service are increasing, a loss of potential revenue is not necessarily detrimental to the LECs. In addition, it appears that the RHCs have not adjusted the amount of lost revenues to reflect cost savings associated with reductions in services."

National Association of State Utility Consumer Advocates

1. "For the benefit of the FCC and Joint Board's study, NASUCA has commissioned three analyses for consideration therein, with special emphasis on the most ballyhooed consideration--bypass. These analyses represent both new evidence and a critical review of evidence recently submitted by the regulated industry. An Evaluation of the Interstate Subscriber Line Charge. Ben Johnson Associates, Inc. (August 1988) ('BJA analysis'); Montgomery, Selwyn, and Baldwin, Analysis of Local Exchange Carrier April 1988 Bypass Data Submissions, Economics and Technology, Inc. (August 24, 1988) ('ETI analysis'); Bolter and Kelsey, Bypass and the Subscriber Line Charge, Bethesda Research Institute, Ltd. (August 1988) ('BRI analysis')."

2. "For its part, ETI conducted a detailed analysis of the bypass studies filed in this docket. ETI finds that the local exchange company (LEC) studies of bypass ignore relevant economic and operational conditions which consequently cause the LECs' submission [to] avoid the question of whether bypass is susceptible to changes in public policy...."

3. "In fact, ETI documents numerous mischaracterizations and inconsistencies in the LECs' bypass data, including overstatement of bypass losses, misaccounting of data communications traffic, unsubstitutability of purported bypass substitutes for switched network services, overestimation of bypass traffic, mischaracterization of what constitutes service bypass, and incorrect reliance on tariffed prices in considering bypass economics. ETI find that the LECs' bypass submissions 'do not begin to fulfill the objectives' of 'evaluating whether present access charge policies either do or do not affect bypass incentives in any meaningful way.' ETI concludes that, based upon such submissions, 'the bypass issue must continue to be viewed as illusory insofar as federal access charge policy is concerned.'"

4. "The third analysis, by BRI, represents a fresh analysis similar to the BRI analysis which NASUCA commissioned in June 1987. The June 1987 analysis considered and discounted certain bypass studies which the FCC had submitted to Congress in 1987, to support its SLC Order."

5. "BRI finds that: 'The disjointed and unsupported data filed by the RBOCs do not permit testing of the results provided, thereby leaving a critical information gap.'"

6. "In concluding, BRI states: '... As shown above, bypass is not even a current threat nor a problem of imminently major proportions. Bypass prospects do not presently place universal service in jeopardy, but may actually afford evidence of proper economic behavior of users. Additionally, it is possible that the imposition of the fixed subscriber line charge on local access lines could, actually encourage bypass of the network by customers with many local lines.'..."

Teleport Communications

"First, the bypass reports filed by the reporting local exchange carriers are inconsistent. The Joint Board Staff should:

- o Require that future reports address only that activity which is consistent with the definition of bypass previously employed by the Common Carrier Bureau;
- o Determine consistent 'Minutes of Use' factor or require the carriers to explain the basis for their assumptions; and
- o Determine consistent 'Fill Factor' assumptions or require the carriers to explain the basis for their assumptions.

Second, the Joint Board's focus should turn from issues of quantity of service as the universal service goal is reached to quality."

United States Telephone Association

1. "Based on the first set of bypass data forms, there appears to be no evidence that the risk of uneconomic bypass has been reduced significantly with the existing SLC."

2. "The monitoring program developed by the Joint Board has provided valuable information regarding the impact of its recommendations adopted by the Commission."

US West Companies

1. "The Mountain States Telephone and Telegraph Company, Northwestern Bell Telephone Company and Pacific Northwest Bell Telephone Company (MTN, MWB and PNB) direct their comments solely toward Teleport's April 13, 1988 modification proposals to the Joint Board's Bypass Monitoring Program."

2. "MTN, NWB, and PNB are supportive of the Joint Board's efforts to monitor and quantify bypass. MTN, NWB and PNB, however, maintain that to implement Teleport's proposals would require an unreasonable expenditure of time and resources on the part of the local exchange carriers (LECs). In most instances, Teleport's proposals will not result in promoting the

production of relevant, available bypass data required by the Monitoring Report simply because the particular kind of data are not available to the LECs. In light of the fact that the burden of producing the data far outweighs its speculative value, MTN, NWB and PNB request that no additional reporting requirements be placed on the LECs at this time."

3. "While Teleport is correct that loss is a different phenomenon than diversion, as far as the impact on the public switched network is concerned, the distinction is without significance. To the extent that bypass decreases demand for use of the public switched network, a lesser benefit accrues to those who remain on the public switched network."

4. "It is not possible to disaggregate broad usage trends into discrete constituent components in a way that would allow LECs to attribute certain proportions of an overall usage projection to a specific phenomenon such as diverted usage. Furthermore, when it comes to knowing which customers intend to bypass the public switched network in the coming year(s), LECs could not predict the extent to which those customer intend to bypass the public switched network and how those customers intend to bypass it..."

5. "Once facilities are constructed or modernized, the costs of construction or modernization that have been incurred must be recovered. The diversion anticipated usage growth as a result of bypass has as much impact on the recovery of those costs as the loss of existing customers from the network."

6. "MTN, NWB and PNB disagree with the proposition that the only significant impact of bypass is the lost subsidy to local exchange rates."

7. "By focusing on the contribution that access charges provide to local exchange rates, Teleport necessarily focuses on the CCL element since it is this element that recovers the interstate portion of the non-traffic sensitive (NTS) costs associated with the local loop. To extent that these interstate NTS costs are not fully borne by the end user as yet, a subsidy to the end user necessarily exists."

8. "While it would likely prove useful to monitor the impacts of bypass on CCL revenues, and in turn end users, it does not appear that there is a reliable means for isolating the impacts of bypass on CCL revenues. Teleport offers no suggestion on how this could be done. LECs simply are not equipped to isolate the impacts of bypass on CCL revenues..."

9. "Teleport's conclusion that there is stimulated terminating traffic which is offsetting originating bypass losses is predicated on several faulty assumptions..."

10. "First, although originating bypass is more prevalent than terminating bypass, end users and IXCs are not solely engaging in originating bypass."

11. "Second, while MTN, NWB and PNB recognize the significance of price in evaluating a bypass alternative against LECs provided access services, in some situations customers will use bypass facilities for non-price related reasons. These include: available technology; terms and conditions; ordering intervals; and service quality."

12. "Third, in those cases where bypass is not occurring solely on the originating end or is not prompted by price-related reasons, it should not be assumed that stimulation in terminating traffic will result. In those case where the bypass is on the originating end, and does result in a cost savings for the end user or the IXC, then the stimulation in terminating traffic suggested by Teleport could occur. However, LECs are not in a position to correlate traffic terminating on their switches with any particular originating arrangement...."

13. "Fourth, even if LECs could identify particular terminating traffic as having originated over bypass facilities, they are without the means to quantify stimulation attributable to the bypass facilities over which the traffic originated. This is because econometric techniques for estimating stimulation rely on two items which are not available to LECs: the percent change in price from the old interexchange service configuration to the new bypass configuration; and the price elasticity coefficient for the new interexchange service configuration."

14. "Finally, the billing and tracking system that LECs use in conjunction with the provision of Switched Access services would not facilitate the tracking of stimulated terminating usage that is derived from bypass. Terminating usage could be stimulated for variety of reasons only one of which might be bypass."

15. "Teleport states that the Program should assess "how much of the growth in LEC switched access volume and revenues is attributable to lower IXC costs resulting form use of non-LEC Point of Presence (POP)-to-POP facilities being passed through to subscribers... this suggestion is predicated upon Teleport's conclusion that IXC use of non-LEC POP-to-POP links contribute to the efficiency of the national long distance telephone network by allowing IXCs to efficiently link their switching centers within a region and to utilize (resell) each others' long distance networks."

16. "MTN, NWB and PNB believe that the underlying factual assumptions are not necessarily true, and that even if they are, LECs would not be able to identify and measure and existing correlation between increases in their switched access usage and lower IXC costs presumed to result from IXC use of non-LEC POP-to-POP facilities."

17. "Finally, Teleport assumes that cost savings passed on to end users result in a stimulation of end-user long distance usage. MTN, NWB and PNB submit that Teleport offers no facts to support the validity of its presumptions."

18. "If IXC use of non-LEC POP-to-POP links does result in the stimulation of LEC Switched Access usage, it would be new information of great interest to MTN, NWB, and PNB. However, it should not be expected that LECs could provide data on any existing inter-relationship between IXC use of non-LEC POP-to-POP links and growth in Switched Access usage."

19. "MTN, NEB and PNB disagree with Teleport's statement that bypass produces cost savings for LECs or that there is any benefit to be measured."

"If one focuses on a LEC's existing facilities which provide Switched Access service, it seems obvious that there is no net savings generated by the bypassing of those facilities...."

20. "Teleport argues that the lower costs for deployment of the smaller capacity facilities is a benefit of bypass. Teleport is wrong for at least two reasons. First, the lower costs simply result in a lower LEC revenue requirement, with the cost of a unit of service remaining the same. There is, at best, no net change in the LEC's financial position... Second, to the extent that the unit of service cost for the larger capacity facilities is less than that for the smaller capacity facilities, the LEC loses the economies of scale, and the cost (and price) for a unit of service increases."

7. Pooling and Rate Deaveraging

As has been noted in previous monitoring reports, the transition to jurisdictionally-specific Carrier Common Line (CCL) charges will not occur until April 1989 and, thus, no new pressures to deaverage interstate toll rates should exist before that time.

Beginning in 1989, our monitoring effort should include information on LECs withdrawing from the pooling process, the dimensions of long term support and transitional support payments among the LECs, and the common line revenue requirements for the LECs remaining in the NECA pool. To further this effort, we asked NECA to file data regarding revenues and expenses of pool members by study area on an annual basis, and nationwide totals on a monthly basis.

The latest nationwide pooling figures through May 1988, provided by NECA, follow in Tables 7.1 through 7.5. Table 7.1 shows the total CCL pool revenues. Table 7.2 shows the pool revenues for Tier I companies. Table 7.3 shows the revenues for non-Tier I companies. Table 7.4 summarizes CCL pool revenues and expenses for the first five months of 1988. Table 7.5 has corresponding figures for NECA's voluntary traffic sensitive pool.

TABLE 7.1

NATIONAL EXCHANGE CARRIER ASSOCIATION, INC.

SUPPLEMENTAL REPORT OF COMMON LINE POOL RESULTS
 REPORTED AS OF JULY, 1988

PAGE 1 OF 1

N E C A CCL EARNED REVENUES

TOTAL COMMON LINE POOL

(REVENUE REPORTED IN MILLIONS)

MONTH/YR	PREMIUM CCL EARNED REVENUE			NONPREMIUM CCL EARNED REVENUE		
	ORIGINATING	TERMINATING	TOTAL	ORIGINATING	TERMINATING	TOTAL
JAN 86	N/A	N/A	662.101	N/A	N/A	29.693
FEB 86	N/A	N/A	636.141	N/A	N/A	27.255
MAR 86	N/A	N/A	686.783	N/A	N/A	26.304
APR 86	N/A	N/A	688.706	N/A	N/A	25.358
MAY 86	N/A	N/A	694.525	N/A	N/A	23.561
JUN 86	173.470	350.905	524.376	6.647	15.937	22.585
JUL 86	191.817	352.163	543.981	7.039	15.158	22.198
AUG 86	186.679	354.802	541.481	5.987	13.927	19.915
SEP 86	190.574	353.459	544.034	5.032	13.657	18.690
OCT 86	201.705	369.636	571.342	4.322	13.365	17.687
NOV 86	194.061	352.967	547.030	4.562	13.693	18.255
DEC 86	213.004	382.452	595.458	3.974	13.072	17.047
JAN 87	109.197	372.381	481.579	2.433	12.717	15.150
FEB 87	105.287	374.189	479.477	2.518	13.541	16.060
MAR 87	115.500	411.838	527.339	2.625	15.219	17.844
APR 87	111.229	399.558	510.788	2.535	14.094	16.630
MAY 87	109.881	389.028	498.910	2.249	13.462	15.713
JUN 87	116.441	406.040	522.482	2.003	14.110	16.114
JUL 87	57.313	410.374	467.688	1.084	13.567	14.652
AUG 87	52.415	412.988	465.404	0.812	13.658	14.471
SEP 87	52.073	421.496	473.570	0.791	13.401	14.194
OCT 87	54.538	442.750	497.289	0.741	12.767	13.509
NOV 87	53.008	421.210	474.219	0.693	12.026	12.720
DEC 87	59.086	457.494	516.581	0.799	11.784	12.584
JAN 88	N/A	425.129	425.130	N/A	10.486	10.486
FEB 88	N/A	429.289	429.290	N/A	11.220	11.221
MAR 88	N/A	467.645	467.645	N/A	11.328	11.328
APR 88	N/A	436.393	436.394	N/A	10.979	10.980
MAY 88	N/A	447.021	447.021	N/A	11.740	11.740

TABLE 7.2

NATIONAL EXCHANGE CARRIER ASSOCIATION, INC.

SUPPLEMENTAL REPORT OF COMMON LINE POOL RESULTS
 REPORTED AS OF JULY, 1988

PAGE 1 OF 1

N E C A CCL EARNED REVENUES

TIER 1

(REVENUE REPORTED IN MILLIONS)

MONTH/YR	PREMIUM CCL EARNED REVENUE			NONPREMIUM CCL EARNED REVENUE		
	ORIGINATING	TERMINATING	TOTAL	ORIGINATING	TERMINATING	TOTAL
JAN 86	N/A	N/A	623.074	N/A	N/A	29.265
FEB 86	N/A	N/A	598.604	N/A	N/A	26.734
MAR 86	N/A	N/A	646.713	N/A	N/A	25.793
APR 86	N/A	N/A	648.589	N/A	N/A	24.835
MAY 86	N/A	N/A	653.340	N/A	N/A	23.006
JUN 86	162.047	327.807	489.855	6.516	15.622	22.139
JUL 86	179.913	330.308	510.222	6.898	14.855	21.754
AUG 86	174.531	331.714	506.246	5.826	13.553	19.380
SEP 86	178.687	331.413	510.101	4.856	13.179	18.036
OCT 86	189.506	347.281	536.788	4.157	12.856	17.014
NOV 86	182.077	331.170	513.249	4.395	13.192	17.588
DEC 86	200.444	359.900	560.345	3.817	12.555	16.373
JAN 87	102.310	348.896	451.207	2.335	12.206	14.542
FEB 87	99.078	352.120	451.199	2.426	13.044	15.471
MAR 87	108.937	388.434	497.372	2.542	14.740	17.283
APR 87	104.688	376.065	480.754	2.449	13.616	16.066
MAY 87	103.164	365.246	468.411	2.157	12.907	15.065
JUN 87	109.560	382.048	491.610	1.925	13.558	15.484
JUL 87	53.796	385.186	438.982	1.044	13.071	14.116
AUG 87	49.127	387.078	436.206	0.777	13.079	13.858
SEP 87	48.973	396.408	445.382	0.758	12.843	13.603
OCT 87	51.367	417.004	468.372	0.709	12.228	12.938
NOV 87	49.797	395.699	445.497	0.658	11.409	12.068
DEC 87	55.751	431.675	487.426	0.760	11.218	11.980
JAN 88	N/A	398.837	398.838	N/A	9.980	9.981
FEB 88	N/A	404.836	404.837	N/A	10.675	10.676
MAR 88	N/A	443.050	443.050	N/A	10.777	10.778
APR 88	N/A	412.071	412.071	N/A	10.443	10.443
MAY 88	N/A	421.790	421.791	N/A	11.177	11.177

TABLE 7.3

NATIONAL EXCHANGE CARRIER ASSOCIATION, INC.

SUPPLEMENTAL REPORT OF COMMON LINE POOL RESULTS
 REPORTED AS OF JULY, 1988

N E C A CCL EARNED REVENUES

NON-TIER 1

(REVENUE REPORTED IN MILLIONS)

MONTH/YR	PREMIUM CCL EARNED REVENUE			NONPREMIUM CCL EARNED REVENUE		
	ORIGINATING	TERMINATING	TOTAL	ORIGINATING	TERMINATING	TOTAL
JAN 86	N/A	N/A	39.027	N/A	N/A	0.428
FEB 86	N/A	N/A	37.537	N/A	N/A	0.522
MAR 86	N/A	N/A	40.069	N/A	N/A	0.511
APR 86	N/A	N/A	40.116	N/A	N/A	0.522
MAY 86	N/A	N/A	41.185	N/A	N/A	0.554
JUN 86	11.422	23.097	34.520	0.131	0.315	0.447
JUL 86	11.904	21.855	33.759	0.140	0.303	0.444
AUG 86	12.147	23.088	35.236	0.160	0.374	0.535
SEP 86	11.886	22.046	33.933	0.176	0.477	0.654
OCT 86	12.198	22.354	34.554	0.164	0.508	0.673
NOV 86	11.984	21.796	33.781	0.166	0.500	0.667
DEC 86	12.560	22.552	35.113	0.157	0.516	0.674
JAN 87	6.886	23.485	30.372	0.097	0.510	0.609
FEB 87	6.209	22.068	28.279	0.092	0.496	0.589
MAR 87	6.563	23.403	29.968	0.082	0.478	0.561
APR 87	6.541	23.492	30.034	0.086	0.478	0.565
MAY 87	6.717	23.781	30.499	0.092	0.555	0.648
JUN 87	6.880	23.992	30.872	0.078	0.551	0.630
JUL 87	3.517	25.188	28.706	0.039	0.496	0.536
AUG 87	3.288	25.909	29.198	0.034	0.578	0.613
SEP 87	3.099	25.088	28.188	0.032	0.558	0.591
OCT 87	3.171	25.745	28.917	0.031	0.539	0.570
NOV 87	3.210	25.511	28.722	0.035	0.617	0.653
DEC 87	3.335	25.819	29.155	0.038	0.566	0.605
JAN 88	N/A	26.292	26.292	N/A	0.505	0.506
FEB 88	N/A	24.452	24.453	N/A	0.544	0.545
MAR 88	N/A	24.594	24.595	N/A	0.550	0.550
APR 88	N/A	24.322	24.323	N/A	0.536	0.537
MAY 88	N/A	25.230	25.230	N/A	0.562	0.563

TABLE 7.4

NATIONAL EXCHANGE CARRIER ASSOCIATION, INC.
SUMMARY OF POOL RESULTS FOR THE MONTH ENDING MAY 31, 1988
REPORTED AS OF JULY 31, 1988

COMMON LINE (CL) (Note 1)	CURRENT MONTH	1988 POOL YEAR (Note 2)
Carrier Common Line (CCL) Earned Revenue		
Premium	\$446,868,200	\$2,206,484,360
Non-premium	\$11,892,869	\$54,749,744
Special Access Surcharge	\$6,048,501	\$32,317,742
CCL Net Realized Uncollectibles	\$101,898	\$2,070,880
CCL Net Earned Revenue	\$464,707,672	\$2,291,480,966
End User Earned Revenues	\$369,715,483	\$1,837,695,678
End User Net Realized Uncollectibles	\$1,787,375	\$8,157,688
End User Net Earned Revenues	\$367,928,108	\$1,829,537,990
Total Common Line Net Earned Revenues	\$832,635,780	\$4,121,018,956
CL Income from Interest Charged Construction	\$1,158,022	\$6,441,034
Total Common Line Revenues	\$833,793,802	\$4,127,459,990
NECA Administrative Cost	\$3,650,265	\$17,098,276
Average Schedule Company Settlements	\$24,155,190	\$119,546,401
Common Line Expenses and other Taxes	\$566,640,512	\$2,836,527,962
Common Line Adjusted Federal Income Tax	\$48,589,445	\$223,277,690
Universal Service Fund (effective 1/1/86)	\$14,726,573	\$73,494,478
Total Common Line Costs	\$657,761,985	\$3,269,944,807
Common Line Residue for Distribution (Note 3)	\$176,031,817	\$857,515,183
Common Line Net Investment	\$16,495,029,962	\$16,562,074,481
Annualized Common Line Residue Ratio (Note 4)	12.81%	12.43%

Note 1: All of the individual line items include some estimates and are subject to further adjustments under current NECA procedures.

Note 2: The 1988 pool year is for the period beginning January 1, 1988 through the CURRENT MONTH. The Net Investment is an average of the cumulative months reported.

Note 3: Residue for Distribution is Total Revenues Less Total Expenses.

Note 4: Annualized Residue Ratio in the CURRENT MONTH is calculated by dividing the amount of Residue for Distribution by the amount of average Net Investment and multiplying by 12 months X 100. The annualized POOL YEAR Residue Ratios are similarly computed except that the sum of the calculation is then divided by the number of POOL YEAR reporting periods.

TABLE 7.5

NATIONAL EXCHANGE CARRIER ASSOCIATION, INC.
SUMMARY OF POOL RESULTS FOR THE MONTH ENDING MAY 31, 1988
REPORTED AS OF JULY 31, 1988

TRAFFIC SENSITIVE (TS) (Note 1)	CURRENT MONTH	1988 POOL YEAR (Note 2)
TS Earned Revenue	\$42,364,516	\$205,980,550
TS Net Realized Uncollectibles	\$77	\$24,183
TS Net Earned Revenue	\$42,364,439	\$205,956,367
TS Income From Interest Charged Construction	\$17,158	\$87,876
Total Traffic Sensitive Revenues	\$42,381,597	\$206,044,243
Average Schedule Company Settlements	\$16,052,249	\$80,225,086
TS Expenses and other Taxes	\$16,729,634	\$83,315,070
TS Adjusted Federal Income Tax	\$1,968,712	\$8,376,681
Total Traffic Sensitive Expenses	\$34,750,595	\$171,916,837
TS Residue For Distribution (Note 3)	\$7,631,002	\$34,127,406
TS Net Investment	\$630,654,794	\$628,615,383
Annualized Traffic Sensitive Residue Ratio (Note 4)	14.52%	13.03%

Note 1: All of the individual line items include some estimates and are subject to further adjustments under current NECA procedures.

Note 2: The 1988 pool year is for the period beginning January 1, 1988 through the CURRENT MONTH. The Net Investment is an average of the cumulative months reported.

Note 3: Residue for Distribution is Total Revenues less Total Expenses.

Note 4: Annualized Residue Ratio in the CURRENT MONTH is calculated by dividing the amount of Residue for Distribution by the amount of average Net Investment and multiplying by 12 months X 100. The annualized POOL YEAR Residue Ratios are similarly computed except that the sum of the calculation is then divided by the number of POOL YEAR reporting periods.

8. Jurisdictional Shifts in Revenue Requirements

To address concerns that changes in the separations procedures might dramatically shift costs between jurisdictions and thereby lead to unanticipated or significant rate increases, the monitoring program includes the examination of jurisdictional shifts in revenue requirements that occur starting in 1988. This section discusses the monitoring efforts that will be undertaken in this area as the information becomes available.

In 1987, the Commission adopted the recommendations of the Joint Board in Docket No. 86-297 which conformed separations procedures to the revised Uniform System of Accounts and simplified those procedures. The Commission also adopted the Joint Board's recommendation that review of the jurisdictional revenue requirement shifts resulting from these changes be included in the monitoring plan. Pursuant to the Commission's decision, no formal reports from carriers on jurisdictional shifts in revenue requirements are due until March 1989. At that time, shifts occurring during calendar year 1988 will be reported by carriers.

Specifically, the Commission requested information on jurisdictional shifts in total revenue requirements that exceed 5% or more of the company's annual total revenue requirements for the study area. The shifts in revenue requirements to be reported by carriers are those resulting from conformance of the separations rules to the new accounting rules and from simplification of the separations rules. Other separations procedures changes (including those relating to Central Office Equipment and other changes recommended by the Joint Board in Docket No. 80-286) will be excluded.

Subsequent to the Commission's adoption of the Joint Board's recommended monitoring plan, further separations issues developed. The Commission reconsidered its decision regarding the separations procedures for marketing expenses, and decided that, on an interim basis, billings for access charges should be included in the allocation factor for these expenses. ¹ The Commission was concerned, as were the state members of the Joint Board, that the revenue requirement impact of the exclusion of

1 MTS and WATS Market Structure, Amendment of Part 67 (New Part 36) of the Commission's Rules and Establishment of a Joint Board, CC Docket Nos. 78-72, 80-286, and 86-297, 2 FCC Rcd 5349 (1987) (Supplemental NPRM).

access revenues from the allocation factor had not been fully tested in the conformance proceeding. The Commission referred this issue to the Joint Board in CC Docket No. 80-286 and requested that the Joint Board recommend a permanent solution. The Joint Board adopted an Order Inviting Comments and Request for Data regarding this issue on May 4, 1988. 2 In addition, the Commission recently acted on petitions for reconsideration regarding other aspects of the revised separations procedures. 3

Reconsideration Order

In the Monitoring Reconsideration Order, 4 the Commission acted on a Petition for Clarification and Reconsideration filed by Pacific Bell and Nevada Bell (Pacific Companies) on October 28, 1987, which raised the issue of the appropriate reporting procedures for jurisdictional revenue requirement shifts. Specifically, the Pacific Companies requested that the Commission clarify or modify its request to permit LECs to report simulated, rather than actual, impacts on revenue requirements of the new separations rules. The Pacific Companies proposed to use modeling techniques to simulate actual revenue requirement impacts.

Several parties filed responsive pleadings. USTA supported the Pacific Companies' petition. The Ameritech Operating Companies (Ameritech) and Southwestern Bell Telephone Company (Southwestern) contended that no reconsideration was necessary because the decisions of the two Joint Boards and the Commission do not require the use of dual accounting and separation procedures and do not prohibit the use of modeling techniques to calculate revenue requirement shifts. These parties agreed, however, with the Pacific Companies' concern that the Commission clarify this issue. In addition, the New York Department of Public Service (New York) requested that the Commission expand the monitoring program to include an assessment of the

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- 2 Amendment of Part 36 of the Commission's Rules and Establishment of a Joint Board, CC Docket No. 80-286, FCC 88J-1, released May 16, 1988.
 - 3 MTS and WATS Market Structure, Amendment of Part 67 (New Part 36) of the Commission's Rules and Establishment of a Federal-State Joint Board, CC Docket Nos. 78-72, 80-286 and 86-297, FCC 88-216, released August 8, 1988.
 - 4 Establishment of a Program to Monitor the Impact of Joint Board Decisions, CC Docket No. 87-339, FCC 88-244, released July 19, 1988.

cumulative nationwide effect of all the revisions that have resulted from the recent separations decisions. New York also requested that the Commission assess the impact resulting from changes in the allocation of depreciation reserve deficiencies.

In the Monitoring Reconsideration Order, at paras. 26-30, the Commission clarified its preferred method for reporting jurisdictional shifts in revenue requirements. The Commission disagreed with the Pacific Companies' interpretation of the Joint Board recommendations and agreed instead with the interpretation of Ameritech and Southwestern. The Commission stated that the Joint Board and the Commission did not intend to request that LECs report actual, rather than modeled, data in reporting jurisdictional shifts in revenue requirements but, rather, intended to allow carriers to use modeling as a technique to calculate the revenue requirement impact of the new Separations Manual. The Commission noted that to report actual data, carriers would be required to maintain dual accounting systems and perform complex and costly studies, which would contravene the goal of simplifying the separations process. The Commission accordingly clarified that in complying with its request for reports on jurisdictional shifts in revenue requirements, LECs may report data using a modeling approach rather than report actual data.

The Commission stated that although several modeling approaches had been proposed by the industry to determine jurisdictional shifts in revenue requirements, the use of one approach by the entire industry is necessary for a meaningful and accurate analysis of the results. The Commission therefore stated that it would establish a modeling technique that will be used by all carriers in reporting jurisdictional shifts in revenue requirements. The Commission solicited suggestions, to be filed in the open docket in this proceeding, of approaches to the modeling of revenue requirement impacts and requested that such proposals be as specific as possible, with appropriate illustrative examples. The Commission specifically requested that USTA, the Pacific Companies, Ameritech and Southwestern submit their suggested techniques. Comments suggesting modeling approaches were filed August 30, 1988.⁵ Reply comments were filed September 20, 1988. These comments will be summarized in the order which selects the model.

In addition, the Commission declined to expand the monitoring program as suggested by New York, stating that neither the Joint Board, nor the

5 Comments were filed by American Telephone and Telegraph, Ameritech, BellSouth, MCI, Pacific Telesis, Southwestern Bell, and the United States Telephone Association.

Commission, intended the monitoring program to be a comprehensive, all-encompassing review of the impact of every recent separations decision. The Commission stated that both Joint Board and the Commission instead intended the program to be a review of certain specific changes in the Commission's rules that the Joint Board estimated would have certain expected impacts. The Commission added that the request for reports of jurisdictional shifts in revenue requirements was intended to confirm that the impact of separations conformance to accounting changes and of separations simplification would be as the Joint Board and the Commission expected. The remainder of the program, the Commission continued, was intended to monitor the effect of certain changes in subscriber line charges, the federal lifeline assistance programs, the high cost assistance formula, and the common line pooling system. The Commission stated that expansion of the monitoring program as suggested by New York would not further the goals of this proceeding and would exceed the purposes of both Joint Boards and of the Commission in establishing the program. Moreover, the Commission noted that the impact of the separations revision not included in the monitoring program, such as changes in Central Office Equipment procedures, had been fully considered and adequately addressed in Docket No. 80-286 and need not be revisited. In addition, the Commission declined to expand the monitoring program to include an evaluation of the impact of changes in depreciation reserve deficiencies because it would exceed the purposes of the monitoring program and because that issue had never been referred to any Joint Board and had never considered by any Joint Board.