



NEWS

FEDERAL COMMUNICATIONS COMMISSION
1919 M STREET, N.W.
WASHINGTON, D.C. 20554

News media information 202 / 632-5050
Recorded listing of releases and texts
202 / 632-0002

This is an unofficial announcement of Commission action. Release of the full text of a Commission order constitutes official action. See MCI v. FCC, 515 F 2d 385 (D.C. Circ. 1975)

Report No. DC-1691

ACTION IN DOCKET CASE

August 1, 1990

COMPREHENSIVE MONITORING REPORT ON TELEPHONE SERVICE RELEASED
(CC DOCKET 87-339)

The Federal-State Joint Board staff has released the tenth in a series of reports to be issued over a five year period. The reports are intended to assist telecommunications policymakers, and the general public, in monitoring the impact of two major decisions adopted by the FCC during 1987.

In the first of the decisions these reports are designed to monitor, the Commission adopted the recommendations of the Federal-State Joint Board in CC Docket 80-286 to increase subscriber line charges (SLCs), 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 recommendation of the Joint Board in CC Docket 86-287 to simplify jurisdictional separations rules and conform them to the recently revised Uniform System of Accounts.

The reports present current data in each of the eight subject categories selected for monitoring. They are: 1) subscribership and penetration levels; 2) lifeline assistance plans, including both the SLC 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.

This is an open docket 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. Future reports will include a list and summary of comments received since the previous report.

Copies of the report are available from the Commission's duplicating contractor, ITS, 2100 M Street, N.W., Washington D.C. 20037, (202) 857-3800.

-FCC-

News Media contact: Patricia A. Chew at (202) 632-5050.

Common Carrier Bureau contact: Alexander Belinfante at (202) 632-0745.

Monitoring Report

CC Docket No. 87-339

July 1990

Prepared by the Staff of the

Federal-State Joint Board

In CC Docket No. 80-286

Table of Contents

Introduction and Summary	3
1. Subscribership and Penetration Levels	10
2. Lifeline Assistance Plans	54
3. Costs and High Cost Assistance	96
4. Network Usage and Growth	145
5. Rates and Revenues	293
6. Bypass	316
7. Pooling and Rate Deaveraging	327
8. Jurisdictional Shifts in Revenue Requirements	339

Monitoring Report
CC Docket No. 87-339
July 1990

Introduction and Summary

This is the tenth report of a series of 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. In an Order released on June 30, 1989, the Commission reduced the frequency of the reports from quarterly to semi-annually, and changed the release dates to January and July.¹ The reports will continue through July 1992.

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.

Since our January 1990 monitoring report, new information in each of the eight categories we are monitoring has become available and is incorporated in this report. We do not repeat here much of the material that was contained in our previous report. Section 1 includes new subscribership information for March 1990. It shows telephone penetration for households in March was 93.3%, which is up 0.3% from the November 1989 level presented in the previous monitoring report. Section 2 includes updated information on the lifeline and Link Up America programs, including a summary of the Form 496 submissions made in May. Section 3 includes

1 Establishment of a Program to Monitor the Impact of Joint Board Decisions, CC Docket No. 87-339, Order, 4 FCC Rcd 5480 (1989).

analysis of last September's universal service fund filing showing changes from the previous year. Section 4 includes revised usage data by company and annual percentage changes. Section 5 includes Consumer Price Index (CPI) and Producer Price Index (PPI) data through June 1990. The most recent data show that for the first 6 months of 1990, the nation's overall level of prices (measured by the CPI for all items) rose at an annualized rate of 6.1%. The CPI for telephone service rose at an annualized rate of 1.9% 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 the first 5 months of 1990, the local service component (including subscriber line charges) increased at an annualized rate of 4.4%, while the price of interstate toll calls fell at an annualized rate of 2.9%, and the price of state toll calls fell at an annualized rate of 2.7%. Section 6 includes a summary of the bypass reports filed in April. Section 7 includes updated estimates of the effects of depooling. Section 8 includes a summary of the reports on jurisdictional shifts filed in January.

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.

At this time the Joint Board staff is contemplating whether some of the information in these reports should continue to be published after the end of the current monitoring program in 1992. We tentatively recommend that the data in first five sections of this report should continue to be compiled and published by the FCC on an annual basis after 1992. We seek comment on the content, format, frequency, and other aspects of reports to be released after 1992. Comments should be filed by December 1, 1990, if they are to be summarized in our next report.

The deadline for submission of information for each future monitoring report is the first day of the month preceding the one in which the report is released. 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 June 30, 1990. 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.

The following federal and state staff members have contributed to this report and can be contacted for further information. Unless otherwise noted, the federal staff members can be reached at (202) 632-0745.

General Information: Alexander Belinfante (Federal)
Peyton Wynns (Federal)
Ronald Choura (Michigan) (517) 334-6240
Dean Evans (California) (415) 577-2152
Sam Loudenslager (Arkansas) (501) 682-5767

Subscribership and Penetration: Alexander Belinfante (Federal)
Carl Hunt (Colorado) (303) 894-2028

Lifeline Assistance Plans: Laurence Povich (Federal)
Ritchie Yu (Federal)
Joel Shifman (Maine) (207) 289-3831
Robert Capshaw (North Carolina) (919) 733-4249

Costs and High Cost Assistance: Alexander Belinfante (Federal)
Rowland Curry (Texas) (512) 458-0103
Joel Shifman (Maine) (207) 289-3831

Network Usage and Growth: Ramses Mina (Federal)
Paul Pederson (Missouri) (314) 751-7427
Brenda Buchan (Florida) (904) 488-1280

Rates and Revenues: James Lande (Federal)
Linda Blake (Federal)
Elton Calder (Georgia) (404) 656-4565

Bypass: Jonathan Kraushaar (Federal)
Fred Sistarenik (New York) (518) 486-2815
Michael Gallagher (New Jersey) (201) 648-7695

Pooling and Rate Deaveraging: Alexander Belinfante (Federal)
Michael Gallagher (New Jersey) (201) 648-7695

Jurisdictional Shifts: Michael Wilson (Federal) (202) 632-7500
Charles Needy (Federal) (202) 632-7500
Fred Sistarenik (New York) (518) 486-2815

SERVICE LIST

All items filed in CC Docket No. 87-339 must be filed with the Secretary, Federal Communications Commission, 1919 M Street, N.W., Room 222, Washington, D.C. 20554, and the following Commissioners and staff members:

DOCKET NO. 80-286 JOINT BOARD MEMBERS

Chairman Alfred C. Sikes
Federal Communications Commission
1919 M Street, N.W., Room 814
Washington, D. C. 20554

Commissioner Ervin S. Duggan
Federal Communications Commission
1919 M Street, N.W., Room 832
Washington, D.C. 20554

Commissioner George H. Barbour
New Jersey Board of Public
Utilities
2 Gateway Center
Newark, New Jersey 07102

Commissioner Ronald L. Lehr
Colorado Public Utilities
Commission
1580 Logan Street
Denver, Colorado 80203

Commissioner Andrew C. Barrett
Federal Communications Commission
1919 M. St., NW, Room 844
Washington, DC 20554

Commissioner Thomas Beard
Florida Public Service Commission
Fletcher Building
101 East Gaines Street
Tallahassee, Florida 32399-0850

Commissioner William E. Long
Michigan Public Service Commission
6545 Mercantile Way
Lansing, Michigan 48910

DOCKET NO. 80-286 FEDERAL-STATE JOINT BOARD STAFF

Ronald Choura
Chairman, Federal-State Joint
Board Staff
Michigan Public Service
Commission
6545 Mercantile Way
Lansing, Michigan 48910

Elton Calder
Georgia Public Service
Commission
162 State Office Building
244 Washington Street, S.W.
Atlanta, Georgia 30334

Rowland Curry
Texas Public Utility Commission
Suite 400 N
7800 Shoal Creek Blvd.
Austin, Texas 78757

Sam Loudenslager
Arkansas Public Service Commission
1000 Center Street
P.O. Box C-400
Little Rock, Arkansas 72203

Michael P. Gallagher
New Jersey Board of Public
Utilities
2 Gateway Center
Newark, New Jersey 07102

Fred Sistarenik
New York Public Service Commission
3 Empire State Plaza
Albany, New York 12223

Robert Capshaw
North Carolina Utilities
Commission
Box 29510
Raleigh, North Carolina 27626-0510
[if hand delivered:
Dobbs Building
430 North Salisbury Street
Raleigh, North Carolina 27602]

Brenda Buchan
Florida Public Service Commission
Fletcher Building
101 East Gaines Street
Tallahassee, Florida 32399-0850

Paul Pederson
Missouri Public Service Commission
Harry S Truman Bldg., 5th Floor
P.O. Box 360
Jefferson City, Missouri 65102

Dean Evans
California Public Utilities
Commission
505 Van Ness Avenue, Room 4004
San Francisco, California 94102

Carl Hunt
Colorado Public Utilities
Commission
1580 Logan Street
Denver, Colorado 80203

Joel B. Shifman
Maine Public Utilities
Commission
State House Station #18
Augusta, Maine 04333

Michael E. Wilson
Chief, Cost Analysis Branch
Accounting and Audits Division
Common Carrier Bureau
Federal Communications Commission
Washington, DC 20554
[if hand delivered:
2000 L Street, N.W., Room 257
Washington, D.C. 20554]

Charles Gray
National Association of
Regulatory Utility Commissioners
1102 ICC Building
Constitution Ave. & 12th St., N.W.
Washington, DC 20044

OTHER FEDERAL STAFF

Alexander Belinfante
Industry Analysis Division
Common Carrier Bureau
Federal Communications Commission
1919 M Street, N.W., Room 538
Washington, D.C. 20554

Jonathan Kraushaar
Industry Analysis Division
Common Carrier Bureau
Federal Communications Commission
1919 M Street, N.W. Room 538
Washington, D.C. 20554

James Lande
Industry Analysis Division
Common Carrier Bureau
Federal Communications Commission
1919 M Street, N.W. Room 538
Washington, D.C. 20554

Linda Blake
Public Reference Room
Industry Analysis Division
Common Carrier Bureau
Federal Communications Commission
1919 M Street, N.W. Room 538
Washington, D.C. 20554

Peyton L. Wynns
Chief, Industry Analysis Division
Common Carrier Bureau
Federal Communications Commission
1919 M Street, N.W., Room 538
Washington, D.C. 20554

Ramses Mina
Industry Analysis Division
Common Carrier Bureau
Federal Communications Commission
1919 M Street, N.W. Room 538
Washington, D.C. 20554

Laurence Povich
Industry Analysis Division
Common Carrier Bureau
Federal Communications Commission
1919 M Street, N.W. Room 538
Washington, D.C. 20554

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 the aggregate effects of Commission actions on households' decisions to maintain, acquire or drop telephone service. This section presents comprehensive data on telephone penetration statistics collected by the Bureau of the Census under contract with the Federal Communications Commission. Along with telephone penetration statistics for the United States and each of the states from November 1983 to March 1990, data are provided on penetration based on various demographic characteristics.

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. Prior to the 1980s, precise measurements of telephone subscribership received little attention. 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 Current Population Survey 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 differences in the sampling methodologies exist 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.

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, changes in telephone penetration between consecutive reports of less than or equal to 0.5% are likely to be due to sampling error and cannot be regarded as statistically significant. As explained below, when comparing the same month in two consecutive years, changes of less than or equal to 0.4% are not statistically significant. When comparing annual averages, changes of less than 0.3% are not statistically significant. The annual averages are the average of the 3 surveys of the year in question. For individual states or other subgroups of the U.S. population, the amount of sampling variability is much greater.

The data in this section are not seasonally adjusted. Seasonal analysis of the data indicates that, for the nation as a whole, there is no significant seasonal variation in the "telephone available" statistics. There is, however, a significant seasonal pattern in the "telephone in unit" statistics. This pattern, after allowing for the effects of the upward trend in the data, is an increase of 0.3% from November to March, followed by a decrease of 0.1% from March to July, followed by a decrease of 0.2% from July to November.

Census Bureau figures for March 1990, the most recent data available, show that the percentage of households subscribing to telephone service has increased by 0.3% to 93.3% in the past year. This increase is not statistically significant. As a result of the increasing percentage of subscribership and an increasing number of households, 0.9 million households were added to the nation's telephone system between March 1989 and March 1990. The estimated penetration rate for March is up 0.3% from the November 1989 level. This increase is not statistically significant, and it can be largely attributed to normal seasonal variation.

This section includes figures showing subscribership percentages by state, by householder's age and race, by household size, by family income, and for individual adults by labor force status. The data for individual adults show that 94.2% of those adults in the civilian noninstitutionalized population have a telephone in their household. This figure is up 0.2% from the March and November 1989 levels. These changes are not statistically significant.

This section contains eleven tables and three charts presenting penetration statistics broken out for various geographic and demographic characteristics.

Table 1.1 summarizes the telephone penetration for the United States, combining information on the number of households with the penetration rates.

Table 1.2 shows the Current Population Survey responses for the United States and for each state for every four months beginning with November 1983. Because the Current Population Survey 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 first question was "yes". The column headed "Avail." indicates the percentage of households which responded "yes" to either the first or the second question.

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

Chart 1.2 shows the states with penetration rates above and below the national average, based on the March 1990 rates in Table 1.2.

Table 1.3 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 1.4 shows the nationwide penetration rates for households by family income and the race of the householder. It shows a strong relationship between income and penetration.

Table 1.5 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.

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 individual adults 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 1.3 depicts the nationwide penetration rates for individual adults graphically over time, with the values taken from the totals in Table 1.6.

Tables 1.7-1.11 present the critical values at the 95% confidence level for testing the statistical significance of changes over time in the earlier tables. These critical values 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. 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. 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 0.8 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 averages are based on three surveys and hence have a lower standard error.

TABLE 1.1

Telephone Penetration in the U.S.

<u>Date</u>	<u>Households</u> (millions)	<u>Households</u> with <u>Telephones</u> (millions)	<u>Percentage</u> with <u>Telephones</u>	<u>Households</u> without <u>Telephones</u> (millions)	<u>Percentage</u> without <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
November 1988	92.6	85.7	92.5	6.9	7.5
March 1989	93.6	87.0	93.0	6.6	7.0
July 1989	93.8	87.5	93.3	6.3	6.7
November 1989	93.9	87.3	93.0	6.6	7.0
March 1990	94.2	87.9	93.3	6.3	6.7

PERCENTAGE OF HOUSEHOLDS WITH A TELEPHONE BY NATIONAL TOTAL AND STATES - TABLE 1, 2

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

PERCENTAGE OF HOUSEHOLDS WITH A TELEPHONE BY NATIONAL TOTAL AND STATES - TABLE 1 . 2

	1984		1985					
	ANNUAL AVERAGE		MARCH		JULY		NOVEMBER	
	Unit	Avail	Unit	Avail	Unit	Avail	Unit	Avail
UNITED STATES	91.6	93.7	91.8	93.7	91.8	93.9	91.9	94.0
ALABAMA	88.4	90.5	88.4	90.3	89.1	90.9	89.9	91.8
ALASKA	86.5	89.0	89.4	91.7	86.4	88.0	85.7	88.7
ARIZONA	86.9	89.4	87.0	89.4	88.0	89.8	86.9	89.8
ARKANSAS	86.6	90.6	85.7	89.8	86.6	90.8	85.5	89.2
CALIFORNIA	92.5	93.8	93.0	94.1	92.7	94.1	93.0	94.1
COLORADO	93.2	95.4	96.2	97.7	93.7	95.9	93.1	95.0
CONNECTICUT	95.5	97.0	94.9	97.2	96.5	97.6	97.1	98.0
DELAWARE	94.3	95.7	96.6	97.4	94.4	96.1	93.4	95.2
DIST OF COL	94.9	96.3	91.6	93.5	93.6	94.9	95.6	97.4
FLORIDA	88.7	91.3	88.8	90.9	89.5	91.6	90.3	92.7
GEORGIA	86.2	89.1	89.0	91.1	88.4	90.2	85.4	88.0
HAWAII	93.5	94.9	93.3	95.1	92.7	95.8	93.1	94.2
IDAHO	90.7	91.7	91.7	93.3	91.1	92.7	92.6	93.5
ILLINOIS	94.2	95.8	94.4	95.6	93.4	95.3	93.3	95.2
INDIANA	91.6	93.6	91.7	94.8	92.8	95.0	92.4	94.3
IOWA	96.2	97.4	96.0	96.9	94.6	96.4	94.7	95.9
KANSAS	94.3	95.8	94.8	97.1	93.9	95.9	94.4	96.2
KENTUCKY	88.1	91.0	89.0	92.1	86.8	90.3	86.4	90.8
LOUISIANA	89.7	92.7	90.5	93.5	90.3	94.0	90.2	93.4
MAINE	93.4	95.3	94.2	95.3	93.8	95.2	94.2	96.2
MARYLAND	95.7	96.5	95.2	96.2	96.2	98.1	95.3	95.9
MASSACHUSETTS	95.9	96.9	95.6	96.7	95.0	95.9	94.8	96.5
MICHIGAN	92.8	94.5	92.6	94.1	93.5	94.7	92.6	93.7
MINNESOTA	95.8	97.1	97.1	98.2	96.8	97.4	95.3	96.7
MISSISSIPPI	82.4	87.5	81.6	87.0	80.1	88.7	81.0	87.0
MISSOURI	91.5	93.7	92.6	94.2	92.9	95.2	92.0	95.0
MONTANA	91.0	94.0	92.2	95.2	90.0	91.4	92.0	95.1
NEBRASKA	95.7	96.8	96.4	96.9	95.0	96.3	94.6	96.7
NEVADA	90.4	92.8	91.3	93.6	90.3	92.8	94.0	95.1
NEW HAMPSHIRE	94.3	95.8	93.4	94.4	93.0	94.2	93.4	95.4
NEW JERSEY	94.8	96.1	95.1	96.5	95.4	96.5	94.1	95.5
NEW MEXICO	82.0	87.0	85.0	88.0	85.1	88.8	82.1	87.8
NEW YORK	91.8	93.6	92.0	93.1	91.2	93.1	93.0	94.5
N. CAROLINA	88.3	91.9	89.8	92.2	89.2	92.7	89.2	92.2
N. DAKOTA	94.6	96.8	95.0	96.1	95.1	96.7	95.7	97.4
OHIO	92.4	94.4	91.7	94.7	93.3	95.1	91.7	93.8
OKLAHOMA	90.3	92.5	90.3	92.7	87.0	89.6	89.2	92.6
OREGON	90.6	92.3	89.2	91.0	91.0	93.2	90.6	92.0
PENNSYLVANIA	94.9	96.5	94.2	95.5	95.8	96.8	95.8	97.5
RHODE ISLAND	93.6	94.6	93.4	94.4	95.1	96.4	93.6	94.5
S. CAROLINA	83.7	87.7	87.2	90.6	85.6	90.5	87.6	90.4
S. DAKOTA	93.2	94.9	92.4	94.5	93.1	94.2	92.2	94.9
TENNESSEE	88.5	92.0	87.7	90.0	88.3	91.8	91.9	95.9
TEXAS	88.4	91.6	87.8	91.5	87.7	91.6	88.9	91.8
UTAH	92.5	94.2	95.3	95.7	93.3	95.1	93.2	94.5
VERMONT	92.3	94.0	90.6	91.8	93.0	94.4	95.1	96.2
VIRGINIA	93.1	95.1	92.8	94.5	90.4	92.3	92.0	94.5
WASHINGTON	93.0	94.4	92.7	94.4	96.1	97.5	95.3	96.6
W. VIRGINIA	87.7	91.8	88.1	91.4	88.7	92.8	86.1	90.8
WISCONSIN	95.2	96.6	93.8	95.7	94.4	95.5	94.1	95.0
WYOMING	89.9	92.8	91.7	94.2	92.7	93.8	95.7	96.7

PERCENTAGE OF HOUSEHOLDS WITH A TELEPHONE BY NATIONAL TOTAL AND STATES - TABLE 1.2

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

PERCENTAGE OF HOUSEHOLDS WITH A TELEPHONE BY NATIONAL TOTAL AND STATES - TABLE 1.2

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

PERCENTAGE OF HOUSEHOLDS WITH A TELEPHONE BY NATIONAL TOTAL AND STATES - TABLE 1 .2

	1987		1988					
	ANNUAL AVERAGE		MARCH		JULY		NOVEMBER	
	Unit	Avail	Unit	Avail	Unit	Avail	Unit	Avail
UNITED STATES	92.4	94.2	92.9	94.6	92.8	94.6	92.5	94.4
ALABAMA	87.5	89.6	88.4	89.6	86.5	89.2	86.9	90.2
ALASKA	87.8	90.2	87.2	89.4	88.2	90.3	87.3	90.0
ARIZONA	88.6	90.7	90.5	92.5	91.2	91.9	90.2	92.4
ARKANSAS	86.3	90.7	83.6	87.7	87.5	92.1	87.3	90.9
CALIFORNIA	93.8	95.0	94.7	95.6	94.0	95.1	94.5	95.8
COLORADO	92.9	95.5	95.1	96.3	94.1	95.7	92.2	94.1
CONNECTICUT	97.0	98.0	96.5	99.0	97.6	98.4	94.8	99.3
DELAWARE	96.5	97.3	97.2	98.4	97.4	98.2	96.3	97.2
DIST OF COL	92.4	94.2	93.3	95.2	94.4	95.3	96.1	97.3
FLORIDA	91.7	93.8	93.0	94.7	92.8	94.8	92.2	94.1
GEORGIA	88.7	91.3	91.5	93.2	90.4	92.5	88.4	91.7
HAWAII	94.2	96.6	95.3	96.2	92.2	95.0	95.9	97.8
IDAHO	91.1	92.5	92.9	93.1	91.9	93.6	91.9	93.2
ILLINOIS	93.7	95.2	94.3	95.6	94.0	95.9	94.1	95.3
INDIANA	91.2	93.2	91.4	94.2	92.8	95.3	92.8	95.3
IOWA	95.1	96.3	94.5	96.2	96.6	97.8	95.1	96.6
KANSAS	95.2	96.6	95.3	95.9	94.0	96.2	93.9	95.0
KENTUCKY	86.5	90.6	89.5	92.2	86.8	90.1	86.3	90.3
LOUISIANA	87.5	90.8	86.8	90.1	87.8	91.9	87.3	91.4
MAINE	93.5	95.2	94.3	95.3	93.5	96.0	94.7	96.3
MARYLAND	95.4	96.6	96.4	97.4	96.0	96.9	95.4	97.2
MASSACHUSETTS	96.4	97.0	97.3	97.7	97.1	97.5	96.4	96.8
MICHIGAN	93.7	94.8	94.4	95.5	93.6	94.9	93.8	94.7
MINNESOTA	96.0	97.4	97.3	98.3	97.3	98.0	97.1	98.9
MISSISSIPPI	81.5	86.3	83.8	88.9	83.7	88.7	82.5	88.1
MISSOURI	93.0	95.3	93.0	95.5	95.5	96.4	92.0	94.8
MONTANA	90.9	93.9	91.4	93.2	91.5	94.0	92.3	95.3
NEBRASKA	94.6	96.1	96.4	96.9	95.3	96.0	94.6	95.5
NEVADA	92.4	93.7	91.8	92.8	92.6	93.7	93.0	93.9
NEW HAMPSHIRE	94.1	96.2	96.5	97.1	94.8	95.4	94.5	95.9
NEW JERSEY	95.0	96.3	94.3	96.0	94.8	96.3	94.1	95.3
NEW MEXICO	86.0	89.3	85.9	89.1	85.5	87.8	85.6	90.5
NEW YORK	92.7	94.2	93.0	94.4	91.6	93.5	92.5	94.1
N. CAROLINA	89.2	91.7	90.1	92.7	91.2	92.9	89.9	92.8
N. DAKOTA	96.8	97.4	96.7	97.9	95.8	96.4	97.9	98.1
OHIO	93.4	94.7	94.0	94.9	95.1	96.1	94.0	94.8
OKLAHOMA	88.7	91.8	89.6	92.0	87.4	90.0	89.6	92.8
OREGON	93.3	94.8	89.4	91.8	94.4	95.0	92.2	93.8
PENNSYLVANIA	96.4	97.3	96.1	97.2	96.8	97.5	95.7	96.6
RHODE ISLAND	95.2	96.3	95.4	96.7	94.4	95.5	96.5	97.3
S. CAROLINA	87.7	90.6	88.3	91.6	87.4	91.1	89.7	91.6
S. DAKOTA	92.8	95.0	92.2	95.0	92.9	95.8	93.7	95.4
TENNESSEE	89.2	92.6	91.7	94.7	90.4	93.1	88.8	92.8
TEXAS	89.5	92.2	87.8	90.6	89.1	92.2	88.5	91.0
UTAH	92.3	94.6	93.0	93.7	91.4	95.4	93.1	94.3
VERMONT	95.3	96.9	95.9	97.2	95.4	96.5	95.6	96.6
VIRGINIA	92.5	94.6	94.7	96.2	91.4	95.2	92.5	95.0
WASHINGTON	94.3	96.4	93.4	94.9	95.2	96.4	94.2	95.6
W. VIRGINIA	87.8	91.5	87.9	92.1	85.8	90.1	88.4	92.0
WISCONSIN	96.4	97.1	95.9	97.4	97.2	97.9	98.0	98.7
WYOMING	92.3	94.1	93.6	94.6	94.3	95.9	91.3	92.7

PERCENTAGE OF HOUSEHOLDS WITH A TELEPHONE BY NATIONAL TOTAL AND STATES - TABLE 1 . 2

	1988		1989					
	ANNUAL AVERAGE		MARCH		JULY		NOVEMBER	
	Unit	Avall	Unit	Avall	Unit	Avall	Unit	Avall
UNITED STATES	92.7	94.5	93.0	94.7	93.3	95.0	93.0	94.9
ALABAMA	87.3	89.6	90.4	91.3	89.8	91.7	86.9	91.0
ALASKA	87.6	89.9	84.1	87.1	88.3	91.4	87.9	91.3
ARIZONA	90.6	92.3	90.5	92.0	91.9	93.2	92.4	94.4
ARKANSAS	86.1	90.2	84.0	89.0	89.5	92.7	88.9	91.4
CALIFORNIA	94.4	95.5	94.6	95.8	95.5	96.3	94.8	95.8
COLORADO	93.8	95.4	96.0	96.6	93.6	95.7	94.2	95.8
CONNECTICUT	96.3	98.9	97.4	98.0	98.4	98.6	98.6	98.9
DELAWARE	97.0	97.9	95.3	95.9	97.3	98.3	97.4	98.2
DIST OF COL	94.6	95.9	95.1	96.3	91.0	93.7	92.0	94.5
FLORIDA	92.7	94.5	91.7	93.2	93.1	95.2	93.8	95.1
GEORGIA	90.1	92.4	90.5	93.2	90.8	93.9	89.3	91.6
HAWAII	94.5	96.3	95.9	96.9	92.9	96.1	96.4	97.7
IDAHO	92.2	93.3	92.3	93.3	92.5	93.3	92.8	94.2
ILLINOIS	94.2	95.6	94.5	95.9	93.2	94.8	93.9	95.6
INDIANA	92.3	94.9	93.4	97.6	94.2	96.2	92.1	94.0
IOWA	95.4	96.9	97.1	98.0	95.4	97.3	96.5	97.1
KANSAS	94.4	95.7	94.6	96.4	94.2	96.2	94.4	95.0
KENTUCKY	87.5	90.9	89.5	93.1	89.0	92.8	88.3	92.3
LOUISIANA	87.3	91.1	90.5	92.5	88.3	91.8	86.9	89.7
MAINE	94.2	95.9	95.0	95.9	95.8	97.0	94.9	96.5
MARYLAND	95.9	97.2	96.0	97.6	94.4	96.3	94.5	96.0
MASSACHUSETTS	96.9	97.3	96.6	97.5	97.7	98.2	97.0	97.8
MICHIGAN	93.9	95.0	94.4	95.2	94.3	95.3	92.6	94.3
MINNESOTA	97.2	98.4	96.7	97.6	95.7	97.1	98.0	98.7
MISSISSIPPI	83.3	88.6	84.4	88.8	85.6	90.5	86.6	91.6
MISSOURI	93.5	95.6	90.9	93.7	91.2	93.3	90.9	93.2
MONTANA	91.7	94.2	92.6	94.6	90.1	94.5	92.3	93.9
NEBRASKA	95.4	96.1	96.1	97.4	96.1	97.2	93.4	94.3
NEVADA	92.4	93.4	91.5	91.8	93.1	94.2	93.5	94.0
NEW HAMPSHIRE	95.2	96.1	95.9	96.5	96.4	98.2	94.0	96.8
NEW JERSEY	94.4	95.9	94.9	95.8	94.5	96.1	95.1	96.3
NEW MEXICO	85.7	89.1	86.9	90.5	85.5	87.9	85.0	90.3
NEW YORK	92.4	94.0	93.1	94.6	92.1	94.0	91.8	93.5
N. CAROLINA	90.4	92.8	92.0	94.2	91.9	93.9	91.8	94.1
N. DAKOTA	96.8	97.5	96.5	98.1	97.5	98.2	97.0	97.8
OHIO	94.4	95.2	94.4	95.2	95.4	96.3	94.2	95.1
OKLAHOMA	88.9	91.6	86.7	89.4	89.2	91.2	88.7	93.1
OREGON	92.0	93.5	89.5	91.9	94.2	95.4	93.0	94.6
PENNSYLVANIA	96.2	97.1	96.8	97.2	96.9	97.4	97.2	97.9
RHODE ISLAND	95.4	96.5	95.3	96.1	96.9	97.9	94.0	94.8
S. CAROLINA	88.5	91.4	87.2	89.5	88.8	92.1	87.4	90.9
S. DAKOTA	92.9	95.4	93.3	94.7	93.7	95.2	92.8	94.9
TENNESSEE	90.3	93.5	92.8	95.0	91.3	94.3	91.6	95.9
TEXAS	88.5	91.3	87.8	90.4	88.8	91.5	89.8	92.9
UTAH	92.5	94.5	95.9	95.9	95.6	96.3	96.3	97.5
VERMONT	95.6	96.8	95.7	96.7	93.4	95.7	92.7	94.8
VIRGINIA	92.9	95.5	92.4	94.9	93.1	96.2	94.0	96.2
WASHINGTON	94.3	95.7	96.5	97.4	97.6	98.0	95.1	96.4
W. VIRGINIA	87.3	91.4	87.7	91.3	84.3	87.5	88.4	92.0
WISCONSIN	97.0	98.0	96.8	98.2	97.7	98.9	97.5	98.0
WYOMING	93.0	94.4	95.3	96.7	93.8	96.5	91.8	93.4

PERCENTAGE OF HOUSEHOLDS WITH A TELEPHONE BY NATIONAL TOTAL AND STATES - TABLE 1.2

	1989		1990	
	ANNUAL AVERAGE		MARCH	
	Unit	Avail	Unit	Avail
UNITED STATES	93.1	94.9	93.3	95.0
ALABAMA	89.0	91.3	88.4	89.3
ALASKA	86.8	89.9	89.9	92.9
ARIZONA	91.6	93.2	91.1	93.8
ARKANSAS	87.5	91.0	88.1	91.7
CALIFORNIA	94.9	96.0	94.4	95.7
COLORADO	94.6	96.0	93.9	96.1
CONNECTICUT	98.1	98.5	97.3	97.6
DELAWARE	96.6	97.5	95.8	96.9
DIST OF COL	92.7	94.8	92.9	93.4
FLORIDA	92.9	94.5	92.3	94.5
GEORGIA	90.2	92.9	90.7	93.7
HAWAII	95.1	96.9	96.7	97.6
IDAHO	92.5	93.6	93.1	95.2
ILLINOIS	93.9	95.4	94.5	95.9
INDIANA	93.2	95.9	92.3	95.2
IOWA	96.3	97.5	97.1	97.8
KANSAS	94.4	95.8	95.6	97.2
KENTUCKY	88.9	92.7	90.4	93.3
LOUISIANA	88.6	91.3	90.4	92.0
MAINE	95.3	96.4	96.5	97.7
MARYLAND	95.0	96.6	95.4	96.7
MASSACHUSETTS	97.1	97.8	96.6	97.1
MICHIGAN	93.7	94.9	94.1	95.7
MINNESOTA	96.8	97.8	96.5	97.5
MISSISSIPPI	85.5	90.3	87.5	90.8
MISSOURI	91.0	93.4	91.9	95.2
MONTANA	91.7	94.3	91.7	93.6
NEBRASKA	95.2	96.3	95.8	96.6
NEVADA	92.7	93.3	94.1	94.4
NEW HAMPSHIRE	95.4	97.1	95.9	96.9
NEW JERSEY	94.8	96.1	95.5	96.5
NEW MEXICO	85.8	89.6	86.5	90.5
NEW YORK	92.3	94.0	90.6	92.5
N. CAROLINA	91.9	94.1	92.3	94.5
N. DAKOTA	97.0	98.0	96.7	97.9
OHIO	94.6	95.5	95.9	96.9
OKLAHOMA	88.2	91.2	90.4	93.8
OREGON	92.3	93.9	92.8	94.3
PENNSYLVANIA	97.0	97.5	96.7	97.5
RHODE ISLAND	95.4	96.3	94.8	95.9
S. CAROLINA	87.8	90.8	89.6	92.9
S. DAKOTA	93.3	95.0	94.4	96.3
TENNESSEE	91.9	95.1	92.1	93.8
TEXAS	88.8	91.6	90.0	92.4
UTAH	95.9	96.5	96.5	97.0
VERMONT	93.9	95.7	96.8	97.6
VIRGINIA	93.2	95.7	93.4	95.4
WASHINGTON	96.4	97.3	97.2	97.7
W. VIRGINIA	86.8	90.3	88.6	92.4
WISCONSIN	97.3	98.4	96.5	97.2
WYOMING	93.6	95.5	95.1	96.5

CHART 1.1

Telephone Penetration

Households

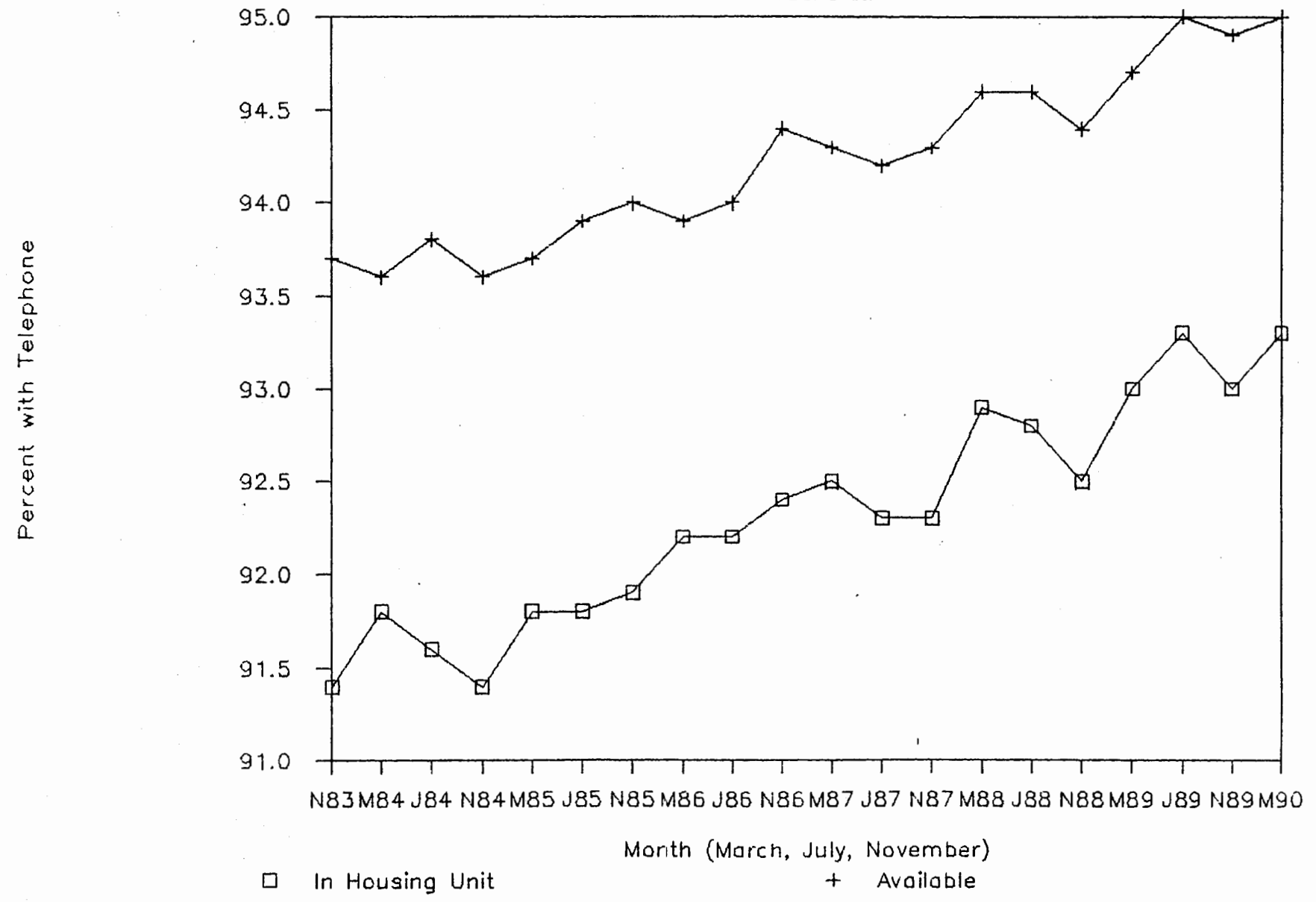
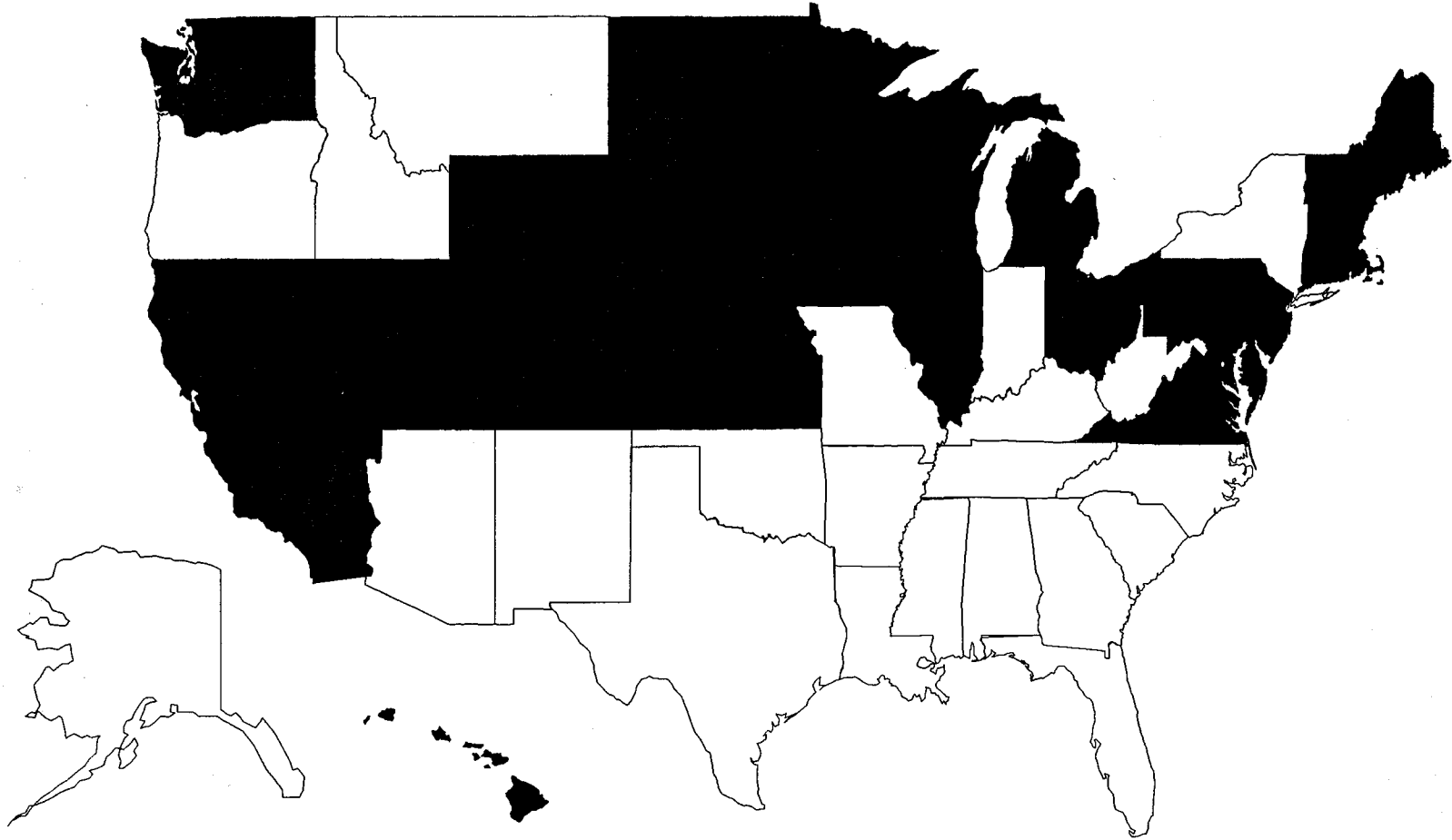


CHART 1.2

Households With Phones

Above or below March 1990 national average



Solid black = Above national average of 93.3%

PERCENTAGE OF HOUSEHOLDS WITH A TELEPHONE BY HOUSEHOLD SIZE - TABLE 1.3

	RACE						HISPANIC ORIGIN	
	TOTAL		WHITE		BLACK		Unit	Avail
	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

PERCENTAGE OF HOUSEHOLDS WITH A TELEPHONE BY HOUSEHOLD SIZE - TABLE 1.3

	RACE						HISPANIC ORIGIN	
	TOTAL		WHITE		BLACK		Unit	Avail
	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

PERCENTAGE OF HOUSEHOLDS WITH A TELEPHONE BY HOUSEHOLD SIZE - TABLE 1.3

	RACE						HISPANIC ORIGIN	
	TOTAL		WHITE		BLACK		Unit	Avail
	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
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
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

PERCENTAGE OF HOUSEHOLDS WITH A TELEPHONE BY HOUSEHOLD SIZE - TABLE 1.3

	RACE						HISPANIC ORIGIN	
	TOTAL		WHITE		BLACK		Unit	Avail
	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
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
NOVEMBER 88								
TOTAL	92.5	94.4	93.9	95.5	82.5	86.6	80.8	83.4
1 PERSON	88.0	91.3	90.4	93.2	74.9	80.8	72.4	76.1
2 - 3	94.3	95.8	95.2	96.4	86.9	90.2	82.9	85.4
4 - 5	95.1	95.8	95.9	96.5	89.5	91.1	84.8	85.7
6 +	91.3	92.2	91.7	92.9	86.0	86.0	79.2	82.1
1988 ANNUAL AVERAGE								
TOTAL	92.7	94.5	94.1	95.6	83.0	86.8	82.1	85.1
1 PERSON	88.4	91.7	90.6	93.5	76.4	82.0	74.4	79.5
2 - 3	94.5	95.7	95.4	96.4	86.8	89.7	84.2	86.9
4 - 5	94.9	95.8	95.8	96.5	89.0	90.7	84.4	85.6
6 +	92.8	94.3	93.7	94.9	87.2	90.6	86.1	88.0
MARCH 89								
TOTAL	93.0	94.7	94.4	95.8	83.2	86.9	81.9	84.8
1 PERSON	88.9	92.1	91.2	94.1	77.3	82.4	72.1	77.9
2 - 3	94.6	95.7	95.6	96.4	86.7	89.7	83.7	86.1
4 - 5	95.9	96.4	96.8	97.1	89.2	91.0	89.7	89.7
6 +	94.1	94.4	95.5	96.0	90.4	90.4	90.6	91.9
JULY 89								
TOTAL	93.3	95.0	94.6	96.0	83.9	87.9	83.5	86.5
1 PERSON	90.7	93.7	92.2	94.9	81.2	85.6	75.8	81.8
2 - 3	94.5	95.9	95.6	96.7	85.1	89.2	84.9	87.8
4 - 5	94.1	95.3	95.3	96.2	85.6	89.0	85.3	87.9
6 +	88.9	90.8	90.8	92.3	80.5	84.4	82.8	84.2
NOVEMBER 89								
TOTAL	93.0	94.9	94.6	96.0	82.5	86.5	83.5	86.8
1 PERSON	90.5	93.3	92.3	94.8	78.8	83.4	78.6	84.2
2 - 3	94.5	95.9	95.6	96.8	85.5	88.9	84.4	88.0
4 - 5	93.5	94.8	95.1	96.1	82.4	86.5	85.7	87.7
6 +	88.5	90.9	91.6	93.0	76.2	82.6	81.5	83.4

PERCENTAGE OF HOUSEHOLDS WITH A TELEPHONE BY HOUSEHOLD SIZE - TABLE 1.3

	RACE						HISPANIC ORIGIN	
	TOTAL		WHITE		BLACK		Unit	Avail
	Unit	Avail	Unit	Avail	Unit	Avail	Unit	Avail
1989 ANNUAL AVERAGE								
TOTAL	93.1	94.9	94.5	95.9	83.2	87.1	83.0	86.0
1 PERSON	90.0	93.0	91.9	94.6	79.1	83.8	75.5	81.3
2 - 3	94.5	95.8	95.6	96.7	85.8	89.3	84.3	87.3
4 - 5	94.5	95.5	95.7	96.4	85.7	88.8	86.9	88.5
6 +	90.5	92.0	92.7	93.8	82.4	85.8	84.9	86.5
MARCH 90								
TOTAL	93.3	95.0	94.6	96.1	83.8	87.1	81.8	84.9
1 PERSON	90.7	93.5	92.5	94.9	79.5	84.1	73.3	78.5
2 - 3	94.9	96.2	95.9	97.0	86.9	89.5	83.8	86.9
4 - 5	93.6	95.0	94.9	96.0	84.2	87.3	84.0	86.7
6 +	87.5	89.5	89.6	91.2	79.0	82.1	79.0	80.4

PERCENTAGE OF FAMILIES WITH A TELEPHONE BY FAMILY INCOME - TABLE 1.4

	RACE						HISPANIC ORIGIN	
	TOTAL		WHITE		BLACK		Unit	Avail
	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

PERCENTAGE OF FAMILIES WITH A TELEPHONE BY FAMILY INCOME - TABLE 1.4

	RACE						HISPANIC ORIGIN	
	TOTAL		WHITE		BLACK		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

PERCENTAGE OF FAMILIES WITH A TELEPHONE BY FAMILY INCOME - TABLE 1.4

	RACE						HISPANIC ORIGIN	
	TOTAL		WHITE		BLACK		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

PERCENTAGE OF FAMILIES WITH A TELEPHONE BY FAMILY INCOME - TABLE 1.4

	RACE						HISPANIC ORIGIN	
	TOTAL		WHITE		BLACK		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

PERCENTAGE OF FAMILIES WITH A TELEPHONE BY FAMILY INCOME - TABLE 1.4

	RACE						HISPANIC ORIGIN	
	TOTAL		WHITE		BLACK		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

PERCENTAGE OF FAMILIES WITH A TELEPHONE BY FAMILY INCOME - TABLE 1.4

	RACE						HISPANIC ORIGIN	
	TOTAL		WHITE		BLACK		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

PERCENTAGE OF FAMILIES WITH A TELEPHONE BY FAMILY INCOME - TABLE 1.4

	RACE						HISPANIC ORIGIN	
	TOTAL		WHITE		BLACK		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
NOVEMBER 88								
TOTAL	92.5	94.4	93.9	95.5	82.5	86.6	80.8	83.4
UNDER \$5,000	71.5	78.3	74.2	80.4	66.0	74.1	56.8	62.2
\$5,000 - \$7,499	81.6	86.0	83.4	87.2	75.2	81.9	59.6	63.1
\$7,500 - \$9,999	84.9	88.1	87.2	90.1	73.1	77.9	67.0	70.6
\$10,000 - \$12,499	88.7	91.2	90.0	92.2	81.0	84.9	74.5	79.3
\$12,500 - \$14,999	91.5	93.9	92.8	94.8	83.4	87.9	81.5	83.1
\$15,000 - \$19,999	93.6	95.5	94.3	96.1	89.1	91.2	87.3	89.7
\$20,000 - \$24,999	96.5	97.6	96.7	97.8	94.4	96.2	93.1	94.1
\$25,000 - \$29,999	97.8	98.7	98.1	98.7	95.0	98.3	95.4	96.1
\$30,000 - \$34,999	98.6	99.2	98.7	99.3	98.0	98.2	99.5	100.0
\$35,000 - \$39,999	99.0	99.5	99.1	99.5	98.1	99.0	99.1	99.1
\$40,000 - \$49,999	99.3	99.5	99.4	99.6	97.0	97.5	99.0	100.0
\$50,000 - \$59,999	99.5	99.8	99.5	99.8	99.3	99.3	100.0	100.0
\$60,000 - \$74,999	99.5	99.9	99.5	99.9	100.0	100.0	100.0	100.0
\$75,000 +	99.4	100.0	99.4	100.0	100.0	100.0	99.6	100.0
1988 ANNUAL AVERAGE								
TOTAL	92.7	94.5	94.1	95.6	83.0	86.8	82.1	85.1
UNDER \$5,000	72.0	78.4	74.9	80.8	65.8	73.2	58.5	64.5
\$5,000 - \$7,499	83.3	87.1	85.1	88.4	76.9	82.3	66.4	71.7
\$7,500 - \$9,999	85.6	88.7	87.2	90.3	77.7	81.4	67.3	72.8
\$10,000 - \$12,499	88.8	91.5	90.1	92.4	81.7	86.5	77.5	80.9
\$12,500 - \$14,999	91.3	93.7	92.2	94.4	85.1	88.8	81.5	84.5
\$15,000 - \$19,999	93.6	95.3	94.3	95.9	88.5	91.1	88.6	90.6
\$20,000 - \$24,999	96.2	97.4	96.5	97.6	93.5	95.7	91.1	93.1
\$25,000 - \$29,999	97.6	98.4	97.9	98.5	94.4	96.7	95.0	96.4
\$30,000 - \$34,999	98.4	99.0	98.7	99.2	95.4	96.7	98.6	99.0
\$35,000 - \$39,999	98.8	99.2	98.9	99.3	97.8	98.4	97.2	97.7
\$40,000 - \$49,999	99.3	99.6	99.4	99.7	97.3	98.5	98.7	99.7
\$50,000 - \$74,999	99.5	99.8	99.6	99.8	99.2	99.3	99.4	99.8
\$75,000 +	99.5	99.9	99.4	99.9	100.0	100.0	97.8	100.0

PERCENTAGE OF FAMILIES WITH A TELEPHONE BY FAMILY INCOME - TABLE 1.4

	RACE						HISPANIC ORIGIN	
	TOTAL		WHITE		BLACK		Unit	Avall
	Unit	Avall	Unit	Avall	Unit	Avall		
MARCH 89								
TOTAL	93.0	94.7	94.4	95.8	83.2	86.9	81.9	84.8
UNDER \$5,000	73.2	79.2	76.6	82.0	65.3	73.0	57.1	61.6
\$5,000 - \$7,499	84.4	87.5	86.4	89.3	79.3	82.6	69.3	74.7
\$7,500 - \$9,999	87.1	89.8	88.4	90.9	82.2	85.6	76.8	80.1
\$10,000 - \$12,499	87.9	90.8	89.6	91.9	78.3	85.2	68.1	70.9
\$12,500 - \$14,999	91.1	93.5	92.5	94.7	81.4	85.4	77.6	80.9
\$15,000 - \$19,999	92.5	94.2	93.8	95.4	82.9	86.0	86.2	88.9
\$20,000 - \$24,999	96.1	97.4	96.5	97.6	92.8	95.3	92.1	94.8
\$25,000 - \$29,999	97.5	98.1	97.7	98.3	95.6	96.9	90.1	92.6
\$30,000 - \$34,999	98.3	98.8	98.5	98.9	96.0	97.6	95.8	96.0
\$35,000 - \$39,999	98.9	99.4	99.0	99.5	96.9	98.3	94.4	97.3
\$40,000 - \$49,999	99.0	99.5	99.2	99.7	97.1	97.7	96.3	98.7
\$50,000 - \$59,999	99.6	99.7	99.7	99.8	99.0	99.0	100.0	100.0
\$60,000 - \$74,999	99.5	99.6	99.4	99.5	99.8	99.8	95.1	95.5
\$75,000 +	99.5	99.8	99.4	99.8	100.0	100.0	99.0	99.0
JULY 89								
TOTAL	93.3	95.0	94.6	96.0	83.9	87.9	83.5	86.5
UNDER \$5,000	74.4	80.2	78.0	83.2	65.1	72.8	62.8	68.7
\$5,000 - \$7,499	84.9	88.4	86.3	89.6	79.3	84.1	72.6	75.1
\$7,500 - \$9,999	86.1	89.5	88.2	91.3	77.1	82.5	75.8	81.7
\$10,000 - \$12,499	88.7	91.9	89.8	92.6	82.0	87.6	74.3	79.2
\$12,500 - \$14,999	91.3	93.9	92.3	94.6	86.0	90.5	78.4	84.1
\$15,000 - \$19,999	93.7	95.7	94.4	96.1	89.1	93.0	85.9	88.0
\$20,000 - \$24,999	95.9	97.1	96.6	97.6	89.6	92.7	92.5	94.0
\$25,000 - \$29,999	97.6	98.5	98.0	98.8	92.9	95.9	97.4	99.0
\$30,000 - \$34,999	98.3	98.8	98.5	98.9	96.1	96.8	93.9	95.4
\$35,000 - \$39,999	98.5	99.1	98.8	99.3	96.4	97.9	94.9	97.1
\$40,000 - \$49,999	99.4	99.6	99.4	99.7	98.3	98.3	98.5	98.5
\$50,000 - \$59,999	99.6	99.8	99.6	99.7	100.0	100.0	96.2	97.6
\$60,000 - \$74,999	99.5	99.8	99.5	99.8	100.0	100.0	100.0	100.0
\$75,000 +	99.5	99.8	99.5	99.8	98.4	98.4	100.0	100.0
NOVEMBER 1989								
TOTAL	93.0	94.9	94.6	96.0	82.5	86.5	83.5	86.8
UNDER \$5,000	75.8	81.7	79.7	84.5	66.6	74.6	66.3	71.6
\$5,000 - \$7,499	81.9	86.4	84.2	88.4	73.7	79.3	64.6	71.5
\$7,500 - \$9,999	86.6	90.0	88.8	91.6	75.7	82.6	75.0	78.8
\$10,000 - \$12,499	88.7	91.4	90.7	93.2	77.5	81.8	77.3	80.3
\$12,500 - \$14,999	91.5	93.8	92.4	94.4	86.3	90.5	81.5	86.0
\$15,000 - \$19,999	93.3	95.1	94.4	96.0	85.6	88.7	86.9	89.5
\$20,000 - \$24,999	95.9	97.2	96.2	97.5	92.3	94.9	91.5	94.4
\$25,000 - \$29,999	97.4	98.4	97.8	98.8	93.6	95.3	92.4	97.2
\$30,000 - \$34,999	98.2	98.7	98.4	98.9	96.2	96.7	97.2	97.2
\$35,000 - \$39,999	98.8	99.4	99.0	99.5	96.8	97.7	98.1	98.1
\$40,000 - \$49,999	99.0	99.4	99.2	99.6	96.1	97.1	96.2	97.5
\$50,000 - \$59,999	99.3	99.7	99.4	99.8	97.2	98.0	100.0	100.0
\$60,000 - \$74,999	99.4	99.6	99.5	99.6	98.2	98.2	92.1	94.8
\$75,000 +	99.7	99.8	99.6	99.8	100.0	100.0	100.0	100.0

PERCENTAGE OF FAMILIES WITH A TELEPHONE BY FAMILY INCOME - TABLE 1.4

	RACE						HISPANIC ORIGIN	
	TOTAL		WHITE		BLACK		Unit	Avail
	Unit	Avail	Unit	Avail	Unit	Avail		
1989 ANNUAL AVERAGE								
TOTAL	93.1	94.9	94.5	95.9	83.2	87.1	83.0	86.0
UNDER \$5,000	74.4	80.4	78.1	83.2	65.6	73.5	62.1	67.3
\$5,000 - \$7,499	83.7	87.4	85.7	89.1	77.4	82.0	68.8	73.8
\$7,500 - \$9,999	86.6	89.8	88.5	91.3	78.4	83.6	75.9	80.2
\$10,000 - \$12,499	88.4	91.3	90.0	92.6	79.3	84.9	73.2	76.8
\$12,500 - \$14,999	91.3	93.7	92.4	94.5	84.5	88.8	79.2	83.7
\$15,000 - \$17,499	93.2	95.0	94.2	95.8	85.9	89.2	86.3	88.8
\$17,500 - \$19,999	95.9	97.2	96.4	97.5	91.6	94.3	92.0	94.4
\$20,000 - \$24,999	97.5	98.4	97.9	98.6	94.0	96.0	93.3	96.3
\$25,000 - \$29,999	98.3	98.8	98.5	98.9	96.1	97.0	95.6	96.2
\$30,000 - \$34,999	98.7	99.3	98.9	99.4	96.7	98.0	95.8	97.5
\$35,000 - \$39,999	99.1	99.5	99.2	99.6	97.2	97.7	97.0	98.2
\$40,000 - \$49,999	99.5	99.7	99.5	99.8	98.7	99.0	98.7	99.2
\$50,000 - \$74,999	99.5	99.7	99.5	99.7	99.3	99.3	95.7	96.8
\$75,000 +	99.5	99.8	99.5	99.8	99.5	99.5	99.7	99.7
MARCH 90								
TOTAL	93.3	95.0	94.6	96.1	83.8	87.1	81.8	84.9
UNDER \$5,000	75.7	81.1	78.9	83.8	68.1	74.1	57.2	62.3
\$5,000 - \$7,499	82.3	87.0	84.5	88.8	74.8	80.3	65.0	70.4
\$7,500 - \$9,999	87.5	90.4	89.2	91.9	78.6	82.7	75.6	78.3
\$10,000 - \$12,499	87.9	90.4	89.6	91.9	78.6	82.7	70.8	74.5
\$12,500 - \$14,999	91.7	93.8	93.0	95.0	84.6	86.7	83.0	84.9
\$15,000 - \$19,999	93.4	95.4	94.1	95.9	88.0	91.6	83.6	88.6
\$20,000 - \$24,999	95.2	96.7	95.6	96.9	92.2	94.4	89.7	92.6
\$25,000 - \$29,999	97.0	97.9	97.8	98.5	89.5	92.1	92.6	94.8
\$30,000 - \$34,999	98.1	98.7	98.6	99.1	94.4	95.4	96.9	98.0
\$35,000 - \$39,999	98.7	99.3	99.0	99.5	96.4	97.4	93.4	96.6
\$40,000 - \$49,999	99.0	99.4	99.2	99.5	98.0	98.4	99.0	99.0
\$50,000 - \$59,999	99.1	99.5	99.4	99.6	97.3	97.3	95.6	95.6
\$60,000 - \$74,999	99.8	99.9	99.9	99.9	99.2	100.0	100.0	100.0
\$75,000 +	99.4	99.8	99.4	99.8	100.0	100.0	97.7	100.0

PERCENTAGE OF HOUSEHOLDS WITH A TELEPHONE BY HOUSEHOLDER'S AGE - TABLE 1.5

	RACE						HISPANIC ORIGIN	
	TOTAL		WHITE		BLACK		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

PERCENTAGE OF HOUSEHOLDS WITH A TELEPHONE BY HOUSEHOLDER'S AGE - TABLE 1.5

	RACE						HISPANIC ORIGIN	
	TOTAL		WHITE		BLACK		Unit	Avail
	Unit	Avail	Unit	Avail	Unit	Avail	Unit	Avail
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
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

PERCENTAGE OF HOUSEHOLDS WITH A TELEPHONE BY HOUSEHOLDER'S AGE - TABLE 1.5

	RACE						HISPANIC ORIGIN	
	TOTAL		WHITE		BLACK		Unit	Avail
	Unit	Avail	Unit	Avail	Unit	Avail	Unit	Avail
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
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

PERCENTAGE OF HOUSEHOLDS WITH A TELEPHONE BY HOUSEHOLDER'S AGE - TABLE 1.5

	RACE						HISPANIC ORIGIN	
	TOTAL		WHITE		BLACK		Unit	Avail
	Unit	Avail	Unit	Avail	Unit	Avail	Unit	Avail
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
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

PERCENTAGE OF HOUSEHOLDS WITH A TELEPHONE BY HOUSEHOLDER'S AGE - TABLE 1.5

	RACE						HISPANIC ORIGIN	
	TOTAL		WHITE		BLACK		Unit	Avail
	Unit	Avail	Unit	Avail	Unit	Avail	Unit	Avail
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
NOVEMBER 88								
TOTAL HOUSEHOLDS	92.5	94.4	93.9	95.5	82.5	86.6	80.8	83.4
16-24 YRS OLD	78.7	84.2	81.0	86.1	63.9	71.6	58.9	66.5
25-54 YRS OLD	92.4	94.4	93.9	95.5	82.0	86.4	82.5	84.4
55-59 YRS OLD	95.5	96.5	96.1	96.9	90.3	92.9	85.2	86.3
60-64 YRS OLD	95.1	96.1	96.2	97.0	86.6	89.2	91.1	91.7
65-69 YRS OLD	96.3	97.1	97.3	98.0	87.9	89.7	91.2	92.2
70-99 YRS OLD	96.3	97.6	96.8	98.1	91.5	93.7	93.0	96.4

PERCENTAGE OF HOUSEHOLDS WITH A TELEPHONE BY HOUSEHOLDER'S AGE - TABLE 1.5

	RACE						HISPANIC ORIGIN	
	TOTAL		WHITE		BLACK		Unit	Avail
	Unit	Avail	Unit	Avail	Unit	Avail		
1988 ANNUAL AVERAGE								
TOTAL HOUSEHOLDS	92.7	94.5	94.1	95.6	83.0	86.8	82.1	85.1
16-24 YRS OLD	80.2	85.1	82.3	86.8	65.6	73.5	64.0	70.9
25-54 YRS OLD	92.6	94.4	94.1	95.6	82.2	86.3	83.5	86.1
55-59 YRS OLD	95.1	96.4	96.1	97.2	88.3	91.0	88.5	89.9
60-64 YRS OLD	95.3	96.2	96.3	97.0	87.6	89.9	87.3	90.0
65-69 YRS OLD	96.4	97.1	97.2	97.7	89.6	92.0	89.6	91.2
70-99 YRS OLD	96.2	97.5	96.7	97.9	92.3	93.9	92.2	94.3
MARCH 89								
TOTAL HOUSEHOLDS	93.0	94.7	94.4	95.8	83.2	86.9	81.9	84.8
16-24 YRS OLD	82.2	86.6	84.5	88.3	66.6	75.5	65.6	70.6
25-54 YRS OLD	92.8	94.5	94.3	95.7	82.2	86.2	83.2	86.2
55-59 YRS OLD	95.6	96.6	96.5	97.4	90.0	91.6	89.8	90.0
60-64 YRS OLD	95.7	96.8	96.5	97.4	90.4	92.6	85.2	85.6
65-69 YRS OLD	96.7	97.2	97.3	97.7	92.1	92.9	85.8	89.7
70-99 YRS OLD	96.0	96.9	96.7	97.6	90.5	91.2	86.0	87.8
JULY 89								
TOTAL HOUSEHOLDS	93.3	95.0	94.6	96.0	83.9	87.9	83.5	86.5
16-24 YRS OLD	80.3	85.7	82.8	87.6	65.7	74.8	69.4	77.3
25-54 YRS OLD	93.0	94.8	94.3	95.9	83.3	87.5	83.7	86.6
55-59 YRS OLD	95.1	96.3	96.0	97.1	88.8	91.1	88.4	88.8
60-64 YRS OLD	95.3	96.3	96.2	97.0	87.7	91.2	89.5	89.5
65-69 YRS OLD	96.1	97.0	96.8	97.5	90.1	92.8	87.3	89.4
70-99 YRS OLD	96.5	97.5	97.2	98.1	90.6	92.3	89.2	92.3
NOVEMBER 1989								
TOTAL HOUSEHOLDS	93.0	94.9	94.6	96.0	82.5	86.5	83.5	86.8
16-24 YRS OLD	79.0	85.5	81.4	87.1	63.7	75.2	59.3	69.1
25-54 YRS OLD	92.5	94.4	94.1	95.7	81.2	85.4	83.8	86.7
55-59 YRS OLD	95.6	96.6	96.8	97.6	87.2	89.5	92.3	94.7
60-64 YRS OLD	96.2	96.9	97.1	97.7	89.5	90.9	94.6	95.0
65-69 YRS OLD	96.1	96.9	97.1	97.9	88.6	90.1	93.3	93.8
70-99 YRS OLD	96.8	97.7	97.5	98.2	92.2	94.4	94.2	95.8

PERCENTAGE OF HOUSEHOLDS WITH A TELEPHONE BY HOUSEHOLDER'S AGE - TABLE 1.5

	RACE						HISPANIC ORIGIN	
	TOTAL		WHITE		BLACK		Unit	Avail
	Unit	Avail	Unit	Avail	Unit	Avail	Unit	Avail
1989 ANNUAL AVERAGE								
TOTAL HOUSEHOLDS	93.1	94.9	94.5	95.9	83.2	87.1	83.0	86.0
16-24 YRS OLD	80.5	85.9	82.9	87.7	65.3	75.2	64.8	72.3
25-54 YRS OLD	92.7	94.6	94.3	95.8	82.2	86.4	83.6	86.5
55-59 YRS OLD	95.4	96.5	96.4	97.4	88.7	90.7	90.1	91.2
60-64 YRS OLD	95.7	96.7	96.6	97.3	89.2	91.6	89.8	90.0
65-69 YRS OLD	96.3	97.0	97.1	97.7	90.3	91.9	88.8	91.0
70-99 YRS OLD	96.4	97.4	97.1	97.9	91.1	92.6	89.8	92.0
MARCH 90								
TOTAL HOUSEHOLDS	93.3	95.0	94.6	96.1	83.8	87.1	81.8	84.9
16-24 YRS OLD	82.2	86.7	84.5	88.5	67.2	75.5	67.3	72.3
25-54 YRS OLD	92.6	94.5	94.1	95.7	83.0	86.4	80.8	84.2
55-59 YRS OLD	95.3	96.2	96.7	97.5	84.9	87.0	90.8	91.4
60-64 YRS OLD	96.3	97.0	97.2	97.6	90.6	92.9	90.7	90.7
65-69 YRS OLD	96.1	97.1	96.9	97.8	90.7	91.8	87.4	91.4
70-99 YRS OLD	96.7	97.6	97.1	98.0	91.9	93.4	94.7	94.7

PERCENTAGE OF PERSONS WITH A TELEPHONE BY LABOR FORCE STATUS - TABLE 1.6

	RACE						HISPANIC ORIGIN	
	TOTAL		WHITE		BLACK		Unit	Avail
	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
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

PERCENTAGE OF PERSONS WITH A TELEPHONE BY LABOR FORCE STATUS - TABLE 1.6

	RACE						HISPANIC ORIGIN	
	TOTAL		WHITE		BLACK		Unit	Avail
	Unit	Avail	Unit	Avail	Unit	Avail		
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
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

PERCENTAGE OF PERSONS WITH A TELEPHONE BY LABOR FORCE STATUS - TABLE 1.6

	RACE						HISPANIC ORIGIN	
	TOTAL		WHITE		BLACK		Unit	Avail
	Unit	Avail	Unit	Avail	Unit	Avail	Unit	Avail
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
NOVEMBER 88								
TOTAL CNP	93.6	95.1	94.7	96.0	85.5	88.8	82.2	84.4
EMPLOYED	94.6	96.1	95.4	96.6	88.2	91.4	83.4	85.4
UNEMPLOYED	82.1	86.0	84.4	88.1	75.4	79.7	77.5	81.7
NOT IN LABOR FORCE	92.9	94.3	94.3	95.5	83.0	86.4	80.7	82.8
1988 ANNUAL AVERAGE								
TOTAL CNP	93.8	95.2	94.9	96.1	85.6	88.7	83.6	86.1
EMPLOYED	94.9	96.2	95.6	96.8	88.5	91.5	85.4	87.7
UNEMPLOYED	83.3	86.8	85.9	88.9	75.4	80.5	76.7	80.3
NOT IN LABOR FORCE	92.8	94.2	94.3	95.5	83.1	86.0	81.5	84.0

PERCENTAGE OF PERSONS WITH A TELEPHONE BY LABOR FORCE STATUS - TABLE 1.6

	RACE						HISPANIC ORIGIN	
	TOTAL		WHITE		BLACK		Unit	Avail
	Unit	Avail	Unit	Avail	Unit	Avail	Unit	Avail
MARCH 89								
TOTAL CNP	94.0	95.3	95.2	96.3	85.5	88.5	83.9	85.9
EMPLOYED	95.1	96.4	95.9	97.0	88.3	91.3	85.6	87.8
UNEMPLOYED	83.6	86.4	86.4	88.5	75.9	81.0	72.0	73.3
NOT IN LABOR FORCE	93.0	94.2	94.7	95.6	83.1	85.7	82.2	84.0
JULY 89								
TOTAL CNP	94.3	95.7	95.3	96.4	86.8	90.0	85.2	87.6
EMPLOYED	95.4	96.7	96.1	97.3	89.6	92.6	87.8	90.3
UNEMPLOYED	84.7	87.5	86.4	88.6	79.4	84.0	75.2	78.1
NOT IN LABOR FORCE	93.1	94.4	94.5	95.6	83.6	86.7	82.0	84.0
NOVEMBER 89								
TOTAL CNP	94.0	95.5	95.3	96.5	85.2	88.6	85.0	87.6
EMPLOYED	95.1	96.4	95.9	97.1	88.5	91.3	86.4	88.9
UNEMPLOYED	83.3	87.6	85.9	89.3	75.7	82.6	78.0	84.5
NOT IN LABOR FORCE	93.1	94.5	94.9	95.9	81.8	85.4	83.6	85.6
1989 ANNUAL AVERAGE								
TOTAL CNP	94.1	95.5	95.3	96.4	85.8	89.0	84.7	87.0
EMPLOYED	95.2	96.5	96.0	97.1	88.8	91.7	86.6	89.0
UNEMPLOYED	83.9	87.1	86.2	88.8	77.0	82.5	75.1	78.6
NOT IN LABOR FORCE	93.1	94.4	94.7	95.7	82.8	85.9	82.6	84.6
MARCH 90								
TOTAL CNP	94.2	95.6	95.3	96.5	86.1	88.7	83.9	86.5
EMPLOYED	95.3	96.6	96.0	97.2	89.5	91.5	85.5	88.4
UNEMPLOYED	83.9	87.3	87.3	89.9	71.6	77.6	74.3	78.0
NOT IN LABOR FORCE	93.3	94.6	94.8	95.8	83.4	86.3	82.6	84.2

CHART 1.3

Telephone Penetration

Individual Adults

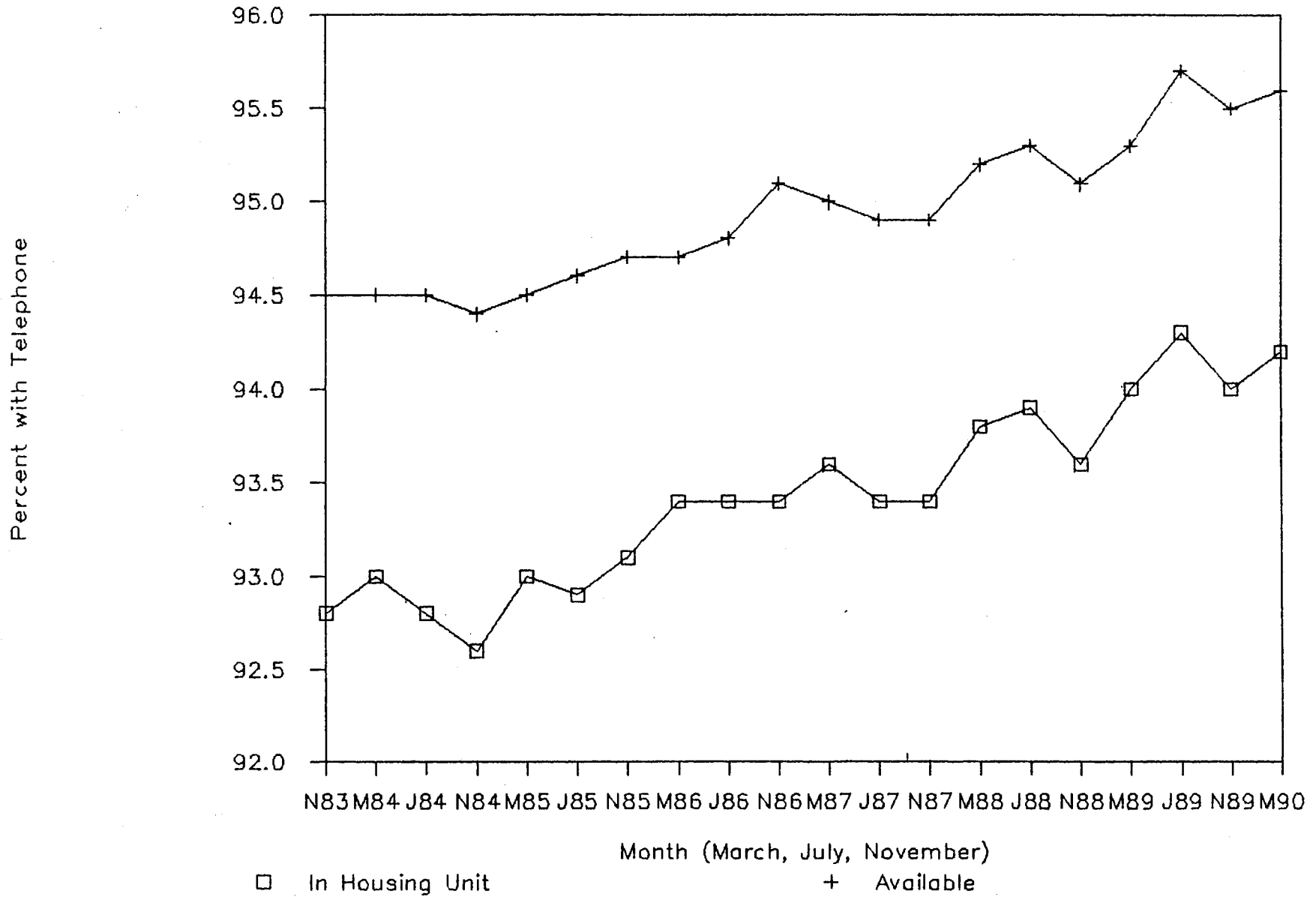


TABLE 1.7

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	3.7	3.4
Alaska	5.2	4.5
Arizona	4.6	4.4
Arkansas	5.9	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	5.0	4.6
Hawaii	2.7	2.1
Idaho	4.2	3.4
Illinois	2.1	1.8
Indiana	3.4	2.8
Iowa	3.0	2.3
Kansas	2.5	2.3
Kentucky	5.3	4.9
Louisiana	4.2	3.7
Maine	3.8	3.3
Maryland	3.2	2.7
Massachusetts	2.6	2.4
Michigan	2.6	2.2
Minnesota	2.7	2.4
Mississippi	5.2	4.7
Missouri	3.5	2.9
Montana	5.3	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	1.8
North Carolina	4.0	3.5
North Dakota	3.9	3.5
Ohio	2.3	1.9
Oklahoma	3.8	3.6
Oregon	3.5	3.0
Pennsylvania	1.6	1.3
Rhode Island	3.0	2.5

TABLE 1.7 (cont.)

<u>State</u>	<u>In Unit</u>	<u>Available</u>
South Carolina	6.2	5.3
South Dakota	3.7	3.5
Tennessee	5.0	4.4
Texas	2.6	2.3
Utah	4.7	4.6
Vermont	5.3	4.6
Virginia	4.0	3.5
Washington	4.1	3.9
West Virginia	4.4	3.9
Wisconsin	3.2	3.1
Wyoming	4.7	3.9

TABLE 1.8

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%	0.6%	0.5%	2.2%	2.0%	4.9%	4.5%
1 Person	1.1%	1.0%	1.1%	1.0%	4.1%	3.7%	11.3%	10.8%
2 - 3	0.8%	0.7%	0.8%	0.7%	3.5%	3.0%	7.6%	7.0%
4 - 5	1.2%	1.0%	1.2%	1.0%	4.7%	4.1%	9.1%	8.2%
6 +	2.6%	2.2%	2.9%	2.5%	8.2%	7.2%	14.6%	13.2%

TABLE 1.9

Critical Values for Determining Significant Differences for Income

	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	0.5%	0.5%	0.6%	0.5%	2.2%	2.0%	4.9%	4.5%
Under \$5,000	1.4%	1.3%	1.6%	1.5%	3.5%	3.3%	9.2%	8.9%
\$5,000 - \$7,499	1.7%	1.5%	1.8%	1.6%	5.7%	5.1%	11.4%	10.9%
\$7,500 - \$9,999	1.9%	1.7%	2.0%	1.8%	7.1%	6.4%	14.5%	13.6%
\$10,000 - \$12,499	1.8%	1.6%	1.9%	1.7%	7.0%	6.3%	14.8%	13.8%
\$12,500 - \$14,999	2.1%	1.8%	2.1%	1.8%	8.6%	7.6%	17.4%	16.3%
\$15,000 - \$17,499	2.2%	1.9%	2.2%	2.0%	9.1%	8.0%	19.7%	18.0%
\$17,500 - \$19,999	2.4%	2.0%	2.4%	2.0%	10.8%	9.4%	21.1%	19.2%
\$20,000 - \$24,999	1.7%	1.5%	1.7%	1.5%	9.1%	7.8%	16.9%	15.5%
\$25,000 - \$29,999	2.0%	1.7%	1.9%	1.6%	11.1%	9.5%	22.2%	19.8%
\$30,000 - \$34,999	2.1%	1.8%	2.0%	1.7%	12.6%	10.8%	24.4%	22.0%
\$35,000 - \$39,999	2.4%	2.1%	2.4%	2.0%	15.5%	13.1%	28.5%	25.6%
\$40,000 - \$49,999	2.2%	1.9%	2.1%	1.8%	15.3%	13.0%	29.0%	25.8%
\$50,000 - \$74,999	2.3%	1.9%	2.2%	1.9%	16.4%	13.9%	31.1%	27.9%
\$75,000 +	3.5%	3.0%	3.3%	2.8%	45.0%	38.0%	55.1%	48.8%

TABLE 1.10

Critical Values for Determining Significant Differences for Householder Age

	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%	0.6%	0.5%	2.2%	2.0%	4.9%	4.5%
16 - 24 Yrs old	1.6%	1.5%	1.7%	1.5%	5.8%	5.7%	10.5%	10.4%
25 - 54 Yrs old	0.7%	0.6%	0.7%	0.6%	2.8%	2.4%	5.9%	5.4%
55 - 59 Yrs old	2.1%	1.8%	2.1%	1.8%	8.9%	7.7%	21.3%	19.1%
60 - 64 Yrs old	2.1%	1.8%	2.1%	1.8%	9.5%	8.2%	24.7%	21.9%
65 - 69 Yrs old	2.3%	2.0%	2.3%	1.9%	10.4%	9.0%	30.1%	27.3%
70 - 99 Yrs old	1.6%	1.4%	1.6%	1.4%	7.8%	6.7%	23.1%	21.0%

TABLE 1.11

Critical Values for Determining Significant Differences for Employment Status

	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 CNP	0.8%	0.7%	0.8%	0.7%	3.3%	2.9%	7.4%	6.7%
Employed	1.0%	0.9%	1.0%	0.9%	4.1%	3.5%	10.0%	9.1%
Unemployed	3.2%	2.8%	3.5%	3.1%	9.5%	8.6%	24.8%	23.0%
Not in Labor Force	1.3%	1.1%	1.3%	1.1%	5.1%	4.5%	12.0%	10.9%

2. Lifeline Assistance

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 low-income households without service to connect to the network. The FCC is monitoring subscriber participation and telephone usage to determine program benefits and costs.¹ Table 2.1 lists the entities within each participating state which have been certified by the FCC and the dates of their certification.

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, reflect matching local rate reductions approved by state utility commissions, and may take the form of a reduction in monthly charges or a reduction in service connection and installation charges. After state programs are certified by the FCC, local exchange carriers are reimbursed through the National Exchange Carrier Association (NECA) for program expenses. These expenses are not funded by federal tax dollars. Table 2.2 provides a list of local exchange companies offering assistance as reported on FCC Form 496² or "NECA Lifeline Assistance SAC Detail Actual for 1/01/89 - 6/31/89".³

Under Lifeline and Link-Up America programs, benefits are 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. Table 2.3 provides a description of the income means test used by each state utility commission or local telephone company.

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, FCC 85-643, 51 Fed. Reg. 1371 (January 13, 1986) at para. 5; and Establishment of a Program to Monitor the Impact of Joint Board Decision, Order, CC Docket No. 87-339, 2 FCC Rcd 5266 (1987).

² These forms were to be filed by May 1, 1990, by the entity (state commission or company) certified by the FCC.

³ Filed by NECA in this docket on June 1, 1990.

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 total 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. 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 is 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 total reduction in fixed charges for telephone service of twice the amount 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 plan meets the following federal requirements:

- a) means test -- highly targeted assistance plan which focuses on those individuals with 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 service rates, reduced connection charges or reduced deposit requirements. No restrictions are imposed on the source of funding for state assistance.

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, federal assistance will be provided to pay one-half of the connection charges, up to a maximum of \$30.00 in benefits, 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 assess the subscribers any interest charges, federal assistance will be available to that LEC to cover the interest on costs of up to \$200. Link-Up is targeted to those qualified individuals who comprise a portion of the approximately 2.9 million low income households who currently are not connected to the public switched network.

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 had declined to participate in the program due to the existence of non-means-based eligibility criteria. The Commission was concerned that the three-month and two-year eligibility rules were discouraging participation in Link-Up America. Data from a pilot program indicated that approximately 15 percent of Link-Up applicants had 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 in which income eligibility is not verified.

On February 27, 1989, the FCC adopted and released a revision of the Link-Up America rules which eliminated two non-income criteria. Connection assistance will be available for one telephone line per household, at a subscriber's principal place of residence. To become eligible for assistance when income is verified, a residential subscriber must meet the requirements of the state established income test, and not be a dependent, unless the subscriber is more than 60 years old. Alternatively, when income is not verified, a

resident may self-certify according to the criteria stated above. However, the entity receiving certification (state or company) must verify that the customer has lived at an address where there has been no telephone service for at least three months, and has not received assistance within the last two years.

The Link-Up America rules encourage, but do not require, states 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.

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. At this time, twenty-nine states and the District of Columbia have been certified to offer lifeline assistance pursuant to Plan 2. A total of forty-eight states, the District of Columbia, and Puerto Rico are participating in some type of federal lifeline assistance program for low income Americans.

Federal assistance for the lifeline plans was funded through the interstate carrier common line charge (CCLC) until April 1989, at which time all three plans began to be funded through direct billing of the interexchange carriers (IXCs) by NECA. Under the new funding procedures, IXCs are responsible for paying lifeline assistance if they have at least 0.05% of presubscribed lines nationwide.

Under the new funding process, which began on April 1, 1989, the costs of the program are allocated based on expenses submitted to NECA by participating LECs. NECA files a lifeline assistance rate which is billed directly to interexchange carriers. The revenues are used to pay certified exchange carriers for matching lifeline assistance costs. Lifeline assistance does not shift program expenses between participating and non-participating states. Further, each state determines the scope of program eligibility through the selection of means tested state assistance programs like AFDC, SSI, food stamps and medical assistance. The lifeline assistance funds are replenished from revenues of the IXCs based on the carriers presubscribed lines. States that choose not to participate do not incur the expenses of LECs in other jurisdictions.

Table 2.4 provides state and telephone company data on the number of subscribers who receive monthly reductions in telephone

bills as a result of the subscriber line charge waiver and matching local rate reductions. This information was taken from Form 496, unless otherwise indicated. Table 2.5 indicates statewide enrollment in the Link-Up America program and the date implemented by each state. Unless otherwise indicated, this information was taken from Form 496.

Table 2.6 and Table 2.7 show the reimbursements paid to local exchange companies for Lifeline and Link-Up respectively for each participating state and for the time periods: 7/87 - 6/89 inclusive. The data was taken from NECA submissions noted on the tables.

The reported costs of Lifeline and Link-Up programs vary greatly from state to state. There are various reasons for this, including (1) variations in the number of subscribers enrolled and the amount of assistance provided per subscriber; (2) in some states the phone companies reported separately, rather than the state public utility commission, and some of these companies were unable to report a start up or recurring cost, thereby causing the costs to look imbalanced when compared to other states; and (3) Form 496 requests "Administrative" costs. These costs are not separately identified by all reporting entities. Charts 2.1 and 2.3 show the costs of Lifeline and Link-Up respectively, for a sampling of states. The start up cost is labeled "Administrative Costs - Start Up", and the recurring cost is labeled "Annual Administrative Costs - Recurring" on Form 496. The Lifeline costs for New York and Ohio were not included in these graphs. The actual costs for New York and Ohio are shown on the bottom of Chart 2.1, and the per household costs for Ohio is shown on the bottom of Chart 2.2. The sample states which have been chosen have reported data in all categories for at least ten months. To arrive at the cost per household, the recurring costs were divided by the number of subscribers participating in the Lifeline or Link-Up programs in each of the listed states.

The Commission estimates from data from Table 2.4 and Table 2.5 that 1,811,518 subscribers receive reduced rates under the federal lifeline assistance program, and 287,641 households have access to the telephone network through the Link-Up America telephone connection assistance program. The National Exchange Carrier Association (NECA) reported that the costs of lifeline assistance in participating states were \$24,129,354 in the first half of 1990, and the cost of Link-Up connection assistance were \$1,353,591.

Chart 2.5 shows the percentage of households with telephones, in March of each year from 1984 to 1989, by income of three income groups: those households whose annual income is less than \$5,000, those households with incomes under \$10,000, and those households with incomes under \$15,000. The data for this chart comes from the Census Bureau's Current Population Survey. From 1984 to 1985, the

percentage of households with phones of all three income groups declined. After 1985, this trend becomes reversed as the percentage of households with phones increases. The growth continues to 1989, the last year data was available, to levels similar to or above those of the 1984.

Comment Filed

The Colorado Public Utilities Commission (CPUC) notes that the Colorado lifeline program was recently reinstated.⁴ Colorado's lifeline legislation, instituted in July, 1986, contained a two year sunset provision and attempts to reinstate a similar assistance program failed in both regular and special sessions in the legislature until recently. The CPUC asserts that the state of Colorado's lack of any assistance program for any low income household for almost two years indicates a major flaw in the Joint Board and FCC program.

It states that to understand CPUC's criticism of the lifeline program, it is important to realize that the program is intended to be part of a carefully integrated plan which includes both SLC and Lifeline programs. It observes that response to resistance to the implementation of the final SLC increase, several commenters suggested that the true effects of the combined programs could not be realized unless all scheduled increases in the SLC were implemented according to the integrated SLC plan. It argues that state action, where lacking, defeats the benefits of Lifeline while the SLC charge continues.

CPUC adds that the results of the "integrated" SLC and Lifeline programs were not to be realized through two separate plans, but rather through the combination of the two. It maintains that this combination does not always work. It concludes that adverse effects of this situation were that Colorado telephone customers were required to help fund Lifeline programs elsewhere in the country through the NECA tariff process, and failed to reap any of the benefits. CPUC urges consideration of the adverse effects experienced by Colorado rate payers. It indicates it has tried but has been unable to find statistical evidence that the Lifeline and Link-up programs have achieved their goals, not only in Colorado but across all states.

Reports Filed

I. US West Communications has filed a study on the disconnect rates of former Lifeline customers who converted to regular service and disconnected their telephone after the Colorado Program was

⁴ State of Colorado Public Utilities Commission, 31 May 1990.

discontinued on August 3, 1989.⁵ A total of 872 former Lifeline customers disconnected their telephones during the six month study period from August, 1989 through January, 1990. About 48% or 420 of these customers attributed their disconnections to the following two categories: "Deceased" and "Moved". Eliminating these two categories, the disconnection rate of former Lifeline customers who converted to regular service was about 3% for the six month study period. This rate is more than double the monthly disconnect rate, excluding the "Deceased" and "Moved" categories, of total residential customers in Colorado during February of 1989. In other attributes investigated in this analysis, former Lifeline customers who disconnected telephones were representative of the total population of former Lifeline customers.

The study stated that there were major weakness inherent in the analytical effort. The primary reason given verbally for disconnection by former Lifeline subscribers was "No Further Use". Prior disconnect studies have revealed that the customers respond differently to service representatives than they respond in confidential written questionnaires. Therefore, a certain percentage of these former Lifeline customers may have disguised economic reasons for disconnection.

II. Southwestern Bell has filed a report in this docket on the effectiveness of telephone assistance programs in Arkansas, Kansas, Missouri, and Texas.⁶ The study employs the use of quantitative data primarily from the statistical analysis of telephone bills of Southwestern Bell's Lifeline and Link-Up programs to reveal the costs associated with these programs, to observe the spending patterns for telephone services to see if the original and continuing goals of low income telephone assistance are upheld, and to evaluate the methods of directing telephone assistance programs to the appropriate groups of customers or potential customers.

The study states that there was evidence supporting the argument that, on average, discounts offered by Southwestern Bell's telephone assistance programs achieve their intended objective of furthering universal service. Secondly, the study states that the telephone assistance programs in several states could be more effective in the promotion of universal service by redirecting the target populations. Finally, the study concluded that while alternatives to current assistance programs exist, the complexities of implementing a wholly new approach suggests that efforts to

⁵ US West Communications, "Colorado Lifeline Disconnect Study", 12 June 1990.

⁶ Thomas J. Makarewicz, "The Effectiveness of Low-Income Telephone Assistance Programs: Southwest Bell's Experience", 10 May 1990.

simplify and broaden existing telephone assistance programs would be more helpful to those whose access to the network is most precarious.

TABLE 2.1
FCC LIFELINE AND LINK-UP AMERICA CERTIFICATION LETTERS

STATE AND/OR LEC	LIFELINE	LINK-UP	DATE OF APPROVAL
Alabama			
Public Service Commission		X	10/01/87
Arizona			
Corporation Commission	X		11/14/86
Dept. of Economic Stabilization	X		11/02/87
Mountain Bell	X	X	1/15/88
Contel of West	X	X	11/22/88
Contel California - AZ	X	X	11/22/88
Arkansas			
Public Service Commission for: (Southwest Bell)	X		5/22/86
(Southwest Bell)		X	10/01/87
California *			
Public Utilities Commission	X		1/01/85
Colorado **			
Public Utilities Commission for: (Mountain States Inc.)	X		7/25/86
CPUC Statewide		X	11/13/87
		X	1/16/90
	X		5/15/90
Connecticut			
Dept. of Public Utility Control		X	11/13/87
District of Columbia			
Public Service Commission	X		3/18/86
		X	8/19/87
Florida			
Public Service Commission		X	8/01/88
Georgia			
Public Service Commission		X	5/25/90
Hawaii			
Public Utilities Commission	X		10/27/86
GTE Hawaiian Telephone Co.		X	8/07/89
Idaho			
Dept. of Human Welfare	X		7/24/87
Contel	X	X	9/07/88
Public Utilities Commission		X	5/12/89
Gem State Utilities (PacTelCm)	X	X	11/27/89

STATE AND/OR LEC	LIFELINE	LINK-UP	DATE OF APPROVAL
Idaho (Cont.) Public Utilities Commission		X	1/22/90
Illinois Commerce Commission		X	9/18/89
Indiana Utilities Regulatory Commission		X	4/25/88
Iowa State Utilities Board		X	3/10/88
Kansas Corporation Commission		X	1/27/88
Kentucky Public Service Commission		X	1/24/87
Louisiana Public Service Commission		X	10/25/88
Maine Public Utilities Commission	X	X	8/11/87
Maryland Public Service Commission	X	X	5/22/86 10/01/87
Massachusetts Dept. of Public Utilities for: (New England Telephone)	X	X	2/09/90
Michigan Public Service Commission for: (Michigan Bell)	X	X	1/24/89
Minnesota Public Utilities Commission	X	X	1/27/88
Runestone Telephone Assn.	X	X	3/10/88
Mississippi Public Service Commission		X	4/27/88
Missouri Southwestern Bell	X		10/01/87
Contel MO		X	12/28/87
UTC MO		X	12/28/87
GTE North Inc - MO		X	4/04/88
Public Service Commission		X	9/23/88

STATE AND/OR LEC	LIFELINE	LINK-UP	DATE OF APPROVAL
Montana			
Public Service Commission	X	X	8/11/87
GTE Northwest Inc. - MT	X	X	9/20/88
Nebraska			
Public Service Commission		X	3/17/88
Nevada			
Nevada Bell	X	X	4/28/87
Centel NV		X	8/16/88
Public Service Commission		X	3/17/88
New Hampshire			
Public Utilities Commission		X	11/03/88
New Jersey			
Bureau of Public Utilities		X	11/03/87
New Mexico			
Mountain bell - NM		X	4/01/87
Contel of West - NM	X		7/13/87
Western New Mexico	X	X	7/13/87
Mountain Bell - NM	X		1/15/88
Contel of West - NM		X	2/09/88
New York			
Public Service Commission	X	X	3/14/87
Rochester Telephone Corp.	X		8/11/87
Public Service Commission	X	X	11/02/87
North Carolina			
Utilities Commission	X		5/22/86
	X		3/05/87
		X	10/19/87
North Dakota			
Public Service Commission	X		12/24/87
		X	12/18/89
Northwestern Bell	X		12/18/89
Ohio			
Public Utilities Commission	X		7/01/87
		X	10/01/87
Oklahoma			
Corporate Commission		X	4/09/90
Oregon			
Public Utilities Commission	X		5/22/86
		X	5/05/88
	X		4/13/89

STATE AND/OR LEC	LIFELINE	LINK-UP	DATE OF APPROVAL
Pennsylvania			
Public Utilities Commission		X	6/02/88
		X	9/29/89
Puerto Rico			
Puerto Rico Telephone		X	11/17/88
Rhode Island			
Public Utilities Commission	X	X	9/21/87
South Carolina			
Public Utilities Commission		X	12/24/87
South Dakota			
Northwestern Bell - SD	X	X	2/25/88
Tennessee			
Public Service Commission		X	11/03/88
Texas			
Public Utilities Commission	X		10/01/87
Poka - Lambro Telephone Co-op	X	X	4/08/88
Public Utilities Commission	X		7/12/88
Central Texas Co-op	X		4/25/89
UTC of Texas Inc.	X		1/23/90
Lufkin - Conroe Telephone Exchange	X	X	3/12/90
Kerrville Telephone Co. of Texas	X		7/13/90
Utah			
Public Service Commission	X		12/31/86
	X		6/29/87
		X	3/17/88
Vermont			
Public Service Board	X		9/30/86
		X	2/09/90
Virginia			
Corporate Commission	X	X	12/24/87
Washington			
Utilities Telephone Commission	X		7/24/87
West Virginia			
Public Service Commission	X		7/25/86
	X		9/11/87
Wisconsin			
Wisconsin Bell	X	X	7/14/98
GTE North - WI		X	7/05/90

STATE AND/OR LEC	LIFELINE	LINK-UP	DATE OF APPROVAL
Wyoming			
Mountain Bell		X	1/24/89
UTC of the West - WY		X	2/23/89
Telephone Utilities (PacCom)		X	8/07/89

Note: State commissions may request FCC certification in Federal assistance programs for all carriers in the state or for selected local exchange carriers.

Local telephone companies may request FCC certification independent of state action. Where no state action is taken, the LEC is listed in the table under participating program along with the date certified by the FCC.

State commission requests for certification may follow the approval of local companies certified by the FCC. A state commission may have two dates where certification reflects an extension of eligibility within the state to a more inclusive program for low-income subscribers.

The list of certified states and/or local telephone companies indicates the extent of participation by carriers and the availability of Lifeline and Link-Up assistance in each state.

- * California is the only state still offering a Lifeline program under Plan 1 (the 50% waiver of the SLC).
- ** The Colorado Lifeline and Link-Up plans expired in legislative sunset provisions. A new Link-Up program was submitted to the FCC on January 5, and certified by the Commission on January 16, 1990.

TABLE 2.2
CERTIFIED LIFELINE AND LINK-UP TELEPHONE COMPANIES

ALABAMA

<p>Alltel Alabama*</p> <p>Blountsville Telephone Co.*</p> <p>Brindlee Mountain*</p> <p>Butler Telephone Co.*</p> <p>Castleberry Telephone Co.*</p> <p>Contel of the South*</p> <p>Farmers Telephone Coop.*</p> <p>Goshen Telephone Co.*</p> <p>Graceba Total Comm.*</p> <p>Grove Hill Telephone Corp.*</p> <p>GTE South, Inc.*</p> <p>Gulf Telephone Co.*</p> <p>Hayneville Telephone Co.*</p> <p>Hopper Telephone Co., Inc.*</p> <p>Lamar County Telephone Co.*</p> <p>Millry Telephone Co.*</p>	<p>Monroeville Telephone Co.*</p> <p>Mon-Cre Telephone Coop.*</p> <p>Moundville Telephone Co.*</p> <p>National of Alabama*</p> <p>New Hope Telephone Coop.*</p> <p>Oakman Telephone Co.*</p> <p>Oneonta Telephone Co.*</p> <p>Peoples Telephone Co.*</p> <p>Pine Belt Telephone Co.*</p> <p>Ragland Telephone Co.*</p> <p>Roanoke Telephone Co.*</p> <p>South Central Bell*</p> <p>Southeast MS Telephone Co.*</p> <p>Southland Telephone Co.*</p> <p>Union Springs Telephone Co.*</p>
---	--

ARIZONA

<p>Arizona Telephone Co.</p> <p>Citizens Utilities Co.</p> <p>Contel of the West</p> <p>Continental Tel. of California Communications Co.</p> <p>Papago Tribal Utility Authority</p>	<p>Rio Virgin Telephone Co.</p> <p>South Central Utah Telephone</p> <p>Southwestern Telephone Co.</p> <p>Universal Tel. Co. of Navajo</p> <p>US West Communications**</p> <p>Valley Telephone Co-op, Inc.</p>
--	---

ARKANSAS

<p>Alltel*</p> <p>Arkansas Telephone Co.*</p> <p>Central Arkansas Telephone*</p> <p>Century Telephone*</p> <p>Contel of Arkansas, Inc.*</p> <p>Decatur Telephone Co.*</p> <p>E. Ritter Telephone*</p> <p>GTE Southwest, Inc.*</p> <p>Lavaca Telephone*</p> <p>Liberty Communications*</p> <p>Liberty Telephone*</p> <p>Madison County Telephone*</p> <p>Magazine Telephone*</p> <p>Mountain Home Telephone*</p> <p>Mountain View Telephone*</p>	<p>Northern Arkansas Telephone*</p> <p>Perco Telephone*</p> <p>Prairie Grove Telephone*</p> <p>Redfield Telephone*</p> <p>Rice Belt Telephone*</p> <p>South Arkansas Telephone*</p> <p>Southwest Arkansas Telephone*</p> <p>Southwestern Bell Telephone*</p> <p>Tri-County Telephone*</p> <p>Union Telephone Co.*</p> <p>United Telephone System*</p> <p>Walnut Hill Telephone*</p> <p>Yelcot Telephone Co.*</p> <p>Yell County Telephone*</p>
---	--

CALIFORNIA

<p>Calaveras Telephone Co.</p>	<p>Kerman Telephone Co.</p>
--------------------------------	-----------------------------

CALIFORNIA (CONT.)

Contel of California
CP National Corp.-CA
Citizens Utilities of CA
California-Oregon Tel. Co.
Ducor Telephone Co.
Evans Telephone Co.
Foresthill Telephone Co.
GTC of California
Happy Valley Telephone Co.
Hornitos Telephone Co.

Ponderosa Telephone Co.
Roseville Telephone Co.
Sierra Telephone Co.
Siskiyou Telephone Co.
Tuolumne Telephone Co.
Volcano Telephone Co.
West Coast Telephone of CA
Pinnacles Telephone Co.
Pacific Bell

COLORADO

US West Communications**

CONNECTICUT

New York Telephone Co.*
Southern New England Tel. Co.*

Woodbury Telephone*

DISTRICT OF COLUMBIA

Chesapeake & Potomac Tel. Co.**

FLORIDA

Alltel Florida, Inc.*
Centel of Florida*
Florida Telephone Co.*
GTE Florida, Inc.*
Gulf Telephone Co.*
Indiantown System*

Northeast Florida*
Quincy Telephone Co.-FL
Southern Bell-FL*
Southland Telephone-FL*
St. Joseph Tel. & Tel.*
United Tel. Co. of Florida*

GEORGIA

Contel of South - GA*
Valley Telephone Co.*
Quincy Telephone Co. - GA Div.*
Alma Telephone Co.*
Blue Ridge Telephone Co.*
Brantley Telephone Co.*
Bulloch County Rural*
Camden Telephone & Telegraph Co.*
Chickamauga Telephone Co.*
Citizens Telephone Co.*
Coastal Utilities*
Alltel Georgia Inc.*
Darrien Telephone Co.*
Ellijay Telephone Co.*
Fairmount Telephone Co.*

Hawkinsville Telephone Co.
Interstate Telephone Co.*
Nelson-Ball Ground*
Pembroke Telephone Co.*
Pineland Telephone Co-op.*
Planters Rural Co-op.*
Plant Telephone Co.*
Progressive Rural*
Public Service Telephone*
Ringgold Telephone Co.*
Standard Telephone Co.*
Statesboro Telephone Co.*
Trenton Telephone Co.*
Waverly Hall Telephone Co.*
Wilkes Telephone & Tel*

GEORGIA (CONT.)

Glenwood Telephone Co.*
Hart County Telephone Co.*

GTE South Inc. - GA*
Southern Bell - GA*

HAWAII

GTE Hawaiian Telephone Co., Inc.

IDAHO

Albion Telephone Co., Inc.
Cambridge Telephone Co.
Century Telephone of Idaho
Contel of the West, Inc.-Idaho
Custer Telephone Coop.
Farmers Mutual Telephone
Filer Mutual Telephone of Idaho
Gem State Util. of Idaho
GTE Northwest, Inc.-Idaho
Inland Telephone of Idaho

Midvale Telephone Exc., Inc.
Mountain Bell-Idaho
Mud Lake Telephone Coop.
Pacific NW Bell-Idaho
Potlatch Telephone Co., Inc.
Project Mutual Telephone
Rockland Telephone Co., Inc.
Rural Telephone Co. of Idaho
Silver Stat Tel. Co. of ID
Troy Telephone Co.

ILLINOIS

Adams Telephone Co-op*
Alhambra-Grantfork*
Cambridge telephone Co.-IL*
Cass County*
Centel of Illinois*
Clarksville Mutual*
Crossville Telephone Co.*
Depue Telephone Co.*
Alltel Iliinois*
Egyptian Co-op Assn.*
El Paso Telephone Co.*
C-R Telephone Co.*
Lakeside Telephone Co.*
Flat Rock Mutual Telephone*
GTE North Inc. - IL*
Genesco Telephone Co.*
Glasford Telephone Co.*
Grafton Telephone Co.*
Grandview Mutual Telephone*
Gridley Telephone Co.*
Hamilton County Co-op*
Shawnee Telephone Co.*
Harrisonville Telephone Co.*
Henry County Telephone Co.*
Home Telephone Co. - St. Jacob*
Contel of Illinois*
IL Consolidated Telephone*

La Harpe Telephone Co.*
Leaf River Valley Telephone*
Leonore Mutual Telephone*
McDonough Telephone Co-op*
McNabb Telephone Co.*
Madison Telephone Co.*
Marseilles Telephone Co.*
Metamora Telephone Co.*
Mid Century Telephone Co-op*
Midland Telephone Co.*
Montrose Mutual Telephone*
Moultrie Independant*
Mt. Poulaski Tel. and Elec.*
New Windsor Telephone Co.*
Odin Telephone Exchange*
Prarie Telephone Co.*
Reynolds Telephone Co.*
Schuyler Telephone Co. - IL*
Tonica Telephone Co.*
Viola Home Telephone Co.*
Wasbash Telephone Co-op. Inc*
Woodhull Community*
Stelle Telephone Co.*
Yates City Telephone Co,*
Illinois Bell*
Inland Telephone Co.*
Kinsman Mutual Telephone*

INDIANA

Indiana Bell*

IOWA

Ace Telephone Assoc.*
 Amana Society Service Co.*
 Andrew Telephone Co., Inc.*
 Arcadia Telephone Coop.*
 Atkins Telephone Co., Inc.*
 Ayrshire Farmers Mutual Tel. Co.*
 Barnes City Coop. Telephone Co.*
 Bernard Telephone Co.*
 Blue Earth Valley Telephone Co.*
 Breda Telephone Corp.*
 Brooklyn Mutual Telephone Co.*
 Burt Telephone Co.*
 Butler-Bremer Mutual Tel. Co.*
 Cannon Valley Telephone Co., Inc.*
 Cascade Telephone Co.*
 Casey Mutual Telephone Co.*
 Center Junction Telephone Co.*
 Central Scott Telephone Co.*
 Central Telephone Co.*
 Citizens Mutual Telephone Co.*
 Clarence Telephone Co., Inc.*
 Clear Lake Ind. Telephone Co.*
 Colo Telephone Co.*
 Contel of Iowa, Inc.*
 Coon Creek Telephone Co.*
 Coon Valley Coop., Inc.*
 Coop Telephone Co.*
 Coop Telephone Exchange*
 Corn Belt Telephone Co.*
 Cumberland Telephone Co.*
 C.M.L. Telephone Coop. Assn.*
 Danville Mutual Telephone Co.*
 Deep River Mutual Telephone Co.*
 Defiance Telephone Co., Inc.*
 Dixon Telephone Co.*
 Dumont Telephone Co.*
 Dunkerton Telephone Coop.*
 East Buchanan Telephone Coop.*
 Ellsworth Coop. Telephone Assn.*
 Farmers Coop. Telephone Co.*
 Farmers Mutual Coop. Telephone*
 Farmers Telephone Co.*
 Farmers & Businessmen's Tel. Co.*
 Farmers & Merchants Mutual Tel.*
 Fenton Coop. Telephone Co.*
 Goldfield Telephone Co.*
 Grand Mound Coop. Tel. Assn.*

Marne & Elk Horn Tel. Co.*
 Martelle Coop. Tel.*
 Massena Telephone Co.*
 Mediapolis Telephone Co.*
 Mid-Iowa Telephone Coop.*
 Miles Coop. Tel. Assn.*
 Miller Telephone Co.*
 Minburn Telephone Co.*
 Minerva Valley Tel. Co.*
 Modern Coop. Tel. Co.*
 Montezuma Mutual Tel. Co.*
 Morley Tel. Co., Inc.*
 Mutual Telephone Co.*
 North English Coop. Tel.*
 Northeast Iowa Tel. Co.*
 Northern Iowa Tel. Co.*
 Northwest Tel. Coop. Assn.*
 Northwestern Bell Tel. Co.*
 Norway Rural Tel. Co.*
 Ogden Telephone Co.*
 Olin Tel. Co., Inc.*
 Onslow Coop. Tel. Assn.*
 Oran Mutual Tel. Co.*
 Palmer Mutual Tel. Co.*
 Palo Coop. Tel. Assn.*
 Panora Coop. Tel. Assn.,
 Peoples Telephone Co.*
 Postville Telephone Co.*
 Prairie Telephone Co., Inc.*
 Prairieburg Tel. Co., Inc.*
 Preston Telephone Co.*
 Radcliffe Telephone Co.*
 Readlyn Telephone Co.*
 Ringstead Telephone Co.*
 River Valley Tel. Coop.*
 Rockwell Coop. Tel. Assn.*
 Royal Telephone Co.*
 Ruthven Tel. Exchange Co.*
 Sac Co. Mutual Tel. Co.*
 Schaller Telephone Co.*
 Schuyler Telephone Co.*
 Scranton Telephone Co.*
 Searsboro Telephone Co.*
 Sharon Telephone Co.*
 Shell Rock Telephone Co.*
 Sioux Valley Telephone Co.*
 South Slope Coop. Tel. Co.*

IOWA (CONT.)

Grand River Mutual Tel. Corp.*
 Griswold Coop. Telephone Co.*
 GTE North, Inc.*
 Harmony Telephone Co.*
 Hawkeye Telephone Co.*
 Heart of Iowa Telephone Coop.*
 Hills Telephone Co., Inc.*
 Hospers Telephone Exchange*
 Hubbard Coop. Telephone Assn.*
 Huxley Coop. Telephone Co.*
 IAMO Telephone Co.*
 Interstate 35 Telephone Co., Inc.*
 Jefferson Telephone Co.*
 Jordan-Soldier Valley Coop. Tel.*
 Kalona Coop. Telephone Co.*
 Keystone Farmers Coop. Tel. Co.*
 LaMotte Telephone Co., Inc.*
 LaPorte City Farmers Mutual Tel.*
 Laurel Telephone Co., Inc.*
 Lehigh Valley Coop. Tel. Assn.*
 Lincoln Tel. & Telegraph Co.*
 Lone Rock Coop. Telephone Co.*
 Lost Nation-Elwood Tel. Co.*
 Lynnville Comm. Tel. Co., Inc.*
 Mabel Coop. Telephone Co.*
 Manilla Telephone Co.*

Southwest Tel. Exch., Inc.*
 Spring Grove Coop. Tel. Co.*
 Stratford Mutual Tel. Co.*
 Superior Tel. Coop.*
 Swisher Telephone Co.*
 Templeton Telephone Co.*
 Terril Telephone Co.*
 Titonka Telephone Co.*
 United Farmers Telephone*
 United Tel. Co. of MN*
 Van Buren Tel. Co., Inc.*
 Van Horne Coop. Tel. Co.*
 Villisca Farmers Tel. Co.*
 Walnut Telephone Co.*
 Webb-Dickens Telephone Corp*
 Webster-Calhoun Coop. Tel.*
 Wellman Coop. Tel. Assn.*
 West Iowa Telephone Co.*
 West Liberty Telephone Co.*
 Western Iowa Telephone*
 Westside Ind. Telephone Co.*
 Wilton Telephone Co.*
 Winnebago Coop. Tel. Assn.*
 Woolstock Mutual Tel. Assn.*
 Wyoming Mutual Tel. Co.*

KANSAS

Assaria Telephone Exchange*
 Blue Valley Telephone Co.*
 Columbus Telephone Co.*
 Contel of Kansas*
 Council Grove Telephone Co.*
 Craw-Kan Telephone Corp.*
 Cunningham Telephone Co.*
 Elkhart Telephone Co.*
 Golden Belt Telephone Assoc.*
 Gorham Telephone Co.*
 H & B Communications*
 Haviland Telephone Co.*
 Home Telephone Co.*
 JBN Telephone Co.*
 Kansas State Telephone*
 Kan-Okla Telephone Assoc.*
 LaHarpe Telephone Co.*
 Madison Telephone Co.*
 MO-KAN Dial*

Moundridge Telephone Co.*
 Mutual Telephone Co.*
 Peoples Telephone Co.*
 Pioneer Telephone Assoc.*
 Rainbow Telephone Corp.*
 Rural Telephone Service Co.*
 S & A Telephone Co.*
 S & T Telephone Coop.*
 South Central Telephone*
 South Kansas Telephone Co.*
 Sunflower Telephone Co.*
 Totah Telephone Co.*
 Tri-County Telephone*
 Twin Valley Telephone*
 United Telephone Assn*
 Wamego Telephone Co.*
 Wheat State Telephone Co.*
 Wilson Telephone Co.*
 Zenda Telephone Co.*

KENTUCKY

Alltel Kentucky, Inc.*
Ballard Rural Tel. Coop. Corp.*
Brandenburg Telephone Co., Inc.*
Cincinnati Bell Tel. Co., Inc.*
Contel of Kentucky, Inc.*
Duo County Telephone Coop. Corp.*
GTE South, Inc.*
Harold Telephone Co., Inc.*

Logan Telephone Coop.,*
Mountain Rural Tel. Coop.*
North Central Tel. Coop.*
Peoples Rural Tel. Coop.*
South Central Bell*
South Central Rural Tel.*
West Kentucky Rural Tel.*

LOUISIANA

Athens Telephone Co.*
Caddoan Telephone Co.*
Cameron Telephone Co.*
Campti-Pleasant Hill*
Central Louisiana*
Century Telephone Co.*
Chatham Telephone Co.*
Coastal Tel. & Electric*
Delcambre Telephone Co.*
East Ascension Telephone*
Elizabeth Telephone Co.*
Evangeline Telephone Co.*

Kaplan Telephone Co.*
Lafourche Telephone Co.*
Louisiana Western*
Northeast Louisiana*
Northwest Louisiana*
Plain Dealing Tel. Co.*
Reserve Telephone Co.*
Ringgold Telephone Co.*
South Central Bell*
Star Telephone Co.*
United Telephone Co.*

MAINE

Bryant Pond Telephone Co.**
China Telephone Co.**
Cobbosseecontee Telephone Co.**
Contel of Maine, Inc.**
Hampden Telephone Co.**
Hartland & St. Albans Tel. Co.**
Island Telephone Co., The**
Lincolnton Telephone Co.**
New England Telephone Co.**

Oxford County Telephone*
Pine Tree Telephone Co.**
Saco River Telephone Co.**
Somerset Telephone Co.**
Standish Telephone Co.**
Union River Telephone Co.**
Unity Telephone Co.**
Warren Telephone Co.**
West Penobscot Tel. Co.**

MARYLAND

Chesapeake & Potomac Telephone Co.**

MASSACHUSETTS

New England Telephone**

MICHIGAN

Michigan Bell**

MINNESOTA

Ace**
 Albany**
 Arrowhead**
 Arvig**
 Barnsville**
 Benton**
 Blackduck**
 Blue Earth**
 Bridgewater**
 Callaway**
 Cannon Valley**
 Central**
 Chester**
 Clara City**
 Clements**
 Consolidated**
 Contel**
 Contel of Iowa**
 Crosslake**
 Danube**
 Deer River**
 Delavan**
 Deuel**
 Dunnell**
 Eagle Valley**
 East Ottertail**
 Easton**
 Eckles**
 Emily**
 Farmers Mutual**
 Federated**
 Felton**
 Garden Valley**
 Gardonville**
 General**
 Granada**
 Halstad**
 Hancock**
 Harmony**
 Hills**
 Hohman**
 Home**
 Hutchinson**
 Interstate Telecom.**
 Johnson**
 Kasson Mantorville**
 KMP**
 Lakedale**
 Lismore**
 Lismore**

Lowry**
 Mabel**
 Madelia**
 Manchester**
 Mankato**
 Melrose**
 Mid-Communications**
 Mid-State**
 Midwest**
 Minnesota Lake**
 Minnesota Valley**
 New Ulm**
 Norman City**
 Northern**
 Northland**
 Osakis**
 Park Region**
 Paul Bunyan**
 Peoples**
 Pine Island**
 Polar Rural**
 Red River**
 Redwood County**
 Rock Deli**
 Rothsay**
 Runestone**
 Sacred Heart**
 Scott Rice**
 Sherburne**
 Sioux Valley**
 Sleepy Eye**
 Solon Springs**
 Southwest**
 Split Rock**
 Spring Grove**
 Starbuck**
 Twin Valley Ulen**
 United**
 Upsala**
 US West**
 Valley**
 West Central**
 Western**
 Wikstrom**
 Winnebago**
 Winstead**
 Winthrop**
 Wolverton**
 Woodstock**
 Zumbrota**

MISSISSIPPI

Franklin Telephone Co., Inc.*
Fulton Telephone Co., Inc.*
Mid-South Telephone Co.*

Mound Bayou Tel., Inc.*
South Central Bell*

MISSOURI

Alltel of Missouri, Inc.*
Contel System of Missouri*
GTE of Missouri*

Southwestern Bell**
United Tel. Co. of MO*

MONTANA

GTE Northwest, Inc.**

NEBRASKA

Arapahoe Telephone Co.*
Arlington Telephone Co.*
Benkelman Telephone Co.*
Blair Telephone Co.*
Cambridge Telephone Co.*
Clarks Telephone Co.*
Consolidated Telco, Inc.*
Cozad Telephone Co.*
Curtis Telephone Co.*
Dalton Telephone Co.*
Diller Telephone Co.*
Eastern Nebraska Telephone*
Eustis Telephone Exchange*
GTE North, Inc.*
Glenwood Tel. Membership Corp.*
Great Plains Comm.*
Hamilton Telephone Co.*
Hartington Telephone Co.*
Hartman Telephone Exchange*

Home Telephone Co.*
Hooper Telephone Co.*
K & M Telephone Co.*
Keystone-Arthur Tel. Co.*
Lincoln Tel. & Telegraph*
Nebraska Central Tel. Co.*
Northeast Nebraska Tel.*
Northwestern Bell*
Petersburg Telephone Co.*
Pierce Telephone Co.*
Plainview Telephone Co.*
Rock County Telephone Co.*
Rodeo Telephone Inc.*
Southeast Nebraska*
Stanton Telephone Co.*
Three River Telco*
United Telephone Co.*
Wauneta Telephone Co.*

NEVADA

Central Telephone Co. of Nevada**

Nevada Bell**

NEW HAMPSHIRE

Bretton Woods Telephone Co.*
Chichester Telephone Co.*
Contel of New Hampshire*
Dixville Telephone Co.*
Dunbarton Telephone Co.*
Granite State Telephone*

Kearsarge Telephone Co.*
Meriden Telephone Co.*
Merrimack County Telephone*
New England Tel. Co. of NH*
Union Telephone Co.*
Wilton Tel. Co. of NH*

NEW JERSEY

New Jersey Bell*
United Telephone Co. of NJ, Inc.*

Warwick Valley Telephone*

NEW MEXICO

Contel of the West-New Mexico**
US West Communications**

Western New Mexico Tel.**

NEW YORK

Alltel New York, Inc.**
Armstrong Telephone Co.**
Ausable Valley Telephone Co.**
Berkshire Telephone Corp.**
Cassadaga Telephone Corp.**
Champlain Telephone Co., The**
Chautauqua & Erie Tel. Corp.**
Chazy & Westport Tel. Corp.**
Citizens Tel. Co. of Hammond**
Clymer Telephone Co., The**
Contel of New York, Inc.**
Crown Point Telephone Corp.**
Delhi Telephone Co.**
Deposit Telephone Co., Inc.**
Dunkirk & Fredonia Tel. Co.**
Edwards Telephone Co., Inc.**
Empire Telephone Corp.**
Fishers Island Tel. Corp.**
Germantown Telephone Co., Inc.**
Hancock Telephone Co., The**
Co.** Highland Telephone Co.**

Margaretville Telephone Co*
Middleburgh Telephone Co.**
Newport Telephone Co.**
New York Telephone Co.**
Nicholville Telephone Co.**
Ogden Telephone Co.**
Oneida County Rural Tel.**
Ontario Telephone Co.**
Oriskany Falls Tel. Corp.**
Pattersonville Telephone**
Port Byron Telephone Co.**
Rochester Telephone Corp.**
Seneca-Gorham Telephone**
State Telephone Co.**
Sylvan Lake Telephone Co.**
Taconic Telephone Co.**
Township Telephone Co.,**
Trumansburg Home Telephone**
Vernon Telephone Co., Inc.**
Warwick Valley Telephone

NORTH CAROLINA

Alltel Carolina**
Barnardsville Telephone Co.**
Carolina Telephone & Telegraph**
Central Telephone Co. of NC**
Citizens Telephone Co.**
Concord Telephone Co.**
Contel of North Carolina**
Contel of Virginia**
Ellerbe Telephone Co.**
GTE South, Inc. of NC**
Heins Telephone Co.**

Lexington Telephone Co.**
Mebane Home Telephone Co.**
North State Telephone Co.**
Pineville Telephone Co.**
Randolph Membership**
Randolph Telephone Co.**
Saluda Mountain Telephone**
Sandhills Telephone Co.**
Service Telephone Co.**
Southern Bell of NC**

NORTH DAKOTA

BEK Telephone Mutual Aid Corp.*
Consolidated Telephone Coop.*
Contel of North Dakota, Inc.*
Dakota Central Rural Tel. Coop.*

Northern States Power*
Northwest Comm. Coop.*
Northwestern Bell Tel. Co.*
Polar Comm. Mutual *

NORTH DAKOTA (CONT.)

Dickey Rural Telephone Coop.*
Halstad Telephone Co.*
Moore & Liberty Telephone Co.*

Reservation Telephone Coop.*
Souris River Telephone*
United Tel. Mutual Aid*

OHIO

Alltel Ohio-Newark**
Arcadia Telephone Co.*
Ayersville Telephone Co.*
Bascom Mutual Telephone Co.*
C, C & S Telephone Co.-Ohio*
Central Telephone Co.**
Cincinnati Bell-Ohio**
Continental Telephone Co.*
Elyria Telephone Co.**
Farmers Mutual Telephone Co.*
Fayetteville Telephone Co.*
Fort Jennings Telephone Co.*
Germantown Independent Tel. Co.*
Glandorf Telephone Co.*
GTE North, Inc.-Ohio**
Harlan Telephone Co.*
Kalida Telephone Co.*
McClure Telephone Co.*

Middle Point Home Tel. Co.*
Minford Telephone Co.*
New Knoxville Telephone Co.*
Oakwood Mutual Tel. Co.*
Ohio Bell Telephone Co.
Ridgeville Telephone Co.*
Sherwood Mutual Tel. Co.*
Sycamore Telephone Co.*
Telephone Service Co.*
The Arthur Mutual*
The Champaign Telephone Co.*
The Chillicothe Tel. Co.*
The Nova Telephone Co.*
United Telephone Co.-OH*
Vanlue Telephone Co.*
Vaughnsville Telephone Co.*
Wabash Mutual Telephone Co.*
Western Reserve Telephone**

OKLAHOMA

Alltell Oklahoma, Inc.*
Atlas Telephone Co.*
Beggs Telephone Co.*
Bixby Telephone Co.*
Canadian Valley Telephone Co.*
Carnegie Telephone Co.*
Central Oklahoma Telephone Co.*
Cherokee Telephone Co.*
Chickasaw Telephone Co.*
Chouteau Telephone Co.*
Cimarron Telephone Co.*
Craw-Kan Telephone Co.*
Cross Telephone Co.*
Dobson Telephone Co.*
Elkhart Telephone Co.*
Grand Telephone Co.*
Hinton Telephone Co.*
Kanokla Telephone Assn.*
Lavaca Telephone Co.*
Mid-America Telephone Co.*

McCloud Telephone Co.*
Medicine Park Telephone Co.*
Oklahoma ALLTEL, Inc.*
Oklahoma Comm. System*
Oklahoma T & T Inc.*
Oklahoma Western Telephone*
Panhandle Telephone*
Pine Telephone Co.*
Pioneer Telephone Co-op.*
Pottowatomie Telephone Co.*
Salina-Spavinaw Tel. Co.*
Santa Rosa Tel. Co., Inc.*
Seneca Telephone Co.*
Shilder Telephone Co.*
South Central Telephone*
Southwest Oklahoma Tel. Co.*
Terral Telephone Co.*
Totah Telephone Co, Inc.*
Valliant Telephone Co.*
Wyandotte Telephone Co.*

OREGON

Asotin Telephone**
Beaver Creek**
Canby Telephone**
Cascade**
Clear Creek**
Colton Telephone**
Contel West/NW**
CP National**
Eagle Telephone**
Gervais**
GTE Northwest**
Helix**
Home**
Malheur Bell**
Midvale**
Molalla**
Monitor**

Monroe**
Mt. Angel**
Nehalem Telephone**
North-State**
Oregon Telephone**
Pacific Telecomm., Inc.**
People's**
Pine Telephone**
Pioneer**
Room Telephone, Inc.**
Scio**
Stayton**
St. Paul**
Trans-Cascade**
United Telephone**
US West Communications**

PENNSYLVANIA

Alltel Pennsylvania*
Bell of Pennsylvania*
Breezewood Telephone Co.*
Brookville Telephone Co.*
Canton Telephone Co.*
Contel of Pennsylvania*
C-Tec Corporation*
Denver & Ephrata*
Enterprise Telephone Co.*

GTE North, Inc.*
Murraysville Telephone Co.*
North Penn. Telephone Co.*
North Pittsburg Telephone*
Oswayo River Telephone Co.*
Pennsylvania Telephone Co.*
Quaker State Telephone Co.*
The Bentleyville Tel.*

PUERTO RICO

Puerto Rico Telephone Co.*

RHODE ISLAND

New England Telephone Co.**

SOUTH CAROLINA

Alltel South Carolina*
Bluffton Tel. & Appliance*
Chesnee Telephone Co.*
Chester Tel. Co.-South Carolina*
Contel of South Carolina*
Farmers Telephone Coop.*
Fort Mill Telephone Co.*
General Telephone Co.*
Hargray Telephone Co.*
Heath Springs Telephone Co.*

McClellanville Telephone*
Norway Telephone Co.*
Palmetto Rural Coop.*
Piedmont Rural Coop.*
Pond Branch Telephone Co.*
Ridge Telephone Co.*
Ridgeway Telephone Co.*
Rock Hill Telephone Co.*
Sandhill Telephone Coop.-SC*
Southern Bell-SC*

SOUTH CAROLINA (CONT.)

Home Telephone Co.*
Horry Telephone Coop.*
Lancaster Telephone Co.*
Lockhart Telephone Co., Inc.*

St. Stephen Telephone Co.*
United Telephone Co.*
West Carolina Rural*
Williston Telephone Co.*

SOUTH DAKOTA

US West Communications**

TENNESSEE

South Central Bell*

United Telephone Co.*

TEXAS

Central Telephone Co. of Texas**
Contel of Texas**
GTE Southwest, Inc.**
Lufkin-Conroe Tel. Exchange**

South Plains Tel. Coop**
Southwestern Bell**
United Telephone Co.- TX**

UTAH

Beehive Telephone Co.**
Central Utah Telephone Inc.**
Contel of the West**
Emery County Farmers**
Gunnison Telephone Co.**
Kamas-Woodland Telephone**
Manti Telephone Co.**

Mountain Bell**
Navajo Communications**
Skyline Telecommunications**
South Central Utah**
Uintah Basin Telephone**
Utah-Wyoming Telecomm.**

VERMONT

Contel of Vermont
Franklin Telephone Co.
Ludlow Telephone Co.
New England Telephone
Northfield Telephone Co.

Perkinsville Telephone Co.
Shoreham Telephone Co.
Topsham Telephone Co.
Waitsfield/Fayston

VIRGINIA

Amelia Telephone Corp.**
Buggs Island Coop.**
Burke's Garden Telephone**
C & P Telephone Co.**
Central Tel. Co. of Virginia**
Citizens Telephone Coop.**
Clifton Forge Waynes**
Contel of Virginia**
GTE South, Inc.**

MT Grove**
New Hope Telephone Co.**
North River Telephone **
Pembroke Telephone Coop.**
Peoples Mutual Telephone**
Roanoke & Botetourt**
Scott County Coop.**
Shenandoah Telephone Co.**
United Inter-MT-VA**

VIRGINIA (CONT.)

Highland Telephone Coop.**

Virginia Hot Springs**

WASHINGTON

Continental Telephone
Ellensburg Telephone Co.
GTE Northwest, Inc.-Washington
Lewis River Telephone Co.
Peninsula Telecommunications
Pioneer Telephone Co.

St. John Telephone Co.
Telephone Utilities - WA
United Telephone Co.- NW
US West Communications
Western Wahkiakum Tel. Co.
Whidbey Telephone Co.

WEST VIRGINIA

Armstrong Telephone Co.**
C & P Telephone Co. of WV**
Contel of West Virginia**
GTE South*

Mountain State Telephone **
War Telephone Co.**
West Side Telephone Co.**

WISCONSIN

Wisconsin Bell**

GTE North - WI**

WYOMING

United Telephone Co.*

US West*

* Link Up only
** Lifeline and Link Up

TABLE 2.3
LIFELINE & LINK-UP STATE ELIGIBILITY QUALIFICATIONS

STATE	ENTITY	ELIGIBILITY CRITERIA	INCOME VERIFICATION
Alabama	Public Service Commission	Recipient of: SSI, AFDC, or Food Stamps	Medicaid or Food Stamp card
Arizona	Corporation Commission	Lifeline: Income below 150% poverty Link Up: Income at or below poverty and participant in Senior Telephone Discount Program	Arizona Dep't. of Economic Security
Arkansas	Public Service Commission	Recipient of: SSI, AFDC, HEAP, Food Stamps, Medicaid, or Subsidized housing	Local Exchange Companies
California	Public Utilities Commission	Income at or below 150% poverty	Self certified
Colorado	Public Utilities Commission	Recipient of: SSI, Old Age Pension, Aid to the Blind, or Aid to the Needy & Disabled	Dep't. of Social Services
Connecticut	Dep't. of Public Utility Control	Eligible for any low-income assistance or energy assistance program administered by the CT Dep't. of Human Resources or CT Dep't. of Income Maintenance or SSI	Applicable agency of those listed
District of Columbia	Public Service Commission	Over age 65 & eligible for LIHEAP or Complementary Energy Assistance Program	D.C. Energy Office
Florida	Public Service Commission	Recipient of: Food Stamps or Medicaid	Dep't. of Health & Rehabilitative Services

STATE	ENTITY	ELIGIBILITY CRITERIA	INCOME VERIFICATION
Georgia	Public Service Commission	Recipient of: SSI, AFDC, and/or Food Stamps	Dep't of Human Resources
Hawaii	Public Utilities Commission	Age 60 or older or handicapped with annual household income \$10,000 or less	Hawaiian Telephone Co.
Idaho	Public Utilities Commission	Recipient of: AFDC, Food Stamps, Aid to the Aged, Blind & Disabled, or Medical Assistance	Medical Assistance or Food Stamp ID card
Illinois	Illinois Commerce Commission	Recipient of public assistance in programs administered by the Illinois Dep't. of Public Aid	Dep't. of Public Aid
Indiana	Utility Regulatory Commission	Recipient of: SSI, AFDC, HEAP, Medicaid, or Food Stamps	Local Exchange Companies
Iowa	State Utilities Board	Recipient of: SSI, AFDC, LIHEAP, or Food Stamps	Local Exchange Companies
Kansas	Corporation Commission	Recipient of: SSI, AFDC, Food Stamps, Medicaid, or General Assistance	Local Exchange Companies
Kentucky	Public Service Commission	Recipient of: SSI, AFDC, Food Stamps, or Medical Assistance	Cabinet for Human Resources
Louisiana	Public Service Commission	Recipient of: SSI, AFDC, or Food Stamps	Medicaid or Food Stamp card
Maine	Public Utilities Commission	Recipient of: SSI, AFDC, HEAP, Medicaid, or Food Stamps	Dep't. of Human Services

STATE	ENTITY	ELIGIBILITY CRITERIA	INCOME VERIFICATION
Maryland	Public Service Commission	Recipient of: General Assistance	Dep't. of Human Resources
Massachusetts	Dep't of Public Utilities	Recipient of: SSI, AFDC, General Public Welfare, Food Stamps, Medicaid, and Fuel Assistance	Dep't of Public Welfare and/or Office of Fuel Assistance
Michigan	Public Service Commission	Income at or below 130% poverty	Dep't. of Social Services or Office Services to the Aging
Minnesota	Public Utilities Commission	Age 65 or older or Income level which meets state poverty levels	Dep't. of Human Services
Mississippi	Public Service Commission	Recipient of: SSI, AFDC, or Food Stamps	Medicaid or Food Stamp card
Missouri	Public Service Commission	Recipient of: Medicaid	Dep't. of Social Services
Montana	GTE, Inc.	Recipient of: SSI, AFDC, or Medicaid	Medicaid card & Social & Rehabilitation Services
Nebraska	Public Service Commission	Recipient of: SSI, AFDC, Energy Assistance, Food Stamps, Medicaid, or Aid to the Aged, Blind or Disabled	Medicaid Agency or Dep't. of Social Service or Food Stamp program
Nevada	Public Service Commission	Recipient of: SSI, AFDC, Energy Assistance, Food Stamps, Indian General Assist., Commodity Foods, or VA Improved Pension	Proof of enrollment in listed programs

STATE	ENTITY	ELIGIBILITY CRITERIA	INCOME VERIFICATION
New Hampshire	Public Utilities Commission	Recipient of: SSI, AFDC, Food Stamps, Fuel Assistance, Old Age Assistance, Weatherization Assist., Aid to Permanently/ Totally Disabled, Women, Infants & Children Feeding Program Welfare, Title XX, or Subsidized Housing	Respective donor agency
New Jersey	Public Service Commission	Recipient of: SSI, AFDC, HEAP, Pharmaceutical Assist. to the Aged, Welfare, or Lifeline Credit	Local Exchange Companies
New Mexico	Mountain Bell Tel.	Recipient of: SSI, AFDC, or LITAP	Medicaid card
	Continental Tel. Co.	Recipient of: SSI, AFDC, or Coordinated Community In-Home Care (CCIC)	Human Services Dept.
	Western NM Tel. Co.	Recipient of: SSI, AFDC, or CCIC	Human Services Dept.
New York	Dep't. of Public Services	Recipient of: SSI, AFDC, Food Stamps, Medicaid, or Home Relief	Administering Agency
North Carolina	Utilities Commission	Recipient of: SSI or AFDC	Dep't. of Human Resources
North Dakota	Public Service Commission	Eligible for: Food Stamps	County Social Service Board
Ohio	Public Utilities Commission	Recipient of: HEAP or Ohio Energy Credits	Local Exchange Companies

STATE	ENTITY	ELIGIBILITY CRITERIA	INCOME VERIFICATION
Oklahoma	Corporate Commission	Recipient of aid from state low income programs	Dep't. of Human Services
Oregon	Public Utilities Commission	Eligible for: Food Stamps	Dep't. of Human Resources
Pennsylvania	Public Utilities Commission	Recipient of: SSI, AFDC, Food Stamps, General Assistance, or Blue Card Medical Ass. Medically Needy Only	Dep't. of Public Welfare
Puerto Rico	PR Tel. Co.	Recipient of: Nutritional Assistance Program	Dep't. of Social Services
Rhode Island	Public Utilities Commission	Recipient of: SSI, AFDC, General Assistance, or Medical Assistance	Dep't. of Human Services
South Carolina	Public Service Commission	Recipient of: AFDC, Food Stamps, Medicaid, or Temporary Emergency Food Assistance	Local Exchange Companies
South Dakota	Northwestern Bell	Recipient of: HEAP or Food Stamps	Dep't. of Social Services
Tennessee	Public Service Commission	Recipient of: SSI, AFDC, Medicaid, or Food Stamps	Medicaid card or Food Stamp Notice of Disposition
Texas	Public Utilities Commission	Eligible for: SSI, AFDC, LIHEAP, Food Stamps, Medicaid, Medical Assistance, or Maternal Health Program	Local Exchange Companies

STATE	ENTITY	ELIGIBILITY	INCOME VERIFICATION
Utah	Public Service Commission	Eligible for: SSI, AFDC, Food Stamps, General Assistance, Home Energy Assistance, Medical Assistance, Refugee Assistance, or Energy Work Programs	Local Exchange Companies
Vermont	Public Service Board	Recipient of: SSI, AFDC, Food Stamps, Medicaid, or Fuel Assistance	Dep't. of Social Welfare
Virginia	Corporation Commission	Recipient of: Virginia Universal Service Plan	Dep't. of Medical Assist. Services
Washington	Utilities & Transportation Commission	Recipient of: SSI, AFDC, Food Stamps, Refugee Assistance, Chore Services, or Community Options Program Entry System	Dep't. of Social & Health Services
West Virginia	Public Service Commission	Disabled or age 60 or older & receives SSI, AFDC or Food Stamps or is eligible for SSI	Dep't. of Human Services
Wisconsin	Wisconsin Bell	Recipient of: AFDC, SSI, Food Stamps, Title 19 Medical and Energy Programs	Dep't. of Health and Social Services
Wyoming	US West	Recipient of: SSI, AFDC, LIEAP, or Food Stamps	Dep't. of Health & Social Services
	United Tel. Co.	Recipient of: SSI, AFDC, LIEAP, Food Stamps, or Food Distribution Program	Dep't. of Health & Social Services

TABLE 2.4
LIFELINE STATE ENROLLMENT

States	Date Implemented	Lifeline Subscribers	Subscribers Eligible	Percentage
Arizona	11/14/86	8,826	35,579	24.81%
Arizona - Pilot	11/86	3,446	5,336	64.58%
Arkansas	5/22/86	6,305 1	74,000	8.52%
California	1/01/85	1,179,658 1	1,880,762	62.72%
Colorado	9/01/86	0 3	59,000	0.00%
District of Columbia	3/18/86	3,793	55,432	6.84%
Hawaii	10/27/86	6,473	19,680	32.89%
Idaho	8/87	8,212	11,171	73.51%
Maine	1/88	33,908	68,502	49.50%
Maryland	7/86	2,929	74,409	3.94%
Massachusetts	(2/09/90)	N/A	419,361	N/A
Michigan	5/10/89	45,502	615,000	7.40%
Minnesota	1/27/88	46,845	133,621	35.06%
Missouri	10/01/87	14,727	25,062	58.76%
Montana	4/01/88	5,348 1	91,296	5.86%
Nevada	7/01/88	4,650	23,535	19.76%
New Mexico	7/87	11,729 1	35,000	33.51%
New York	11/02/87	260,628	1,100,000	23.69%
North Carolina	3/05/87	15,413	189,134	8.15%
North Dakota	(12/18/89)	N/A	25,668	N/A
Ohio	4/01/87	12,095	120,154	10.07%
Oregon	6/01/86	21,503	85,000	25.30%
Rhode Island	11/22/88	14,056 2	46,194	30.43%
South Dakota	6/11/88	4,653	8,650	53.79%
Texas	9/07/88	15,346	124,000	12.38%
Utah	(12/31/86)	13,473 1	40,000	33.68%
Vermont	10/01/86	17,250	36,051	47.85%
Virginia	1/01/88	15,453	48,106	32.12%
Washington	8/01/87	33,237 1	193,784	17.15%
West Virginia	10/86	6,060	43,856	13.82%
TOTAL		1,811,518	5,687,342	31.85%

() DATE APPROVED BY FCC

1 DATA FROM BELL COMMUNICATIONS RESEARCH

2 AS OF 6/89 FROM BELL COMMUNICATIONS RESEARCH

3 COLORADO'S TELEPHONE ASSISTANCE PLAN WAS DISCONTINUED IN FEBRUARY, 1989. HOWEVER, A NEW PLAN WAS CERTIFIED IN MAY 1990.

SOURCE: UNLESS NOTED, FCC FORM 496, STATE TELEPHONE ASSISTANCE REPORT, FILED MAY 1, 1990; DATA AS OF DECEMBER 31, 1989.

NOTE: OTHER SOURCES USED WHERE NOTED AND REQUIRED BY THE FAILURE OF CERTIFIED STATES AND LEC'S TO SUBMIT COST/BENEFIT REPORTS.

TABLE 2.5
LINK-UP STATE ENROLLMENT

States	Date Implemented	New Link-Up Subscribers*	Total Link-Up Subscribers**	Subscribers Eligible	Percentage
Alabama	2/15/88	4,551 1	5,961	446,271	1.34%
Arizona		5,961 2	5,961	376,325	1.58%
Arkansas	11/1/87	5,427	11,099	342,101	3.24%
Colorado	8/88	0 3	0	208,406	0.00%
Connecticut	11/20/87	2,620 2	5,605	158,284	3.54%
District of Columbia	8/21/87	528	1,602	55,432	2.89%
Florida	10/17/88	4,463	5,689	25,000	22.76%
Georgia	1/25/89	N/A	N/A	N/A	N/A
Hawaii	9/01/89	79	79	59,773	0.13%
Idaho	(5/12/89)	5,579 2	5,579	79,377	7.03%
Illinois	(9/18/89)	N/A	N/A	N/A	N/A
Indiana	1/25/89	1,272	1,272	62,751	2.03%
Iowa	4/13/88	3,037	6,383	14,326	44.56%
Kansas	2/29/88	681	1,272	2,556	49.77%
Kentucky	1/01/88	893	1,631	438,009	0.37%
Louisiana	(10/25/88)	10,896 4	11,140	560,639	1.99%
Maine	1/88	377	7,913	29,371	26.94%
Maryland	10/87	260	540	241,448	0.22%
Massachusetts	2/02/90	2,542 2	2,542	419,361	0.61%
Michigan	5/10/89	8,325	8,325	615,000	1.35%
Minnesota	1/27/88	721	1,704	187,293	0.91%
Mississippi	5/11/88	1,185 4	2,322	267,385	0.87%
Missouri	4/15/88	715	1,945	101,018	1.93%
Montana	4/01/88	2,021 2	2,125	91,296	2.33%
Nebraska	6/07/88	214 2	495	882	56.12%
Nevada	11/1/88	50 4	N/A	86,276	0.00%
New Hampshire	12/16/88	N/A	361	40,343	0.89%
New Jersey	1/01/88	442	1,673	38,500	4.35%
New Mexico	3/01/88	1,266	2,548	216,397	1.18%
New York	8/11/87	16,472	95,967	1,100,000	8.72%
North Carolina	3/01/88	1,111	4,976	270,497	1.84%
North Dakota	1/19/89	463 2	687	62,689	1.10%
Ohio	12/09/87	9,194	10,115	120,154	8.42%
Oklahoma	(4/09/90)	N/A	N/A	N/A	N/A
Oregon	5/05/88	629	1,899	41,190	4.61%
Pennsylvania	6/13/88	34,069 2	34,281	743,973	4.61%
Puerto Rico	(11/17/88)	2,519	2,519	96,000	2.62%
Rhode Island	11/22/88	586 4	853	46,194	1.85%
South Carolina	2/15/88	4,376	8,988	385,214	2.33%
South Dakota	6/11/88	519	1,038	75,357	1.38%
Tennessee	1/01/89	7,771	7,909	442,527	1.79%
Texas	11/13/87	12,743	14,244	180,000	7.91%
Utah	3/17/88	654	1,298	93,622	1.39%
Vermont	(2/09/90)	N/A	N/A	36,051	N/A
Virginia	1/01/88	3,201	4,470	525,364	0.85%
West Virginia	10/87	503	2,113	11,692	18.07%
Wisconsin	(7/14/89)	N/A	N/A	N/A	N/A
Wyoming	3/01/89	259	518	18,000	2.88%
TOTALS		159,174	287,641	9,412,345	3.06%

- 1 ESTIMATES FROM STATE AND 1989 NECA SOURCES FOR ALABAMA
 - 2 REPORTED FROM PHONE TO FCC
 - 3 COLORADO'S TELEPHONE ASSISTANCE WAS DISCONTINUED IN
FEBRUARY, 1989. HOWEVER, A NEW PLAN WAS CERTIFIED IN MAY 1990.
 - 4 ESTIMATES FROM 1989 NECA SOURCE
- * NUMBER OF NEW SUBSCRIBERS FOR YEAR ENDING DECEMBER 31, 1989
** NUMBER OF SUBSCRIBERS SINCE IMPLEMENTATION OF PROGRAM

SOURCE: FCC FORM 496, STATE TELEPHONE ASSISTANCE REPORT, FILED
MAY 1, 1990; DATA AS OF DECEMBER 31, 1989.

NOTE: OTHER SOURCES USED WHERE NOTED AND REQUIRED BY THE FAILURE
OF CERTIFIED STATES AND LEC'S TO SUBMIT COST/BENEFIT REPORTS.

Table 2.6
Lifeline Reimbursements to Local Exchange Companies

State	7/87 - 12/87	1/88 - 6/88	7/88 - 12/88	1/89 - 6/89
Arizona	\$0	\$65,104	\$75,411	\$55,279
Arkansas	\$61,474	\$77,680	\$91,057	\$119,988
California	\$9,033,918	\$9,396,980	\$10,620,010	\$13,671,449
Colorado	\$282,157	\$279,139	\$279,888	\$346,983
District of Columbia	\$62	\$45,149	\$47,815	\$56,348
Hawaii	\$83,770	\$90,339	\$16,195	\$99,739
Idaho	\$93,115	\$120,433	\$128,917	\$175,388
Maine	\$265	\$441,061	\$514,667	\$624,317
Maryland	\$421	\$46,012	\$47,745	\$58,518
Massachusetts	\$0	\$0	\$0	\$0
Michigan	\$0	\$0	\$0	\$73,264
Minnesota	\$0	\$89,409	\$363,476	\$712,056
Missouri	\$17,116	\$228,529	\$260,133	\$314,828
Montana	\$31,980	\$70,255	\$74,260	\$86,603
Nevada	\$5,368	\$5,738	\$14,761	\$62,944
New Mexico	\$126,407	\$145,057	\$173,316	\$219,260
New York	\$829,277	\$1,499,048	\$2,671,478	\$4,214,147
North Carolina	\$178,103	\$255,836	\$265,486	\$349,937
North Dakota	\$0	\$9	\$16	\$75
Ohio	\$7,351	\$118,716	\$121,671	\$321,433
Oregon	\$112,613	\$130,781	\$385,651	\$442,930
Rhode Island	\$81,510	\$195,992	\$208,629	\$276,998
South Dakota	\$0	\$569	\$65,233	\$92,603
Texas	\$0	\$0	\$126,953	\$358,529
Utah	\$240,021	\$253,274	\$230,311	\$222,081
Vermont	\$217,074	\$235,831	\$250,380	\$334,622
Virginia	\$78	\$135,114	\$193,445	\$286,336
Washington	\$172,978	\$378,309	\$344,574	\$432,082
West Virginia	\$31,540	\$97,348	\$100,081	\$120,617
TOTAL	\$11,606,598	\$14,401,712	\$17,671,559	\$24,129,354

SOURCE: NECA SUBMISSIONS: CC DOCKET 87-339: SEPTEMBER 29, 1989, NOVEMBER 13, 1989,
JUNE 1, 1990.

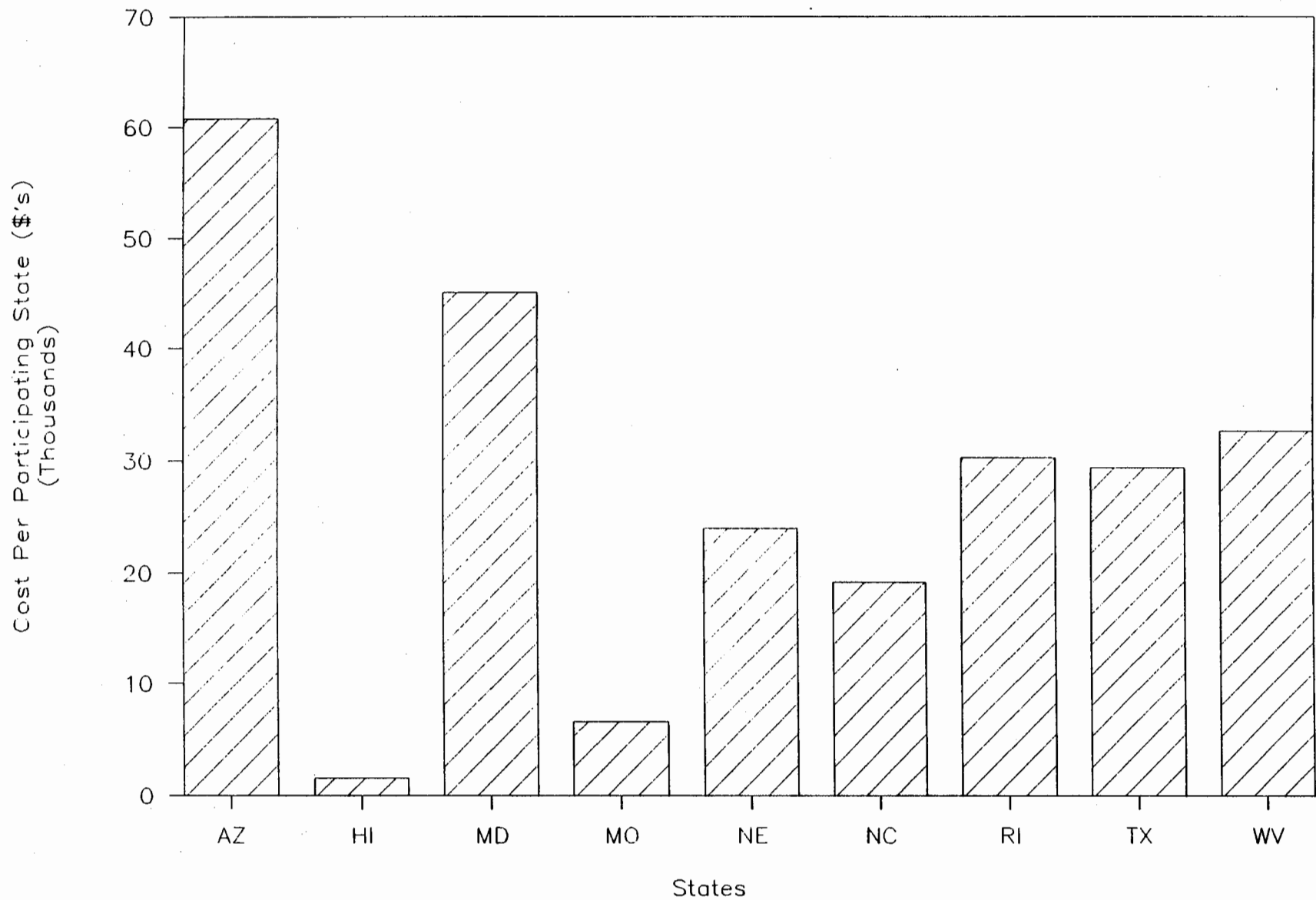
Table 2.7
Link-Up Connection Assistance Reimbursements to Local Exchange Companies

State	7/87 - 12/87	1/88 - 6/88	7/88 - 12/88	1/89 - 6/89
Alabama	\$0	\$54,805	\$32,816	\$20,318
Arizona	\$0	\$824	\$1,321	\$1,535
Arkansas	\$39,601	\$92,693	\$57,289	\$48,208
Colorado	\$1,325	\$0	\$0	\$0
Connecticut	\$6,967	\$31,889	\$24,209	\$26,035
District of Col	\$154	\$9,075	\$6,191	\$5,429
Florida	\$0	\$0	\$29,724	\$48,036
Hawaii	\$8,623	\$0	\$0	\$0
Indiana	\$0	\$120	\$49	\$22,708
Iowa	\$0	\$7,303	\$29,070	\$70,473
Kansas	\$0	\$8,818	\$7,988	\$4,413
Kentucky	\$42	\$73,839	\$83,751	\$82,960
Louisiana	\$0	\$0	\$7,318	\$205,459
Maine	\$531	\$3,497	\$1,052	\$81,826
Maryland	\$1,296	\$3,048	\$2,259	\$2,616
Michigan	\$0	\$0	\$0	\$14,448
Minnesota	\$0	\$16	\$1,857	\$5,919
Mississippi	\$0	\$3,554	\$17,719	\$17,804
Missouri	\$0	\$4,195	\$26,951	\$26,690
Montana	\$0	\$9,755	\$9,960	\$10,942
Nebraska	\$0	\$0	\$3,453	\$3,236
New Hampshire	\$0	\$0	\$40	\$4,472
New Jersey	\$0	\$18,364	\$7,559	\$5,977
New Mexico	\$4,652	\$23,248	\$15,210	\$12,355
New York	\$1,068	\$2,300	\$1,447	\$3,342
North Carolina	\$42	\$144,949	\$64,776	\$44,313
North Dakota	\$0	\$2,158	\$856	\$3,213
Ohio	\$3,352	\$153,184	\$43,959	\$124,637
Oregon	\$0	\$3,168	\$30,111	\$3,716
Pennsylvania	\$0	\$2,931	\$45,774	\$26,348
Puerto Rico	\$0	\$0	\$0	\$14,717
Rhode Island	\$1,335	\$812	\$375	\$3,613
South Carolina	\$0	\$50,259	\$50,720	\$38,500
South Dakota	\$0	\$70	\$2,959	\$13,984
Tennessee	\$182	\$1,194	\$1,345	\$92,020
Texas	\$26,725	\$252,459	\$243,758	\$185,974
Utah	\$802	\$16,508	\$15,656	\$12,532
Virginia	\$0	\$54,112	\$31,160	\$51,303
Washington	\$8,062	\$0	\$7,465	\$1,179
West Virginia	\$45,358	\$55,562	\$6,890	\$6,007
Wyoming	\$0	\$0	\$0	\$6,334
TOTAL	\$150,117	\$1,084,709	\$913,037	\$1,353,591

SOURCE: NECA SUBMISSIONS: CC DOCKET 87-339: SEPTEMBER 29, 1989, NOVEMBER 13, 1989,
JUNE 1, 1990

CHART 2.1

Lifeline Administrative Costs



NEW YORK: \$274,333 OHIO: \$267,988

Cost Per Participating Household (\$'s)

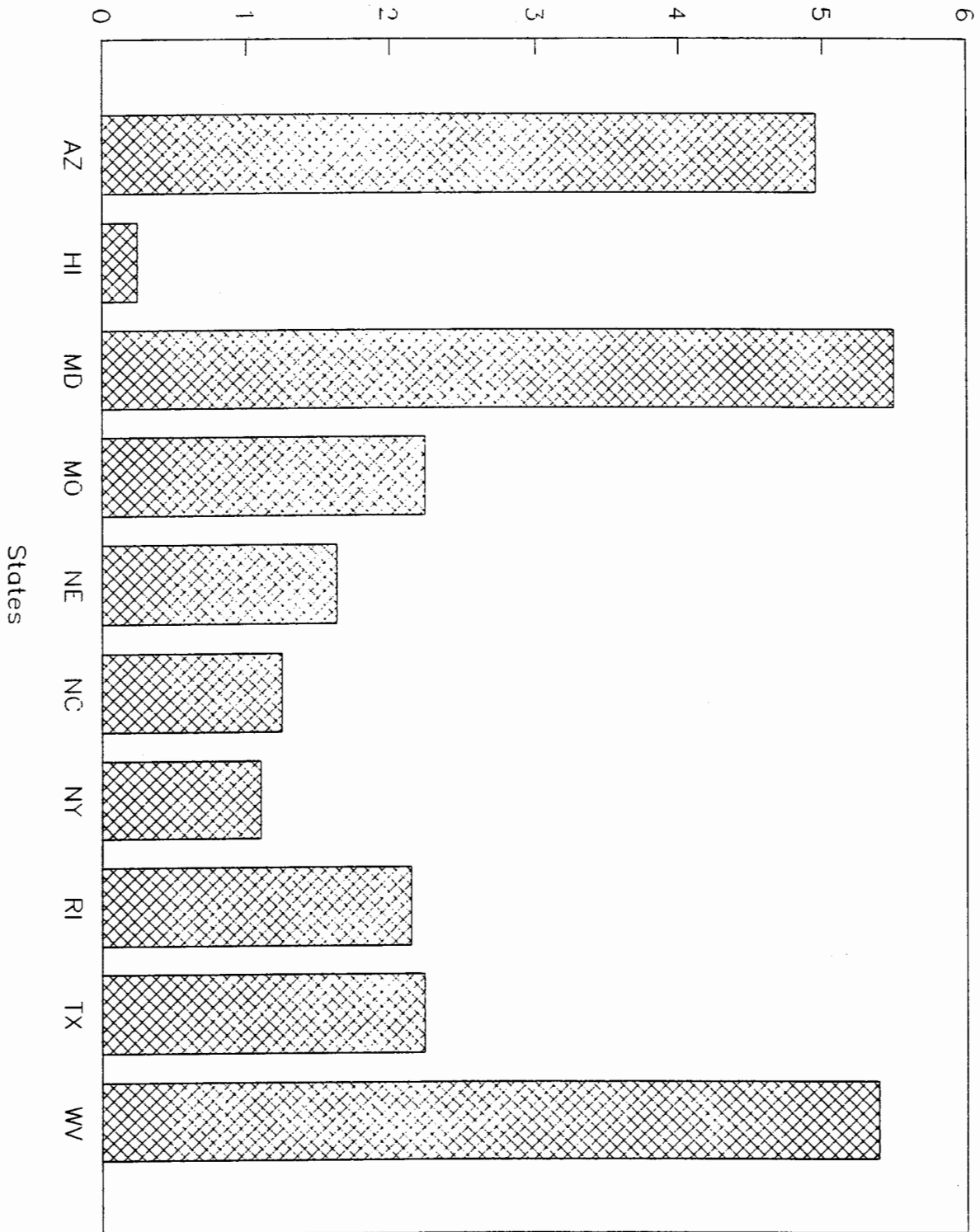


CHART 2.2
Lifeline Administrative Costs

Cost Per Participating State (\$'s)
(Thousands)

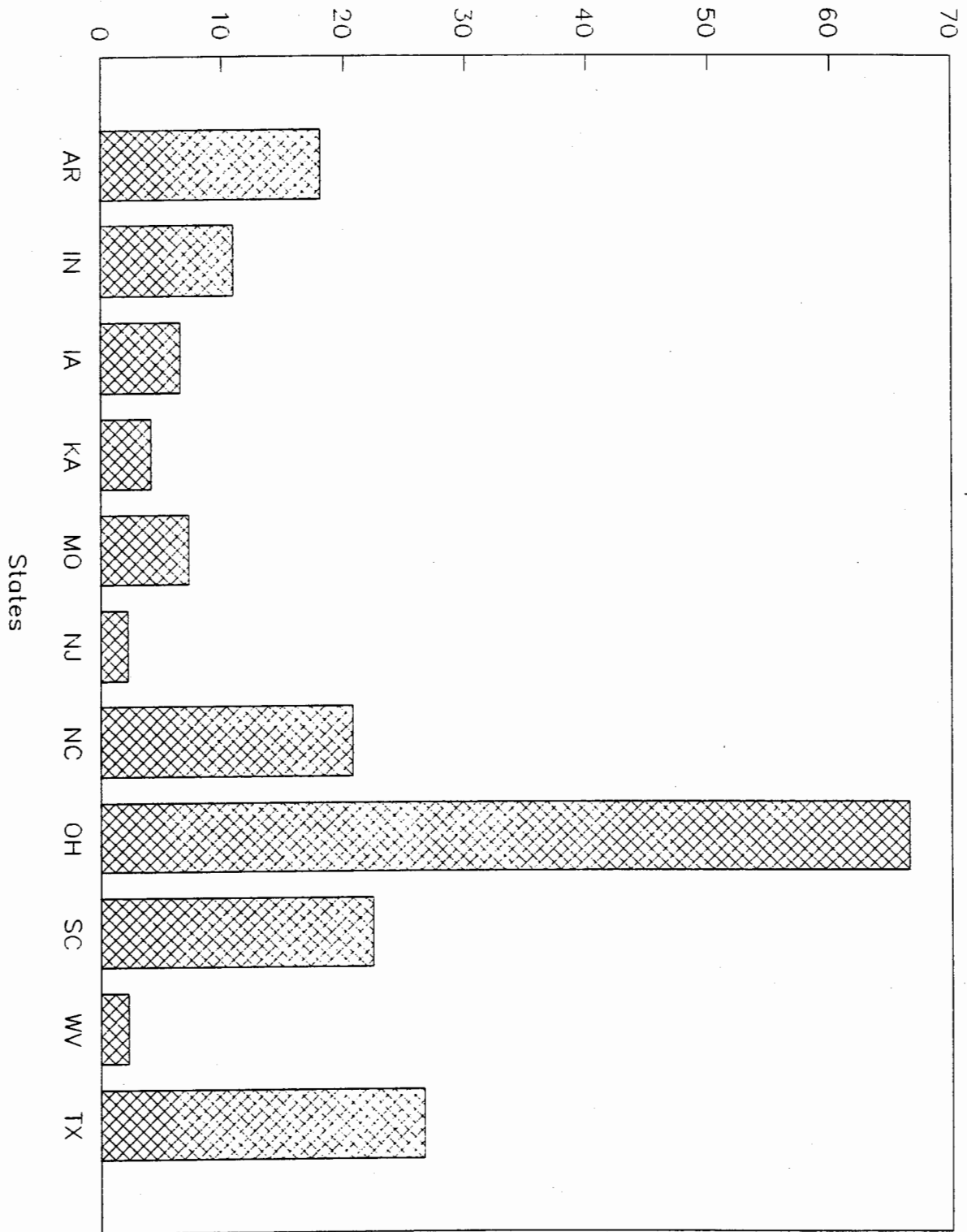
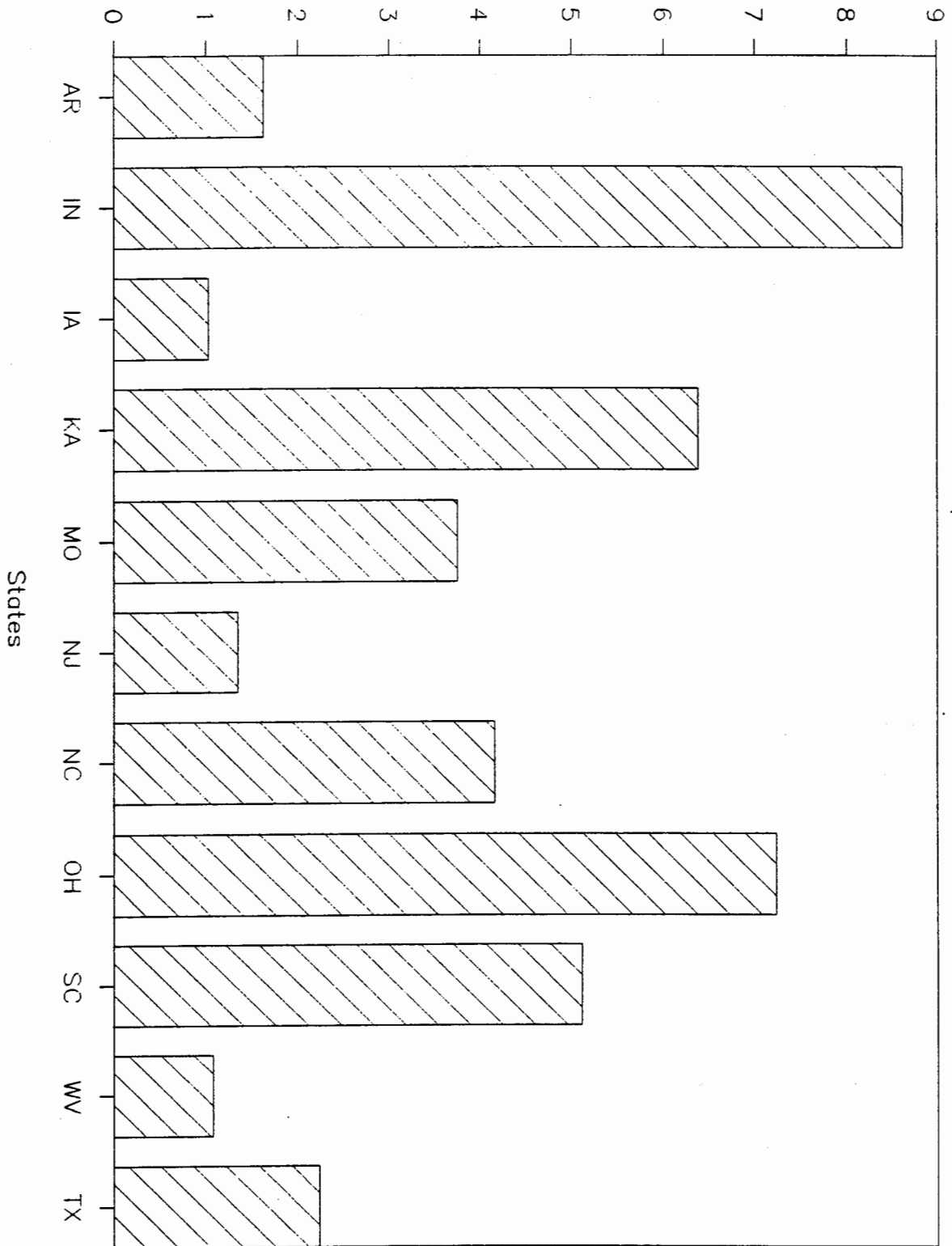


CHART 2.3
Link-Up Administrative Costs

Cost Per Participating Household (\$'s)



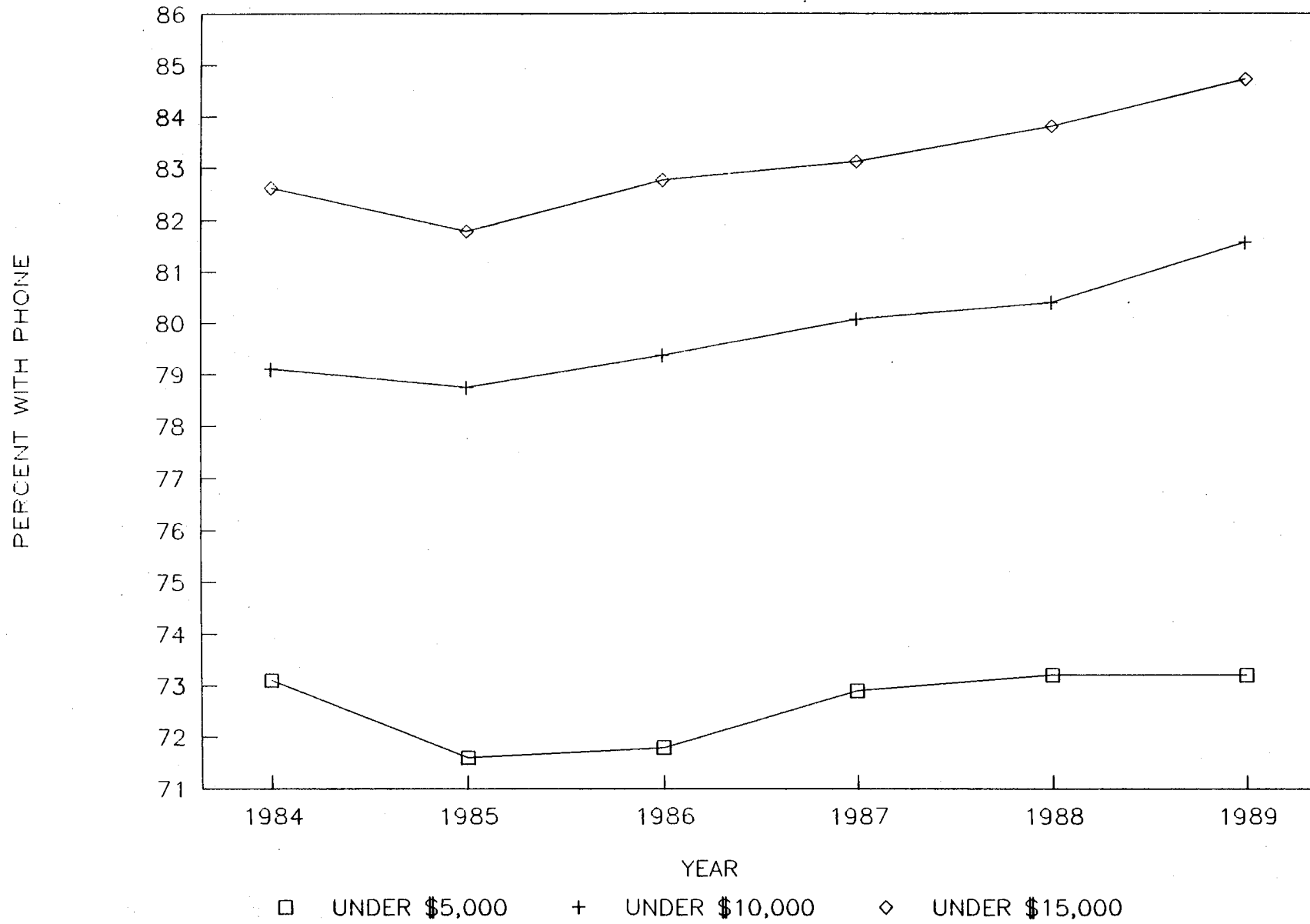
Link-Up Administrative Costs

CHART 2.4

CHART 2.5

TELEPHONE PENETRATION BY INCOME

ANNUAL HOUSEHOLD INCOME IN 1989 DOLLARS



3. Cost and High Cost Assistance

On a nationwide average basis, approximately 27 percent of local exchange carrier (LEC) local loop costs are allocated to the interstate (federal) jurisdiction, ¹ and 73 percent are allocated to the state jurisdiction. The average cost per loop, however, varies significantly among LECs. The Commission's high cost assistance program enables 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. Consequently, the funding of this high cost assistance is known as the Universal Service Fund (USF). 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 took the form of changes in the additional interstate cost allocation for such LECs. The old and new high cost formulas are compared in Table 3.1. ²

1 Of this amount, approximately 26 percent is a direct allocation by the transitional subscriber plant factor, and approximately 1 percent is covered by the universal service fund.

2 Of course, the percentages shown in the table are in addition to the

The Commission's high cost assistance program is being implemented during a period in which the basic interstate allocation of loop costs is being shifted from a level based on the Subscriber Plant Factor (SPF) to a flat allocation factor of 25%. Both of these changes are being phased in over the same eight-year period.

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.³ 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 based on NECA's 1989 report, covering high cost data for 1988, are presented in Table 3.2.⁴ This table shows the number of study areas, the number of loops, the unseparated NTS costs (Revenue Requirement) per loop, the ratio of the costs per loop to the national average, and the USF high cost assistance calculation for 1990, using 1988 data, based on the new high cost formula which took effect in 1988. The introduction of the USF is being accomplished over an eight-year transition period which began in 1986. Since 1990 is the fifth year of this transition, the annual USF payment for 1990 will be 5/8 of the amount calculated from the high cost formula. Table 3.2 also shows the average 1990 transitional SPF⁵ and an estimate of the combined impact of the SPF transition and the USF transition on the allocation of costs to interstate. This estimate is shown in the last column of the table. It is intended to provide a rough indication of the impact of transitional separations shifts and should be useful for analytical purposes. It does not, however, provide entirely accurate information, because it does not allow for the two year difference between

basic allocation of NTS costs to the interstate jurisdiction.

- 3 These are the carriers that settle on a cost basis. NECA also imputes costs to average schedule companies based on their average exchange size.
- 4 These data are taken from the November 17, 1989, revision of the filing originally submitted on September 1, 1989.
- 5 Each study area has its own transitional SPF. The average for each state is calculated as a weighted average of the study area SPF's, using unseparated revenue requirements as weights.

the year costs are incurred and the year USF funds are disbursed. ⁶ Unfortunately, information incorporating recent changes in costs per loop is not yet available, and more accurate representations of 1990 separations changes can not be produced until well after the fact. This deficiency is most important for states and companies where costs per loop are not growing at the same rate as the national average. Comparable data for individual study areas are given in Table 3.4. ⁷

Table 3.3 shows the changes from 1987 to 1988, for state totals, of the unseparated NTS revenue requirement, the number of loops, the revenue requirement per loop, and the universal service fund. For the changes in the USF, the column headed "universal service fund after full transition" represents the changes in the full post-transitional amounts calculated from the formula, and the column headed "universal service fund applicable to later year" represents the changes in the transitional amounts applicable to 1989 and 1990. The changes in the post-transitional USF amounts reflect the effect on the USF of changes in costs. The changes in the transitional

6 The table uses values based on 1988 costs for both. In actuality, 1988 costs are being used to disburse USF funds in 1990, while the 1990 transitional SPF will be applied to 1990 costs. From a technical standpoint, old (1989) interstate revenue requirement per loop (OIRRPL) should be calculated as 1989 unseparated costs per loop times 1989 SPF plus 1/2 of the high cost allocation based on 1987 costs, new (1990) interstate revenue requirement per loop (NIRRPL) should be calculated as 1990 unseparated costs per loop times 1990 SPF plus 5/8 of the high cost allocation based on 1988 costs, and the change (CIRRPL) as the difference between these two (NIRRPL minus OIRRPL). The use of 1988 costs throughout, instead of 1987, 1989, and 1990 costs where appropriate, is the source of discrepancies between the estimates in the table and actual results.

7 Differences between the values shown in Tables 3.2 and 3.4 in this report for URRPL and HCA and the corresponding values filed by NECA and shown in Tables 3.2 and 3.4 in the January 1990 Monitoring Report are due to differences in rounding during the calculations. The values here were recalculated from the raw account data supplied by NECA, and more decimal places were retained in the calculation of ratios used in the computations here than the number of decimal places retained by NECA. Also, one study area (Southeast Mississippi Tel. Corp.) was mistakenly classified by NECA as an Alabama company. It has here been reclassified as a Mississippi company, affecting the totals for those two states.

amounts reflect the change in the transition factor from 4/8 to 5/8, as well as the changes in costs. In the USF columns in this table, the entry "ERR" indicates that the USF in the first year was zero, while it was positive in the second year. Comparable data for individual study areas are given in Table 3.5.

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%

TABLE 3.2

1990 SEPARATIONS ESTIMATES USING NECA NTS COST DATA FOR 1988

ST NUMBER	LOOPS	URRPL	RTNA	HCA	HCAPL	SPF	OIRRPL	NIRRPL	CIRRPL	
AL	30	1751930.	257.52	1.13	11477934.	6.55	0.2415	66.71	68.75	2.04
AK	25	258769.	377.26	1.66	16933730.	65.44	0.3730	208.48	206.16	-2.32
AZ	10	1763692.	263.35	1.16	9081487.	5.15	0.3289	97.38	91.78	-5.60
AR	28	962543.	310.90	1.37	13365464.	13.89	0.2696	96.95	97.70	0.75
CA	22	16130533.	209.78	0.92	22250302.	1.38	0.2496	53.46	53.75	0.29
CO	27	1756793.	219.27	0.96	1531596.	0.87	0.3183	75.47	70.67	-4.80
CT	2	1816037.	188.98	0.83	0.	0.	0.2833	55.64	53.54	-2.10
DE	1	379900.	138.36	0.83	0.	0.	0.2857	56.06	53.81	-2.24
DC	1	792735.	84.30	0.37	0.	0.	0.3204	28.98	27.01	-1.97
FL	13	6968845.	298.93	1.32	21239964.	3.05	0.3048	99.02	94.17	-4.85
GA	36	3051354.	296.05	1.30	19645801.	6.44	0.2620	83.91	84.01	0.10
HI	1	544748.	165.60	0.73	0.	0.	0.2644	44.60	43.78	-0.81
ID	20	444818.	271.86	1.20	6975616.	15.68	0.3127	103.25	100.69	-2.56
IL	56	6064742.	156.90	0.69	972746.	0.16	0.2578	40.99	40.60	-0.39
IN	45	2500844.	216.19	0.95	1694888.	0.68	0.2573	56.68	56.30	-0.39
IA	153	1273677.	201.06	0.88	1101214.	0.86	0.2644	54.81	54.02	-0.79
KS	40	1207249.	258.00	1.14	6113909.	5.06	0.2749	77.11	75.98	-1.13
KY	19	1512476.	276.90	1.22	4792431.	3.17	0.2386	67.53	69.22	1.70
LA	23	1870917.	310.14	1.36	12523501.	6.69	0.2324	75.62	78.79	3.16
ME	19	615586.	285.22	1.26	2580907.	4.19	0.2727	83.28	81.96	-1.32
MD	2	2615317.	180.38	0.79	0.	0.	0.2367	41.89	42.70	0.81
MA	3	3439457.	157.95	0.70	0.	0.	0.2610	41.82	41.23	-0.59
MI	40	4632396.	206.95	0.91	1251725.	0.27	0.2235	44.63	46.51	1.89
MN	91	2200339.	207.32	0.91	3198505.	1.45	0.2562	54.70	54.56	-0.13
MS	20	977689.	327.52	1.44	6709566.	6.86	0.2522	88.33	89.46	1.13
MO	43	2441269.	230.56	1.01	21677123.	8.88	0.2626	68.64	69.43	0.79
MT	17	369932.	312.65	1.38	4775699.	12.91	0.3245	119.56	114.36	-5.19
NE	42	807716.	211.26	0.93	2591780.	3.21	0.2868	65.76	63.81	-1.96
NV	13	624741.	205.44	0.90	1980743.	3.17	0.3924	92.88	83.78	-9.10
NH	12	595471.	313.65	1.38	2288109.	3.84	0.3226	111.64	105.01	-6.62
NJ	3	4714496.	160.40	0.71	0.	0.	0.2774	45.97	44.50	-1.47
NM	14	639421.	277.73	1.22	10817425.	16.92	0.3058	103.61	101.86	-1.75
NY	45	10200580.	210.11	0.92	7061299.	0.69	0.2606	56.06	55.44	-0.62
NC	28	3123618.	266.46	1.17	8627801.	2.76	0.2493	68.58	69.19	0.61
ND	24	339742.	262.53	1.16	1238145.	3.64	0.2798	78.98	77.10	-1.88
OH	45	5156325.	210.52	0.93	919714.	0.18	0.2351	48.60	49.68	1.08
OK	39	1469070.	285.71	1.26	15383266.	10.47	0.2777	90.37	89.81	-0.56
OR	33	1393045.	243.35	1.07	6816262.	4.89	0.2884	77.22	75.08	-2.14
PA	39	6209971.	173.35	0.76	1102527.	0.18	0.2438	42.05	42.44	0.39
PR	2	835592.	241.41	1.06	635526.	0.76	0.2507	61.19	61.28	0.09
RI	1	514739.	188.97	0.83	0.	0.	0.2638	50.72	49.85	-0.87
SC	28	1495955.	310.01	1.36	6412414.	4.29	0.2514	81.52	82.22	0.70
SD	31	320440.	243.52	1.07	1217983.	3.80	0.2920	77.55	74.92	-2.63
TN	25	2318040.	239.85	1.06	1611075.	0.70	0.2427	58.19	58.91	0.72
TX	60	7987375.	282.10	1.24	44276232.	5.54	0.2459	73.44	74.92	1.49
UT	13	701519.	200.02	0.88	1349079.	1.92	0.2775	58.88	57.43	-1.45
VT	9	295021.	334.27	1.47	2694120.	9.13	0.3291	126.13	119.15	-6.97
VI	1	44087.	423.31	1.86	3127968.	70.95	0.3300	207.76	210.64	2.89
VA	20	3113617.	229.31	1.01	1380941.	0.44	0.2600	60.73	60.06	-0.68
WA	23	2417272.	223.59	0.98	7301619.	3.02	0.2757	65.97	64.66	-1.31
WV	10	767336.	345.10	1.52	8731774.	11.38	0.2399	90.77	94.18	3.41
WI	98	2384786.	216.55	0.95	1223440.	0.51	0.2471	53.70	54.01	0.31
WY	11	228968.	434.09	1.91	5071491.	22.15	0.3727	196.78	183.93	-12.84
US	1456	127043530.	227.26	1.00	333754844.	2.63	0.2626	62.73	62.30	-0.43

TABLE 3.2

1990 SEPARATIONS ESTIMATES USING NECA NTS COST DATA FOR 1988

EXPLANATION OF COLUMN HEADINGS

ST	STATE (POSTAL ABBREVIATION)
NUMBER	NUMBER OF STUDY AREAS IN SAMPLE
LOOPS	NUMBER OF OSP CAT 1.3 WORKING LOOPS
URRPL	UNSEPARATED NTS REVENUE REQUIREMENT PER LOOP
RTNA	RATIO OF URRPL TO NATIONAL AVERAGE
HCA	HIGH COST ASSISTANCE (AT 5/8 TRANSITION)
HCAPL	HIGH COST ASSISTANCE PER LOOP
SPF	1990 TRANSITIONAL SUBSCRIBER PLANT FACTOR
OIRRPL	OLD (1989 SPF + 1/2 HCA) INTERSTATE NTS REVENUE REQUIREMENT PER LOOP
NIRRPL	NEW (1990 SPF + 5/8 HCA) INTERSTATE NTS REVENUE REQUIREMENT PER LOOP
CIRRPL	CHANGE IN INTERSTATE REVENUE REQUIREMENT PER LOOP

TABLE 3.3

National Exchange Carrier Association
Universal Service Fund
State Summary
Percentage Changes from 1987 to 1988

STATE	UNSEPARATED NTS REVENUE REQUIREMENT	NUMBER OF LOOPS	UNSEPARATED NTS REVENUE REQUIREMENT PER LOOP	UNIVERSAL SERVICE FUND AFTER FULL TRANSITION	UNIVERSAL SERVICE FUND APPLICABLE TO LATER YEAR *
ALABAMA	6.13%	5.42%	0.67%	21.02%	51.27%
ALASKA	-1.04%	3.13%	-4.05%	-4.81%	18.99%
ARIZONA	6.13%	4.21%	1.84%	7.82%	34.77%
ARKANSAS	1.88%	2.18%	-0.29%	22.48%	53.10%
CALIFORNIA	1.93%	4.95%	-2.87%	-5.83%	17.72%
COLORADO	9.99%	2.44%	7.37%	-2.58%	21.78%
CONNECTICUT	-3.89%	3.80%	-7.42%	0.00%	0.00%
DELAWARE	10.19%	3.02%	6.96%	0.00%	0.00%
DISTRICT OF COLUMBIA	-17.60%	2.16%	-19.33%	0.00%	0.00%
FLORIDA	8.82%	4.77%	3.87%	30.96%	63.70%
GEORGIA	9.68%	2.90%	6.59%	35.75%	69.69%
HAWAII	5.23%	8.24%	-2.78%	0.00%	0.00%
IDAHO	1.04%	3.79%	-2.64%	45.91%	82.39%
ILLINOIS	-0.56%	2.71%	-3.18%	-31.99%	-14.98%
INDIANA	4.50%	4.19%	0.30%	70.87%	113.58%
IOWA	-2.07%	-1.31%	-0.78%	44.92%	81.15%
KANSAS	2.92%	1.33%	1.57%	-28.49%	-10.61%
KENTUCKY	4.04%	3.57%	0.45%	-4.78%	19.02%
LOUISIANA	2.61%	1.81%	0.79%	8.92%	36.15%
MAINE	19.45%	5.74%	12.96%	68.98%	111.23%
MARYLAND	2.23%	3.54%	-1.26%	0.00%	0.00%
MASSACHUSETTS	11.08%	4.13%	6.67%	0.00%	0.00%
MICHIGAN	18.10%	4.00%	13.56%	10.54%	38.17%
MINNESOTA	1.32%	3.13%	-1.76%	52.80%	91.00%
MISSISSIPPI	6.10%	4.27%	1.75%	14.36%	42.96%
MISSOURI	0.20%	1.14%	-0.93%	4.03%	30.04%
MONTANA	-0.16%	1.64%	-1.77%	-1.75%	22.82%
NEBRASKA	13.30%	3.15%	9.83%	-6.99%	16.26%
NEVADA	0.67%	8.30%	-7.05%	-43.36%	-29.20%
NEW HAMPSHIRE	26.64%	5.24%	20.34%	421.04%	551.30%
NEW JERSEY	-1.98%	3.89%	-5.65%	0.00%	0.00%
NEW MEXICO	5.80%	2.80%	2.92%	-0.80%	24.00%
NEW YORK	-7.95%	2.45%	-10.16%	14.52%	43.15%
NORTH CAROLINA	10.74%	3.85%	6.64%	13.45%	41.82%
NORTH DAKOTA	0.83%	1.06%	-0.24%	-13.13%	8.59%
OHIO	7.23%	3.62%	3.48%	81.75%	127.19%
OKLAHOMA	1.75%	-0.52%	2.28%	4.72%	30.91%
OREGON	6.87%	4.59%	2.17%	-2.41%	21.99%
PENNSYLVANIA	3.41%	3.50%	-0.09%	-4.07%	19.91%
PUERTO RICO	2.92%	9.23%	-5.78%	ERR	ERR
RHODE ISLAND	7.16%	4.61%	2.44%	0.00%	0.00%
SOUTH CAROLINA	9.42%	3.98%	5.23%	23.83%	54.79%
SOUTH DAKOTA	-2.70%	2.48%	-5.05%	-3.30%	20.88%
TENNESSEE	8.73%	3.86%	4.68%	2.47%	28.08%
TEXAS	7.53%	1.43%	6.02%	0.23%	25.29%
UTAH	7.18%	2.23%	4.84%	27.61%	59.51%
VERMONT	20.60%	5.26%	14.58%	41.80%	77.25%
VIRGIN ISLANDS	-0.28%	7.43%	-7.18%	-12.22%	9.73%
VIRGINIA	2.26%	4.95%	-2.57%	-39.81%	-24.76%
WASHINGTON	8.85%	2.73%	5.96%	7.16%	33.95%
WEST VIRGINIA	1.88%	1.83%	0.05%	12.02%	40.02%
WISCONSIN	5.92%	3.39%	2.45%	-14.93%	6.33%
WYOMING	16.48%	1.59%	14.65%	82.77%	128.46%
INDUSTRY TOTAL	4.29%	3.48%	0.78%	8.64%	35.79%

TOTAL NUMBER OF STUDY AREA CODES: -0.75%

* Percentage changes from 1989 to 1990

TABLE 3.4

1990 SEPARATIONS ESTIMATES USING NECA NTS COST DATA FOR 1988 - INDIVIDUAL STUDY AREAS

NAME	ST	LOOPS	URRPL	RTNA	HCA	HCAPL	SPF	OIRRPL	MIRRPL	CIRRPL
CONTEL OF THE SOUTE - AL	AL	75632.	406.87	1.79	4783231.	63.24	0.2371	145.31	159.71	14.40
BUTLER TELEPHONE CO. INC.	AL	3165.	376.04	1.65	154416.	48.79	0.2665	141.31	149.00	7.69
GTE SOUTH INC. - ALABAMA	AL	115439.	338.29	1.49	3608161.	31.26	0.2734	120.13	123.74	3.61
GROVE HILL TEL. CORP.	AL	1653.	301.66	1.33	27069.	16.38	0.2358	82.81	87.51	4.69
GULF TELEPHONE COMPANY - ALABAMA	AL	23497.	287.36	1.26	248318.	10.57	0.2999	99.43	96.75	-2.69
HOPPER TEL. COMPANY INC.	AL	2635.	360.20	1.58	109004.	41.37	0.2078	102.90	116.22	13.32
ALLTEL ALABAMA	AL	16479.	410.17	1.80	1067680.	64.79	0.2838	172.83	181.20	8.36
MILLRY TELEPHONE CO. INC	AL	4772.	463.58	2.04	428639.	89.82	0.2804	206.53	219.81	13.28
MONROEVILLE TELEPHONE COMPANY	AL	9979.	337.25	1.48	307719.	30.84	0.2466	107.43	114.00	6.57
PEOPLES TELEPHONE COMPANY	AL	9908.	355.44	1.56	387734.	39.13	0.2287	110.07	120.42	10.35
RAGLAND TEL. CO.	AL	988.	278.86	1.23	7029.	7.11	0.2270	66.85	70.42	3.57
SOUTHLAND TEL. CO.-AL	AL	8820.	356.35	1.57	348934.	39.56	0.2562	123.69	130.86	7.16
SOUTH CENTRAL BELL-AL	AL	1420487.	238.22	1.05	0.	0.	0.2342	54.53	55.79	1.26
AVERAGE SCHEDULE COMPANIES - AL (17)	AL	58476.	244.14	1.07	0.	0.	0.2838	72.02	69.29	-2.73
ANCHORAGE TELEPHONE UTILITY	AK	118036.	203.97	0.90	0.	0.	0.3603	81.00	73.49	-7.51
ARCTIC SLOPE TEL. ASSOCIATION COOP.INC.	AK	1262.	933.05	4.11	391082.	309.89	0.4750	761.09	753.09	-8.00
BRISTOL BAY TELEPHONE COOP. INC.	AK	1045.	740.00	3.26	229269.	219.40	0.4750	582.52	570.90	-11.62
BUSH-TELL INC.	AK	511.	680.49	2.99	97858.	191.50	0.3392	404.30	422.33	18.02
COPPER VALLEY TEL. COOP. INC.	AK	2852.	567.32	2.50	394866.	138.45	0.3979	364.47	364.19	-0.28
CORDOVA TELEPHONE COOPERATIVE, INC.	AK	1272.	352.04	1.55	47749.	37.54	0.4713	221.89	203.45	-18.44
FAIRBANKS MUNICIPAL UTILITIES SYSTEM	AK	25115.	388.15	1.71	1367944.	54.47	0.3451	189.83	188.42	-1.41
GTE ALASKA INC.	AK	11989.	230.55	1.01	0.	0.	0.3748	96.03	86.41	-9.61
GLACIER STATE TELEPHONE COMPANY	AK	28690.	690.41	3.04	5627619.	196.15	0.4141	480.66	482.05	1.40
INTERIOR TELEPHONE COMPANY INC.	AK	2272.	851.11	3.75	616801.	271.48	0.4750	685.29	675.76	-9.54
JUNEAU & DOUGLAS TELEPHONE COMPANY	AK	14471.	348.79	1.53	521228.	36.02	0.3994	185.52	175.33	-10.20
KETCHIKAN PUBLIC UTILITIES	AK	6873.	347.25	1.53	242597.	35.30	0.4032	185.96	175.31	-10.65
MATANUSKA TELEPHONE ASSOC., INC.	AK	25952.	683.56	3.01	5007249.	192.94	0.3234	392.17	414.01	21.84
MUKLUK TEL. COMPANY, INC.	AK	642.	969.17	4.26	209817.	326.82	0.3278	604.25	644.51	40.26
KUSHAGAK TELEPHONE COOPERATIVE, INC.	AK	1280.	698.02	3.07	255638.	199.72	0.4076	480.93	484.23	3.30
OTZ TELEPHONE COOPERATIVE, INC.	AK	1553.	464.42	2.04	140109.	90.22	0.2955	216.42	227.45	11.03
SITKA TELEPHONE COMPANY	AK	7308.	606.14	2.67	1144795.	156.65	0.4112	407.17	405.89	-1.28
TELEPHONE UTILITIES OF ALASKA	AK	2339.	123.22	0.54	0.	0.	0.6000	80.09	73.93	-6.16
UNITED UTILITIES INC.	AK	3163.	626.36	2.76	525463.	166.13	0.2765	311.67	339.32	27.65
YUKON TELEPHONE COMPANY, INC.	AK	322.	781.29	3.44	76878.	238.75	0.4750	620.71	609.87	-10.85
AVERAGE SCHEDULE COMPANIES - AK (5)	AK	1822.	311.70	1.37	36765.	20.18	0.2838	108.09	108.64	0.54
ARIZONA TEL. CO.	AZ	1746.	484.47	2.13	173929.	99.62	0.4750	346.15	329.74	-16.41
CITIZENS UTILITIES RURAL COMPANY INC.	AZ	39718.	473.40	2.08	3750486.	94.43	0.4752	324.17	319.39	-4.78
PAPAGO TRIBAL UTILITY AUTHORITY	AZ	1386.	457.71	2.01	120682.	87.07	0.3274	231.32	236.93	5.61
UNIVERSAL TEL CO OF SOUTHWEST - AZ	AZ	1101.	253.11	1.11	0.	0.	0.3723	104.56	94.23	-10.33
VALLEY TELEPHONE COOPERATIVE INC-AZ	AZ	1820.	725.47	3.19	386903.	212.58	0.4299	525.47	524.46	-1.01
CONTEL OF THE WEST - ARIZONA	AZ	22964.	519.66	2.29	2666424.	116.11	0.3135	266.82	279.03	12.21
NAVAJO COMMUNICATIONS CO. INC.- AZ	AZ	7057.	813.62	3.58	1791834.	253.91	0.4628	650.86	646.73	-4.14
CONTEL OF CALIFORNIA - ARIZONA	AZ	5032.	353.01	1.55	191228.	37.99	0.4018	190.10	179.83	-10.26
MOUNTAIN BELL-ARIZONA	AZ	1660537.	251.45	1.11	0.	0.	0.3199	86.30	80.44	-5.86
AVERAGE SCHEDULE COMPANIES - AZ (1)	AZ	2330.	244.14	1.07	0.	0.	0.2838	72.02	69.29	-2.73
ADTEL ARKANSAS, INC.	AR	56827.	340.52	1.50	1827702.	32.16	0.2771	123.15	126.52	3.37
ARKANSAS TELEPHONE COMPANY	AR	5660.	247.09	1.09	0.	0.	0.3530	95.70	87.22	-8.48
CENTRAL ARKANSAS TEL. COOP INC.	AR	1965.	337.57	1.49	50843.	30.96	0.2489	108.69	114.96	6.29
CLEVELAND COUNTY TEL. CO.	AR	2223.	658.23	2.90	492514.	181.07	0.2706	327.45	359.19	31.74
DECATUR TELEPHONE CO. INC. - ARKANSAS	AR	923.	412.35	1.81	50743.	65.81	0.4809	271.56	264.11	-7.46
SOUTH ARKANSAS TEL. CO., INC.	AR	3261.	311.17	1.37	66004.	20.24	0.2627	99.27	101.98	2.71
LIBERTY TEL. & COMMUNICATIONS INC.	AR	10901.	354.70	1.56	422810.	38.79	0.2951	141.32	143.46	2.14
MADISON COUNTY TEL. CO. INC.	AR	1958.	300.06	1.32	30795.	15.73	0.2698	95.55	96.68	1.14
MOUNTAIN HOME TELEPHONE COMPANY INC.	AR	13910.	263.87	1.16	14257.	1.02	0.3401	98.50	90.77	-7.74

TABLE 3.4

1990 SEPARATIONS ESTIMATES USING NECA NTS COST DATA FOR 1988 - INDIVIDUAL STUDY AREAS

NAME	ST	LOOPS	URRPL	RTNA	HCA	HCAPL	SPF	OIRRPL	NIRRPL	CIRRPL
NORTHERN ARKANSAS TEL. CO., INC.	AR	3908.	324.81	1.43	100755.	25.78	0.3617	150.19	143.27	-6.93
PERCC TELEPHONE COMPANY	AR	2039.	293.03	1.29	26247.	12.87	0.2838	96.74	96.04	-0.71
REDFIELD TELEPHONE COMPANY INC.	AR	1318.	455.94	2.01	113668.	86.24	0.3007	213.80	223.34	9.54
TRI-COUNTY TEL. CO. INC.-AR	AR	3733.	439.86	1.94	293815.	78.71	0.2530	174.69	189.99	15.30
UNION TELEPHONE COMPANY INC.	AR	864.	617.45	2.72	139926.	161.95	0.3061	330.17	350.95	20.78
UNITED TELEPHONE CO. OF ARK. INC.	AR	16791.	227.10	1.00	0.	0.	0.3311	81.35	75.19	-6.15
WALNUT HILL TELEPHONE COMPANY	AR	4324.	580.85	2.56	626105.	144.80	0.3318	324.36	337.53	13.16
CONTEL OF ARKANSAS	AR	64499.	399.30	1.76	3850084.	59.69	0.2727	159.68	168.58	8.90
YELCOT TEL. CO., INC.	AR	2609.	325.16	1.43	67637.	25.92	0.2991	123.30	123.18	-0.12
YELL COUNTY TELEPHONE COMPANY	AR	4058.	251.27	1.11	0.	0.	0.2442	60.88	61.36	0.48
GTE SOUTHWEST INC. - ARKANSAS	AR	61987.	408.42	1.80	3965230.	63.97	0.2649	161.37	172.16	10.79
SOUTHWESTERN BELL-ARKANSAS	AR	677823.	291.80	1.28	1290116.	1.90	0.2633	79.67	78.73	-0.93
AVERAGE SCHEDULE COMPANIES - AR (7)	AR	20962.	246.42	1.08	6216.	0.30	0.2838	72.93	70.23	-2.70
CALAVERAS TELEPHONE COMPANY	CA	1658.	476.85	2.10	159240.	96.04	0.2494	195.66	214.97	19.30
CONTEL OF CALIFORNIA - CALIFORNIA	CA	247680.	448.71	1.97	5534970.	22.35	0.2514	130.91	135.15	4.25
C P NATIONAL CORP. - CALIFORNIA	CA	11096.	419.08	1.84	765237.	68.97	0.2636	167.57	179.43	11.87
CITIZENS UTILITIES CO. OF CALIF.	CA	55130.	524.43	2.31	6524438.	118.35	0.2410	219.49	244.73	25.24
CALIFORNIA-OREGON TELEPHONE CO	CA	2044.	555.26	2.44	271447.	132.80	0.3894	348.28	349.02	0.74
DUCOR TELEPHONE COMPANY	CA	581.	523.10	2.30	68399.	117.73	0.2328	212.98	239.50	26.53
EVANS TELEPHONE COMPANY	CA	7643.	316.00	1.39	169682.	22.20	0.2235	85.57	92.83	7.25
FORESTHILL TELEPHONE COMPANY	CA	1806.	289.95	1.28	20984.	11.62	0.2555	83.90	85.70	1.80
GENERAL TEL CO OF CALIFORNIA	CA	3032722.	280.40	1.23	3610626.	1.19	0.2496	70.91	71.18	0.27
HAPPY VALLEY TELEPHONE COMPANY	CA	2473.	682.92	3.01	476406.	192.64	0.2178	295.48	341.38	45.90
HORNITOS TELEPHONE COMPANY	CA	443.	1072.17	4.72	166170.	375.10	0.2519	570.80	645.18	74.38
WINTERHAVEN TELEPHONE COMPANY	CA	1151.	352.69	1.55	43560.	37.85	0.2838	134.32	137.94	3.62
KERMAN TELEPHONE COMPANY	CA	4037.	317.26	1.40	91690.	22.71	0.1994	76.10	85.97	9.87
THE PONDEROSA TELEPHONE COMPANY	CA	5444.	735.13	3.23	1181980.	217.12	0.2236	331.60	381.49	49.89
ROSEVILLE TELEPHONE COMPANY	CA	62604.	210.06	0.92	0.	0.	0.2245	45.37	47.16	1.79
SIERRA TELEPHONE COMPANY, INC.	CA	11113.	520.96	2.29	1297136.	116.72	0.2294	209.29	236.23	26.94
THE SISKIYOU TELEPHONE CO.	CA	3129.	556.42	2.45	417238.	133.35	0.2803	268.26	289.31	21.05
TUOLUMNE TELEPHONE COMPANY	CA	4144.	809.20	3.56	1043611.	251.84	0.2567	410.97	459.56	48.59
THE VOLCANO TELEPHONE COMPANY	CA	7496.	323.32	1.42	188707.	25.17	0.2268	90.98	98.50	7.52
WEST COAST TEL. CO. OF CALIFORNIA	CA	8871.	320.39	1.41	212791.	23.99	0.3055	123.00	121.87	-1.13
PINNACLES TELEPHONE COMPANY	CA	117.	381.17	1.68	5990.	51.19	0.3285	176.12	176.41	0.29
PACIFIC BELL	CA	12659151.	185.36	0.82	0.	0.	0.2498	46.30	46.30	0.
SUNFLOWER TELEPHONE CO., INC. - CO	CO	292.	585.60	2.58	42931.	147.02	0.3383	333.00	345.13	12.13
BIJOU TEL COOPERATIVE ASSOC. INC	CO	954.	250.75	1.10	0.	0.	0.3078	82.02	77.18	-4.84
BLANCA TELEPHONE CO.	CO	464.	541.89	2.38	58711.	126.53	0.4393	373.47	364.58	-8.89
DELTA COUNTY TELE-COMM INC.	CO	5930.	239.95	1.06	0.	0.	0.2738	67.62	65.70	-1.92
EAGLE TELECOMMUNICATIONS INC.	CO	5232.	505.97	2.23	573936.	109.70	0.3937	311.20	308.90	-2.30
EASTERN SLOPE RURAL TEL ASSN INC	CO	3777.	277.29	1.22	24458.	6.48	0.3016	93.58	90.11	-3.47
EL PASO COUNTY MUTUAL TEL CO	CO	1868.	379.88	1.67	94502.	50.59	0.2954	158.42	162.81	4.38
FARMERS MUTUAL TEL CO - COLORADO	CO	280.	598.84	2.64	42904.	153.23	0.3437	347.09	359.05	11.96
HAXTON TELEPHONE COMPANY	CO	1211.	375.78	1.65	58938.	48.67	0.2858	150.81	156.07	5.26
BIG SANDY TELECOM INC.	CO	643.	648.66	2.85	113542.	176.58	0.2854	334.11	361.71	27.60
NUCLA-NATURITA TEL. CO.	CO	1047.	398.04	1.75	61883.	59.10	0.2398	194.48	194.36	-0.12
NUNN TEL. COMPANY	CO	261.	563.96	2.48	35726.	136.88	0.3859	352.69	354.51	1.83
PEETE COOP. TEL. CO.	CO	182.	433.76	1.91	13804.	75.85	0.3290	214.79	218.55	3.76
PLAINS COOPERATIVE TEL. ASSOC. INC.	CO	1331.	306.10	1.35	24196.	18.18	0.2550	93.12	96.23	3.12
THE RYE TELEPHONE CO. INC.	CO	1269.	488.50	2.15	126813.	101.51	0.3331	257.46	264.23	6.77
COLUMBINE TELEPHONE COMPANY	CO	626.	695.17	3.06	124186.	198.32	0.4231	492.94	492.51	-0.43
STRASSBURG TEL. CO.	CO	869.	223.89	0.99	0.	0.	0.3114	74.51	69.72	-4.89
UNIVERSAL TEL. CO. OF COLORADO	CO	3772.	301.44	1.33	61441.	16.29	0.5151	183.38	171.56	-11.81
WIGGINS TEL. ASSOC.	CO	1096.	355.66	1.57	43007.	39.24	0.2666	128.17	134.06	5.89

TABLE 3.4

1990 SEPARATIONS ESTIMATES USING NECA WTS COST DATA FOR 1988 - INDIVIDUAL STUDY AREAS

NAME	ST	LOOPS	URRPL	RTNA	HCA	HCAPL	SPF	OIRRPL	NIRRPL	CIRRPL
MOUNTAIN BELL-COLORADO	CO	1723118.	216.56	0.95	0.	0.	0.3174	73.61	68.74	-4.87
AVERAGE SCHEDULE COMPANIES - CO (7)	CO	2571.	273.41	1.20	28618.	11.13	0.2838	89.56	88.72	-0.84
SOUTHERN NEW ENGLAND TEL.	CT	1800875.	188.51	0.83	0.	0.	0.2833	55.50	53.42	-2.09
AVERAGE SCHEDULE COMPANIES - CT (1)	CT	15162.	244.14	1.07	0.	0.	0.2838	72.02	69.29	-2.73
DIAMOND STATE TEL. CO.	DE	379900.	188.36	0.83	0.	0.	0.2857	56.06	53.81	-2.24
C & P TELEPHONE CO. OF WASHINGTON D.C.	DC	792735.	84.30	0.37	0.	0.	0.3204	28.98	27.01	-1.97
FLORALA TELEPHONE COMPANY- FLORIDA	FL	2689.	381.67	1.68	138297.	51.43	0.2733	148.43	155.74	7.31
SOUTHLAND TELEPHONE COMPANY-FL	FL	2864.	376.71	1.66	140634.	49.10	0.2633	140.13	148.29	8.16
GTE FLORIDA INC.	FL	1576779.	284.92	1.25	2322857.	1.47	0.3195	98.82	92.50	-6.32
GULF TEL. CO.- FL	FL	7040.	256.59	1.13	0.	0.	0.2311	57.68	59.30	1.62
VISTA-UNITED TELECOMMUNICATIONS SYSTEMS	FL	9141.	218.48	0.96	0.	0.	0.4133	102.18	90.30	-11.89
INDIANTOWN TELEPHONE SYSTEM	FL	2013.	528.35	2.32	241932.	120.18	0.3203	277.74	289.41	11.67
NORTHEAST FLORIDA TEL. CO.,INC.	FL	4865.	434.80	1.91	371369.	76.33	0.2324	159.59	177.38	17.79
ALLTEL FLORIDA INC.	FL	46100.	414.63	1.82	3083213.	66.88	0.2532	158.95	171.87	12.92
QUINCY TELEPHONE CO-FL DIV.	FL	8195.	303.70	1.34	141008.	17.21	0.2294	81.37	86.88	5.51
ST. JOSEPH TEL. AND TELE. CO.	FL	20241.	358.31	1.58	819376.	40.48	0.2957	143.82	146.43	2.61
CENDEL OF FLORIDA	FL	239795.	220.02	0.97	0.	0.	0.2888	66.38	63.54	-2.84
UNITED TELEPHONE CO. OF FLORIDA	FL	922832.	295.25	1.30	1955317.	2.12	0.3443	112.62	103.77	-8.85
SOUTHERN BELL-FLORIDA	FL	4126291.	307.98	1.36	12025962.	2.91	0.2929	96.94	93.12	-3.82
CONTEL OF THE SOUTH-GA	GA	59216.	305.20	1.34	1054822.	17.81	0.2350	84.45	89.53	5.09
QUINCY TELEPHONE CO-GA DIV.	GA	566.	330.17	1.45	15824.	27.96	0.3179	134.82	132.92	-1.90
ALMA TELEPHONE CO INC	GA	5160.	350.12	1.54	189055.	36.64	0.2191	102.45	113.35	10.90
BRANTLEY TELEPHONE COMPANY INC.	GA	2980.	369.81	1.63	136694.	45.87	0.2252	116.95	129.15	12.21
CAMDEN TEL & TEL CO INC - GEORGIA	GA	9862.	302.64	1.33	165456.	16.78	0.3783	140.87	131.27	-9.60
CITIZENS TELEPHONE CO INC - GEORGIA	GA	3781.	338.65	1.49	118746.	31.41	0.2300	100.75	109.30	8.55
COASTAL UTILITIES INC	GA	19776.	229.02	1.01	0.	0.	0.3684	93.42	84.37	-9.05
DARIEN TELEPHONE CO. INC.	GA	3458.	288.25	1.27	37796.	10.93	0.2562	83.20	84.78	1.58
ELLIJAY TEL. CO.	GA	6454.	231.28	1.02	0.	0.	0.2177	47.87	50.35	2.47
INTERSTATE TELEPHONE COMPANY	GA	9373.	136.61	0.60	0.	0.	0.2492	34.00	34.04	0.04
PINELAND TELEPHONE COOP.	GA	8536.	276.73	1.22	53335.	6.25	0.2133	60.65	65.27	4.63
PLANT TEL. & POWER CO. INC.	GA	7161.	386.40	1.70	384160.	53.65	0.2195	123.79	138.46	14.67
PUBLIC SERVICE TELEPHONE CO.	GA	7511.	394.47	1.74	431341.	57.43	0.2160	126.69	142.63	15.94
STANDARD TEL. CO.	GA	33139.	367.69	1.62	1487105.	44.87	0.2259	116.02	127.93	11.92
WAVERLY HALL TEL. CO.,INC.	GA	930.	281.82	1.24	7735.	8.32	0.2452	75.31	77.42	2.11
WILKES TEL & ELECTRIC CO.	GA	8727.	178.94	0.79	0.	0.	0.2236	38.44	40.01	1.57
GTE SOUTH INC. - GEORGIA	GA	191453.	392.70	1.73	10836016.	56.60	0.2376	136.97	149.90	12.93
SOUTHERN BELL-GEORGIA	GA	2559501.	290.90	1.28	4727715.	1.85	0.2647	79.90	78.85	-1.06
AVERAGE SCHEDULE COMPANIES - GA (18)	GA	113773.	244.14	1.07	0.	0.	0.2838	72.32	69.29	-2.73
GTE HAWAIIAN TELEPHONE COMPANY	HI	544748.	165.60	0.73	0.	0.	0.2644	44.60	43.78	-0.81
CONTEL OF THE WEST - IDAHO	ID	12414.	481.58	2.12	1219817.	98.26	0.3405	257.08	262.24	5.16
ALBION TEL. CO. INC.	ID	896.	609.66	2.68	141839.	158.30	0.3135	330.64	349.43	18.80
CAMBRIDGE TEL. CO.,INC.-ID	ID	815.	535.07	2.35	100520.	123.34	0.3145	278.45	291.62	13.16
CUSTER TEL. COOPERATIVE INC.	ID	1403.	295.42	1.30	19419.	13.84	0.4750	173.55	154.16	-19.39
GEM STATE UTILITIES CORP-ID	ID	869.	905.49	3.98	258067.	296.97	0.3513	586.28	615.07	28.79
CENTURY TELEPHONE OF IDAHO	ID	2407.	525.41	2.31	285969.	118.81	0.3216	276.57	287.78	11.20
MIDVALE TEL. EXCH. INC.	ID	253.	798.76	3.51	62476.	246.94	0.2699	418.41	462.53	44.12
PROJECT MUTUAL TEL. COOP. ASSK.	ID	6089.	188.22	0.83	0.	0.	0.2735	52.95	51.48	-1.47
ROCKLAND TEL. CO.,INC.	ID	328.	912.51	4.02	98486.	300.26	0.2850	512.14	561.24	49.10
RURAL TEL. CO.	ID	277.	707.98	3.12	56616.	204.39	0.4750	552.90	540.88	-12.22
TROY TELEPHONE COMPANY	ID	633.	349.93	1.54	23138.	36.55	0.3468	161.90	157.91	-3.99
SILVER STAR TEL. CO. INC.-ID	ID	310.	680.22	2.99	59326.	191.37	0.4044	463.21	466.45	3.24
GTE NORTHWEST INC. - IDAHO	ID	66638.	417.93	1.84	4559825.	68.43	0.3712	226.76	223.56	-3.20
INLAND TELEPHONE COMPANY - ID	ID	251.	825.35	3.63	65111.	259.40	0.3044	473.70	510.64	36.94
MOUNTAIN BELL-IDAHO	ID	323016.	231.86	1.02	0.	0.	0.2888	69.98	66.56	-3.01

TABLE 3.4

1990 SEPARATIONS ESTIMATES USING NECA WTS COST DATA FOR 1988 - INDIVIDUAL STUDY AREAS

NAME	ST	LOOPS	URRPL	RTNA	HCA	HCAPL	SPF	OIRRPL	MIRRPL	CIRRPL
PACIFIC NORTHWEST BELL-IDAHO	ID	23113.	213.29	0.94	0.	0.	0.2983	67.06	63.62	-3.43
AVERAGE SCHEDULE COMPANIES - ID (4)	ID	5106.	262.99	1.16	25009.	4.90	0.2838	81.50	79.53	-1.97
CENDEL OF ILLINOIS	IL	169498.	166.09	0.73	0.	0.	0.2755	47.17	45.76	-1.41
ALLTEL ILLINOIS INC.	IL	39144.	173.65	0.76	0.	0.	0.2866	51.89	49.77	-2.12
EL PASO TELEPHONE COMPANY	IL	1505.	236.76	1.04	0.	0.	0.2485	58.74	58.83	0.09
GTE NORTH INC. - ILLINOIS	IL	542576.	207.25	0.91	0.	0.	0.2526	52.54	52.35	-0.19
GRIDLEY TELEPHONE COMPANY	IL	1077.	191.83	0.84	0.	0.	0.2524	48.57	48.42	-0.15
CONTEL OF ILLINOIS	IL	156767.	271.31	1.19	634760.	4.05	0.2573	73.73	73.86	0.13
ILLINOIS CONSOLIDATED TELEPHONE COMPANY	IL	71662.	266.26	1.17	143007.	2.00	0.2398	64.57	65.84	1.28
INLAND TEL. CO.	IL	4085.	261.31	1.15	0.	0.	0.2269	57.28	59.29	2.01
LEAF RIVER VALLEY TELEPHONE COMPANY	IL	542.	412.66	1.82	35748.	65.96	0.2349	147.59	162.89	15.30
MIDLAND TELEPHONE COMPANY	IL	3944.	308.32	1.36	75267.	19.08	0.2275	83.10	89.23	6.13
MOULTRIE INDEPENDENT TELEPHONE COMPANY	IL	660.	177.88	0.78	0.	0.	0.2149	36.15	38.23	2.08
ILLINOIS BELL TEL CO	IL	4992857.	144.02	0.63	0.	0.	0.2575	37.46	37.09	-0.37
AVERAGE SCHEDULE COMPANIES - IL (44)	IL	80425.	252.09	1.11	83963.	1.04	0.2838	75.20	72.59	-2.61
CLAY CTY RURAL TEL. COOP. INC.	IN	7887.	181.75	0.80	0.	0.	0.2582	47.44	46.93	-0.51
GTE NORTH INC. - IN	IN	545380.	228.85	1.01	0.	0.	0.2756	65.02	63.07	-1.95
COMMUNICATIONS CORP. OF INDIANA	IN	7313.	266.12	1.17	14185.	1.94	0.2838	80.06	77.47	-2.59
CONTEL OF INDIANA	IN	133555.	286.07	1.26	1341347.	10.04	0.2605	83.56	84.56	1.01
NEW PARIS TELEPHONE INC.	IN	1506.	226.64	1.00	0.	0.	0.2504	56.80	56.75	-0.05
NORTHWESTERN INDIANA TEL CO INC	IN	7700.	240.23	1.06	0.	0.	0.3078	78.58	73.94	-4.64
UNITED TELEPHONE CO. OF INDIANA INC.	IN	174215.	266.14	1.17	339357.	1.95	0.2723	76.00	74.42	-1.58
INDIANA BELL TEL CO	IN	1532276.	198.06	0.87	0.	0.	0.2446	48.09	48.44	0.36
AVERAGE SCHEDULE COMPANIES - IN (37)	IN	91012.	244.19	1.07	0.	0.	0.2838	72.04	69.30	-2.73
AYRSHIRE FMRS. MUT. TEL. CO.	IA	388.	229.41	1.01	0.	0.	0.2423	55.01	55.59	0.57
BERNARD TELEPHONE COMPANY INC.	IA	454.	400.07	1.76	27264.	60.05	0.2249	134.66	150.03	15.37
GTE NORTH INC. - IOWA	IA	103503.	241.53	1.06	0.	0.	0.2634	64.68	63.62	-1.06
CONTEL OF IOWA, INC.	IA	70359.	283.63	1.25	636805.	9.05	0.2438	75.82	78.20	2.38
LOST NATION - ELWOOD TEL. CO.	IA	594.	293.90	1.29	7856.	13.22	0.2144	70.09	76.24	6.14
UNITED FARMERS TELEPHONE COMPANY	IA	528.	317.47	1.40	12039.	22.80	0.2756	108.44	110.30	1.86
UNITED TELEPHONE CO. OF IOWA	IA	61775.	212.81	0.94	0.	0.	0.2528	53.99	53.80	-0.19
WEBB-DICKENS TELEPHONE CORPORATION	IA	452.	312.74	1.38	9437.	20.88	0.2579	98.17	101.53	3.36
ACE TELEPHONE ASSOCIATION- IOWA	IA	3662.	233.40	1.03	0.	0.	0.2273	51.28	53.05	1.77
GRAND RIVER MUTUAL TEL CORP - IA	IA	5156.	309.35	1.36	100543.	19.50	0.2996	113.38	112.18	-1.20
NORTHWESTERN BELL-IOWA	IA	870462.	177.96	0.78	0.	0.	0.2631	47.60	46.82	-0.78
AVERAGE SCHEDULE COMPANIES - IA (142)	IA	156344.	255.00	1.12	307270.	1.97	0.2838	76.80	74.33	-2.46
ASSARIA TELEPHONE EXCHANGE INC.	KS	444.	313.80	1.38	9460.	21.31	0.2718	104.63	106.60	1.97
BLUE VALLEY TELEPHONE COMPANY	KS	2718.	291.72	1.28	33542.	12.34	0.2622	87.56	88.83	1.27
CUNNINGHAM TELEPHONE CO. INC.	KS	1538.	375.94	1.65	74965.	48.74	0.2684	142.19	149.64	7.46
ELKHART TELEPHONE COMPANY INC.	KS	1409.	230.00	1.01	0.	0.	0.3643	92.55	83.79	-8.76
H & B COMMUNICATIONS INC.	KS	950.	480.05	2.11	92670.	97.55	0.2817	218.36	232.78	14.42
HOME TELEPHONE COMPANY INC.	KS	1259.	431.28	1.90	94025.	74.68	0.2683	178.09	190.39	12.31
J. B. N. TELEPHONE COMPANY INC.	KS	2296.	301.07	1.32	37048.	16.14	0.2613	92.72	94.80	2.08
KANOLA TEL. ASSOC. INC.- KS	KS	2212.	328.10	1.44	59984.	27.12	0.2978	124.62	124.83	0.21
KANSAS STATE TELEPHONE COMPANY	KS	5184.	204.40	0.90	0.	0.	0.3355	74.40	68.58	-5.83
CONTEL OF KANSAS, INC.	KS	44908.	402.48	1.77	2747640.	61.18	0.2762	163.65	172.35	8.69
MADISON TEL. CO. INC.- KS	KS	726.	567.80	2.50	100682.	138.68	0.2698	267.94	291.87	23.93
MORAN DIAL, INC.- KS	KS	1942.	309.90	1.36	38304.	19.72	0.2817	106.33	107.02	0.69
MOUNDRIE TEL. CO.	KS	2112.	405.34	1.78	132057.	62.53	0.2706	162.50	172.21	9.71
PEOPLES MUTUAL TEL. CO.-KS	KS	999.	353.43	1.56	38186.	38.19	0.3251	154.29	153.10	-1.20
PIONEER TELEPHONE ASSOCIATION INC.	KS	11009.	210.46	0.93	0.	0.	0.3399	77.85	71.24	-6.31
CRAN-RAN TELEPHONE COOP INC- KS	KS	11385.	274.26	1.21	59730.	31.25	0.2713	80.55	79.65	-0.90
RURAL TEL. SERVICE CO., INC.	KS	6545.	478.17	2.10	632677.	96.67	0.2605	203.57	221.23	17.66
S & T TEL. COOP. ASSK.	KS	1603.	642.38	2.83	278338.	173.64	0.3089	349.93	372.07	22.14

TABLE 3.4

1990 SEPARATIONS ESTIMATES USING NECA NTS COST DATA FOR 1988 - INDIVIDUAL STUDY AREAS

NAME	ST	LOOPS	URRPL	RTNA	HCA	HCAPL	SPF	OIRRPL	NIRRPL	CIRRPL
SOUTH CENTRAL TEL. ASSN. INC.-KS	KS	1058.	376.72	1.66	51957.	49.11	0.2737	145.37	152.22	6.85
SUNFLOWER TEL. CO., INC.	KS	3806.	439.72	1.93	299308.	78.64	0.3140	210.40	216.71	6.32
TWIN VALLEY TEL. INC.-KS	KS	2176.	413.20	1.82	144071.	66.21	0.2510	156.85	169.92	13.08
UNITED TELEPHONE ASSN. INC.	KS	4524.	452.55	1.99	382976.	84.65	0.3304	229.37	234.18	4.80
UNITED TELEPHONE CO OF KS	KS	66837.	263.34	1.16	54113.	0.81	0.3311	94.95	88.00	-6.95
THE WHEAT STATE TEL. CO. INC.	KS	1947.	486.83	2.14	196107.	100.72	0.2676	213.73	231.00	17.27
WILSON TELEPHONE COMPANY INC.	KS	2192.	369.16	1.62	99877.	45.56	0.2500	128.74	137.85	9.11
ZENDA TELEPHONE COMPANY INC.	KS	230.	469.84	2.07	21335.	92.76	0.2307	179.59	201.15	21.56
TOTAE TELEPHONE CO. INC.	KS	1296.	591.57	2.60	194169.	149.82	0.3386	337.67	350.13	12.45
SOUTHWESTERN BELL-KANSAS	KS	999442.	244.24	1.07	0.	0.	0.2688	67.19	65.65	-1.54
AVERAGE SCHEDULE COMPANIES - KS (12)	KS	24502.	282.11	1.24	240714.	9.82	0.2838	91.08	89.89	-1.19
GTE SOUTH INC. - KENTUCKY	KY	299861.	322.08	1.42	1138217.	3.80	0.2514	84.17	84.77	0.60
CONTEL OF KENTUCKY	KY	58942.	385.22	1.70	3129530.	53.10	0.2201	123.41	137.88	14.47
CINCINNATI BELL-KENTUCKY	KY	134577.	200.61	0.88	0.	0.	0.2052	38.16	41.17	3.01
SOUTH CENTRAL BELL-KENTUCKY	KY	890771.	270.77	1.19	524683.	0.59	0.2330	62.02	63.68	1.66
AVERAGE SCHEDULE COMPANIES - KY (15)	KY	128325.	244.14	1.07	0.	0.	0.2838	72.02	69.29	-2.73
ATHEENS TELEPHONE COMPANY	LA	285.	879.61	3.87	81180.	284.84	0.2651	470.21	521.54	51.34
CENTRAL LOUISIANA TELEPHONE COMPANY	LA	12555.	509.89	2.24	1400318.	111.53	0.2222	197.78	224.83	27.05
COASTAL TELEPHONE & ELECTRONICS CORP.	LA	9299.	403.94	1.78	575320.	61.87	0.2133	130.73	148.03	17.30
CAMERON TEL. CO.- LA	LA	5665.	459.98	2.02	499294.	88.14	0.2934	212.14	223.09	10.96
EAST ASCENSION TELEPHONE COMPANY	LA	20675.	312.51	1.38	429729.	20.78	0.2231	83.57	90.51	6.94
ELIZABETH TELEPHONE COMPANY INC	LA	2250.	567.76	2.50	311982.	138.66	0.2281	236.29	268.16	31.88
CADDOAN TELEPHONE COMPANY	LA	7776.	417.27	1.84	529698.	68.12	0.2689	169.33	180.32	11.00
LAFOURCHE TEL. CO.	LA	11139.	404.78	1.78	693566.	62.26	0.2495	150.72	163.26	12.53
EVANGELINE TELEPHONE COMPANY	LA	25194.	375.99	1.65	1228675.	48.77	0.2069	111.43	126.56	15.13
NORTHEAST LOUISIANA TEL. CO. INC.	LA	791.	668.49	2.94	147028.	185.88	0.2627	327.12	361.49	34.37
CENTURY TEL. OF NORTH LOUISIANA	LA	971.	385.95	1.70	51888.	53.44	0.2722	150.66	158.49	7.83
PLAIN DEALING TELEPHONE COMPANY	LA	1474.	735.44	3.24	320242.	217.26	0.2271	335.16	384.28	49.11
RESERVE TELEPHONE COMPANY	LA	4187.	267.70	1.18	10797.	2.58	0.2838	81.03	78.55	-2.48
CENTURY TELEPHONE COMPANY INC.	LA	1450.	931.58	4.10	448339.	309.20	0.2074	427.34	502.41	75.07
LOUISIANA WESTERN TELEPHONE COMPANY	LA	2963.	775.60	3.41	699521.	236.09	0.2367	369.04	419.67	50.63
UNITED TELEPHONE COMPANY OF LOUISIANA	LA	2411.	710.93	3.13	496109.	205.77	0.2473	339.79	381.58	41.79
SOUTH CENTRAL BELL-LOUISIANA	LA	1747249.	303.47	1.34	4599817.	2.63	0.2321	70.72	73.07	2.35
AVERAGE SCHEDULE COMPANIES - LA (6)	LA	14583.	244.14	1.07	0.	0.	0.2838	72.02	69.29	-2.73
LINCOLNVILLE TEL. CO.	ME	1173.	297.12	1.31	17046.	14.53	0.4207	153.53	139.53	-14.00
CHINA TEL. CO.	ME	2336.	275.91	1.21	13823.	5.92	0.2900	88.42	85.93	-2.49
HAMPDEN TEL. CO.	ME	2194.	212.25	0.93	0.	0.	0.2671	57.88	56.69	-1.19
HARTLAND & ST. ALBANS TEL. CO.	ME	2682.	346.59	1.53	93831.	34.99	0.2750	126.18	130.30	4.12
CONTEL OF MAINE	ME	36958.	360.47	1.59	1533407.	41.49	0.2978	146.31	148.84	2.53
SOMERSET TEL. CO.	ME	8747.	218.76	0.96	0.	0.	0.2824	64.16	61.78	-2.38
STANDISH TEL. CO.	ME	4993.	319.64	1.41	118248.	23.68	0.3577	144.76	138.02	-6.74
UNION RIVER TEL. CO.	ME	939.	502.91	2.21	101658.	108.26	0.3329	267.91	275.68	7.77
UNITY TEL. CO.	ME	3154.	265.12	1.17	4835.	1.53	0.2890	81.27	78.15	-3.11
WARREN TEL. CO.	ME	1259.	233.46	1.03	0.	0.	0.2887	70.41	67.40	-3.01
WEST PENOBSCOT TEL. & TEL. CO.	ME	1627.	256.81	1.13	0.	0.	0.2519	64.87	64.69	-0.18
NEW ENGLAND TEL.-MAINE	ME	527225.	282.39	1.24	698422.	1.32	0.2683	78.54	77.08	-1.46
AVERAGE SCHEDULE COMPANIES - ME (7)	ME	22299.	244.63	1.08	4638.	0.21	0.2838	72.33	69.63	-2.70
C & P TELEPHONE COMPANY OF MARYLAND	MD	2611062.	180.28	0.79	0.	0.	0.2366	41.84	42.65	0.81
AVERAGE SCHEDULE COMPANIES - MD (1)	MD	4255.	244.14	1.07	0.	0.	0.2838	72.02	69.29	-2.73
NEW ENGLAND TEL.-MA	MA	3436292.	157.87	0.69	0.	0.	0.2610	41.75	41.20	-0.58
AVERAGE SCHEDULE COMPANIES - MA (2)	MA	3185.	244.14	1.07	0.	0.	0.2838	72.02	69.29	-2.73
BLOOMINGDALE TELEPHONE COMPANY	MI	1460.	419.26	1.84	100211.	69.65	0.2540	162.32	175.54	13.22
CHIPPEWA COUNTY TELEPHONE COMPANY	MI	817.	309.60	1.36	16017.	19.60	0.2551	95.19	98.58	3.39
ADTEL MICHIGAN INC.	MI	37912.	231.55	1.02	0.	0.	0.2486	57.47	57.56	0.09

TABLE 3.4

1990 SEPARATIONS ESTIMATES USING NECA NTS COST DATA FOR 1988 - INDIVIDUAL STUDY AREAS

NAME	ST	LOOPS	URRPL	RTKA	ECA	HCAPL	SPF	OIRRPL	NIRRPL	CIRRPL
C. C & S TELCO, INC. - MICHIGAN	MI	17457.	201.45	0.89	0.	0.	0.2311	45.29	46.56	1.27
CARR TELEPHONE COMPANY	MI	1348.	219.52	0.97	0.	0.	0.3074	71.67	67.48	-4.19
CHATHAM TELEPHONE COMPANY - MI	MI	2230.	224.92	0.99	0.	0.	0.2447	54.66	55.04	0.38
GTE NORTE INC. - MICHIGAN	MI	464154.	258.97	1.14	0.	0.	0.2283	57.23	59.12	1.89
CENTURY TELEPHONE OF MICHIGAN, INC.	MI	39567.	292.08	1.29	493933.	12.48	0.2323	76.11	80.33	4.22
ACE TELEPHONE CO. OF MICHIGAN INC.	MI	3363.	368.94	1.62	152892.	45.46	0.2372	122.33	132.98	10.64
MIDWAY TELEPHONE COMPANY	MI	740.	481.81	2.12	72792.	98.37	0.2662	209.55	226.62	17.07
HIAWATEA TELEPHONE COMPANY	MI	3395.	297.46	1.31	49808.	14.67	0.2691	93.69	94.72	1.03
ODGEN TELEPHONE COMPANY	MI	407.	359.61	1.58	16724.	41.09	0.2691	131.95	137.86	5.92
ONTONAGON COUNTY TELEPHONE CO.	MI	3716.	228.70	1.01	0.	0.	0.2721	63.92	62.23	-1.69
PIGEON TELEPHONE COMPANY	MI	2545.	318.93	1.40	59537.	23.39	0.2188	85.21	93.18	7.96
SPRINGPORT TEL. CO.	MI	1600.	250.06	1.10	0.	0.	0.2301	55.89	57.54	1.65
UPPER PENINSULA TEL. CO.	MI	3187.	456.82	2.01	276173.	86.66	0.2995	213.68	223.47	9.79
WINN TELEPHONE COMPANY	MI	543.	305.14	1.34	9661.	17.79	0.3942	149.20	138.08	-11.12
WOLVERINE TELEPHONE COMPANY	MI	7140.	180.95	0.80	0.	0.	0.2096	35.50	37.93	2.42
MICHIGAN BELL TEL CO	MI	3987789.	198.67	0.87	0.	0.	0.2209	41.96	43.89	1.93
AVERAGE SCHEDULE COMPANIES - MI (21)	MI	53026.	244.67	1.08	3378.	0.06	0.2838	72.23	69.50	-2.73
CORTEL OF MINNESOTA, INC.	MN	94311.	319.30	1.41	2226375.	23.54	0.2344	92.02	98.39	6.37
GTE NORTH INC. - MINNESOTA	MN	3323.	183.69	0.81	0.	0.	0.2539	46.88	46.64	-0.24
ACE TELEPHONE ASSOCIATION - MN	MN	8623.	193.20	0.85	0.	0.	0.2535	49.21	48.98	-0.23
ARVIG TELEPHONE COMPANY	MN	8128.	218.25	0.96	0.	0.	0.2927	66.98	63.88	-3.10
CENTEL OF MINNESOTA	MN	74699.	161.26	0.71	0.	0.	0.2442	39.06	39.38	0.32
CLARA CITY TELEPHONE EXCH. CO.	MN	1442.	363.72	1.60	62027.	43.01	0.2653	132.76	139.51	6.75
ARROWHEAD COMMUNICATIONS CORP.	MN	583.	397.39	1.75	34279.	58.80	0.2601	151.75	162.16	10.41
EAST OTTER TAIL TELEPHONE CO.	MN	12893.	262.02	1.15	3523.	70.27	0.2584	68.66	67.98	-0.68
GARDEN VALLEY TELEPHONE COMPANY	MN	12720.	257.52	1.13	0.	0.	0.2441	62.37	62.86	0.49
JOHNSON TELEPHONE COMPANY	MN	1346.	531.72	2.34	163898.	121.77	0.2741	247.41	267.51	20.10
LAKEDALE TELEPHONE COMPANY	MN	9377.	191.72	0.84	0.	0.	0.2208	40.47	42.33	1.86
MID STATE TELEPHONE COMPANY	MN	5548.	203.11	0.89	0.	0.	0.2274	44.66	46.19	1.52
NEW ULM TELECOM, INC.	MN	8012.	168.66	0.74	0.	0.	0.2539	43.06	42.82	-0.24
PAUL BUNYAN RURAL TEL. COOP.	MN	4953.	335.47	1.48	149156.	30.11	0.2440	105.28	111.97	6.69
UNITED TELEPHONE CO OF MINN	MN	103096.	269.89	1.19	357854.	3.47	0.2280	62.34	65.01	2.66
SLEEPY EYE TEL. CO.	MN	5112.	241.79	1.06	0.	0.	0.2197	50.66	53.12	2.47
TWIN VALLEY-ULEX TEL CO INC.	MN	2718.	266.83	1.17	6056.	2.23	0.2341	62.83	64.69	1.86
NORTHWESTERN BELL-MINNESOTA	MN	1670119.	193.38	0.85	0.	0.	0.2578	50.36	49.85	-0.50
AVERAGE SCHEDULE COMPANIES - MN (73)	MN	173336.	248.91	1.10	201338.	1.16	0.2838	74.36	71.80	-2.56
BAY SPRINGS TELEPHONE COMPANY INC.	MS	8078.	469.93	2.07	749662.	92.80	0.2299	179.13	200.84	21.71
DELTA TELEPHONE COMPANY INC.	MS	3142.	220.75	0.97	0.	0.	0.2573	57.33	56.80	-0.53
ALLTEL MISSISSIPPI INC.	MS	7883.	381.03	1.68	403065.	51.13	0.2838	153.21	159.27	5.96
FRANKLIN TELEPHONE COMPANY INC - MS	MS	6017.	361.55	1.59	252699.	42.00	0.2341	116.32	126.64	10.32
GEORGETOWN TEL. CO., INC.	MS	240.	522.87	2.30	28228.	117.62	0.2838	248.34	266.01	17.67
HOME TELEPHONE COMPANY - OLIVE BRANCE	MS	7408.	574.93	2.53	1052085.	142.02	0.3935	367.39	368.25	0.86
HUGHES TELEPHONE COMPANY	MS	5135.	335.95	1.48	155630.	30.31	0.2241	96.64	105.59	8.95
SOUTHEAST MISSISSIPPI TEL. CORP.	MS	3413.	540.04	2.38	428901.	125.67	0.2778	255.53	275.69	20.16
SOUTH CENTRAL BELL-MISSISSIPPI	MS	915468.	324.93	1.43	3638250.	3.97	0.2497	84.28	85.11	0.83
AVERAGE SCHEDULE COMPANIES - MS (11)	MS	20905.	245.08	1.08	1046.	0.05	0.2838	72.34	69.60	-2.73
GTE NORTE INC. - MISSOURI	MO	85720.	300.63	1.32	1367819.	15.96	0.2731	97.18	98.06	0.88
MORAN DIAL, INC. - MO	MO	591.	297.38	1.31	8652.	14.64	0.2458	84.42	87.74	3.31
CONTINENTAL SYSTEMS OF MISSOURI	MO	36957.	362.28	1.59	1864796.	42.34	0.2844	141.07	145.37	4.30
CITIZENS TELEPHONE CO - MISSOURI	MO	3414.	315.39	1.39	74956.	21.96	0.2446	84.14	99.10	4.96
EASTERN MISSOURI TELEPHONE CO.	MO	2511.	409.79	1.80	162236.	64.61	0.2256	140.82	157.06	16.24
FIDELITY TELEPHONE COMPANY	MO	9731.	301.03	1.32	156882.	16.12	0.2363	82.66	87.26	4.58
ALLTEL MISSOURI INC.	MO	20233.	391.03	1.72	1129366.	55.82	0.2465	140.57	152.21	11.63
GOODMAN TEL. CO.	MO	1410.	338.78	1.49	44356.	31.46	0.3253	142.91	141.66	-2.25

TABLE 3.4

1990 SEPARATIONS ESTIMATES USING NECA NTS COST DATA FOR 1968 - INDIVIDUAL STUDY AREAS

NAME	ST	LOOPS	URRPL	RTNA	HCA	HCAPL	SPF	OIRRPL	WIRRPL	CIRRPL
GRAND RIVER MUTUAL TEL CORP - MO	MO	12008.	315.84	1.39	265828.	22.14	0.2480	95.85	100.47	4.62
KINGDOM TELEPHONE COMPANY	MO	2462.	393.90	1.73	140736.	57.16	0.3106	176.03	179.51	3.48
MISSOURI TELEPHONE COMPANY	MO	15450.	274.01	1.21	75487.	5.14	0.2409	69.28	71.15	1.88
LE-RU TELEPHONE COMPANY	MO	961.	709.33	3.12	197025.	205.02	0.3501	435.97	453.36	17.38
CONTEL OF MISSOURI	MO	140673.	475.54	2.09	13424420.	95.43	0.2629	203.41	220.45	17.04
HOLWAY TELEPHONE COMPANY	MO	550.	562.59	2.48	74931.	136.24	0.2640	260.10	284.76	24.66
NORTHEAST MISSOURI RURAL TEL. CO.	MO	3360.	470.12	2.07	312118.	92.89	0.2655	201.58	217.71	16.13
ORCHARD FARM TELEPHONE COMPANY	MO	662.	436.52	1.92	51068.	77.14	0.2584	175.78	189.94	14.16
STOUTLAND TELEPHONE COMPANY	MO	892.	538.05	2.37	111260.	124.73	0.2637	244.14	266.61	22.47
UNITED TELEPHONE CO. OF MISSOURI	MO	169414.	295.18	1.30	2328425.	13.74	0.2876	99.61	98.64	-0.97
SOUTHWESTERN BELL-MISSOURI	MO	1894098.	195.45	0.86	0.	0.	0.2578	50.91	50.39	-0.53
AVERAGE SCHEDULE COMPANIES - MO (24)	MO	40172.	265.89	1.17	182761.	4.55	0.2838	82.08	80.01	-2.07
BLACKFOOT TEL. COOPERATIVE INC.	MT	4692.	536.22	2.36	581222.	123.88	0.3632	314.07	318.63	4.56
INTERBEL TEL. COOPERATIVE INC.	MT	856.	399.90	1.76	51338.	59.97	0.3857	220.34	214.22	-6.12
LINCOLN TEL. CO. INC.	MT	710.	296.21	1.31	10632.	14.97	0.3628	131.41	123.16	-8.25
MID-RIVERS TEL. COOPERATIVE INC.	MT	5911.	579.43	2.55	851939.	144.13	0.2750	279.51	303.47	23.96
NEMONT TELEPHONE COOP.- MONTANA	MT	2271.	528.81	2.33	273430.	120.40	0.3115	271.94	285.12	13.19
NORTHERN TEL. COOP INC.- MT	MT	1358.	438.60	1.93	106078.	78.11	0.3666	240.30	238.90	-1.39
NORWESTERN TELEPHONE SYSTEMS, INC.	MT	28996.	302.80	1.33	488299.	16.84	0.3329	122.66	117.64	-5.02
PROJECT TEL. CO.	MT	2556.	427.94	1.88	186889.	73.12	0.3082	198.69	205.01	6.32
RANGE TEL. COOP INC.-MT	MT	2657.	624.37	2.75	438926.	165.20	0.3444	366.86	380.23	13.37
SOUTHERN MONTANA TEL. CO.	MT	604.	908.48	4.00	180217.	298.37	0.4536	712.47	710.46	-2.01
3-RIVERS TEL. COOPERATIVE INC.	MT	8382.	297.98	1.31	124756.	14.88	0.3394	121.92	116.02	-5.90
TRIANGLE TEL. COOPERATIVE ASSN. INC.	MT	8094.	385.50	1.70	430806.	53.23	0.2877	158.35	164.13	5.79
VALLEY RURAL TEL. COOP. ASSN.-MT	MT	825.	729.11	3.21	176790.	214.29	0.4613	559.17	550.63	-8.54
GTE NORTHWEST INC. - MONTANA	MT	6149.	369.07	1.62	279931.	45.52	0.3306	168.33	167.54	-0.79
MOUNTAIN BELL-MONTANA	MT	293419.	293.76	1.29	594444.	2.03	0.3231	103.70	96.94	-6.76
AVERAGE SCHEDULE COMPANIES - MT (2)	MT	2452.	246.09	1.08	0.	0.	0.2838	72.60	69.84	-2.76
GTE NORTE INC. - NEBRASKA	NE	42385.	235.86	1.04	0.	0.	0.2581	61.51	60.87	-0.64
ARAPAHOE TELEPHONE COMPANY	NE	1004.	406.43	1.79	63286.	63.03	0.2796	168.09	176.67	8.58
ARLINGTON TELEPHONE COMPANY	NE	899.	469.02	2.06	83044.	92.37	0.2693	203.25	218.68	15.43
BLAIR TELEPHONE COMPANY	NE	5178.	270.71	1.19	19700.	3.80	0.2792	81.23	79.39	-1.84
THREE RIVER TELCO	NE	1207.	442.19	1.95	96319.	79.80	0.3065	207.69	215.33	7.65
COZAD TELEPHONE COMPANY	NE	2548.	222.93	0.98	0.	0.	0.2804	64.76	62.51	-2.25
CURTIS TELEPHONE COMPANY	NE	731.	405.80	1.79	45862.	62.74	0.2222	136.63	152.91	16.28
DALTON TEL. CO., INC.	NE	1254.	476.26	2.10	120095.	95.77	0.3429	254.69	259.08	4.39
DILLER TELEPHONE COMPANY	NE	889.	548.74	2.41	115344.	129.75	0.2762	260.13	281.31	21.17
EASTERN NEBRASKA TELEPHONE COMPANY	NE	2358.	363.41	1.60	101087.	42.87	0.2932	146.12	149.42	3.30
HARTMAN TELEPHONE EXCHANGES INC.	NE	437.	702.09	3.09	88111.	201.63	0.3560	436.10	451.57	15.47
HEMINGFORD COOP. TELEPHONE COMPANY	NE	834.	299.55	1.32	12945.	15.52	0.2659	93.66	95.17	1.52
KEYSTONE-ARTHUR TELEPHONE COMPANY	NE	554.	515.94	2.27	63361.	114.37	0.3775	308.19	309.14	0.95
LINCOLN TEL. & TELE. CO.	NE	224786.	180.23	0.79	0.	0.	0.2750	51.06	49.56	-1.50
NEBRASKA CENTRAL TELEPHONE COMPANY	NE	5796.	318.14	1.40	133730.	23.07	0.2535	99.49	103.72	4.23
GREAT PLAINS COMMUNICATIONS, INC.	NE	24746.	308.57	1.36	474728.	19.18	0.2615	97.24	99.88	2.63
PETERSBURG TELEPHONE COMPANY	NE	446.	563.83	2.48	61020.	136.82	0.2392	242.29	271.68	29.39
ROCK COUNTY TEL. CO.	NE	980.	684.26	3.01	189402.	193.27	0.2662	340.46	375.42	34.96
SOUTHEAST NEBRASKA TEL. CO.	NE	3828.	522.55	2.30	449659.	117.47	0.2781	244.15	262.79	18.63
STANTON TEL. CO., INC.	NE	1004.	465.81	2.05	91234.	90.87	0.2233	172.57	194.89	22.32
UNITED TELEPHONE CO. OF THE WEST-NE	NE	23216.	251.22	1.11	0.	0.	0.2581	78.93	74.89	-4.04
WAUNETA TEL. CO.	NE	621.	790.40	3.48	150916.	243.02	0.2990	443.71	479.35	35.64
BENHELMAN TELEPHONE COMPANY INC.	NE	1185.	520.69	2.29	136165.	116.59	0.3210	272.71	283.74	11.03
NORWESTERN BELL-NEBRASKA	NE	434258.	200.28	0.88	0.	0.	0.2981	62.93	59.70	-3.22
AVERAGE SCHEDULE COMPANIES - NE (18)	NE	26572.	260.89	1.15	93771.	3.53	0.2838	79.79	77.57	-2.22
GEM STATE UTILITIES CORP-NV	NV	333.	601.37	2.65	51419.	154.41	0.5121	465.47	462.37	-3.09

TABLE 3.4

1990 SEPARATIONS ESTIMATES USING NECA NTS COST DATA FOR 1988 - INDIVIDUAL STUDY AREAS

NAME	ST	LOOPS	URRPL	RTNA	HCA	HCAPL	SPF	OIRRPL	NIRRPL	CIRRPL
RURAL TEL. CO.	NV	349.	871.68	3.84	98112.	281.12	0.4750	704.32	695.17	-9.15
BEEHIVE TELEPHONE CO., INC.-NV	NV	31.	1007.53	4.43	10689.	344.80	0.4713	824.94	819.65	-5.29
CONTEL OF CALIFORNIA - NEVADA	NV	17576.	358.47	1.58	712775.	40.55	0.4675	226.02	208.14	-17.88
C P NATIONAL CORP. - NEVADA	NV	10781.	384.12	1.69	566872.	52.58	0.4638	247.57	230.74	-16.83
CENDEL OF NEVADA	NV	376213.	148.54	0.65	0.	0.	0.3770	62.28	56.00	-6.28
CHURCHILL COUNTY TEL. & TEL. SYSTEM	NV	7993.	348.47	1.53	286692.	35.87	0.3985	184.81	174.73	-10.08
LINCOLN COUNTY TELEPHONE SYSTEM INC.	NV	1501.	287.20	1.26	15766.	10.50	0.4078	140.66	127.63	-13.03
MOAPA VALLEY TELEPHONE COMPANY	NV	2038.	187.98	0.83	0.	0.	0.4455	94.07	83.75	-10.32
NEVADA TELEPHONE-TELEGRAPH COMPANY	NV	2475.	277.97	1.22	16714.	6.75	0.4750	158.29	138.79	-19.50
RIG VIRGIN TELEPHONE COMPANY	NV	1056.	269.03	1.18	3296.	3.12	0.4675	147.77	128.89	-18.88
NEVADA BELL	NV	204035.	278.47	1.23	218408.	1.07	0.3911	122.88	109.98	-12.90
AVERAGE SCHEDULE COMPANIES - NV (1)	NV	360.	263.54	1.16	0.	0.	0.2838	77.74	74.79	-2.95
BRETTON WOODS TEL. CO.	NH	258.	219.02	0.96	0.	0.	0.4750	120.46	104.04	-16.43
GRANITE STATE TEL. CO.	NH	6653.	302.99	1.33	112545.	16.92	0.3336	123.06	117.99	-5.07
CHICHESTER TEL. CO.	NH	1090.	184.41	0.81	0.	0.	0.2838	54.40	52.34	-2.07
CONTEL OF NH	NH	9161.	291.80	1.28	113345.	12.37	0.4042	142.43	130.32	-12.12
KEARSARGE TEL. CO.	NH	5153.	228.16	1.00	0.	0.	0.4490	112.87	102.44	-10.43
MERIDEN TEL. CO.	NH	463.	200.05	0.88	0.	0.	0.5800	126.03	116.03	-10.00
MERRIMACK COUNTY TEL. CO.	NH	5805.	266.20	1.17	11453.	1.97	0.3734	111.95	101.37	-10.57
UNION TEL. CO.	NH	5187.	185.01	0.81	0.	0.	0.5500	118.41	109.16	-9.25
WILTON TEL. CO. - NH	NH	2177.	376.95	1.66	107146.	49.22	0.5128	255.86	242.52	-13.34
NEW ENGLAND TEL.-NH	NH	558467.	316.85	1.39	1937491.	3.47	0.3175	110.51	104.07	-6.44
AVERAGE SCHEDULE COMPANIES - NH (2)	NH	1037.	259.91	1.14	6129.	5.91	0.2838	81.40	79.67	-1.73
WARWICK VALLEY TEL. CO.-NJ	NJ	6785.	100.28	0.44	0.	0.	0.3017	31.99	30.25	-1.73
UNITED TELEPHONE COMPANY OF NJ	NJ	135362.	258.99	1.14	0.	0.	0.3121	86.19	80.83	-5.36
NEW JERSEY BELL	NJ	4572349.	157.57	0.69	0.	0.	0.2757	44.80	43.44	-1.36
DELL TELEPHONE CO-OP. INC.-NM	NM	250.	2388.10	10.51	247986.	991.94	0.4750	2107.01	2126.29	19.28
GTE SOUTHWEST INC. - NEW MEXICO	NM	36636.	284.11	1.25	338779.	9.25	0.3382	111.86	105.33	-6.53
VALLEY TELEPHONE COOPERATIVE INC-NM	NM	1132.	769.04	3.38	263766.	233.01	0.3957	528.01	537.32	9.30
CONTEL OF THE WEST - NEW MEXICO	NM	26482.	482.71	2.12	2616204.	98.79	0.3218	245.91	254.13	8.22
BACA VALLEY TEL. CO.	NM	556.	1166.19	5.13	233061.	419.17	0.4104	876.34	897.78	21.44
E.K.M.R. TEL COOP. INC.-NM	NM	8981.	929.17	4.09	2766790.	308.07	0.3330	581.52	617.49	35.97
LA JICARITA RURAL TEL. COOP. INC.	NM	1391.	517.48	2.28	160093.	115.09	0.2533	223.72	246.17	22.45
LEACO RURAL TEL. COOPERATIVE INC.	NM	756.	948.79	4.17	239854.	317.27	0.3828	659.04	680.46	21.42
WESTERN NEW MEXICO TEL. CO., INC.	NM	3998.	1251.95	5.51	1836572.	459.37	0.3735	886.56	926.98	40.42
PENASCO VALLEY TEL. COOPERATIVE INC.	NM	1949.	1218.01	5.36	864308.	443.46	0.3867	881.19	914.47	33.27
ROOSEVELT COUNTY RURAL TEL. COOP., INC.	NM	1413.	837.06	3.68	374293.	264.89	0.2923	468.39	509.56	41.18
UNIVERSAL TEL CO OF SOUTHWEST- NM	NM	3354.	267.34	1.26	35411.	10.56	0.3400	114.79	108.25	-6.54
NAVAJO COMMUNICATIONS CO INC.-NM	NM	3025.	864.57	3.80	840308.	277.79	0.4709	684.25	684.91	0.66
MOUNTAIN BELL-NEW MEXICO	NM	549498.	237.22	1.04	0.	0.	0.2904	72.09	68.89	-3.20
AU SABLE VALLEY TEL. CO. INC.	NY	5410.	290.38	1.28	63807.	11.79	0.2798	93.56	93.04	-0.52
CHAMPLAIN TEL. CO.	NY	4319.	239.28	1.05	0.	0.	0.3589	94.56	85.88	-8.69
CHAUTAQUA & ERIE TEL. CORP.	NY	8656.	192.91	0.85	0.	0.	0.3195	66.11	61.64	-4.48
CITIZENS TEL. CO OF HAMMOND, NY	NY	780.	675.22	2.97	147445.	189.03	0.2402	311.25	351.22	39.97
CLYMER TEL. CO.	NY	750.	349.19	1.54	27155.	36.21	0.3661	170.32	164.05	-6.27
TACONIC TEL. CORP.	NY	17739.	295.19	0.90	0.	0.	0.2970	64.16	60.94	-3.22
CROWN POINT TELEPHONE CORPORATION	NY	648.	665.76	2.93	119619.	184.60	0.2566	319.97	355.43	35.45
DUNKIRK AND FREDONIA TEL. CO.	NY	8297.	113.42	0.50	0.	0.	0.2455	27.68	27.85	0.17
EDWARDS TELEPHONE CO. INC.	NY	1538.	815.49	2.27	175578.	114.16	0.2240	202.37	229.63	27.27
EMPIRE TELEPHONE CORP - NEW YORK	NY	5907.	281.22	1.24	47661.	8.07	0.2550	78.64	79.78	1.14
CONTEL OF NY, INC.	NY	168617.	327.57	1.44	5055298.	26.94	0.2399	99.05	105.55	6.50
GERMANTOWN TELEPHONE CO INC.	NY	1806.	440.61	1.94	142776.	79.06	0.2646	181.94	195.64	13.70
HANCOCK TELEPHONE COMPANY - NY	NY	1275.	364.47	1.60	55294.	43.37	0.2713	136.16	142.25	6.09
HIGHLAND TELEPHONE CO.	NY	47387.	199.28	0.88	0.	0.	0.2705	55.28	53.90	-1.38

TABLE 3.4

1990 SEPARATIONS ESTIMATES USING NECA NTS COST DATA FOR 1988 - INDIVIDUAL STUDY AREAS

NAME	ST	LOOPS	URRPL	RTNA	HCA	HCAPL	SPF	OIRRPL	WIRRPL	CIRRPL
MIDDLEBURGH TELEPHONE CO.	NY	4307.	374.74	1.65	207526.	48.18	0.2330	123.73	135.50	11.77
ALLTEL NEW YORK INC.- FULTON	NY	37693.	245.64	1.08	0.	0.	0.2248	53.16	55.22	2.06
NICHOLSVILLE TEL. CO. INC.	NY	1385.	331.61	1.46	39533.	28.54	0.2316	97.61	105.34	7.73
ALLTEL NEW YORK INC. - JAMESTOWN	NY	38955.	180.14	0.79	0.	0.	0.2497	44.96	44.98	0.02
OGDEN TELEPHONE COMPANY - NY	NY	16899.	134.26	0.59	0.	0.	0.2254	29.16	30.26	1.10
ALLTEL NY INC. - RED JACKET	NY	2380.	169.19	0.74	0.	0.	0.2347	38.86	39.71	0.85
PATTERSONVILLE TEL. CO. - NY	NY	1080.	241.14	1.06	0.	0.	0.2838	71.14	68.44	-2.70
RED HOOK TELEPHONE COMPANY	NY	11407.	270.95	1.19	44479.	3.90	0.2676	77.22	76.40	-0.82
ROCHESTER TELEPHONE CORPORATION	NY	437892.	191.55	0.84	0.	0.	0.2394	45.19	45.86	0.67
SENECA-GORHAM TEL. CORP.	NY	7431.	198.55	0.87	0.	0.	0.2319	44.85	46.04	1.19
SYLVAN LAKE TELEPHONE COMPANY	NY	13117.	217.82	0.96	0.	0.	0.2644	58.64	57.59	-1.05
VERNON TELEPHONE COMPANY INC.	NY	2136.	232.70	1.02	0.	0.	0.2535	59.27	58.99	-0.28
WARWICK VALLEY TEL. CO.-NY	NY	10472.	124.25	0.55	0.	0.	0.3017	39.64	37.49	-2.15
WESTERN COUNTIES TELEPHONE CO.	NY	18321.	380.84	1.68	935128.	51.04	0.2466	134.29	144.96	10.67
NEW YORK TELEPHONE	NY	9252023.	207.99	0.92	0.	0.	0.2621	55.37	54.51	-0.85
AVERAGE SCHEDULE COMPANIES - NY (16)	NY	52953.	244.14	1.07	0.	0.	0.2838	72.02	69.29	-2.73
ATLANTIC TELEPHONE MEMB. CORP.	NC	18605.	208.23	0.92	0.	0.	0.2386	48.89	49.68	0.79
BARNARDSVILLE TELEPHONE COMPANY	NC	840.	256.41	1.13	0.	0.	0.2304	57.41	59.08	1.67
CAROLINA TELEPHONE & TEL. CO.	NC	747123.	254.01	1.12	0.	0.	0.2479	62.79	62.97	0.18
CENDEL OF NORTH CAROLINA	NC	186735.	191.69	0.84	0.	0.	0.2316	43.23	44.39	1.17
CITIZENS TELEPHONE COMPANY - NC	NC	13200.	290.67	1.28	157233.	11.91	0.2493	81.93	84.38	2.44
THE CONCORD TELEPHONE COMPANY	NC	72465.	125.90	0.55	0.	0.	0.2105	24.84	26.50	1.66
ALLTEL CAROLINA INC.- NORTH	NC	89562.	294.10	1.29	1191769.	13.31	0.2318	77.02	81.48	4.46
GTE SOUTH INC. - NORTH CAROLINA	NC	134155.	230.70	1.02	0.	0.	0.2726	64.62	62.89	-1.73
HEINS TELEPHONE COMPANY	NC	22635.	210.72	0.93	0.	0.	0.2328	47.85	49.05	1.20
STAR TEL. MEMB. CORP.	NC	11795.	239.09	1.05	0.	0.	0.2022	44.52	48.34	3.83
CONTEL OF N.C.	NC	78589.	399.61	1.76	4702537.	59.84	0.2641	155.32	165.37	10.05
WILKES TELEPHONE MEMB. CORP.	NC	7224.	296.49	1.30	103144.	14.28	0.1879	61.00	69.99	8.99
SOUTHERN BELL-NORTH CAROLINA	NC	1553541.	286.82	1.26	2473118.	1.59	0.2478	72.15	72.67	0.52
AVERAGE SCHEDULE COMPANIES - NC (15)	NC	187149.	244.14	1.07	0.	0.	0.2838	72.02	69.29	-2.73
CONTEL OF NORTH DAKOTA	ND	10073.	266.56	1.17	21327.	2.12	0.2655	73.82	72.89	-0.94
CONSOLIDATED TELEPHONE COOPERATIVE	ND	4055.	568.38	2.50	563443.	138.95	0.2846	279.51	300.71	21.20
INTER-COMMUNITY TELEPHONE COMPANY	ND	1226.	490.00	2.16	125311.	102.21	0.2365	195.45	218.10	22.65
MIDSTATE TELEPHONE COMPANY	ND	1366.	278.79	1.23	9682.	7.09	0.3206	101.60	96.47	-5.13
POLAR COMMUNICATIONS MUTUAL AID CORP	ND	8167.	231.91	1.02	0.	0.	0.2485	57.51	57.63	0.12
RESERVATION TELEPHONE COOPERATIVE	ND	4194.	400.94	1.76	253583.	60.46	0.2871	168.41	175.57	7.16
SOURIS RIVER TEL. MUTUAL AID CORP.	ND	11481.	249.70	1.10	0.	0.	0.3265	87.89	81.53	-6.37
WEST RIVER MUTUAL AID TELEPHONE CORP	ND	8661.	198.29	0.87	0.	0.	0.2982	62.30	59.13	-3.17
NORTHWESTERN BELL-NORTH DAKOTA	ND	247211.	257.06	1.13	0.	0.	0.2778	73.80	71.41	-2.39
AVERAGE SCHEDULE COMPANIES - ND (15)	ND	43308.	265.88	1.17	264798.	6.11	0.2838	83.32	81.57	-1.75
CHILLICOTHE TELEPHONE COMPANY	OH	25017.	308.80	1.36	482292.	19.28	0.2072	74.99	83.26	8.27
CONTEL OF OHIO	OH	2003.	298.09	1.31	29900.	14.93	0.2170	73.35	79.61	6.26
PAYETTEVILLE TELEPHONE COMPANY	OH	1182.	357.60	1.57	47453.	40.15	0.2126	103.71	116.17	12.46
GTE NORTH INC. - OHIO	OH	621570.	232.47	1.02	0.	0.	0.2409	55.30	56.00	0.70
HARLAN TELEPHONE COMPANY	OH	687.	286.94	1.26	7143.	10.40	0.2936	96.72	94.64	-2.08
CENDEL OF OHIO	OH	59420.	169.51	0.75	0.	0.	0.2232	36.31	37.83	1.53
UNITED TELEPHONE CO. OF OHIO	OH	429594.	272.11	1.20	288934.	0.67	0.2375	64.05	65.30	1.25
ALLTEL OHIO INC - WESTERN OHIO	OH	16955.	269.72	1.19	57651.	3.40	0.2320	63.68	65.97	2.30
C O & S TELCO INC.- OHIO	OH	465.	185.78	0.82	0.	0.	0.2636	49.81	48.97	-0.84
CINCINNATI BELL-OHIO	OH	618701.	154.98	0.68	0.	0.	0.2302	34.65	35.68	1.02
OHIO BELL TEL CO	OH	3136238.	205.60	0.90	0.	0.	0.2302	45.97	47.33	1.36
AVERAGE SCHEDULE COMPANIES - OH (34)	OH	244493.	244.40	1.08	6343.	0.03	0.2838	72.12	69.39	-2.73
KANONKA TELEPHONE ASSN. INC. - OK	OK	1254.	480.53	2.11	122605.	97.77	0.2931	225.98	238.61	12.63
SOUTH CENTRAL TEL. ASSN., INC.-OK	OK	396.	308.35	1.36	7562.	19.10	0.3187	120.61	117.37	-3.24

TABLE 3.4

1990 SEPARATIONS ESTIMATES USING NECA NTS COST DATA FOR 1988 - INDIVIDUAL STUDY AREAS

NAME	ST	LOOPS	URRPL	RTNA	HCA	HCAPL	SPF	CIREPL	WIRRPL	CIRRPL
ALLTEL OKLAHOMA, INC.	OK	10618.	539.85	2.38	1333354.	125.57	0.2856	261.06	279.75	18.69
ATLAS TELEPHONE CO.	OK	1409.	431.80	1.90	105574.	74.93	0.3922	249.76	244.28	-5.48
CANADIAN VALLEY TELEPHONE CO.	OK	811.	478.94	2.11	78687.	97.02	0.2995	228.96	240.47	11.50
CARNEGIE TELEPHONE CO. INC.	OK	1530.	295.01	1.30	20925.	13.68	0.2577	87.73	89.70	1.97
CHEROKEE TELEPHONE CO.	OK	4144.	249.26	1.10	0.	0.	0.3165	84.42	78.89	-5.53
CHICKASAW TELEPHONE CO.	OK	6924.	264.16	1.16	7916.	1.14	0.2805	77.68	75.24	-2.44
CHOUTEAU TELEPHONE CO.	OK	2696.	515.55	2.27	307850.	114.19	0.2756	237.87	256.27	18.40
OKLAHOMA COMMUNICATION SYSTEMS INC.	OK	12479.	487.30	2.14	1259686.	100.94	0.2450	199.36	220.33	20.97
CROSS TELEPHONE CO.	OK	7225.	303.46	1.34	123612.	17.11	0.2609	93.95	96.28	2.33
DOBSON TELEPHONE CO.	OK	4098.	699.16	3.08	820637.	200.25	0.3093	390.23	416.50	26.28
GRAND TELEPHONE CO. INC.	OK	2163.	379.05	1.67	108591.	50.20	0.3409	180.91	179.42	-1.48
HINTON TELEPHONE CO.	OK	3139.	378.50	1.67	156776.	49.94	0.2377	128.37	139.91	11.54
M CLOUD TELEPHONE CO.	OK	5764.	311.45	1.37	117312.	20.35	0.2270	84.58	91.05	6.47
OKLAHOMA ALLTEL, INC.	OK	9891.	468.41	2.06	910847.	92.09	0.2785	208.57	222.54	13.97
OKLAHOMA TELEPHONE & TELEGRAPH INC.	OK	1735.	472.93	2.08	163448.	94.21	0.2632	201.92	218.68	16.76
OKLAHOMA WESTERN TELEPHONE CO.	OK	2475.	590.53	2.60	369600.	149.33	0.3073	312.22	330.80	18.59
PANHANDLE TELEPHONE COOPERATIVE INC.	OK	4213.	529.26	2.33	508139.	120.61	0.3881	326.24	326.02	-0.22
PIONEER TEL. COOP. INC.	OK	34812.	313.69	1.38	740219.	21.26	0.2601	99.67	102.85	3.19
POTTAWATOMIE TELEPHONE CO.	OK	1724.	945.21	4.16	544080.	315.59	0.2529	492.46	554.64	62.17
TOTAH TELEPHONE CO. INC.	OK	1660.	753.27	3.31	374522.	225.62	0.2879	406.85	442.48	35.63
VALLIANT TELEPHONE COMPANY	OK	1734.	372.48	1.64	81706.	47.12	0.2909	151.15	155.47	4.32
WYANDOTTE TELEPHONE COMPANY	OK	359.	595.37	2.62	54425.	151.60	0.4476	426.95	418.09	-8.85
GTE SOUTHWEST INC. - OKLAHOMA	OK	99230.	419.96	1.85	6884346.	69.38	0.2801	177.33	187.01	9.68
SOUTHWESTERN BELL-OKLAHOMA	OK	1214589.	262.65	1.16	98592.	0.08	0.2771	75.23	72.86	-2.37
AVERAGE SCHEDULE COMPANIES - OK (13)	OK	31998.	254.41	1.12	82258.	2.57	0.2838	77.11	74.77	-2.34
MIDVALE TEL. EXCH. - OR	OR	171.	938.62	4.13	53437.	312.50	0.3438	602.07	635.19	33.12
C P NATIONAL CORP. - OREGON	OR	9364.	416.14	1.83	632906.	67.59	0.3475	212.21	212.20	-0.01
BEAVER CREEK COOPERATIVE TEL. CO.	OR	3118.	274.81	1.21	17052.	5.47	0.2525	73.98	74.86	0.87
TELEPHONE UTILITIES OF OREGON INC.	OR	34788.	457.32	2.01	3022700.	86.89	0.3093	220.01	228.34	8.32
CANBY TELEPHONE ASSOCIATION	OR	7218.	176.90	0.78	0.	0.	0.2686	48.61	47.52	-1.10
CLEAR CREEK MUTUAL TELEPHONE CO.	OR	2700.	366.42	1.61	119565.	44.28	0.2513	127.69	136.37	8.67
COLTON TELEPHONE COMPANY	OR	951.	356.00	1.57	37466.	39.40	0.2816	135.54	139.65	4.11
CASCADE UTILITIES INC.	OR	6956.	245.04	1.08	0.	0.	0.2767	70.01	67.80	-2.21
RTI/HALSEY TEL. CO.	OR	566.	464.66	2.04	51128.	90.33	0.3178	230.44	238.00	7.57
HELIX TELEPHONE COMPANY	OR	235.	653.86	2.88	42069.	179.02	0.3323	378.47	396.30	17.82
HOME TELEPHONE COMPANY	OR	535.	639.40	2.81	92148.	172.24	0.2831	325.84	353.25	27.41
TRANS-CASCADES TELEPHONE COMPANY	OR	88.	1951.31	8.59	69273.	787.20	0.3480	1372.62	1466.25	93.63
MOLALLA TELEPHONE COMPANY	OR	4257.	387.18	1.70	229941.	54.01	0.2538	141.98	152.28	10.30
MONROE TELEPHONE COMPANY	OR	671.	319.95	1.41	15974.	23.81	0.3163	127.32	125.01	-2.31
KEHALEM TELEPHONE AND TELEGRAPH	OR	1833.	244.74	1.08	0.	0.	0.3315	87.79	81.13	-6.66
NORTH STATE TELEPHONE COMPANY - OR	OR	375.	441.91	1.94	29875.	79.57	0.3041	206.12	214.05	7.93
OREGON TELEPHONE CORPORATION	OR	1285.	288.33	1.27	14088.	10.96	0.3243	109.43	104.47	-4.96
PINE TELEPHONE SYSTEM INC. - OR	OR	636.	507.80	2.23	70313.	110.55	0.3965	314.57	311.90	-2.67
PIONEER TELEPHONE COOPERATIVE	OR	9955.	225.63	0.99	0.	0.	0.3120	75.07	70.40	-4.67
SCIO MUTUAL TEL. ASSOCIATION	OR	1298.	321.16	1.41	31539.	24.30	0.2476	98.70	103.82	5.12
UNITED TELEPHONE CO OF THE NW - OR	OR	46235.	332.27	1.46	1332104.	28.81	0.3141	134.53	133.18	-1.35
ASOTIN TELEPHONE COMPANY - OREGON	OR	88.	2225.77	9.79	80595.	915.85	0.4750	1956.85	1973.09	16.24
GTE NORTHWEST INC. - OREGON	OR	257638.	268.52	1.18	115503.	0.45	0.3031	86.50	81.84	-4.66
CONTEL OF THE NORTHWEST INC. - OR	OR	20968.	348.98	1.54	757102.	36.11	0.2725	126.60	131.21	4.60
MALEBUR HOME TELEPHONE COMPANY	OR	10011.	258.19	1.14	0.	0.	0.3369	92.38	85.43	-6.95
PACIFIC NORTHWEST BELL-OREGON	OR	962041.	218.53	0.96	0.	0.	0.2791	63.11	60.99	-2.12
AVERAGE SCHEDULE COMPANIES - OR (7)	OR	9064.	245.30	1.08	1463.	0.16	0.2838	72.49	69.78	-2.71
GTE NORTH INC. - PENNSYLVANIA	PA	410788.	199.19	0.88	0.	0.	0.2393	46.97	47.67	0.70
CONTEL OF PA	PA	47577.	254.15	1.12	0.	0.	0.2544	65.04	64.65	-0.38

TABLE 3.4

1990 SEPARATIONS ESTIMATES USING NECA NTS COST DATA FOR 1988 - INDIVIDUAL STUDY AREAS

NAME	ST	LOOPS	URRPL	RTNA	HCA	HCAPL	SPF	OIRRPL	NIRRPL	CIRRPL
LACKAWAXEN TELEPHONE COMPANY	PA	2375.	276.36	1.22	14483.	6.10	0.4576	150.46	132.56	-17.90
MAHONNY & MAHANTONGO TEL CO	PA	3456.	324.52	1.43	88700.	25.67	0.2193	88.39	96.83	8.44
NORTH PENN TELEPHONE COMPANY	PA	3919.	249.89	1.10	0.	0.	0.2834	73.62	70.82	-2.80
OSWAYO RIVER TELEPHONE COMPANY	PA	1600.	293.32	1.29	20783.	12.99	0.3329	116.13	110.64	-5.50
QUAKER STATE TELEPHONE COMPANY	PA	30580.	336.65	1.48	935449.	30.59	0.2746	119.71	123.03	3.32
SUGAR VALLEY TELEPHONE COMPANY	PA	853.	368.97	1.62	38790.	45.47	0.2541	130.65	139.23	8.58
UNITED TELEPHONE COMPANY OF PA	PA	278730.	209.08	0.92	0.	0.	0.2386	49.11	49.89	0.77
BELL OF PENNSYLVANIA	PA	4880264.	159.05	0.70	0.	0.	0.2369	37.00	37.68	0.68
AVERAGE SCHEDULE COMPANIES - PA (29)	PA	549829.	244.16	1.07	4321.	0.01	0.2838	72.03	69.30	-2.73
PUERTO RICO COMMUNICATION AUTHORITY	PR	97930.	277.32	1.22	635526.	6.49	0.2385	70.28	72.63	2.35
PUERTO RICO TEL. CO.	PR	737662.	236.64	1.04	0.	0.	0.2526	59.99	59.77	-0.21
NEW ENGLAND TEL.-RI	RI	514739.	188.97	0.83	0.	0.	0.2638	50.72	49.85	-0.87
GTE SOUTH INC. - SOUTH CAROLINA	SC	129793.	280.24	1.23	996130.	7.67	0.2797	87.30	86.06	-1.24
UNITED TELEPHONE CO. OF THE CAROLINAS	SC	64711.	264.07	1.16	71466.	1.10	0.2656	72.39	71.24	-1.15
BLUFFTON TEL. & APPL. CO. INC.	SC	2553.	367.92	1.62	114848.	44.99	0.3917	197.47	189.10	-8.37
FARMERS TEL COOP INC - SC	SC	36345.	296.80	1.31	523447.	14.40	0.2610	90.08	91.87	1.78
HARGRAY TEL. CO. INC.	SC	30116.	258.47	1.14	0.	0.	0.4161	121.87	107.55	-14.32
CONTEL OF S.C.	SC	13458.	266.38	1.17	27500.	2.04	0.2639	73.16	72.34	-0.82
HORRY TEL. COOP. INC.	SC	39157.	203.80	0.90	0.	0.	0.2676	55.74	54.54	-1.20
MCCLELLANVILLE TEL. CO. INC.	SC	1126.	275.62	1.21	6528.	5.80	0.2768	83.38	82.09	-1.29
POND BRANCH TEL. CO. INC.	SC	7303.	253.90	1.12	0.	0.	0.2280	56.04	57.89	1.85
WILLISTON TELEPHONE COMPANY	SC	3437.	319.14	1.40	80691.	23.48	0.2329	91.29	97.80	6.51
SOUTHERN BELL-SOUTH CAROLINA	SC	1008315.	334.21	1.47	4591804.	4.55	0.2390	82.32	84.43	2.11
AVERAGE SCHEDULE COMPANIES - SC (17)	SC	159641.	244.14	1.07	0.	0.	0.2838	72.02	69.29	-2.73
CONTEL OF SOUTH DAKOTA	SD	7709.	324.03	1.43	196313.	25.47	0.3038	124.61	123.91	-0.71
CHEYENNE RIVER SIOUX TRIBAL TEL AUTH	SD	1813.	455.84	2.01	156271.	86.19	0.2685	194.13	208.59	14.46
GOLDEN WEST TEL. COOP., INC	SD	11699.	343.87	1.51	394380.	33.71	0.3084	139.69	139.76	0.07
JEFFERSON TELEPHONE COMPANY - SD	SD	466.	253.11	1.11	0.	0.	0.5373	150.83	136.00	-14.83
KADOKA TELEPHONE COMPANY	SD	513.	207.84	0.91	0.	0.	0.4737	108.84	98.45	-10.39
KENNEBEC TELEPHONE COMPANY	SD	265.	679.77	2.99	50659.	191.16	0.2700	341.02	374.70	33.68
WEST RIVER COOPERATIVE TEL. CO.	SD	1506.	609.38	2.68	238205.	158.17	0.2807	303.87	329.22	25.36
NORTHWESTERN BELL-SOUTH DAKOTA	SD	246878.	228.55	1.01	0.	0.	0.2920	69.94	66.74	-3.20
AVERAGE SCHEDULE COMPANIES - SD (23)	SD	49591.	260.94	1.15	182156.	3.67	0.2838	79.92	77.73	-2.19
GTE SOUTH INC. - TENNESSEE	TN	48457.	311.99	1.37	996852.	20.57	0.2438	91.90	96.63	4.74
ADAMSVILLE TELEPHONE COMPANY INC.	TN	5585.	362.60	1.60	237307.	42.49	0.2474	123.37	132.20	8.82
UNITED INTER-MOUNTAIN TEL. COMPANY-TN	TN	161332.	235.31	1.04	0.	0.	0.2385	55.20	56.12	0.92
MILLINGTON TELEPHONE COMPANY INC.	TN	16769.	209.83	0.92	0.	0.	0.3028	67.23	63.54	-3.69
TENNESSEE TELEPHONE COMPANY	TN	34802.	288.01	1.27	376915.	10.83	0.2215	69.75	74.62	4.87
TWIN LAKES TEL. COOP. CORP.	TN	23423.	242.99	1.07	0.	0.	0.2219	51.66	53.92	2.26
SOUTH CENTRAL BELL-TENNESSEE	TN	1885165.	237.03	1.04	0.	0.	0.2401	56.13	56.91	0.78
AVERAGE SCHEDULE COMPANIES - TN (18)	TN	142507.	244.17	1.07	0.	0.	0.2838	72.03	69.29	-2.73
CAMERON TELEPHONE COMPANY - TEXAS	TX	984.	353.57	1.56	37648.	38.26	0.2426	115.54	124.04	8.50
SIG BEND TELEPHONE COMPANY INC.	TX	2609.	1205.47	5.30	1141668.	437.59	0.3105	748.72	811.89	63.17
BRAZORIA TEL. CO.	TX	5255.	470.44	2.07	488942.	93.04	0.2101	167.02	191.88	24.87
BRAZOS TELEPHONE COOPERATIVE INC.	TX	1133.	757.22	3.33	257716.	227.46	0.2177	338.71	392.31	53.59
CAP ROCK TELEPHONE COMPANY INC.	TX	2217.	433.03	1.91	167397.	75.51	0.2192	150.91	170.43	19.52
CENTRAL TEXAS TELEPHONE CO-OP. INC.	TX	3516.	923.24	4.06	1073408.	305.29	0.2101	426.02	499.27	73.25
COLORADO VALLEY TELEPHONE CO-OP. INC.	TX	4841.	429.82	1.89	358233.	74.00	0.2088	143.06	163.75	20.69
BELL TELEPHONE CO-OP. INC.	TX	456.	2620.62	11.53	502027.	1100.94	0.3581	1913.80	2039.738	125.98
EASTEX TELEPHONE COOPERATIVE INC.	TX	20161.	426.66	1.88	1462030.	72.52	0.2322	154.57	171.59	17.02
ETEX TELEPHONE COOPERATIVE INC.	TX	9061.	305.62	1.34	162947.	17.98	0.2154	76.70	83.81	7.11
FIVE AREA TELEPHONE CO-OP. INC.	TX	1447.	976.05	4.29	477573.	330.04	0.2558	515.56	579.72	64.15
FORT BEND TELEPHONE COMPANY	TX	17142.	368.94	1.62	779316.	45.46	0.2613	134.18	141.87	7.69
GANADO TELEPHONE COMPANY INC.	TX	1275.	393.08	1.73	72395.	56.78	0.1979	116.38	134.57	18.20

TABLE 3.4

1990 SEPARATIONS ESTIMATES USING NECA NTS COST DATA FOR 1988 - INDIVIDUAL STUDY AREAS

NAME	ST	LOOPS	URRPL	RTNA	HCA	HCAPL	SPF	OIRRPL	NIRRPL	CIRRPL
GTE SOUTHWEST INC. - TEXAS	TX	1060811.	349.55	1.54	5847706.	5.51	0.2502	91.90	92.97	1.07
GUADALUPE VALLEY TEL CO-OP. INC.	TX	15208.	346.76	1.53	533306.	35.07	0.2420	111.07	118.98	7.92
UNITED TELEPHONE CO. OF TEXAS INC.	TX	99259.	375.18	1.65	4802782.	48.39	0.2208	117.91	131.23	13.32
HILL COUNTRY TELEPHONE CO-OP. INC.	TX	9034.	525.87	2.31	1075271.	119.02	0.2501	226.79	250.55	23.75
INDUSTRY TELEPHONE COMPANY	TX	1541.	856.57	3.77	422297.	274.04	0.2086	386.09	452.72	66.63
KERRVILLE TELEPHONE COMPANY	TX	14392.	190.03	0.84	0.	0.	0.2838	56.06	53.93	-2.13
LAKE DALLAS TELEPHONE COMPANY, INC.	TX	4185.	539.47	2.37	524791.	125.40	0.2991	270.47	286.75	16.29
LA WARD TELEPHONE EXCHANGE INC.	TX	871.	614.00	2.70	139652.	160.34	0.2186	256.10	294.56	38.45
LAKE LIVINGSTON TELEPHONE COMPANY	TX	944.	532.91	2.34	115475.	122.32	0.2808	252.99	271.97	18.98
LUFKIN-CONROE TELEPHONE EXCHANGE INC.	TX	59737.	285.05	1.25	575102.	9.63	0.2491	78.62	80.63	2.01
MID-PLAINS RURAL TEL. CO-OP. INC.	TX	2026.	607.18	2.67	318358.	157.14	0.2298	261.17	296.67	35.50
CENTEL OF TEXAS	TX	123833.	294.40	1.30	1662720.	13.43	0.3005	104.15	101.89	-2.26
MUENSTER TELEPHONE CORP. OF TEXAS	TX	2539.	311.08	1.37	51293.	20.20	0.2292	85.28	91.50	6.22
MUSTANG TELEPHONE COMPANY	TX	2340.	397.63	1.75	137851.	58.91	0.4513	253.26	238.36	-14.90
ALLTEL TEXAS INC.	TX	2627.	316.85	1.39	59231.	22.55	0.2523	98.20	102.49	4.29
PEOPLES TELEPHONE COOPERATIVE - TX	TX	6821.	347.79	1.53	242479.	35.55	0.2170	100.08	111.02	10.94
POKA-LAMBRO RURAL TEL. CO-OP. INC.	TX	3237.	543.41	2.39	411897.	127.25	0.2084	207.55	240.49	32.95
RIVIERA TELEPHONE COMPANY INC.	TX	819.	597.84	2.63	125111.	152.76	0.2422	265.51	297.56	32.05
SOUTHWEST TEXAS TELEPHONE COMPANY	TX	2480.	987.82	4.35	832190.	335.56	0.2264	484.39	559.20	74.82
ROMAIN TELEPHONE COMPANY	TX	838.	609.28	2.68	132505.	158.12	0.2644	290.51	319.21	28.70
SUGAR LAND TEL. CO.	TX	27345.	284.83	1.25	260852.	9.54	0.2715	87.01	86.87	-0.14
TATUM TELEPHONE COMPANY	TX	664.	222.12	0.98	0.	0.	0.2838	65.53	63.04	-2.49
TAYLOR TEL. CO-OP., INC.	TX	5218.	397.69	1.75	307544.	58.94	0.2158	128.44	144.76	16.32
TEXAS-MIDLAND TELEPHONE COMPANY	TX	9425.	620.68	2.73	1540670.	163.47	0.2227	263.41	301.69	38.28
CENTEL OF TEXAS	TX	148020.	474.71	2.09	14068341.	95.04	0.2384	187.35	208.21	20.86
TRI-COUNTY TEL CO INC - TX	TX	772.	721.24	3.17	162585.	210.60	0.2159	315.98	366.32	50.34
TRINITY VALLEY TELEPHONE COMPANY INC.	TX	5090.	550.03	2.42	663470.	130.35	0.2477	240.14	266.59	26.45
VALLEY TELEPHONE CO-OP. INC. - TX	TX	4363.	896.01	3.94	1276291.	292.53	0.2257	428.99	494.76	65.76
WATERWOOD COMMUNICATIONS INC.	TX	380.	578.78	2.55	54653.	143.82	0.4382	404.97	397.44	-7.52
WEST TEXAS RURAL TEL. CO-OP. INC.	TX	1749.	665.87	2.93	322953.	184.65	0.2859	346.08	375.02	28.94
WES-TEX TELEPHONE CO-OP.	TX	3044.	390.26	1.72	168805.	55.46	0.2117	121.99	138.07	16.09
XIT RURAL TELEPHONE CO-OP. INC.	TX	1005.	828.94	3.65	262392.	261.09	0.3354	510.52	539.11	28.59
E.N.M.R. TEL. COOP., INC.-TX	TX	749.	347.15	1.53	26404.	35.25	0.2696	124.05	128.85	4.79
SOUTHWESTERN BELL-TEXAS	TX	6253586.	259.22	1.14	0.	0.	0.2443	62.84	63.33	0.49
AVERAGE SCHEDULE COMPANIES - TX (13)	TX	42326.	258.46	1.14	169955.	4.02	0.2838	79.46	77.37	-2.09
CENTEL OF THE WEST - UTAE	UT	13799.	403.10	1.77	848277.	61.47	0.3037	178.86	183.89	5.04
NAVAJO COMMUNICATIONS COMPANY - UT	UT	297.	838.41	3.69	78861.	265.53	0.4750	673.54	663.77	-9.78
CENTRAL UTAE TEL. INC.	UT	735.	282.74	1.24	6388.	8.69	0.2295	69.89	73.58	3.69
EMERY COUNTY FARMERS UNION TEL ASSN	UT	2413.	198.83	0.87	0.	0.	0.2552	51.08	50.74	-0.34
KAMAS-WOODLAND TEL. CO.	UT	1550.	368.83	1.62	70386.	45.41	0.2487	127.91	137.14	9.23
BEEHIVE TELEPHONE CO., INC.-UT	UT	489.	647.29	2.85	86034.	175.94	0.2308	286.00	325.33	39.33
SOUTH CENTRAL UTAE TEL. ASSN. INC.	UT	2701.	230.74	1.02	0.	0.	0.3261	81.11	75.25	-5.86
UINTAH BASIN TEL. ASSN. INC.	UT	2166.	524.09	2.31	255996.	118.19	0.2703	239.78	259.85	20.07
UTAE-WYOMING TELECOM - UT	UT	429.	279.34	1.23	3136.	7.31	0.3823	124.96	114.10	-10.86
MOUNTAIN BELL-UTAH	UT	674417.	193.41	0.85	0.	0.	0.2761	55.08	53.40	-1.68
AVERAGE SCHEDULE COMPANIES - UT (3)	UT	2523.	244.14	1.07	0.	0.	0.2838	72.02	69.29	-2.73
LUDLOW TEL. CO.	VT	3648.	188.70	0.83	0.	0.	0.3485	71.97	65.76	-6.21
NORFIELD TEL. CO.	VT	2525.	158.23	0.70	0.	0.	0.4643	81.38	73.46	-7.91
PERKINSVILLE TEL. CO.	VT	734.	261.62	1.15	80.	0.11	0.3604	104.00	94.40	-9.60
TOPSHAM TEL. CO., INC.	VT	1008.	246.50	1.06	0.	0.	0.3054	79.82	75.28	-4.54
WAITSFIELD/PAYSTON TEL. CO.	VT	4285.	301.75	1.33	70336.	16.41	0.4600	173.06	155.22	-17.84
CENTEL OF VERMONT	VT	31928.	370.34	1.63	1472474.	46.12	0.3692	188.36	182.85	-5.52
NEW ENGLAND TEL.-VT	VT	248014.	335.62	1.48	1151230.	4.64	0.3210	119.40	112.37	-7.03
AVERAGE SCHEDULE COMPANIES - VT (2)	VT	2879.	255.09	1.12	0.	0.	0.2838	75.25	72.39	-2.86

TABLE 3.4

1990 SEPARATIONS ESTIMATES USING NECA NTS COST DATA FOR 1988 - INDIVIDUAL STUDY AREAS

NAME	ST	LOOPS	URRPL	RTNA	HCA	HCAPL	SPP	OIRRPL	NIRRPL	CIRRPL
VIRGIN ISLANDS TELEPHONE CORPORATION	VI	44067.	423.31	1.86	3127968.	70.95	0.3300	207.76	210.64	2.89
AMELIA TEL. CORP.	VA	2986.	402.37	1.77	182544.	61.13	0.2172	131.92	148.53	16.61
CONTEL OF VIRGINIA	VA	329814.	270.79	1.19	194581.	0.59	0.2780	78.30	75.87	-2.43
ROANOKE & BOTETOURT TEL. CO.	VA	6152.	282.98	1.25	54062.	8.79	0.2429	75.11	77.52	2.41
CENTEL OF VIRGINIA	VA	203716.	251.36	1.11	0.	0.	0.2651	67.92	66.64	-1.28
GTE SOUTH INC. - VIRGINIA	VA	28892.	325.45	1.43	752422.	26.04	0.2314	94.13	101.35	7.23
UNITED INTER-MOUNTAIN TELEPHONE CO-VA	VA	73214.	266.98	1.17	167578.	2.29	0.2361	63.64	65.32	1.69
C & P TELEPHONE COMPANY OF VIRGINIA	VA	2402558.	218.64	0.96	0.	0.	0.2572	56.76	56.23	-0.52
AVERAGE SCHEDULE COMPANIES - VA (13)	VA	66285.	245.90	1.08	29753.	0.45	0.2838	72.90	70.24	-2.66
UNITED TELEPHONE CO OF THE NW - WA	WA	49227.	332.06	1.46	1414153.	28.73	0.3086	131.96	131.20	-0.76
ASOTIA TELEPHONE COMPANY - WA	WA	813.	530.01	2.33	98344.	120.96	0.2591	235.74	258.29	22.55
TELEPHONE UTILITIES OF WA INC.	WA	73305.	303.76	1.34	1263046.	17.23	0.3249	120.04	115.92	-4.12
CONICHE TELEPHONE CO. INC.	WA	1422.	240.01	1.06	0.	0.	0.2706	66.60	64.95	-1.66
ELLENSBURG TELEPHONE COMPANY	WA	14043.	177.94	0.78	0.	0.	0.2677	48.68	47.63	-1.05
GTE NORTHWEST INC. - WASHINGTON	WA	460264.	268.40	1.18	202857.	0.44	0.2786	77.71	75.22	-2.49
HAT ISLAND TELEPHONE COMPANY	WA	51.	203.37	0.89	0.	0.	0.3681	82.87	74.86	-8.01
HOOD CANAL TELEPHONE COMPANY	WA	709.	329.33	1.45	19582.	27.62	0.3318	140.36	136.89	-3.47
INLAND TELEPHONE COMPANY - WA	WA	1440.	485.29	2.14	144003.	100.00	0.2913	228.06	241.37	13.30
KALAMA TELEPHONE COMPANY	WA	1546.	307.13	1.35	28757.	18.60	0.3374	127.48	122.23	-5.25
LEWIS RIVER TELEPHONE COMPANY INC.	WA	2298.	338.68	1.49	72195.	31.42	0.3214	142.08	140.27	-1.81
MASHELL TELEPHONE COMPANY INC.	WA	1830.	388.82	1.71	100250.	54.78	0.2628	147.64	156.96	9.32
PENINSULA TELECOMMUNICATIONS, INC.	WA	4124.	300.83	1.32	66150.	16.04	0.2871	102.90	102.41	-0.49
PIONEER TELEPHONE COMPANY	WA	727.	606.64	2.67	114055.	156.88	0.2710	294.15	321.28	27.13
ST. JOHN TELEPHONE CO.	WA	537.	322.10	1.42	13255.	24.68	0.2454	98.28	103.73	5.45
TENING TEL. CO.	WA	2054.	360.86	1.59	85604.	41.68	0.2445	120.92	129.91	8.98
TOLEDO TELEPHONE COMPANY INC.	WA	1323.	364.76	1.61	57557.	43.50	0.2437	122.93	132.40	9.47
CONTEL OF THE NORTHWEST INC. - WA	WA	47509.	414.78	1.83	3180656.	66.95	0.2801	173.93	183.13	9.20
WESTERN WAKIAKUM COUNTY TEL COMPANY	WA	843.	375.56	1.65	40940.	48.56	0.2554	135.45	144.48	9.04
WEIDBEY TEL. CO.	WA	6905.	389.35	1.71	379982.	55.03	0.2706	152.07	160.39	8.32
YELM TELEPHONE COMPANY	WA	4968.	271.37	1.19	20234.	4.07	0.2635	75.99	75.58	-0.41
PACIFIC NORTHWEST BELL-WASHINGTON	WA	1739290.	198.08	0.87	0.	0.	0.2697	54.71	53.42	-1.29
AVERAGE SCHEDULE COMPANIES - WA (1)	WA	2044.	244.14	1.07	0.	0.	0.2838	72.02	69.29	-2.73
HARDY TELEPHONE COMPANY	WV	1879.	531.92	2.34	228971.	121.86	0.2510	231.16	255.37	24.21
MOUNTAIN STATE TELEPHONE CO.	WV	15303.	487.79	2.15	1548238.	101.17	0.2385	195.37	217.51	22.14
CONTEL OF WEST VIRGINIA	WV	23677.	422.52	1.86	1671077.	70.58	0.2404	156.68	172.15	15.47
GTE SOUTH INC. - WEST VIRGINIA	WV	62610.	342.10	1.51	2058649.	32.88	0.2662	119.25	123.95	4.69
C & P TELEPHONE COMPANY OF W VA	WV	653816.	340.26	1.50	3224839.	4.93	0.2369	83.09	85.54	2.45
AVERAGE SCHEDULE COMPANIES - WV (5)	WV	10051.	244.14	1.07	0.	0.	0.2838	72.02	69.29	-2.73
CENCOM OF WISCONSIN INC.	WI	21879.	271.21	1.19	87667.	4.01	0.2463	69.68	70.81	1.13
CENTRAL STATE TELEPHONE COMPANY	WI	6984.	300.89	1.32	112179.	16.06	0.2321	80.88	85.90	5.02
CHEQUAMEGON TELEPHONE COOP INC.	WI	5623.	233.76	1.03	0.	0.	0.3162	79.08	73.91	-5.17
CRANDON TELEPHONE COMPANY	WI	2279.	315.98	1.39	50582.	22.19	0.2221	85.00	92.37	7.38
GTE NORTH INC. - WISCONSIN	WI	334955.	300.32	1.32	815969.	2.44	0.2542	78.71	78.78	0.07
HEADWATERS TEL. CO.	WI	3528.	279.17	1.23	25546.	7.24	0.2779	85.97	84.82	-1.15
CENTURY TELEPHONE OF WISCONSIN INC.	WI	41737.	186.65	0.82	0.	0.	0.2547	47.82	47.54	-0.28
MARQUETTE-ADAMS TEL. COOP. INC.	WI	2528.	227.85	1.00	0.	0.	0.3687	93.03	84.01	-9.02
MIDWAY TELEPHONE COMPANY	WI	6120.	214.93	0.95	0.	0.	0.2320	48.57	49.86	1.29
MONROE COUNTY TELEPHONE COMPANY	WI	8588.	290.33	0.88	0.	0.	0.2733	56.29	54.75	-1.54
MOUNT MORIS TELEPHONE COMPANY	WI	2871.	262.50	1.16	1546.	0.47	0.2447	64.14	64.70	0.57
MOUNT VERNON TELEPHONE COMPANY	WI	5367.	178.89	0.79	0.	0.	0.2377	41.79	42.52	0.73
NORTH-WEST TELEPHONE COMPANY	WI	53065.	223.20	0.98	0.	0.	0.2490	55.51	55.58	0.07
PEOPLES TELEPHONE CO OF RANDOLPH	WI	5513.	242.64	1.07	0.	0.	0.2309	54.47	56.03	1.56
PLATTEVILLE TELEPHONE COMPANY	WI	7306.	154.27	0.68	0.	0.	0.2809	44.92	43.33	-1.59
INDIANHEAD TEL. CO.	WI	1614.	310.34	1.37	32126.	19.93	0.2898	109.99	109.84	-0.15

TABLE 3.4

1990 SEPARATIONS ESTIMATES USING NECA NTS COST DATA FOR 1988 - INDIVIDUAL STUDY AREAS

NAME	ST	LOOPS	URRPL	RTNA	ECA	HCAPL	SPF	OIRRPL	MIRRPL	CIRRPL
PRICE COUNTY TELEPHONE COMPANY	WI	3376.	320.39	1.41	80982.	23.99	0.2653	105.82	108.99	3.16
RHEINELANDER TEL. CO.	WI	8944.	169.98	0.75	0.	0.	0.2426	40.81	41.24	0.42
SOLOM SPRINGS TEL. CO.	WI	13864.	211.90	0.93	0.	0.	0.2956	65.86	62.64	-3.22
SOUTHEAST TEL. CO. OF WIS., INC.	WI	5616.	232.28	1.02	0.	0.	0.2258	50.59	52.45	1.86
UNIVERSAL TEL. CO. OF NORTHERN WIS. INC	WI	10039.	248.32	1.09	0.	0.	0.2655	67.22	65.93	-1.29
UTELCO, INC.	WI	12316.	175.35	0.77	0.	0.	0.2599	46.15	45.57	-0.58
URBAN TELEPHONE CORPORATION	WI	16115.	182.87	0.80	0.	0.	0.2322	41.38	42.46	1.08
WOOD COUNTY TELEPHONE COMPANY	WI	20337.	137.55	0.61	0.	0.	0.2325	31.18	31.98	0.80
WISCONSIN BELL	WI	1615058.	197.05	0.87	0.	0.	0.2388	46.33	47.05	0.73
AVERAGE SCHEDULE COMPANIES - WI (73)	WI	169164.	244.55	1.08	17043.	0.10	0.2838	72.22	69.50	-2.72
UNITED TELEPHONE CO. OF THE WEST-WY	WY	5815.	226.02	0.99	0.	0.	0.3439	84.80	77.73	-7.07
RANGE TEL. COOPERATIVE INC.	WY	1322.	555.07	2.44	175446.	132.71	0.3970	353.73	353.08	-0.66
UTAH-WYOMING TELECOM - WY	WY	293.	256.42	1.13	0.	0.	0.5800	161.55	148.73	-12.82
DUBOIS TELEPHONE EXCHANGE INC.	WY	1519.	582.68	2.56	221246.	145.65	0.4112	387.41	385.25	-2.16
SILVER STAR TEL. CO.- WY	WY	1003.	317.17	1.40	22747.	22.68	0.5700	214.79	203.47	-11.32
UNION TELEPHONE CO.	WY	2782.	322.50	1.42	69115.	24.84	0.5444	211.57	200.41	-11.16
TELEPHONE UTILITIES OF WYOMING, INC.	WY	2844.	313.40	1.38	60135.	21.14	0.5380	201.19	189.75	-11.44
MOUNTAIN BELL-WYOMING	WY	212012.	442.68	1.95	4498334.	21.22	0.3689	197.81	184.52	-13.29
AVERAGE SCHEDULE COMPANIES - WY (3)	WY	1378.	308.05	1.36	24467.	17.76	0.2838	105.08	105.18	0.10

TABLE 3.4

1990 SEPARATIONS ESTIMATES USING NECA NTS COST DATA FOR 1988 - INDIVIDUAL STUDY AREAS

EXPLANATION OF COLUMN HEADINGS

NAME	NAME OF STUDY AREA
ST	STATE (POSTAL ABBREVIATION)
LOOPS	NUMBER OF OSP CAT 1.3 WORKING LOOPS
URRPL	UNSEPARATED NTS REVENUE REQUIREMENT PER LOOP
RTNA	RATIO OF URRPL TO NATIONAL AVERAGE
HCA	HIGH COST ASSISTANCE (AT 5/8 TRANSITION)
HCAPL	HIGH COST ASSISTANCE PER LOOP
SPF	1990 TRANSITIONAL SUBSCRIBER PLANT FACTOR
OIRRPL	OLD (1989 SPF + 1/2 HCA) INTERSTATE NTS REVENUE REQUIREMENT PER LOOP
NIRRPL	NEW (1990 SPF + 5/8 HCA) INTERSTATE NTS REVENUE REQUIREMENT PER LOOP
CIRRPL	CHANGE IN INTERSTATE REVENUE REQUIREMENT PER LOOP

TABLE 3.5

National Exchange Carrier Association
 Universal Service Fund
 Individual Study Areas
 Percentage Changes from 1987 to 1988

STUDY AREA CODE	COMPANY NAME	UNSEPARATED NTS REVENUE REQUIREMENT	NUMBER OF LOOPS	UNSEPARATED NTS REVENUE REQUIREMENT PER LOOP	UNIVERSAL SERVICE FUND AFTER FULL TRANSITION	UNIVERSAL SERVICE FUND APPLICABLE TO LATER YEAR
TOTAL:	INDUSTRY	4.29%	3.48%	0.78%	8.64%	35.79%
TOTAL:	ALABAMA	6.13%	5.42%	0.67%	21.02%	51.27%
250281	CONTINENTAL TEL CO OF THE SOUTH - AL	4.74%	3.70%	1.00%	5.83%	32.29%
250282	BLOUNTSVILLE TEL. COMPANY INC.	11.09%	2.33%	8.57%	0.00%	0.00%
250283	BRINDLEE MOUNTAIN TEL. COMPANY	14.28%	5.26%	8.57%	0.00%	0.00%
250284	BUTLER TELEPHONE CO. INC.	3.25%	0.57%	2.66%	9.83%	37.29%
250285	CASTLEBERRY TEL. COMPANY INC.	12.79%	3.88%	8.57%	0.00%	0.00%
250286	NATIONAL TEL. CO. OF AL	13.12%	4.19%	8.57%	0.00%	0.00%
250290	FARMERS TEL COOP INC - ALABAMA	12.96%	4.05%	8.57%	0.00%	0.00%
250293	GTE SOUTH INC. - ALABAMA	6.50%	2.34%	4.07%	20.94%	51.18%
250295	GRACEBA TOTAL COMMUNICATIONS	10.81%	2.06%	8.57%	0.00%	0.00%
250296	GOSHEN TELEPHONE COMPANY	11.99%	3.15%	8.57%	0.00%	0.00%
250297	GROVE HILL TEL. CORP.	12.12%	1.47%	10.49%	258.18%	347.72%
250298	GULF TELEPHONE COMPANY - ALABAMA	12.83%	6.29%	6.16%	226.05%	307.56%
250299	HAYNEVILLE TEL. COMPANY INC.	13.80%	4.82%	8.57%	0.00%	0.00%
250300	HOPPER TEL. COMPANY INC.	-6.68%	1.62%	-8.17%	-26.78%	-8.48%
250301	LAMAR COUNTY TEL. COMPANY	10.21%	1.51%	8.57%	0.00%	0.00%
250302	ALLTEL ALABAMA	93.67%	5.52%	83.54%	ERR	ERR
250304	MILLRY TELEPHONE CO. INC	-4.59%	2.71%	-7.11%	-13.74%	7.82%
250305	MON-CRE TEL. COOP. INC.	19.59%	10.15%	8.57%	0.00%	0.00%
250306	MONROEVILLE TELEPHONE COMPANY	3.68%	8.00%	-4.00%	-11.97%	10.04%
250307	MOUNDEVILLE TELEPHONE COMPANY	9.97%	1.29%	8.57%	0.00%	0.00%
250308	NEW HOPE TEL. COOP. INC.- AL	14.52%	5.48%	8.57%	0.00%	0.00%
250311	OAKMAN TEL. COMPANY INC.	7.63%	-0.86%	8.57%	0.00%	0.00%
250312	ONEONTA TEL. COMPANY INC.	13.26%	4.32%	8.57%	0.00%	0.00%
250314	PEOPLES TELEPHONE COMPANY	-2.93%	4.89%	-7.45%	-23.34%	-4.17%
250315	PINE BELT TELEPHONE COMPANY	11.39%	2.60%	8.57%	0.00%	0.00%
250316	RAGLAND TEL. CO.	0.88%	2.81%	-1.87%	-22.72%	-3.40%
250317	ROANOKE TEL. CO. INC.	11.57%	2.76%	8.57%	0.00%	0.00%
250318	SOUTHLAND TEL. CO.-AL	11.92%	2.20%	9.51%	52.41%	90.52%
250322	UNION SPRINGS TEL. COMPANY	10.42%	1.70%	8.57%	0.00%	0.00%
255181	SOUTH CENTRAL BELL-AL	5.11%	5.87%	-0.72%	0.00%	0.00%
TOTAL:	ALASKA	-1.04%	3.13%	-4.05%	-4.81%	18.99%
613000	ANCHORAGE TELEPHONE UTILITY	-5.42%	0.95%	-6.31%	0.00%	0.00%
613001	ARCTIC SLOPE TEL. ASSOCIATION COOP. INC	-16.37%	2.94%	-18.76%	-22.46%	-3.08%
613002	BETTLES TELEPHONE CO. INC.	-7.79%	-2.22%	-5.70%	-13.73%	7.84%
613003	BRISTOL BAY TELEPHONE COOP. INC.	14.91%	13.10%	1.60%	15.66%	44.58%
613004	BUSH-TELL INC.	19.64%	-2.67%	22.92%	41.00%	76.25%
613005	CIRCLE UTILITIES	-2.37%	0.00%	-2.37%	-4.32%	19.60%
613006	COPPER VALLEY TEL. COOP. INC.	-10.11%	1.49%	-11.43%	-18.94%	1.32%
613007	CORDOVA TELEPHONE COOPERATIVE, INC.	-9.88%	5.82%	-14.84%	-41.87%	-27.34%
613008	FAIRBANKS MUNICIPAL UTILITIES SYSTEM	-8.74%	9.29%	-16.50%	-35.48%	-19.35%
613009	GTE ALASKA INCORPORATED	12.95%	6.91%	5.64%	0.00%	0.00%
613010	GLACIER STATE TELEPHONE COMPANY	2.86%	5.94%	-2.91%	0.62%	25.78%
613011	INTERIOR TELEPHONE COMPANY INC.	7.17%	14.06%	-6.04%	3.98%	29.97%
613012	JUNEAU & DOUGLAS TELEPHONE COMPANY	0.13%	7.66%	-6.99%	-21.60%	-2.00%
613013	KETCHIKAN PUBLIC UTILITIES	-25.46%	6.61%	-30.08%	-65.83%	-57.29%
613015	MATANUSKA TELEPHONE ASSOC., INC.	0.66%	-1.86%	2.57%	2.06%	27.58%
613016	MUKLUK TEL. COMPANY, INC.	-3.19%	5.94%	-8.62%	-6.54%	16.83%
613017	NATIONAL UTILITIES INC.	5.80%	14.42%	-7.53%	-41.05%	-26.31%
613018	NUSHAGAK TELEPHONE COOPERATIVE, INC.	2.12%	1.91%	0.20%	1.94%	27.42%
613019	OTZ TELEPHONE COOPERATIVE, INC.	-0.70%	-3.00%	2.37%	2.07%	27.58%
613020	SITKA TELEPHONE COMPANY	30.65%	0.30%	30.26%	72.98%	116.23%
613022	TELEPHONE UTILITIES OF ALASKA	57.32%	9.04%	44.27%	0.00%	0.00%
613023	UNITED UTILITIES INC.	6.20%	10.98%	-4.31%	2.48%	28.10%
613025	YUKON TELEPHONE COMPANY, INC.	-5.40%	-9.55%	4.59%	-3.27%	20.92%
613026	NORTH COUNTRY TELEPHONE COMPANY	1.74%	14.46%	-11.11%	-17.41%	3.23%
613028	SUMMIT TEL & TEL CO OF ALASKA	-5.10%	0.00%	-5.10%	-10.20%	12.25%

TABLE 3.5

National Exchange Carrier Association
Universal Service Fund
Individual Study Areas
Percentage Changes from 1987 to 1988

STUDY AREA CODE	COMPANY NAME	UNSEPARATED NTS REVENUE REQUIREMENT	NUMBER OF LOOPS	UNSEPARATED NTS REVENUE REQUIREMENT PER LOOP	UNIVERSAL SERVICE FUND AFTER FULL TRANSITION	UNIVERSAL SERVICE FUND APPLICABLE TO LATER YEAR
TOTAL:	ARIZONA	6.13%	4.21%	1.84%	7.82%	34.77%
452171	ARIZONA TEL. CO.	-11.54%	3.44%	-14.48%	-25.09%	-6.36%
452172	CITIZENS UTILITIES RURAL COMPANY INC.	8.50%	-0.35%	8.89%	22.71%	53.39%
452173	PAPAGO TRIBAL UTILITY AUTHORITY	109.94%	115.55%	-2.60%	100.65%	150.81%
452174	SOUTHWESTERN TEL. CO.	48.11%	36.42%	8.57%	0.00%	0.00%
452175	UNIVERSAL TEL CO OF SOUTHWEST - AZ	-13.54%	5.36%	-17.94%	-100.00%	-100.00%
452176	VALLEY TELEPHONE COOPERATIVE INC-AZ	2.78%	5.32%	-2.42%	1.00%	26.25%
452177	CONTEL OF THE WEST - ARIZONA	8.49%	3.06%	5.27%	14.47%	43.09%
452275	NAVAJO COMMUNICATIONS CO. INC. - AZ	-10.70%	5.31%	-15.21%	-17.28%	3.40%
452302	CONTEL OF CALIFORNIA - ARIZONA	7.22%	4.46%	2.64%	14.89%	43.61%
455101	MOUNTAIN BELL-ARIZONA	6.18%	4.25%	1.84%	0.00%	0.00%
TOTAL:	ARKANSAS	1.88%	2.18%	-0.29%	22.48%	53.10%
401691	ALLTEL ARKANSAS, INC.	4.41%	3.82%	0.57%	4.70%	30.88%
401692	ARKANSAS TELEPHONE COMPANY	-0.34%	4.83%	-4.94%	0.00%	0.00%
401697	CENTRAL ARKANSAS TEL. COOP INC.	1.84%	0.72%	1.11%	4.18%	30.22%
401698	CLEVELAND COUNTY TEL. CO.	71.68%	57.10%	9.28%	83.08%	128.85%
401699	DECATUR TELEPHONE CO INC- ARKANSAS	79.17%	36.94%	30.83%	315.92%	419.90%
401702	SOUTH ARKANSAS TEL. CO., INC.	4.50%	3.85%	0.62%	5.28%	31.60%
401704	LAVACA TELEPHONE-AR	14.72%	5.66%	8.57%	0.00%	0.00%
401705	LIBERTY TEL. & COMMUNICATIONS INC.	8.60%	4.38%	4.04%	23.25%	54.06%
401709	MADISON COUNTY TEL. CO. INC.	-4.39%	3.49%	-7.62%	-40.40%	-25.50%
401710	MAGAZINE TELEPHONE COMPANY	5.55%	6.82%	-1.19%	-55.22%	-44.03%
401711	MOUNTAIN HOME TELEPHONE COMPANY INC.	2.47%	4.84%	-2.26%	-90.31%	-87.89%
401712	MOUNTAIN VIEW TELEPHONE COMPANY	14.41%	8.06%	5.88%	0.00%	0.00%
401713	NORTHERN ARKANSAS TEL. CO., INC.	-0.00%	5.54%	-5.25%	-19.52%	0.60%
401717	PERCO TELEPHONE COMPANY	13.89%	3.92%	9.59%	441.03%	576.29%
401718	PRAIRIE GROVE TELEPHONE COMPANY	14.34%	5.32%	8.57%	0.00%	0.00%
401720	REDFIELD TELEPHONE COMPANY INC.	12.92%	3.21%	9.41%	30.64%	63.30%
401721	RICE BELT TEL. CO., INC.	2.07%	3.60%	-1.47%	-25.11%	-6.39%
401722	E. RITTER TELEPHONE COMPANY	11.82%	2.99%	8.57%	0.00%	0.00%
401724	SOUTHWEST ARKANSAS TEL. COOP. INC.	11.78%	2.96%	8.57%	0.00%	0.00%
401726	TRI-COUNTY TEL. CO. INC.-AR	19.96%	0.92%	18.87%	70.79%	113.49%
401727	UNION TELEPHONE COMPANY INC.	0.91%	2.13%	-1.19%	-0.41%	24.48%
401728	UNITED TELEPHONE CO. OF ARKANSAS INC.	-3.43%	9.90%	-12.13%	0.00%	0.00%
401729	WALNUT HILL TELEPHONE COMPANY	6.93%	2.93%	3.89%	10.31%	37.89%
401730	CONTEL OF ARKANSAS, INC.	14.71%	6.45%	7.76%	35.98%	69.97%
401733	YELCOT TEL. CO., INC.	-2.41%	8.75%	-10.27%	-34.96%	-18.71%
401734	YELL COUNTY TELEPHONE COMPANY	9.80%	0.59%	9.15%	0.00%	0.00%
402080	GTE SOUTHWEST INC. - ARKANSAS	17.55%	4.88%	12.08%	53.34%	91.68%
405211	SOUTHWESTERN BELL-ARKANSAS	-2.28%	0.87%	-3.12%	-25.01%	-6.26%
TOTAL:	CALIFORNIA	1.93%	4.95%	-2.87%	-5.83%	17.72%
542301	CALAVERAS TELEPHONE COMPANY	-2.50%	9.87%	-11.26%	-15.47%	5.66%
542302	CONTEL OF CALIFORNIA - CALIFORNIA	12.54%	2.02%	10.31%	54.31%	92.89%
542304	C P NATIONAL CORP. - CALIFORNIA	-1.06%	6.12%	-6.77%	-13.17%	8.54%
542308	CITIZENS UTILITIES CO. OF CALIF.	4.19%	7.17%	-2.78%	0.62%	25.78%
542311	CALIFORNIA-OREGON TELEPHONE CO	6.94%	5.69%	1.18%	7.65%	34.56%
542313	DUCOR TELEPHONE COMPANY	14.58%	9.62%	4.52%	19.92%	49.90%
542315	EVANS TELEPHONE COMPANY	-9.92%	6.58%	-15.48%	-51.88%	-39.85%
542318	FORESTHILL TELEPHONE COMPANY	-10.28%	9.59%	-18.13%	-63.28%	-54.10%
542319	GENERAL TEL CO OF CALIFORNIA	-1.25%	5.18%	-6.12%	-48.12%	-35.15%
542321	HAPPY VALLEY TELEPHONE COMPANY	8.17%	1.98%	6.07%	12.33%	40.41%
542322	HORNITOS TELEPHONE COMPANY	3.06%	6.75%	-3.46%	1.69%	27.11%
542323	WINTERHAVEN TELEPHONE COMPANY					
542324	KERMAN TELEPHONE COMPANY	1.40%	4.59%	-3.05%	-13.29%	8.39%
542332	THE PONDEROSA TELEPHONE COMPANY	7.20%	1.43%	5.68%	10.57%	38.21%
542334	ROSEVILLE TELEPHONE COMPANY	-6.33%	4.00%	-9.93%	0.00%	0.00%
542338	SIERRA TELEPHONE COMPANY, INC.	11.12%	4.43%	6.41%	18.54%	48.17%

TABLE 3.5

National Exchange Carrier Association
Universal Service Fund
Individual Study Areas
Percentage Changes from 1987 to 1988

STUDY AREA CODE	COMPANY NAME	UNSEPARATED NTS REVENUE REQUIREMENT	NUMBER OF LOOPS	UNSEPARATED NTS REVENUE REQUIREMENT PER LOOP	UNIVERSAL SERVICE FUND AFTER FULL TRANSITION	UNIVERSAL SERVICE FUND APPLICABLE TO LATER YEAR
CALIFORNIA (CONT.)						
542339	THE SISKIYOU TELEPHONE CO.	7.86%	4.30%	3.41%	10.93%	38.66%
542342	TUOLUMNE TELEPHONE COMPANY	-11.75%	2.93%	-14.27%	-17.94%	2.57%
542343	THE VOLCANO TELEPHONE COMPANY	-4.05%	4.80%	-8.44%	-29.34%	-11.68%
542344	WEST COAST TEL. CO. OF CALIFORNIA	27.54%	0.34%	27.11%	ERR	ERR
542346	PINNACLES TELEPHONE COMPANY	-45.97%	9.35%	-50.58%	-73.28%	-66.59%
545170	PACIFIC BELL	2.68%	4.95%	-2.16%	ERR	ERR
TOTAL:	COLORADO	9.99%	2.44%	7.37%	-2.58%	21.78%
461835	SUNFLOWER TELEPHONE CO., INC. - CO	9.08%	0.00%	9.08%	17.85%	47.31%
462178	AGATE TELEPHONE CO.	40.61%	80.00%	-21.88%	-1.31%	23.37%
462181	BIJOU TEL COOPERATIVE ASSOC. INC	-17.41%	0.32%	-17.67%	-100.00%	-100.00%
462182	BLANCA TELEPHONE CO.	3.74%	0.22%	3.51%	6.73%	33.42%
462184	DELTA COUNTY TELE-COMM INC.	-0.87%	1.04%	-1.88%	0.00%	0.00%
462185	EAGLE TELECOMMUNICATIONS INC.	15.95%	2.81%	12.78%	34.81%	68.51%
462186	EASTERN SLOPE RURAL TEL ASSN INC	-5.66%	-3.60%	-2.14%	-30.69%	-13.37%
462187	EL PASO COUNTY MUTUAL TEL CO	-21.89%	9.95%	-28.96%	-54.12%	-42.64%
462188	FARMERS TEL CO, INC. - COLORADO	-7.85%	4.09%	-11.47%	-16.20%	4.75%
462190	HAXTUN TELEPHONE COMPANY	27.02%	6.70%	19.05%	130.25%	187.82%
462192	BIG SANDY TELECOM INC.	-9.78%	-1.68%	-8.23%	-14.71%	6.61%
462193	NUCLA-NATURITA TEL. CO.	-12.57%	2.65%	-14.82%	-33.49%	-16.87%
462194	NUNN TEL. COMPANY	4.88%	1.95%	2.87%	7.22%	34.02%
462196	PEETZ COOP. TEL. CO.	-15.85%	1.68%	-17.24%	-34.96%	-18.70%
462197	PHILLIPS COUNTY TEL. CO.	11.27%	2.49%	8.57%	0.00%	0.00%
462198	PINE DRIVE TEL. CO.	20.71%	11.18%	8.57%	0.00%	0.00%
462199	PLAINS COOPERATIVE TEL. ASSOC. INC.	-13.10%	-8.46%	-5.06%	-32.63%	-15.78%
462201	RICO TEL. CO.	-5.61%	2.47%	-7.88%	-17.75%	2.81%
462202	ROGGEN TELEPHONE COOPERATIVE CO.	-5.93%	0.00%	-5.93%	-24.95%	-6.19%
462203	THE RYE TELEPHONE CO. INC.	9.30%	4.79%	4.31%	14.86%	43.58%
462204	COLUMBINE TELEPHONE COMPANY	17.58%	3.64%	13.45%	27.94%	59.92%
462206	STONEHAM COOPERATIVE TEL. CO.	10.79%	28.30%	-13.65%	-8.72%	14.10%
462207	STRASBURG TEL. CO.	-25.01%	2.48%	-26.82%	-100.00%	-100.00%
462208	UNIVERSAL TEL. CO. OF COLORADO	-4.09%	1.75%	-5.75%	-29.25%	-11.57%
462209	WIGGINS TEL. ASSOC.	4.11%	9.71%	-5.11%	-10.92%	11.35%
462210	WILLARD TEL. CO.	-11.59%	-7.02%	-4.91%	-17.22%	3.47%
465102	MOUNTAIN BELL-COLORADO	10.33%	2.45%	7.69%	0.00%	0.00%
TOTAL:	CONNECTICUT	-3.89%	3.80%	-7.42%	0.00%	0.00%
132454	THE WOODBURY TEL. CO.	22.17%	12.53%	8.57%	0.00%	0.00%
135200	SOUTHERN NEW ENGLAND TEL.	-4.11%	3.74%	-7.57%	0.00%	0.00%
TOTAL:	DELAWARE	10.19%	3.02%	6.96%	0.00%	0.00%
565010	DIAMOND STATE TEL. CO.	10.19%	3.02%	6.96%	0.00%	0.00%
TOTAL:	DISTRICT OF COLUMBIA	-17.60%	2.16%	-19.33%	0.00%	0.00%
575020	C & P TELEPHONE CO. OF WASHINGTON DC	-17.60%	2.16%	-19.33%	0.00%	0.00%
TOTAL:	FLORIDA	8.82%	4.77%	3.87%	30.96%	63.70%
210291	FLORALA TELEPHONE COMPANY- FLORIDA	1.48%	3.38%	-1.84%	-4.20%	19.75%
210318	SOUTHLAND TELEPHONE COMPANY-FL	1.51%	3.77%	-2.17%	-5.22%	18.48%
210328	GTE FLORIDA INCORPORATED	11.35%	5.40%	5.65%	130.75%	188.44%
210329	GULF TEL. CO.- FL	-7.27%	4.95%	-11.64%	-100.00%	-100.00%
210330	VISTA-UNITED TELECOMMUNICATIONS SYSTE	44.16%	30.85%	10.17%	0.00%	0.00%
210331	INDIANTOWN TELEPHONE SYSTEM	-1.52%	11.71%	-11.84%	-13.17%	8.54%
210335	NORTHEAST FLORIDA TEL. CO., INC.	17.26%	6.20%	10.42%	40.86%	76.07%
210336	ALLTEL FLORIDA INC.	7.99%	5.95%	1.93%	11.05%	38.81%

TABLE 3.5

National Exchange Carrier Association
 Universal Service Fund
 Individual Study Areas
 Percentage Changes from 1987 to 1988

STUDY AREA CODE	COMPANY NAME	UNSEPARATED NTS REVENUE REQUIREMENT	NUMBER OF LOOPS	UNSEPARATED NTS REVENUE REQUIREMENT PER LOOP	UNIVERSAL SERVICE FUND AFTER FULL TRANSITION	UNIVERSAL SERVICE FUND APPLICABLE TO LATER YEAR
FLORIDA (CONT.)						
210338	QUINCY TELEPHONE CO-FL DIV.	1.88%	7.45%	-5.18%	-25.65%	-7.06%
210339	ST. JOSEPH TEL. AND TELE. CO.	11.61%	3.95%	7.37%	40.72%	75.89%
210340	CENTRAL TELEPHONE COMPANY OF FLORIDA	14.73%	8.66%	5.59%	0.00%	0.00%
210341	UNITED TELEPHONE CO. OF FLORIDA	14.72%	8.41%	5.82%	89.00%	136.25%
215191	SOUTHERN BELL-FLORIDA	6.57%	3.47%	3.00%	22.81%	53.51%
TOTAL:	GEORGIA	9.68%	2.90%	6.59%	35.75%	69.69%
220281	CONTINENTAL TEL CO OF THE SOUTH-GA	-6.33%	3.41%	-9.42%	-41.69%	-27.11%
220324	VALLEY TEL. CO.- GA	63.61%	-0.88%	65.07%	0.00%	0.00%
220338	QUINCY TELEPHONE CO-GA DIV.	-8.38%	6.19%	-13.72%	-44.11%	-30.14%
220344	ALMA TELEPHONE CO INC	4.51%	2.04%	2.42%	11.45%	39.31%
220346	BLUE RIDGE TELEPHONE COMPANY	16.17%	7.00%	8.57%	0.00%	0.00%
220347	BRANTLEY TELEPHONE COMPANY INC.	15.37%	8.21%	6.62%	40.16%	75.20%
220348	BULLOCH COUNTY RURAL TEL. COOP INC.	17.67%	8.38%	8.57%	0.00%	0.00%
220351	CAMDEN TEL & TEL CO INC - GEORGIA	0.91%	10.59%	-8.75%	-37.02%	-21.28%
220354	CHICKAMAUGA TEL. CORP.	-3.86%	-11.45%	8.57%	0.00%	0.00%
220355	CITIZENS TELEPHONE CO INC - GEORGIA	-7.24%	4.33%	-11.09%	-37.11%	-21.39%
220356	COASTAL UTILITIES INC	8.44%	4.40%	3.87%	0.00%	0.00%
220357	ALLTEL GEORGIA INC.	13.12%	4.19%	8.57%	0.00%	0.00%
220358	DARIEN TELEPHONE CO. INC.	-12.36%	4.03%	-15.75%	-64.91%	-56.14%
220360	ELLIJAY TEL. CO.	-0.68%	6.13%	-6.42%	0.00%	0.00%
220362	FAIRMOUNT TELEPHONE CO. INC.	17.99%	8.67%	8.57%	0.00%	0.00%
220364	GEORGIA TELEPHONE CORPORATION	-3.19%	-10.83%	8.57%	0.00%	0.00%
220365	GLENWOOD TEL. CO. INC.	24.05%	14.26%	8.57%	0.00%	0.00%
220368	HART COUNTY TELEPHONE COMPANY	15.06%	5.98%	8.57%	0.00%	0.00%
220369	HAWKINSVILLE TELEPHONE CO.	10.72%	1.98%	8.57%	0.00%	0.00%
220371	INTERSTATE TELEPHONE COMPANY	22.50%	2.10%	19.97%	0.00%	0.00%
220375	NELSON-BALL GROUND TEL. CO.	15.56%	6.44%	8.57%	0.00%	0.00%
220376	PEMBROKE TELEPHONE CO. INC.	12.07%	3.22%	8.57%	0.00%	0.00%
220377	PINELAND TELEPHONE COOP	7.48%	2.92%	4.43%	218.70%	298.37%
220378	PLANTERS RURAL TEL. COOP INC.	12.66%	3.77%	8.57%	0.00%	0.00%
220379	PLANT TELEPHONE COMPANY	-2.77%	5.29%	-7.66%	-18.38%	2.02%
220380	PROGRESSIVE RURAL TEL. COOP INC.	14.02%	5.02%	8.57%	0.00%	0.00%
220381	PUBLIC SERVICE TELEPHONE CO.	-1.26%	6.21%	-7.03%	-15.64%	5.46%
220382	RINGGOLD TEL. COMPANY	15.40%	6.30%	8.57%	0.00%	0.00%
220386	STANDARD TEL. CO.	9.32%	8.47%	0.78%	10.27%	37.84%
220387	STATESBORO TEL. CO.	14.24%	5.22%	8.57%	0.00%	0.00%
220389	TRENTON TELEPHONE COMPANY	13.59%	4.62%	8.57%	0.00%	0.00%
220392	WAVERLY HALL TEL. CO., INC.	-2.32%	8.90%	-10.31%	-63.82%	-54.77%
220394	WILKES TEL & ELECTRIC CO.	18.22%	3.27%	14.48%	0.00%	0.00%
220395	WILKINSON COUNTY TEL. CO. INC.	11.64%	2.83%	8.57%	0.00%	0.00%
220479	GTE SOUTH INC. - GEORGIA	14.04%	4.21%	9.43%	42.80%	78.49%
225192	SOUTHERN BELL-GEORGIA	9.80%	2.63%	6.99%	136.13%	195.17%
TOTAL:	HAWAII	5.23%	8.24%	-2.78%	0.00%	0.00%
623100	GTE HAWAIIAN TEL. CO. INC.	5.23%	8.24%	-2.78%	0.00%	0.00%
TOTAL:	IDAHO	1.04%	3.79%	-2.64%	45.91%	82.39%
472177	CONTEL OF THE WEST - IDAHO	0.28%	2.81%	-2.46%	-3.34%	20.83%
472213	ALBION TEL. CO. INC.	-12.27%	-0.22%	-12.07%	-20.25%	-0.32%
472215	CAMBRIDGE TEL. CO., INC.-ID	1.12%	0.49%	0.62%	1.26%	26.57%
472218	CUSTER TEL. COOPERATIVE INC.	-4.57%	9.35%	-12.73%	-51.48%	-39.35%
472220	FILER MUTUAL TELEPHONE COMPANY - ID	12.13%	3.28%	8.57%	0.00%	0.00%
472221	FARMERS MUTUAL TEL CO LTD. - ID	21.66%	12.06%	8.57%	0.00%	0.00%
472223	GEM STATE UTILITIES CORP-ID	-2.50%	6.50%	-8.45%	-6.08%	17.41%
472225	CENTURY TELEPHONE OF IDAHO	6.70%	4.52%	2.09%	8.58%	35.72%
472226	MIDVALE TEL. EXCH. INC.	7.04%	-5.60%	13.38%	14.77%	43.46%

TABLE 3.5

National Exchange Carrier Association
 Universal Service Fund
 Individual Study Areas
 Percentage Changes from 1987 to 1988

STUDY AREA CODE	COMPANY NAME	UNSEPARATED NTS REVENUE REQUIREMENT	NUMBER OF LOOPS	UNSEPARATED NTS REVENUE REQUIREMENT PER LOOP	UNIVERSAL SERVICE FUND AFTER FULL TRANSITION	UNIVERSAL SERVICE FUND APPLICABLE TO LATER YEAR	
IDAHO (CONT.)							
472227	MUD LAKE TEL. COOP. INC. ASSOC.	0.30%	7.75%	-6.91%	-28.42%	-10.53%	
472230	POTLATCH TELEPHONE COMPANY INC.	4.58%	8.60%	-3.70%	-42.44%	-28.06%	
472231	PROJECT MUTUAL TEL. COOP. ASSN.	6.01%	4.39%	1.55%	0.00%	0.00%	
472232	ROCKLAND TEL. CO., INC.	17.75%	-6.02%	25.29%	31.66%	64.58%	
472233	RURAL TELEPHONE COMPANY - ID	-4.39%	24.22%	-23.03%	-16.45%	4.44%	
472234	TROY TELEPHONE COMPANY	-2.78%	-1.56%	-1.25%	-8.44%	14.45%	
472295	SILVER STAR TEL. CO. INC.-ID	8.18%	-0.96%	9.22%	14.90%	43.62%	
472416	GTE NORTHWEST INC. - IDAHO	26.14%	4.72%	20.46%	97.69%	147.11%	
472423	INLAND TELEPHONE COMPANY - ID	17.54%	29.38%	-9.15%	12.22%	40.27%	
475103	MOUNTAIN BELL-IDAHO	-5.72%	3.38%	-8.80%	0.00%	0.00%	
475162	PACIFIC NORTHWEST BELL-IDAHO	-6.23%	6.24%	-11.73%	0.00%	0.00%	
TOTAL:	ILLINOIS	-0.56%	2.71%	-3.18%	-31.99%	-14.98%	
340976	ADAMS TELEPHONE COOPERATIVE	1.09%	1.68%	-0.59%	-15.55%	5.56%	
340978	ALHAMBRA-GRANTFORK TELEPHONE COMPANY	10.82%	2.07%	8.57%	0.00%	0.00%	
340983	CAMBRIDGE TELEPHONE COMPANY - IL	9.26%	0.64%	8.57%	0.00%	0.00%	
340984	CASS COUNTY TELEPHONE COMPANY	9.45%	0.81%	8.57%	0.00%	0.00%	
340985	CENTRAL TEL. CO. OF IL	6.11%	3.13%	2.89%	0.00%	0.00%	
340986	CHANDLERVILLE TELEPHONE COMPANY	MERGED INTO 340984 CASS COUNTY TELEPHONE COMPANY					
340990	CLARKSVILLE MUTUAL TELEPHONE COMPANY	-0.93%	9.15%	-9.24%	-26.48%	-8.09%	
340993	CROSSVILLE TELEPHONE COMPANY	7.44%	-1.04%	8.57%	0.00%	0.00%	
340998	DEPUE TELEPHONE COMPANY	7.04%	-1.41%	8.57%	0.00%	0.00%	
341000	ALLTEL ILLINOIS INC.	7.32%	3.60%	3.59%	0.00%	0.00%	
341003	EGYPTIAN TELEPHONE COOPERATIVE ASSN.	4.31%	1.96%	2.30%	0.00%	0.00%	
341004	EL PASO TELEPHONE COMPANY	9.86%	-1.38%	11.39%	0.00%	0.00%	
341009	C-R TELEPHONE COMPANY	8.42%	1.40%	6.92%	0.00%	0.00%	
341011	LAKESIDE TEL. CO.	-20.42%	4.97%	-24.18%	-100.00%	-100.00%	
341012	FLAT ROCK MUTUAL TELEPHONE COMPANY	9.04%	0.44%	8.57%	0.00%	0.00%	
341015	GTE NORTH INC. - ILLINOIS	-1.11%	2.30%	-3.33%	0.00%	0.00%	
341016	GENESEU TELEPHONE COMPANY	5.68%	-2.66%	8.57%	0.00%	0.00%	
341017	GLASFORD TELEPHONE COMPANY	4.20%	-4.03%	8.57%	0.00%	0.00%	
341020	GRAFTON TELEPHONE COMPANY	11.32%	2.54%	8.57%	0.00%	0.00%	
341021	THE GRANDVIEW MUTUAL TELEPHONE CO.	-8.98%	-2.88%	-6.27%	-20.39%	-0.49%	
341023	GRIDLEY TELEPHONE COMPANY	-20.35%	0.28%	-20.57%	0.00%	0.00%	
341024	HAMILTON COUNTY TELEPHONE COOP.	2.92%	4.09%	-1.13%	-27.30%	-9.13%	
341025	SHAWNEE TELEPHONE COMPANY	5.04%	-0.83%	5.93%	0.00%	0.00%	
341026	HARRISONVILLE TELEPHONE COMPANY	10.59%	1.86%	8.57%	0.00%	0.00%	
341029	HENRY COUNTY TEL. CO.	-3.80%	-11.39%	8.57%	0.00%	0.00%	
341032	HOME TELEPHONE COMPANY - ST JACOB	11.24%	2.46%	8.57%	0.00%	0.00%	
341036	CONTEL OF ILLINOIS, INC.	-0.12%	2.95%	-2.98%	-45.32%	-31.64%	
341037	ILLINOIS CONSOLIDATED TELEPHONE CO.	3.02%	0.36%	2.65%	ERR	ERR	
341038	INLAND TEL. CO.	-2.47%	2.28%	-4.64%	-100.00%	-100.00%	
341041	KINSMAN MUTUAL TELEPHONE COMPANY	-9.92%	-3.85%	-6.32%	-18.94%	1.32%	
341043	LA HARPE TELEPHONE COMPANY	9.99%	1.31%	8.57%	0.00%	0.00%	
341045	LEAF RIVER VALLEY TELEPHONE COMPANY	6.85%	-3.04%	10.20%	32.21%	65.26%	
341046	LEONORE MUTUAL TELEPHONE COMPANY	-10.91%	-7.28%	-3.91%	-21.56%	-1.95%	
341047	MCDONOUGH TELEPHONE COOPERATIVE INC.	3.75%	0.93%	2.80%	0.00%	0.00%	
341048	MENABB TELEPHONE COMPANY	5.26%	-0.75%	6.05%	0.00%	0.00%	
341049	MADISON TELEPHONE COMPANY	7.61%	3.10%	4.38%	0.00%	0.00%	
341050	MARSEILLES TEL. CO. OF MARS.	13.47%	4.51%	8.57%	0.00%	0.00%	
341053	METAMORA TELEPHONE COMPANY	11.06%	2.29%	8.57%	0.00%	0.00%	
341054	MID CENTURY TEL. COOP. INC.	1.78%	2.14%	-0.35%	-14.66%	6.67%	
341055	MIDLAND TELEPHONE COMPANY	-0.18%	-2.04%	1.90%	8.23%	35.29%	
341058	MONTROSE MUTUAL TELEPHONE COMPANY	2.64%	2.23%	0.40%	-0.89%	23.89%	
341060	MOULTRIE INDEPENDENT TELEPHONE CO.	-3.18%	-1.79%	-1.42%	0.00%	0.00%	
341061	MT. PULASKI TELEPHONE & ELECTRIC CO.	9.55%	0.90%	8.57%	0.00%	0.00%	
341062	NEW WINDSOR TELEPHONE COMPANY	8.19%	-0.35%	8.57%	0.00%	0.00%	
341065	ODIN TELEPHONE EXCHANGE INC.	9.97%	1.29%	8.57%	0.00%	0.00%	
341066	ONEIDA TELEPHONE EXCHANGE	9.90%	1.22%	8.57%	0.00%	0.00%	

TABLE 3.5

National Exchange Carrier Association
Universal Service Fund
Individual Study Areas
Percentage Changes from 1987 to 1988

STUDY AREA CODE	COMPANY NAME	UNSEPARATED NTS REVENUE REQUIREMENT	NUMBER OF LOOPS	UNSEPARATED NTS REVENUE REQUIREMENT PER LOOP	UNIVERSAL SERVICE FUND AFTER FULL TRANSITION	UNIVERSAL SERVICE FUND APPLICABLE TO LATER YEAR
ILLINOIS (CONT.)						
341067	ORION TELEPHONE EXCHANGE ASSOCIATION	10.85%	2.10%	8.57%	0.00%	0.00%
341073	PRAIRIE TEL. CO.	11.36%	-2.65%	14.39%	0.00%	0.00%
341075	REYNOLDS TELEPHONE COMPANY	8.57%	0.00%	8.57%	0.00%	0.00%
341079	SCHUYLER TELEPHONE COMPANY - IL	6.80%	-1.63%	8.57%	0.00%	0.00%
341086	TONICA TELEPHONE COMPANY	9.27%	0.64%	8.57%	0.00%	0.00%
341087	VIOLA HOME TELEPHONE COMPANY	8.88%	0.29%	8.57%	0.00%	0.00%
341088	WABASH TELEPHONE COOPERATIVE INC.	9.62%	0.96%	8.57%	0.00%	0.00%
341091	WOODHULL COMMUNITY TELEPHONE COMPANY	9.08%	0.47%	8.57%	0.00%	0.00%
341092	STELLE TEL. CO.	-4.34%	3.77%	-7.82%	-13.61%	7.99%
341093	YATES CITY TELEPHONE COMPANY	10.10%	1.41%	8.57%	0.00%	0.00%
345070	ILLINOIS BELL TEL CO	-1.09%	2.80%	-3.78%	0.00%	0.00%
TOTAL:	INDIANA	4.50%	4.19%	0.30%	70.87%	113.58%
320742	BLOOMINGDALE HOME TEL. CO. INC.	8.00%	-0.53%	8.57%	0.00%	0.00%
320744	CAMDEN TELEPHONE CO INC - INDIANA	7.99%	-0.53%	8.57%	0.00%	0.00%
320747	CENTRAL INDIANA TELEPHONE CO. INC.	17.37%	8.11%	8.57%	0.00%	0.00%
320750	CITIZEN'S TEL CO, INC. FAIRMOUNT, IN	11.27%	2.49%	8.57%	0.00%	0.00%
320751	CITIZENS TELEPHONE CORP - WARREN	9.61%	0.96%	8.57%	0.00%	0.00%
320753	CLAY CTY RURAL TEL. COOP. INC.	-11.13%	2.63%	-13.40%	0.00%	0.00%
320756	CRAIGVILLE TELEPHONE CO INC.	8.39%	-0.17%	8.57%	0.00%	0.00%
320759	DAVIESS-MARTIN CTY RURAL TEL CORP	12.11%	3.26%	8.57%	0.00%	0.00%
320762	ELNORA TELEPHONE COMPANY INC.	33.53%	1.21%	31.93%	0.00%	0.00%
320771	GEETINGSVILLE TELEPHONE CO INC.	8.87%	4.74%	3.94%	0.00%	0.00%
320772	GTE NORTH INC. - INDIANA	1.66%	5.49%	-3.63%	0.00%	0.00%
320775	HANCOCK RURAL TELEPHONE CORP.	12.39%	3.52%	8.57%	0.00%	0.00%
320776	COMMUNICATIONS CORP OF INDIANA	23.74%	3.83%	19.17%	ERR	ERR
320777	HOME TELEPHONE COMPANY OF PITTSBORO	13.36%	4.41%	8.57%	0.00%	0.00%
320778	HOME TELEPHONE COMPANY INC.	-10.08%	4.21%	-13.71%	-100.00%	-100.00%
320779	CONTEL OF INDIANA, INC.	9.23%	2.86%	6.19%	179.14%	248.92%
320783	LIGONIER TELEPHONE COMPANY	11.88%	3.05%	8.57%	0.00%	0.00%
320784	LIBERTY CENTER TELEPHONE COMPANY	9.36%	0.72%	8.57%	0.00%	0.00%
320788	MERCHANTS & FARMERS TELEPHONE CO	11.51%	2.71%	8.57%	0.00%	0.00%
320790	MONON TELEPHONE CO. INC.	12.26%	3.40%	8.57%	0.00%	0.00%
320792	MULBERRY COOP. TELEPHONE CO INC.	10.57%	1.84%	8.57%	0.00%	0.00%
320796	NEW LISBON TELEPHONE COMPANY INC.	11.35%	2.56%	8.57%	0.00%	0.00%
320797	NEW PARIS TELEPHONE INC.	-5.14%	1.01%	-6.09%	0.00%	0.00%
320800	NORTHWESTERN INDIANA TEL. CO. INC.	-5.48%	6.57%	-11.31%	-100.00%	-100.00%
320801	ODON TEL. CO.	13.87%	4.88%	8.57%	0.00%	0.00%
320807	PERRY-SPENCER RURAL TEL. COOP. INC.	13.01%	4.09%	8.57%	0.00%	0.00%
320809	POSEYVILLE TELEPHONE CO INC.	8.57%	0.00%	8.57%	0.00%	0.00%
320813	PULASKI-WHITE RURAL TEL. COOP. INC.	10.39%	1.68%	8.57%	0.00%	0.00%
320815	ROCHESTER TELEPHONE CO. INC.	25.16%	15.28%	8.57%	0.00%	0.00%
320816	S & W TEL. CO., INC.	5.32%	-2.99%	8.57%	0.00%	0.00%
320818	SMITHVILLE TEL. CO., INC.	10.68%	1.94%	8.57%	0.00%	0.00%
320819	SOUTHEASTERN IND. RURAL TEL. COOP INC	10.97%	2.21%	8.57%	0.00%	0.00%
320825	SUNMAN TEL. CO. INC.	12.70%	3.81%	8.57%	0.00%	0.00%
320826	SWAYZEE TEL. CO. INC.	9.85%	1.18%	8.57%	0.00%	0.00%
320827	SWEETSER RURAL TEL. CO. INC.	10.95%	2.19%	8.57%	0.00%	0.00%
320828	THORNTOWN TELEPHONE CO. INC.	10.55%	1.83%	8.57%	0.00%	0.00%
320829	TIPTON TELEPHONE COMPANY INC.	9.14%	0.53%	8.57%	0.00%	0.00%
320830	TRI-COUNTY TEL. CO. INC.-IN	11.00%	2.24%	8.57%	0.00%	0.00%
320831	ALLTEL INDIANA INC.	14.87%	5.80%	8.57%	0.00%	0.00%
320832	UNITED TELEPHONE CO. OF INDIANA INC.	4.13%	4.26%	-0.13%	-17.50%	3.12%
320833	WADESVILLE TELEPHONE COMPANY INC.	13.00%	5.00%	7.62%	0.00%	0.00%
320834	WASH. CTY. RURAL TEL. COOP. INC.	12.41%	3.54%	8.57%	0.00%	0.00%
320837	WEST POINT TELEPHONE CO. INC.	11.81%	2.98%	8.57%	0.00%	0.00%
320839	YEOMAN TELEPHONE COMPANY INC.	15.21%	6.11%	8.57%	0.00%	0.00%
325080	INDIANA BELL TEL CO	4.76%	3.88%	0.84%	0.00%	0.00%

TABLE 3.5

National Exchange Carrier Association
 Universal Service Fund
 Individual Study Areas
 Percentage Changes from 1987 to 1988

STUDY AREA CODE	COMPANY NAME	UNSEPARATED NTS REVENUE REQUIREMENT	NUMBER OF LOOPS	UNSEPARATED NTS REVENUE REQUIREMENT PER LOOP	UNIVERSAL SERVICE FUND AFTER FULL TRANSITION	UNIVERSAL SERVICE FUND APPLICABLE TO LATER YEAR
TOTAL:	IOWA	-2.07%	-1.31%	-0.78%	44.92%	81.15%
351096	AMANA SOCIETY SERVICE CO.	17.02%	7.78%	8.57%	0.00%	0.00%
351097	ANDREW TELEPHONE CO. INC.	0.84%	0.98%	-0.14%	-10.37%	12.04%
351098	ARCADIA TELEPHONE COOP.	1.56%	1.61%	-0.05%	-9.50%	13.12%
351101	ATKINS TELEPHONE COMPANY	11.82%	3.00%	8.57%	0.00%	0.00%
351105	AYRSHIRE FMRS. MUT. TEL. CO.	14.08%	0.00%	14.08%	0.00%	0.00%
351107	BALDWIN-NASHVILLE TELEPHONE CO. INC.	-3.43%	-6.56%	3.35%	75.01%	118.76%
351108	BARNES CITY COOP TELEPHONE CO.	-4.65%	1.76%	-6.30%	-25.22%	-6.53%
351110	BERNARD TELEPHONE COMPANY INC.	-2.81%	-2.78%	-0.03%	-3.87%	20.16%
351112	BREDA TELEPHONE COOPERATIVE	3.35%	2.83%	0.51%	4.80%	31.00%
351113	BROOKLYN MUTUAL TELEPHONE COMPANY	2.64%	-5.46%	8.57%	0.00%	0.00%
351114	THE BURT TELEPHONE COMPANY	9.50%	3.29%	6.00%	0.00%	0.00%
351115	BUTLER-BREMER MUT. TELEPHONE COMPANY	14.75%	5.70%	8.57%	0.00%	0.00%
351118	CASCADE TELEPHONE COMPANY	12.92%	4.00%	8.57%	0.00%	0.00%
351119	CASEY MUTUAL TELEPHONE CO.	9.60%	2.77%	6.65%	0.00%	0.00%
351121	CENTER JUNCTION TEL. CO., INC.	-3.18%	6.02%	-8.67%	-24.72%	-5.91%
351125	CENTRAL SCOTT TELEPHONE	10.77%	2.02%	8.57%	0.00%	0.00%
351126	CHESTER TELEPHONE COMPANY- IOWA	-7.43%	-4.78%	-2.78%	-19.19%	1.01%
351127	CENTRAL TELEPHONE COMPANY - IOWA	1988 DATA MISSING				
351129	THE CITIZENS MUTUAL TELEPHONE COMPANY	10.62%	1.89%	8.57%	0.00%	0.00%
351130	CLARENCE TELEPHONE COMPANY INC.	13.60%	4.64%	8.57%	0.00%	0.00%
351132	CLEAR LAKE INDP TELEPHONE CO	10.18%	1.48%	8.57%	0.00%	0.00%
351133	C-M-L TEL COOP ASSN	-4.69%	0.52%	-5.19%	-23.26%	-4.08%
351134	COLO TELEPHONE COMPANY	11.32%	2.53%	8.57%	0.00%	0.00%
351136	COON CREEK TELEPHONE COMPANY	12.67%	3.78%	8.57%	0.00%	0.00%
351137	COON VALLEY COOP TEL. ASSN. INC.	3.19%	4.38%	-1.14%	-28.39%	-10.48%
351139	COOPERATIVE TELEPHONE COMPANY	2.38%	1.53%	0.84%	19.61%	49.51%
351141	CORN BELT TELEPHONE COMPANY	12.76%	3.86%	8.57%	0.00%	0.00%
351146	CUMBERLAND TEL. CO.	7.88%	2.98%	4.76%	0.00%	0.00%
351147	DANVILLE MUT. TELEPHONE COMPANY	10.70%	1.97%	8.57%	0.00%	0.00%
351148	DEEP RIVER MUT. TELEPHONE COMPANY	1.71%	3.40%	-1.64%	-25.73%	-7.16%
351149	DEFIANCE TELEPHONE COMPANY	-2.12%	0.40%	-2.51%	-20.66%	-0.83%
351150	DIXON TELEPHONE COMPANY	11.55%	2.75%	8.57%	0.00%	0.00%
351152	DUMONT TELEPHONE COMPANY	15.64%	6.51%	8.57%	0.00%	0.00%
351153	DUNKERTON TELEPHONE COOP., INC,	15.31%	6.21%	8.57%	0.00%	0.00%
351156	EAST BUCHANAN TELEPHONE COOP	12.85%	5.68%	6.79%	0.00%	0.00%
351157	ELLSWORTH COOP TELEPHONE ASSN.	2.05%	4.14%	-2.00%	-27.86%	-9.83%
351160	FARMERS & BUSINESSMEN'S TEL. CO.	14.36%	5.33%	8.57%	0.00%	0.00%
351162	FARMERS COOP TELEPHONE CO - DYSART	11.29%	2.50%	8.57%	0.00%	0.00%
351166	FARMERS & MERCHANTS MUTUAL TEL. CO.	10.63%	1.90%	8.57%	0.00%	0.00%
351168	FARMERS MUTUAL COOP TEL CO- HARLAN	-1.77%	1.57%	-3.29%	-23.37%	-4.21%
351169	FARMERS MUTUAL COOP TEL CO- MOULTON	7.02%	-1.43%	8.57%	0.00%	0.00%
351171	FARMERS MUTUAL TEL CO- JESUP	13.71%	4.73%	8.57%	0.00%	0.00%
351172	FARMERS MUTUAL TEL CO - NORA SPRINGS	12.01%	3.17%	8.57%	0.00%	0.00%
351173	FARMERS MUTUAL TEL CO - SHELLSBURG	12.70%	3.80%	8.57%	0.00%	0.00%
351174	FARMERS MUTUAL TEL CO - STANTON	4.25%	2.37%	1.83%	0.00%	0.00%
351175	FARMERS TELEPHONE COMPANY- BATAVIA	5.59%	2.70%	2.81%	0.00%	0.00%
351176	FARMERS TELEPHONE COMPANY- ESSEX	10.18%	1.49%	8.57%	0.00%	0.00%
351177	FARMERS TEL. CO.-RICEVILLE	7.65%	2.79%	4.73%	0.00%	0.00%
351179	FENTON CO-OP TELEPHONE COMPANY	3.66%	-0.27%	3.94%	0.00%	0.00%
351186	GTE NORTH INC. - IOWA	15.23%	0.74%	14.38%	0.00%	0.00%
351187	MID-IOWA TELEPHONE CO.	12.64%	3.75%	8.57%	0.00%	0.00%
351188	GOLDFIELD TEL. CO.	17.85%	8.55%	8.57%	0.00%	0.00%
351189	RIVER VALLEY TEL. COOP.	12.14%	5.57%	6.22%	0.00%	0.00%
351191	GRAND MOUND COOP TELEPHONE ASSN.	10.61%	1.88%	8.57%	0.00%	0.00%
351195	GRISWOLD CO-OP TELEPHONE COMPANY	10.70%	1.96%	8.57%	0.00%	0.00%
351199	HAWKEYE TELEPHONE COMPANY	11.97%	3.13%	8.57%	0.00%	0.00%
351202	HOSPERS TELEPHONE EXCHANGE INC.	11.24%	2.46%	8.57%	0.00%	0.00%
351203	HUBBARD COOP TEL. ASSN.	9.14%	0.52%	8.57%	0.00%	0.00%
351205	HUXLEY COOP TELEPHONE COMPANY	12.31%	3.45%	8.57%	0.00%	0.00%
351206	IAMO TELEPHONE COMPANY- IA	-1.58%	4.29%	-5.62%	-26.01%	-7.51%

TABLE 3.5

National Exchange Carrier Association
 Universal Service Fund
 Individual Study Areas
 Percentage Changes from 1987 to 1988

STUDY AREA CODE	COMPANY NAME	UNSEPARATED NTS REVENUE REQUIREMENT	NUMBER OF LOOPS	UNSEPARATED NTS REVENUE REQUIREMENT PER LOOP	UNIVERSAL SERVICE FUND AFTER FULL TRANSITION	UNIVERSAL SERVICE FUND APPLICABLE TO LATER YEAR
IOWA (CONT.)						
351207	CONTEL OF IOWA, INC.	10.15%	4.77%	5.13%	145.87%	207.34%
351209	INTERSTATE 35 TELEPHONE COMPANY	0.19%	-1.25%	1.46%	29.60%	62.00%
351212	JEFFERSON TELEPHONE COMPANY- IA	10.63%	1.90%	8.57%	0.00%	0.00%
351213	JORDAN SOLDIER VAL COOP TEL. CO.	-0.57%	2.31%	-2.81%	-23.77%	-4.71%
351214	KALONA COOP TELEPHONE COMPANY	10.06%	1.38%	8.57%	0.00%	0.00%
351217	KEYSTONE FRMS. COOP TELEPHONE CO	1.92%	2.37%	-0.44%	-16.26%	4.68%
351220	LA PORTE CITY TELEPHONE COMPANY	7.15%	-1.31%	8.57%	0.00%	0.00%
351222	LA MOTTE TELEPHONE CO.	14.82%	5.75%	8.57%	0.00%	0.00%
351223	LAUREL TELEPHONE COMPANY INC.	1.68%	4.24%	-2.45%	-28.68%	-10.85%
351225	LEHIGH VALLEY COOP TEL. ASSN.	5.83%	-2.69%	8.75%	0.00%	0.00%
351228	LONE ROCK CO-OP TELEPHONE CO	0.26%	1.75%	-1.46%	-20.52%	-0.64%
351229	LOST NATION - ELWOOD TEL. CO.	3.69%	-0.17%	3.86%	45.26%	81.57%
351230	NORTHEAST IOWA TELEPHONE CO.	9.52%	0.88%	8.57%	0.00%	0.00%
351232	LYNNVILLE COMM. TEL. CO. INC.	1.80%	1.58%	0.22%	-4.90%	18.87%
351235	MANILLA TELEPHONE COMPANY	9.70%	1.05%	8.57%	0.00%	0.00%
351237	MARNE & ELK HORN TELEPHONE CO	3.06%	2.76%	0.29%	-5.17%	18.54%
351238	MARTELLE COOP TELEPHONE ASSN	4.76%	9.78%	-4.58%	-43.72%	-29.65%
351239	MASSENA TELEPHONE COMPANY	1.06%	-0.15%	1.22%	26.53%	58.16%
351241	MECHANICSVILLE TELEPHONE COMPANY	10.61%	1.88%	8.57%	0.00%	0.00%
351242	MILES COOP TEL. ASSN.	14.01%	5.01%	8.57%	0.00%	0.00%
351243	MILLER TELEPHONE COMPANY-IA	-5.96%	2.00%	-7.80%	-20.14%	-0.18%
351245	MINBURN TELEPHONE COMPANY	7.51%	-0.46%	8.01%	0.00%	0.00%
351246	MINERVA VALLEY TELEPHONE CO. INC.	1.90%	-3.91%	6.05%	0.00%	0.00%
351247	MODERN COOP TELEPHONE COMPANY	10.38%	0.92%	9.37%	111.31%	164.14%
351248	MONTEZUMA MUTUAL TELEPHONE COMPANY	13.96%	4.96%	8.57%	0.00%	0.00%
351249	MORLEY TELEPHONE COMPANY	-1.73%	7.75%	-8.79%	-25.78%	-7.23%
351250	MUTUAL TEL. CO. OF MORNING SUN	10.63%	1.90%	8.57%	0.00%	0.00%
351251	MEDIAPOLIS TELEPHONE COMPANY	16.23%	7.05%	8.57%	0.00%	0.00%
351252	MUTUAL TEL. CO.	14.95%	5.88%	8.57%	0.00%	0.00%
351257	NORTH ENGLISH COOP TEL. COMPANY	13.17%	4.24%	8.57%	0.00%	0.00%
351259	NORTHERN IOWA TELEPHONE COMPANY	3.33%	2.07%	1.23%	193.86%	267.32%
351260	NORTHWEST IOWA TEL CO INC	5.49%	-2.83%	8.57%	0.00%	0.00%
351261	NORTHWEST TEL. COOP.	1.21%	3.04%	-1.78%	-24.33%	-5.41%
351262	NORWAY RURAL TELEPHONE COMPANY	13.74%	4.76%	8.57%	0.00%	0.00%
351263	OGDEN TELEPHONE COMPANY - IA	8.78%	0.19%	8.57%	0.00%	0.00%
351264	OLIN TELEPHONE CO INC.	17.84%	8.54%	8.57%	0.00%	0.00%
351265	ONslow COOP TELEPHONE ASSN.	-7.33%	-4.74%	-2.72%	-19.13%	1.09%
351266	ORAN MUTUAL TELEPHONE COMPANY	-1.45%	3.56%	-4.84%	-26.03%	-7.53%
351269	PALO COOP TEL. ASSN.	3.92%	3.63%	0.28%	-10.16%	12.30%
351270	PALMER MUTUAL TELEPHONE CO.	1.36%	0.31%	1.05%	21.01%	51.27%
351271	PANORA COOP TEL. ASSN. INC.	12.98%	4.06%	8.57%	0.00%	0.00%
351273	PEOPLES TELEPHONE COMPANY - IA	13.71%	4.73%	8.57%	0.00%	0.00%
351274	POSTVILLE TELEPHONE COMPANY	10.94%	2.18%	8.57%	0.00%	0.00%
351275	PRAIRIEBURG TELEPHONE COMPANY INC.	-1.48%	6.04%	-7.09%	-26.41%	-8.01%
351276	PRESTON TELEPHONE COMPANY	11.80%	2.98%	8.57%	0.00%	0.00%
351277	RADCLIFFE TELEPHONE CO INC.	9.93%	1.26%	8.57%	0.00%	0.00%
351278	READLYN TELEPHONE COMPANY	7.62%	-0.88%	8.57%	0.00%	0.00%
351280	RINGSTED TELEPHONE COMPANY	9.04%	0.44%	8.57%	0.00%	0.00%
351282	ROCKWELL COOP TELEPHONE ASSN.	0.82%	0.73%	0.09%	-6.58%	16.78%
351283	ROYAL TEL. CO.	1.98%	-4.36%	6.63%	0.00%	0.00%
351284	RUTHVEN TEL. EXCH. CO.	15.84%	6.70%	8.57%	0.00%	0.00%
351285	SAC COUNTY MUTUAL TEL. CO.	13.31%	4.36%	8.57%	0.00%	0.00%
351291	SCHALLER TEL. CO.	7.83%	2.91%	4.78%	0.00%	0.00%
351292	SEARSBORO TEL. CO.	-5.14%	2.00%	-7.00%	-24.89%	-6.11%
351293	SHARON TEL. CO.	12.78%	4.05%	8.39%	0.00%	0.00%
351294	SCRANTON TEL. CO.	12.53%	3.64%	8.57%	0.00%	0.00%
351295	SHELL ROCK TEL. CO.	12.14%	3.28%	8.57%	0.00%	0.00%
351297	HEART OF IOWA TELEPHONE COOP	0.91%	3.85%	-2.83%	-27.01%	-8.77%
351298	SOUTH SLOPE COOP TEL. CO.	13.43%	4.48%	8.57%	0.00%	0.00%
351301	SOUTHWEST TEL. EXCH., INC.	-1.73%	3.33%	-4.90%	-25.32%	-6.64%

TABLE 3.5

National Exchange Carrier Association
Universal Service Fund
Individual Study Areas
Percentage Changes from 1987 to 1988

STUDY AREA CODE	COMPANY NAME	UNSEPARATED NTS REVENUE REQUIREMENT	NUMBER OF LOOPS	UNSEPARATED NTS REVENUE REQUIREMENT PER LOOP	UNIVERSAL SERVICE FUND AFTER FULL TRANSITION	UNIVERSAL SERVICE FUND APPLICABLE TO LATER YEAR
IOWA (CONT.)						
351302	SPRINGVILLE COOP TEL. ASSN.	10.52%	1.79%	8.57%	0.00%	0.00%
351303	COOPERATIVE TELEPHONE EXCHANGE	1.84%	2.09%	-0.25%	-13.58%	8.03%
351304	SWISHER TEL. CO.	15.44%	6.33%	8.57%	0.00%	0.00%
351305	STRATFORD MUTUAL TEL. CO.	13.14%	4.21%	8.57%	0.00%	0.00%
351306	SULLY TEL. ASSOC.	14.06%	5.05%	8.57%	0.00%	0.00%
351307	SUPERIOR TEL. COOP.	-8.70%	-5.08%	-3.80%	-21.89%	-2.37%
351308	TEMPLETON TELEPHONE COMPANY	5.46%	5.71%	-0.23%	-58.12%	-47.65%
351309	TERRIL TELEPHONE COMPANY	2.77%	-1.09%	3.90%	0.00%	0.00%
351310	TITONKA TELEPHONE COMPANY	10.29%	1.58%	8.57%	0.00%	0.00%
351316	UNITED FARMERS TELEPHONE COMPANY	0.81%	3.13%	-2.24%	-10.74%	11.58%
351317	UNITED TELEPHONE CO. OF IOWA	-2.80%	1.37%	-4.11%	0.00%	0.00%
351319	VAN BUREN TELEPHONE CO INC.	0.87%	-1.65%	2.56%	507.76%	659.71%
351320	VAN HORNE COOP TELEPHONE CO.	14.87%	5.81%	8.57%	0.00%	0.00%
351322	VENTURA TELEPHONE CO. INC.	12.88%	3.97%	8.57%	0.00%	0.00%
351324	VILLISCA FARMERS TELEPHONE CO.	10.84%	2.09%	8.57%	0.00%	0.00%
351326	WALNUT TELEPHONE COMPANY	13.01%	4.09%	8.57%	0.00%	0.00%
351327	WEBB-DICKENS TELEPHONE CORPORATION	2.67%	3.20%	-0.51%	-2.51%	21.87%
351328	WEBSTER-CALHOUN COOP TELEPHONE ASSN.	0.01%	1.91%	-1.86%	-21.82%	-2.27%
351329	WELLMAN COOP TELEPHONE ASSN.	12.77%	3.87%	8.57%	0.00%	0.00%
351331	WEST IOWA TELEPHONE COMPANY	9.59%	0.94%	8.57%	0.00%	0.00%
351332	WEST LIBERTY TELEPHONE COMPANY	87.25%	72.47%	8.57%	0.00%	0.00%
351334	WESTERN IOWA TELEPHONE ASSN.	4.55%	2.05%	2.45%	0.00%	0.00%
351335	WESTSIDE INDP. TELEPHONE COMPANY	1.86%	-0.58%	2.46%	ERR	ERR
351336	WILTON TELEPHONE COMPANY	12.89%	3.98%	8.57%	0.00%	0.00%
351337	WINNEBAGO COOP TELEPHONE ASSN - IA	4.54%	-0.31%	4.86%	0.00%	0.00%
351341	SCHUYLER TELEPHONE COMPANY - IA	11.83%	3.00%	8.57%	0.00%	0.00%
351342	WOOLSTOCK MUT. TELEPHONE ASSN.	-1.49%	0.77%	-2.24%	-20.65%	-0.81%
351343	WYOMING MUTUAL TELEPHONE COMPANY	11.69%	2.87%	8.57%	0.00%	0.00%
351344	PRAIRIE TELEPHONE COMPANY INC.	2.32%	2.09%	0.23%	-5.26%	18.43%
351346	ACE TELEPHONE ASSOCIATION- IOWA	0.22%	-1.66%	1.91%	0.00%	0.00%
351405	HILLS TEL. CO., INC. - IA	25.96%	6.05%	18.77%	0.00%	0.00%
351424	MABEL COOPERATIVE TELEPHONE CO. IA	0.61%	3.16%	-2.46%	-25.48%	-6.85%
351888	GRAND RIVER MUTUAL TEL CORP - IA	-3.35%	-4.59%	1.30%	1.29%	26.61%
355141	NORTHWESTERN BELL-IOWA	-1.83%	2.46%	-4.19%	0.00%	0.00%
TOTAL:	KANSAS	2.92%	1.33%	1.57%	-28.49%	-10.61%
411741	ASSARIA TELEPHONE EXCHANGE INC.	2.26%	5.21%	-2.81%	-12.93%	8.84%
411746	BLUE VALLEY TELEPHONE COMPANY	9.18%	3.07%	5.93%	119.03%	173.78%
411756	COLUMBUS TELEPHONE COMPANY	10.22%	1.52%	8.57%	0.00%	0.00%
411758	COUNCIL GROVE TEL. CO.	11.80%	2.98%	8.57%	0.00%	0.00%
411761	CUNNINGHAM TELEPHONE CO. INC.	-6.81%	1.52%	-8.21%	-24.40%	-5.50%
411764	ELKHART TELEPHONE COMPANY INC.	-1.25%	0.14%	-1.39%	0.00%	0.00%
411777	GOLDEN BELT TELEPHONE ASSN. INC.	-4.41%	-0.20%	-4.22%	-22.34%	-2.93%
411778	GORHAM TELEPHONE COMPANY INC.	-4.53%	3.08%	-7.38%	-24.75%	-5.94%
411780	HAVILAND TELEPHONE COMPANY INC.	1.09%	2.71%	-1.57%	-22.89%	-3.62%
411781	H & B COMMUNICATIONS INC.	-7.32%	0.00%	-7.32%	-15.98%	5.02%
411782	HOME TELEPHONE COMPANY INC.	-4.64%	5.44%	-9.56%	-18.67%	1.66%
411785	J. B. N. TELEPHONE COMPANY INC.	-1.15%	9.07%	-9.37%	-41.65%	-27.07%
411788	KANOKLA TEL. ASSOC. INC.- KS	-8.74%	-2.56%	-6.35%	-29.32%	-11.65%
411789	KANSAS STATE TELEPHONE COMPANY	-3.05%	0.91%	-3.93%	0.00%	0.00%
411790	CONTEL OF KANSAS, INC	-15.93%	0.18%	-16.09%	-37.85%	-22.31%
411791	LA HARPE TELEPHONE COMPANY INC.	7.64%	8.93%	-1.19%	-100.00%	-100.00%
411801	MADISON TEL. CO. INC.- KS	-7.00%	-2.81%	-4.31%	-10.96%	11.30%
411807	MOKAN DIAL, INC.- KS	21.93%	3.13%	18.23%	ERR	ERR
411808	MOUNDRIDGE TEL. CO.	-16.86%	-0.38%	-16.54%	-38.64%	-23.30%
411809	MUTUAL TELEPHONE COMPANY	8.10%	0.00%	8.10%	0.00%	0.00%
411814	PEOPLES MUTUAL TEL. CO.-KS	-4.67%	0.30%	-4.95%	-19.87%	0.16%
411817	PIONEER TELEPHONE ASSOCIATION INC.	24.44%	1.85%	22.18%	0.00%	0.00%
411818	CRAW-KAN TELEPHONE COOP INC- KS	0.67%	-0.01%	0.68%	5.84%	32.31%

TABLE 3.5

National Exchange Carrier Association
Universal Service Fund
Individual Study Areas
Percentage Changes from 1987 to 1988

STUDY AREA CODE	COMPANY NAME	UNSEPARATED NTS REVENUE REQUIREMENT	NUMBER OF LOOPS	UNSEPARATED NTS REVENUE REQUIREMENT PER LOOP	UNIVERSAL SERVICE FUND AFTER FULL TRANSITION	UNIVERSAL SERVICE FUND APPLICABLE TO LATER YEAR
KANSAS (CONT.)						
411820	RAINBOW TEL COOPERATIVE ASSN INC.	-3.66%	0.11%	-3.77%	-22.35%	-2.93%
411826	RURAL TEL. SERVICE CO., INC.	7.94%	-0.14%	8.09%	20.33%	50.41%
411827	S & T TEL. COOP. ASSN.	-1.86%	0.31%	-2.16%	-3.75%	20.31%
411829	S & A TEL. CO., INC.	3.91%	3.12%	0.77%	51.09%	88.86%
411831	SOUTH CENTRAL TEL. ASSN. INC.-KS	-3.44%	-0.66%	-2.80%	-11.31%	10.86%
411833	SOUTHERN KANSAS TEL. CO., INC.	0.65%	5.62%	-4.71%	-29.15%	-11.44%
411835	SUNFLOWER TEL. CO., INC.	-19.92%	-0.91%	-19.19%	-39.40%	-24.25%
411839	TRI-COUNTY TEL. ASSN. INC.-KS	-1.98%	1.64%	-3.56%	-23.65%	-4.56%
411840	TWIN VALLEY TEL. INC.-KS	-9.97%	2.69%	-12.33%	-28.21%	-10.26%
411841	UNITED TELEPHONE ASSN. INC.	19.91%	0.71%	19.07%	65.91%	107.39%
411842	UNITED TELEPHONE CO OF KS	-0.57%	6.11%	-6.29%	-85.99%	-82.49%
411845	WAMEGO TELEPHONE COMPANY INC.	12.37%	3.50%	8.57%	0.00%	0.00%
411847	THE WHEAT STATE TEL. CO. INC.	5.48%	0.83%	4.61%	11.37%	39.21%
411849	WILSON TELEPHONE COMPANY INC.	1.19%	6.87%	-5.32%	-12.93%	8.84%
411852	ZENDA TELEPHONE COMPANY INC.	-15.08%	0.88%	-15.81%	-30.88%	-13.60%
412030	TOTAH TELEPHONE CO. INC.	-7.31%	0.00%	-7.31%	-13.15%	8.56%
415214	SOUTHWESTERN BELL-KANSAS	5.14%	1.07%	4.04%	0.00%	0.00%
TOTAL:	KENTUCKY	4.04%	3.57%	0.45%	-4.78%	19.02%
260396	BALLARD RURAL TEL. COOP. CORP. INC.	7.86%	-0.65%	8.57%	0.00%	0.00%
260398	BRANDENBURG TELEPHONE COMPANY, INC.	16.68%	7.47%	8.57%	0.00%	0.00%
260401	DUO COUNTY TEL. COOP. INC.	14.36%	5.34%	8.57%	0.00%	0.00%
260402	ALLTEL KENTUCKY, INC.	15.83%	6.69%	8.57%	0.00%	0.00%
260406	FOOTHILLS RURAL TEL. COOP. CORP. INC.	9.51%	0.87%	8.57%	0.00%	0.00%
260407	GTE SOUTH INC. - KENTUCKY	6.41%	2.02%	4.30%	27.35%	59.18%
260408	HAROLD TELEPHONE CO INC.	11.52%	2.72%	8.57%	0.00%	0.00%
260410	CONTINENTAL TELEPHONE CO OF KENTUCKY	3.69%	13.63%	-8.74%	-15.75%	5.31%
260411	LESLIE COUNTY TEL. CO. INC.	14.69%	5.63%	8.57%	0.00%	0.00%
260412	LEWISPORT TEL. CO. INC.	7.92%	-0.60%	8.57%	0.00%	0.00%
260413	LOGAN TELEPHONE COOPERATIVE, INC.	10.71%	1.97%	8.57%	0.00%	0.00%
260414	MOUNTAIN RURAL TEL. COOP. CORP. INC.	12.24%	3.38%	8.57%	0.00%	0.00%
260415	PEOPLES RURAL TEL. COOP. CORP.	13.29%	4.34%	8.57%	0.00%	0.00%
260417	SALEM TEL. CO.	10.51%	1.79%	8.57%	0.00%	0.00%
260418	SOUTH CENTRAL RURAL TEL. COOP. CORP. INC	13.36%	4.42%	8.57%	0.00%	0.00%
260419	THACKER/GRIGSBY TEL. CO., INC.	11.30%	2.52%	8.57%	0.00%	0.00%
260421	WEST KY. RURAL TEL. COOP. CORP. INC.	12.92%	4.01%	8.57%	0.00%	0.00%
265061	CINCINNATI BELL-KENTUCKY	-12.02%	4.55%	-15.85%	0.00%	0.00%
265182	SOUTH CENTRAL BELL-KENTUCKY	4.18%	3.26%	0.89%	16.80%	46.00%
TOTAL:	LOUISIANA	2.61%	1.81%	0.79%	8.92%	36.15%
270422	ATHENS TELEPHONE COMPANY	23.95%	2.89%	20.47%	36.24%	70.29%
270423	CENTRAL LOUISIANA TELEPHONE COMPANY	7.33%	2.66%	4.55%	12.69%	40.87%
270424	COASTAL TELEPHONE & ELECTRONICS CORP.	18.55%	1.73%	16.54%	77.69%	122.11%
270425	CAMERON TEL. CO.- LA	-15.91%	2.98%	-18.35%	-33.96%	-17.44%
270426	CAMPTI-PLEASANT HILL TEL. COMPANY	25.73%	17.21%	7.27%	0.00%	0.00%
270427	CHATHAM TELEPHONE COMPANY, INC.	3.52%	-4.65%	8.57%	0.00%	0.00%
270428	DELCAMBRE TELEPHONE COMPANY	14.55%	5.51%	8.57%	0.00%	0.00%
270429	EAST ASCENSION TELEPHONE COMPANY	-2.69%	4.01%	-6.45%	-29.35%	-11.68%
270430	ELIZABETH TELEPHONE COMPANY INC	-9.48%	-0.71%	-8.83%	-16.77%	4.03%
270431	CADDOAN TELEPHONE COMPANY	21.11%	1.66%	19.13%	87.83%	134.79%
270432	KAPLAN TELEPHONE COMPANY	10.62%	1.89%	8.57%	0.00%	0.00%
270433	LAFOURCHE TEL. CO.	1.89%	2.32%	-0.42%	0.05%	25.06%
270434	EVANGELINE TELEPHONE COMPANY	8.51%	1.85%	6.54%	29.71%	62.14%
270435	NORTHEAST LOUISIANA TEL. CO. INC.	8.95%	-2.83%	12.12%	18.44%	48.05%
270436	CENTURY TEL. OF NORTH LA. (NORTHWEST)	11.88%	-1.12%	13.15%	61.19%	101.49%
270437	PLAIN DEALING TELEPHONE COMPANY	34.10%	1.73%	31.82%	64.19%	105.24%
270438	RESERVE TELEPHONE COMPANY	32.79%	10.39%	20.29%	ERR	ERR
270439	RINGGOLD TEL. CO., INC.	9.86%	1.19%	8.57%	0.00%	0.00%

TABLE 3.5

National Exchange Carrier Association
 Universal Service Fund
 Individual Study Areas
 Percentage Changes from 1987 to 1988

STUDY AREA CODE	COMPANY NAME	UNSEPARATED NTS REVENUE REQUIREMENT	NUMBER OF LOOPS	UNSEPARATED NTS REVENUE REQUIREMENT PER LOOP	UNIVERSAL SERVICE FUND AFTER FULL TRANSITION	UNIVERSAL SERVICE FUND APPLICABLE TO LATER YEAR	

LOUISIANA (CONT.)							
270440	CENTURY TELEPHONE COMPANY INC.	39.28%	5.76%	31.69%	60.14%	100.18%	
270441	STAR TEL. CO., INC.	11.70%	2.89%	8.57%	0.00%	0.00%	
270442	LOUISIANA WESTERN TELEPHONE COMPANY	5.14%	1.86%	3.22%	6.74%	33.42%	
270443	UNITED TELEPHONE COMPANY OF LOUISIANA	14.12%	0.42%	13.65%	24.38%	55.47%	
275183	SOUTH CENTRAL BELL-LOUISIANA	2.20%	1.74%	0.45%	1.93%	27.41%	

TOTAL:	MAINE	19.45%	5.74%	12.96%	68.98%	111.23%	

100002	BRYANT POND TEL. CO.	15.73%	8.01%	7.15%	0.00%	0.00%	
100003	LINCOLNVILLE TEL. CO.	-6.39%	5.11%	-10.94%	-51.49%	-39.36%	
100004	CHINA TEL. CO.	8.15%	3.13%	4.87%	6037.93%	7572.41%	
100005	COBBOSSECONTEE TEL. CO.	13.27%	4.33%	8.57%	0.00%	0.00%	
100007	ISLAND TEL. CO.	2.16%	9.38%	-6.60%	-4.40%	19.51%	
100010	HAMPDEN TEL. CO.	4.57%	7.18%	-2.43%	0.00%	0.00%	
100011	HARTLAND & ST. ALBANS TEL. CO.	5.27%	55.93%	-32.49%	-53.61%	-42.02%	
100014	CONTINENTAL TEL. CO OF MAINE	14.97%	7.56%	6.88%	42.47%	78.09%	
100015	COMMUNITY SERVICE TEL. CO.	28.63%	18.48%	8.57%	0.00%	0.00%	
100019	OXFORD COUNTY TEL. & TELE. CO.	31.81%	21.41%	8.57%	0.00%	0.00%	
100020	PINE TREE TEL. & TELE. CO.	16.13%	6.97%	8.57%	0.00%	0.00%	
100022	SACO RIVER TEL. & TELE. CO.	18.87%	9.49%	8.57%	0.00%	0.00%	
100024	SOMERSET TEL. CO.	9.21%	12.28%	-2.74%	0.00%	0.00%	
100025	STANDISH TEL. CO.	2.80%	11.23%	-7.58%	-25.56%	-6.95%	
100027	UNION RIVER TEL. CO.	29.78%	30.24%	-0.35%	28.52%	60.65%	
100029	UNITY TEL. CO.	-4.94%	6.99%	-11.15%	-83.73%	-79.66%	
100031	WARREN TEL. CO.	52.68%	22.95%	24.18%	0.00%	0.00%	
100034	WEST PENOBSCOT TEL. & TEL. CO.	4.80%	8.47%	-3.38%	-100.00%	-100.00%	
105111	NEW ENGLAND TEL.-MAINE	20.50%	4.91%	14.86%	ERR	ERR	

TOTAL:	MARYLAND	2.23%	3.54%	-1.26%	0.00%	0.00%	

180216	ARMSTRONG TELEPHONE COMPANY OF MD	20.17%	8.93%	10.31%	0.00%	0.00%	
185030	C & P TELEPHONE COMPANY OF MARYLAND	2.20%	3.53%	-1.29%	0.00%	0.00%	

TOTAL:	MASSACHUSETTS	11.08%	4.13%	6.67%	0.00%	0.00%	

110036	GRANBY TEL. & TELE. CO - MA	14.83%	5.76%	8.57%	0.00%	0.00%	
110037	RICHMOND TEL. CO.	14.49%	5.45%	8.57%	0.00%	0.00%	
115112	NEW ENGLAND TEL.-MA	11.08%	4.13%	6.67%	0.00%	0.00%	

TOTAL:	MICHIGAN	18.10%	4.00%	13.56%	10.54%	38.17%	

310669	ALLENDALE TELEPHONE COMPANY	19.26%	9.85%	8.57%	0.00%	0.00%	
310671	CENTURY TEL. MIDWEST (AU GRES)	803.15%	731.86%	8.57%	0.00%	0.00%	
310672	AUGUSTA TEL. CO.	11.68%	2.87%	8.57%	0.00%	0.00%	
310675	BARAGA TELEPHONE COMPANY	19.78%	10.32%	8.57%	0.00%	0.00%	
310676	BARRY COUNTY TELEPHONE COMPANY	13.09%	4.16%	8.57%	0.00%	0.00%	
310677	ISLAND TELEPHONE COMPANY	5.74%	9.78%	-3.68%	-48.75%	-35.93%	
310678	BLANCHARD TELEPHONE ASSOC. INC.	17.66%	8.37%	8.57%	0.00%	0.00%	
310679	BLOOMINGDALE TELEPHONE COMPANY	10.85%	2.03%	8.65%	30.92%	63.66%	
310680	CHIPPEWA COUNTY TELEPHONE COMPANY	-0.35%	6.52%	-6.45%	-28.08%	-10.10%	
310681	ALLTEL MICHIGAN INC.	2.04%	5.33%	-3.13%	0.00%	0.00%	
310682	C, C & S TELCO, INC. - MICHIGAN	19.99%	2.57%	16.98%	0.00%	0.00%	
310683	CARR TELEPHONE COMPANY	0.89%	12.24%	-10.11%	0.00%	0.00%	
310684	CENTRAL TEL CO	MERGED INTO 310671 CENTURY TEL. MIDWEST, 1987 DATA MISSING					
310685	CHATHAM TELEPHONE COMPANY - MI	-2.71%	5.44%	-7.73%	0.00%	0.00%	
310687	CLAYTON TELEPHONE COMPANY	-24.99%	3.41%	-27.47%	-100.00%	-100.00%	
310688	CLIMAX TELEPHONE COMPANY	12.76%	3.86%	8.57%	0.00%	0.00%	
310691	DEERFIELD FARMERS TELEPHONE COMPANY	10.67%	1.93%	8.57%	0.00%	0.00%	
310692	DRENTHE TELEPHONE COMPANY	14.72%	5.67%	8.57%	0.00%	0.00%	
310694	FARMERS MUTUAL TEL CO OF CHAPIN	2.45%	0.90%	1.55%	126.13%	182.66%	

TABLE 3.5

National Exchange Carrier Association
 Universal Service Fund
 Individual Study Areas
 Percentage Changes from 1987 to 1988

STUDY AREA CODE	COMPANY NAME	UNSEPARATED NTS REVENUE REQUIREMENT	NUMBER OF LOOPS	UNSEPARATED NTS REVENUE REQUIREMENT PER LOOP	UNIVERSAL SERVICE FUND AFTER FULL TRANSITION	UNIVERSAL SERVICE FUND APPLICABLE TO LATER YEAR

MICHIGAN (CONT.)						

310695	GTE NORTH INC. - MICHIGAN	5.16%	1.81%	3.29%	0.00%	0.00%
310698	HADLEY TEL CO	MERGED INTO 310671 CENTURY TEL. MIDWEST, 1987 DATA MISSING				
310699	HICKORY TELEPHONE COMPANY	19.72%	1.90%	17.49%	0.00%	0.00%
310702	CENTURY TELEPHONE OF MICHIGAN, INC.	8.77%	4.36%	4.23%	56.61%	95.76%
310703	KALEVA TELEPHONE COMPANY	17.31%	16.18%	0.98%	0.00%	0.00%
310704	ACE TELEPHONE CO. OF MI INC.	-9.93%	6.90%	-15.74%	-38.88%	-23.60%
310705	KINGSLEY TELEPHONE COMPANY	13.51%	4.55%	8.57%	0.00%	0.00%
310708	LENNON TELEPHONE COMPANY	15.22%	6.12%	8.57%	0.00%	0.00%
310711	MIDWAY TELEPHONE COMPANY	2.85%	2.92%	-0.07%	2.11%	27.63%
310713	HIAWATHA TELEPHONE COMPANY	-0.38%	1.10%	-1.46%	-12.64%	9.20%
310714	ODGEN TELEPHONE COMPANY	87.27%	57.14%	19.17%	295.83%	394.79%
310717	ONTONAGON COUNTY TELEPHONE CO.	6.23%	1.47%	4.68%	0.00%	0.00%
310720	PENINSULA TELEPHONE COMPANY - MI	22.88%	13.18%	8.57%	0.00%	0.00%
310721	PIGEON TELEPHONE COMPANY	5.19%	2.66%	2.46%	16.00%	44.99%
310725	SAND CREEK TEL. CO.	19.39%	9.96%	8.57%	0.00%	0.00%
310726	SHIAWASSEE TELEPHONE COMPANY	12.06%	3.21%	8.57%	0.00%	0.00%
310728	SPRINGPORT TEL. CO.	2.36%	4.03%	-1.61%	0.00%	0.00%
310732	UPPER PENINSULA TEL. CO.	5.81%	7.81%	-1.86%	2.30%	27.87%
310734	WALDRON TELEPHONE COMPANY	10.15%	1.46%	8.57%	0.00%	0.00%
310735	WESTPHALIA TELEPHONE COMPANY	10.84%	2.09%	8.57%	0.00%	0.00%
310737	WINN TELEPHONE COMPANY	28.80%	6.47%	20.97%	ERR	ERR
310738	WOLVERINE TELEPHONE COMPANY	-7.09%	2.96%	-9.75%	0.00%	0.00%
315090	MICHIGAN BELL TEL CO	20.36%	3.79%	15.96%	0.00%	0.00%

TOTAL:	MINNESOTA	1.32%	3.13%	-1.76%	52.80%	91.00%

361140	CONTEL OF MINNESOTA, INC.	13.91%	1.37%	12.37%	135.84%	194.80%
361186	GTE NORTH INC. - MINNESOTA	-9.95%	2.28%	-11.96%	0.00%	0.00%
361337	WINNEBAGO COOP TELEPHONE ASSOC - MN	-6.21%	-1.84%	-4.45%	-22.00%	-2.51%
361346	ACE TELEPHONE ASSOCIATION - MN	2.11%	-0.19%	2.30%	0.00%	0.00%
361347	ALBANY MUTUAL TELEPHONE ASSN. INC.	20.50%	10.98%	8.57%	0.00%	0.00%
361350	ARVIG TELEPHONE COMPANY	7.16%	-5.47%	13.36%	0.00%	0.00%
361353	CITY OF BARNESVILLE TELEPHONE CO	20.70%	11.17%	8.57%	0.00%	0.00%
361356	BENTON COOPERATIVE TELEPHONE CO.	14.22%	5.21%	8.57%	0.00%	0.00%
361357	BLACKDUCK TELEPHONE COMPANY	12.14%	3.29%	8.57%	0.00%	0.00%
361358	BLUE EARTH VALLEY TELEPHONE CO.	-0.95%	-8.77%	8.57%	0.00%	0.00%
361362	BRIDGEWATER TELEPHONE COMPANY	-14.40%	5.90%	-19.17%	-100.00%	-100.00%
361365	CALLAWAY TELEPHONE COMPANY	-4.01%	0.00%	-4.01%	-22.25%	-2.81%
361367	CENTRAL TELEPHONE COMPANY - MN	-6.93%	7.19%	-13.17%	0.00%	0.00%
361370	CLARA CITY TELEPHONE EXCH. CO.	-9.68%	-3.29%	-6.61%	-25.94%	-7.42%
361372	CLEMENTS TELEPHONE COMPANY	-4.48%	2.50%	-6.81%	-25.66%	-7.07%
361373	CONSOLIDATED TELEPHONE COMPANY- MN	11.44%	2.64%	8.57%	0.00%	0.00%
361374	ARROWHEAD COMMUNICATIONS CORP.	12.42%	5.81%	6.25%	27.14%	58.93%
361375	MID-COMMUNICATIONS INC.	9.09%	0.48%	8.57%	0.00%	0.00%
361377	DANUBE TELEPHONE COMPANY	8.04%	-0.45%	8.53%	0.00%	0.00%
361379	DEER RIVER TELEPHONE CO.	-22.28%	3.53%	-24.93%	-100.00%	-100.00%
361380	DELANAV TELEPHONE COMPANY	0.20%	-3.19%	3.50%	ERR	ERR
361381	DUNNELL TELEPHONE COMPANY INC.	-3.48%	-2.31%	-1.20%	-14.80%	6.50%
361383	EAGLE VALLEY TELEPHONE COMPANY	9.61%	0.96%	8.57%	0.00%	0.00%
361384	EASTON TELEPHONE COMPANY	-2.79%	0.86%	-3.62%	-22.98%	-3.72%
361385	EAST OTTER TAIL TELEPHONE CO.	8.10%	2.73%	5.23%	ERR	ERR
361386	ECKLES TELEPHONE COMPANY	14.66%	5.61%	8.57%	0.00%	0.00%
361387	EMILY COOPERATIVE TELEPHONE CO.	12.48%	3.60%	8.57%	0.00%	0.00%
361389	FARMERS MUTUAL TEL CO - BELLINGHAM	-0.66%	0.17%	-0.83%	-14.93%	6.33%
361390	FEDERATED TELEPHONE COOPERATIVE	-0.72%	0.82%	-1.53%	-18.96%	1.29%
361391	FELTON TELEPHONE COMPANY INC.	-2.45%	1.59%	-3.98%	-23.90%	-4.87%
361395	GARDEN VALLEY TELEPHONE COMPANY	3.12%	0.78%	2.32%	0.00%	0.00%
361396	GARDONVILLE COOPERATIVE TEL. ASSN.	16.48%	7.29%	8.57%	0.00%	0.00%
361399	GRANADA TEL. CO.	-0.85%	2.37%	-3.14%	-24.02%	-5.02%
361401	HALSTAD TELEPHONE COMPANY	-5.75%	1.27%	-6.93%	-23.85%	-4.81%

TABLE 3.5

National Exchange Carrier Association
 Universal Service Fund
 Individual Study Areas
 Percentage Changes from 1987 to 1988

STUDY AREA CODE	COMPANY NAME	UNSEPARATED NTS REVENUE REQUIREMENT	NUMBER OF LOOPS	UNSEPARATED NTS REVENUE REQUIREMENT PER LOOP	UNIVERSAL SERVICE FUND AFTER FULL TRANSITION	UNIVERSAL SERVICE FUND APPLICABLE TO LATER YEAR
MINNESOTA (CONT.)						
361403	HANCOCK TELEPHONE COMPANY- MN	8.41%	-0.15%	8.57%	0.00%	0.00%
361404	HARMONY TELEPHONE COMPANY	9.59%	4.72%	4.65%	0.00%	0.00%
361405	HILLS TELEPHONE CO. INC. - MN	23.29%	-0.76%	24.23%	206.25%	282.82%
361407	HOHMAN TELEPHONE COMPANY	17.65%	8.36%	8.57%	0.00%	0.00%
361408	HOME TEL. CO.- MN	13.03%	4.11%	8.57%	0.00%	0.00%
361409	HUTCHINSON TELEPHONE COMPANY	13.87%	4.88%	8.57%	0.00%	0.00%
361410	JOHNSON TELEPHONE COMPANY	-4.52%	2.28%	-6.65%	-10.73%	11.59%
361412	KASSON & MANTORVILLE TEL. CO.	14.19%	5.18%	8.57%	0.00%	0.00%
361413	K M P TELEPHONE COMPANY	8.05%	-0.48%	8.57%	0.00%	0.00%
361414	LAKEDALE TELEPHONE COMPANY	-9.48%	2.94%	-12.06%	0.00%	0.00%
361419	LISMORE COOPERATIVE TELEPHONE CO.	2.42%	1.20%	1.20%	55.85%	94.82%
361422	LONSDALE TELEPHONE COMPANY	8.76%	0.17%	8.57%	0.00%	0.00%
361423	LOWRY TELEPHONE COMPANY	10.31%	1.60%	8.57%	0.00%	0.00%
361424	MABEL COOPERATIVE TELEPHONE CO.- MN	5.64%	3.00%	2.56%	0.00%	0.00%
361425	MADELIA TELEPHONE COMPANY	9.01%	0.40%	8.57%	0.00%	0.00%
361426	MANCHESTER-HARTLAND TELEPHONE CO.	-0.47%	0.70%	-1.16%	-17.38%	3.28%
361427	MANKATO CITIZENS TELEPHONE CO.	15.30%	6.20%	8.57%	0.00%	0.00%
361430	MELROSE TELEPHONE COMPANY	27.29%	17.25%	8.57%	0.00%	0.00%
361431	MIDWEST TEL. CO.	9.82%	1.16%	8.57%	0.00%	0.00%
361433	MID STATE TELEPHONE COMPANY	-7.74%	5.56%	-12.60%	0.00%	0.00%
361437	MINNESOTA LAKE TELEPHONE COMPANY	10.92%	2.17%	8.57%	0.00%	0.00%
361439	MINNESOTA VALLEY TEL. CO. INC.	1.11%	-0.51%	1.62%	59.51%	99.39%
361440	CANNON VALLEY TELECOM, INC.	10.70%	1.96%	8.57%	0.00%	0.00%
361442	NEW ULM TELECOM, INC.	-14.42%	-0.01%	-14.41%	0.00%	0.00%
361443	NORMAN COUNTY TELEPHONE CO. INC.	-1.10%	5.04%	-5.84%	0.00%	0.00%
361445	NORTHLAND TELEPHONE COMPANY	12.43%	3.56%	8.57%	0.00%	0.00%
361448	OSAKIS TELEPHONE COMPANY	12.72%	3.82%	8.57%	0.00%	0.00%
361450	PARK REGION MUTUAL TEL. CO.	11.16%	2.39%	8.57%	0.00%	0.00%
361451	PAUL BUNYAN RURAL TEL. COOP.	1.91%	-0.26%	2.18%	7.90%	34.87%
361453	PEOPLES TELEPHONE COMPANY - MN	14.62%	7.29%	6.84%	0.00%	0.00%
361454	PINE ISLAND TELEPHONE COMPANY	15.78%	6.64%	8.57%	0.00%	0.00%
361456	UNITED TELEPHONE CO OF MINN	11.07%	10.95%	0.12%	-2.71%	21.61%
361472	REDWOOD COUNTY TEL. CO.	12.12%	3.27%	8.57%	0.00%	0.00%
361473	ROCK DELL TEL. CO.	28.89%	29.53%	-0.50%	0.00%	0.00%
361474	ROTHSAY TELEPHONE COMPANY INC.	9.24%	0.62%	8.57%	0.00%	0.00%
361475	RUNESTONE TEL. ASSN.	8.37%	6.79%	1.48%	0.00%	0.00%
361476	SACRED HEART TEL. CO.	11.07%	2.30%	8.57%	0.00%	0.00%
361479	SCOTT RICE TEL. CO.	17.61%	8.33%	8.57%	0.00%	0.00%
361482	SHERBURNE COUNTY RURAL TEL. CO.	14.05%	5.05%	8.57%	0.00%	0.00%
361483	SLEEPY EYE TEL. CO.	-9.95%	-0.49%	-9.51%	-100.00%	-100.00%
361485	SPRING GROVE COOP TEL CO	9.34%	0.71%	8.57%	0.00%	0.00%
361487	STARBUCK TEL. CO.	13.99%	5.00%	8.57%	0.00%	0.00%
361491	TWIN VALLEY-ULEN TEL CO INC.	-8.54%	-0.04%	-8.50%	-82.80%	-78.50%
361494	UPSALA COOPERATIVE TELEPHONE ASSN.	7.92%	-0.60%	8.57%	0.00%	0.00%
361495	VALLEY TEL. CO.-MN	21.81%	0.46%	21.25%	ERR	ERR
361499	CROSSLAKE TELEPHONE COMPANY	35.89%	25.16%	8.57%	0.00%	0.00%
361500	NORTHERN TELEPHONE COMPANY OF MN	-8.83%	-6.45%	-2.54%	-11.19%	11.02%
361501	WEST CENTRAL TELEPHONE ASSN.	12.16%	3.31%	8.57%	0.00%	0.00%
361502	WESTERN TELEPHONE COMPANY	9.99%	1.31%	8.57%	0.00%	0.00%
361505	WIKSTROM TELEPHONE COMPANY INC.	5.82%	-0.25%	6.08%	0.00%	0.00%
361507	WINSTED TELEPHONE COMPANY	10.85%	2.10%	8.57%	0.00%	0.00%
361508	WINTHROP TEL. CO.	10.84%	2.09%	8.57%	0.00%	0.00%
361510	WOODSTOCK TELEPHONE COMPANY	-1.73%	1.63%	-3.30%	-23.52%	-4.39%
361512	WOLVERTON TELEPHONE COMPANY	-7.08%	-2.31%	-4.88%	-23.38%	-4.22%
361515	ZUMBROTA TELEPHONE COMPANY	10.49%	1.77%	8.57%	0.00%	0.00%
361654	INTERSTATE TELECOMMUNICATIONS COOP.,	10.32%	1.61%	8.57%	0.00%	0.00%
365142	NORTHWESTERN BELL-MINNESOTA	-1.00%	2.62%	-3.53%	0.00%	0.00%

TABLE 3.5

National Exchange Carrier Association
 Universal Service Fund
 Individual Study Areas
 Percentage Changes from 1987 to 1988

STUDY AREA CODE	COMPANY NAME	UNSEPARATED NTS REVENUE REQUIREMENT	NUMBER OF LOOPS	UNSEPARATED NTS REVENUE REQUIREMENT PER LOOP	UNIVERSAL SERVICE FUND AFTER FULL TRANSITION	UNIVERSAL SERVICE FUND APPLICABLE TO LATER YEAR
TOTAL:	MISSISSIPPI	6.10%	4.27%	1.75%	14.36%	42.96%
280446	BAY SPRINGS TELEPHONE COMPANY INC.	-2.00%	0.20%	-2.19%	-5.56%	18.05%
280447	BRUCE TELEPHONE COMPANY - MS	10.94%	2.18%	8.57%	0.00%	0.00%
280448	CALHOUN CITY TEL. COMPANY INC.	9.34%	0.71%	8.57%	0.00%	0.00%
280449	MYRTLE TELEPHONE COMPANY INC.	16.25%	7.08%	8.57%	0.00%	0.00%
280451	DECATUR TELEPHONE CO INC- MS	12.96%	4.05%	8.57%	0.00%	0.00%
280452	DELTA TELEPHONE COMPANY INC.	-2.82%	8.87%	-10.74%	0.00%	0.00%
280453	ALLTEL MISSISSIPPI INC.	79.15%	4.73%	71.06%	ERR	ERR
280454	FRANKLIN TELEPHONE COMPANY INC - MS	-12.03%	1.28%	-13.15%	-38.82%	-23.53%
280455	FULTON TELEPHONE COMPANY INC.	6.88%	-1.56%	8.57%	0.00%	0.00%
280456	GEORGETOWN TELE. CO., INC.	98.47%	35.59%	46.37%	305.86%	407.32%
280457	LAKESSIDE TELEPHONE CO. (GLEN ALLAN)	1.25%	-2.01%	3.33%	ERR	ERR
280458	HOME TELEPHONE COMPANY- OLIVE BRANCH	13.61%	7.16%	6.01%	19.60%	49.50%
280459	HUGHES TELEPHONE COMPANY	-1.16%	3.72%	-4.71%	-18.26%	2.18%
280460	MID-SOUTH TEL. COMPANY INC.	15.00%	5.92%	8.57%	0.00%	0.00%
280461	SOUTHEAST MISSISSIPPI TELEPHONE CO.	50.71%	30.27%	15.69%	79.02%	123.78%
280462	MOUND BAYOU TEL. & COMMUNICATIONS, INC	3.76%	-4.43%	8.57%	0.00%	0.00%
280464	NOXAPATER TELEPHONE COMPANY	MERGED INTO 280461 SOUTHEAST MISSISSIPPI TELEPHONE CO.				
280465	SHERWOOD TEL. CO., INC.	3.88%	3.30%	0.56%	9.88%	37.35%
280466	SLEDGE TEL. CO., INC.	5.55%	-1.21%	6.84%	0.00%	0.00%
280467	SMITHVILLE TEL. CO.	11.09%	2.32%	8.57%	0.00%	0.00%
285184	SOUTH CENTRAL BELL-MISSISSIPPI	5.63%	4.27%	1.31%	9.03%	36.28%
TOTAL:	MISSOURI	0.20%	1.14%	-0.93%	4.03%	30.04%
421186	GTE NORTH INC. - MISSOURI	-0.24%	-0.27%	0.03%	-3.44%	20.70%
421206	IAMO TELEPHONE COMPANY - MO	-3.28%	-3.91%	0.66%	-1.50%	23.13%
421759	CRAW-KAN TELEPHONE COOP INC - MO	2.22%	1.92%	0.29%	-3.76%	20.30%
421807	MOKAN DIAL, INC. - MO	-1.67%	4.23%	-5.66%	-33.51%	-16.89%
421846	CONTINENTAL SYSTEMS OF MISSOURI	4.08%	7.93%	-3.57%	-7.46%	15.67%
421859	BOURBEUSE TELEPHONE COMPANY	-18.70%	-9.18%	-10.49%	-100.00%	-100.00%
421860	ALMA TELEPHONE COMPANY	4.98%	5.88%	-0.85%	-44.61%	-30.76%
421864	CHARITON VALLEY TELEPHONE CO.	5.37%	1.07%	4.25%	0.00%	0.00%
421865	CITIZENS TELEPHONE CO - MISSOURI	30.76%	1.37%	29.00%	ERR	ERR
421873	EASTERN MISSOURI TELEPHONE CO.	2.31%	1.41%	0.88%	3.15%	28.93%
421874	ELLINGTON TELEPHONE COMPANY	-0.36%	3.84%	-4.04%	-26.73%	-8.41%
421876	FARBER TELEPHONE COMPANY	-5.29%	-1.43%	-3.92%	-21.89%	-2.36%
421882	FIDELITY TELEPHONE COMPANY	13.90%	-0.24%	14.17%	1144.27%	1455.34%
421885	ALLTEL MISSOURI INC.	7.59%	2.37%	5.10%	20.44%	50.55%
421886	GOODMAN TEL. CO.	1.03%	4.06%	-2.91%	-10.75%	11.56%
421887	GRANBY TEL CO - MISSOURI	12.93%	4.01%	8.57%	0.00%	0.00%
421888	GRAND RIVER MUTUAL TEL CORP - MO	-2.75%	-1.96%	-0.80%	-8.43%	14.46%
421890	GREEN HILLS TELEPHONE CORP.	-1.98%	1.14%	-3.09%	-22.67%	-3.33%
421893	CHOCTAW TELEPHONE COMPANY	9.57%	6.03%	3.34%	0.00%	0.00%
421900	KLM TEL. CO.	2.59%	5.92%	-3.14%	-32.88%	-16.10%
421901	KINGDOM TELEPHONE COMPANY	1.64%	0.70%	0.94%	2.67%	28.34%
421904	MISSOURI TELEPHONE COMPANY	-1.65%	1.08%	-2.70%	-49.48%	-36.84%
421908	LE-RU TELEPHONE COMPANY	-5.30%	3.11%	-8.16%	-10.18%	12.27%
421912	MCDONALD COUNTY TELEPHONE CO.	11.99%	3.16%	8.57%	0.00%	0.00%
421914	MARK TWAIN RURAL TELEPHONE CO.	-1.50%	0.21%	-1.71%	-18.86%	1.42%
421917	MID-MISSOURI TELEPHONE CO.	-0.82%	2.77%	-3.50%	-25.07%	-6.34%
421920	MILLER TELEPHONE COMPANY - MO	9.94%	1.26%	8.57%	0.00%	0.00%
421922	CONTEL OF MISSOURI, INC.	5.87%	6.82%	-0.89%	3.94%	29.93%
421927	NEW FLORENCE TELEPHONE CO.	5.56%	5.29%	0.25%	-100.00%	-100.00%
421928	NEW LONDON TEL. CO.	-16.70%	-23.28%	8.57%	0.00%	0.00%
421929	HOLWAY TELEPHONE COMPANY	7.98%	-10.28%	20.34%	32.83%	66.04%
421931	NORTHEAST MISSOURI RURAL TEL. CO.	-10.52%	1.33%	-11.69%	-23.04%	-3.80%
421932	LATHROP TELEPHONE COMPANY	16.56%	2.92%	13.25%	0.00%	0.00%
421934	ORCHARD FARM TELEPHONE COMPANY	5.47%	3.28%	2.12%	8.48%	35.60%
421935	OREGON FARMERS MUTUAL TEL. CO.	9.66%	1.00%	8.57%	0.00%	0.00%
421936	PEACE VALLEY TELEPHONE CO.	1.70%	5.20%	-3.33%	-29.97%	-12.46%

TABLE 3.5

National Exchange Carrier Association
Universal Service Fund
Individual Study Areas
Percentage Changes from 1987 to 1988

STUDY AREA CODE	COMPANY NAME	UNSEPARATED NTS REVENUE REQUIREMENT	NUMBER OF LOOPS	UNSEPARATED NTS REVENUE REQUIREMENT PER LOOP	UNIVERSAL SERVICE FUND AFTER FULL TRANSITION	UNIVERSAL SERVICE FUND APPLICABLE TO LATER YEAR
MISSOURI (CONT.)						
421942	ROCK PORT TEL. CO.	10.22%	1.52%	8.57%	0.00%	0.00%
421945	SENECA TEL. CO.	9.92%	1.25%	8.57%	0.00%	0.00%
421949	STEELVILLE TEL. EXCH. INC.	12.36%	3.49%	8.57%	0.00%	0.00%
421951	STOUTLAND TELEPHONE COMPANY	-10.93%	2.53%	-13.12%	-21.95%	-2.43%
421957	UNITED TELEPHONE CO. OF MISSOURI	4.10%	2.06%	1.99%	17.91%	47.39%
421963	WEBSTER COUNTY TELEPHONE	MERGED INTO 421922 CONTEL OF MISSOURI, INC.				
421964	WHEELING TELEPHONE COMPANY	-2.14%	6.31%	-7.95%	-26.82%	-8.52%
425213	SOUTHWESTERN BELL-MISSOURI	-1.61%	0.62%	-2.21%	0.00%	0.00%
TOTAL:	MONTANA	-0.16%	1.64%	-1.77%	-1.75%	22.82%
482235	BLACKFOOT TEL. COOPERATIVE INC.	8.92%	2.36%	6.41%	15.90%	44.88%
482241	HOT SPRINGS TEL. CO.	13.54%	19.38%	-4.90%	-100.00%	-100.00%
482242	INTERBEL TEL. COOPERATIVE INC.	-5.01%	-3.39%	-1.69%	-8.90%	13.87%
482244	LINCOLN TEL. CO. INC.	-8.95%	-1.25%	-7.79%	-43.62%	-29.53%
482246	MID-RIVERS TEL. COOPERATIVE INC.	5.95%	-4.38%	10.80%	15.67%	44.59%
482247	NEMONT TELEPHONE COOP.- MONTANA	-8.85%	-0.26%	-8.61%	-16.82%	3.97%
482248	NORTHERN TEL. COOP INC.- MT	-41.69%	2.57%	-43.15%	-65.14%	-56.42%
482249	NORTHWESTERN TELEPHONE SYSTEMS, INC.	7.16%	5.26%	1.81%	17.12%	46.40%
482250	PROJECT TEL. CO.	6.30%	1.55%	4.68%	14.75%	43.44%
482251	RANGE TEL. COOP INC.-MT	-2.46%	-0.34%	-2.13%	-4.25%	19.69%
482252	RONAN TEL. CO.	16.35%	7.17%	8.57%	0.00%	0.00%
482254	SOUTHERN MONTANA TEL. CO.	2.90%	-6.79%	10.40%	7.53%	34.41%
482255	3-RIVERS TEL. COOPERATIVE INC.	-12.39%	1.04%	-13.29%	-55.80%	-44.75%
482257	TRIANGLE TEL. COOPERATIVE ASSN. INC.	-1.92%	0.19%	-2.10%	-7.68%	15.39%
482258	VALLEY RURAL TEL. COOP. ASSN.-MT	-0.59%	13.01%	-12.04%	-7.44%	15.70%
482416	GTE NORTHWEST INC. - MONTANA	39.41%	3.19%	35.11%	524.39%	680.49%
485104	MOUNTAIN BELL-MONTANA	-1.07%	1.43%	-2.47%	-19.17%	1.04%
TOTAL:	NEBRASKA	13.30%	3.15%	9.83%	-6.99%	16.26%
371186	GTE NORTH INC. - NEBRASKA	6.09%	1.81%	4.21%	0.00%	0.00%
371516	ARAPAHOE TELEPHONE COMPANY	-6.27%	-0.89%	-5.43%	-16.51%	4.36%
371517	ARLINGTON TELEPHONE COMPANY	8.21%	1.24%	6.88%	18.96%	48.70%
371524	BLAIR TELEPHONE COMPANY	6.02%	3.93%	2.01%	189.16%	261.45%
371525	THREE RIVER TELCO	1.83%	1.34%	0.48%	1.83%	27.29%
371526	CAMBRIDGE TELEPHONE COMPANY - NE	11.37%	2.58%	8.57%	0.00%	0.00%
371530	CONSOLIDATED TELCO, INC.	1.43%	3.50%	-2.00%	-25.75%	-7.18%
371531	CLARKS TELEPHONE COMPANY	1.80%	1.47%	0.33%	-2.48%	21.90%
371532	CONSOLIDATED TELEPHONE COMPANY- NE	-1.79%	2.74%	-4.40%	-25.02%	-6.28%
371534	COZAD TELEPHONE COMPANY	5.22%	7.83%	-2.42%	0.00%	0.00%
371536	CURTIS TELEPHONE COMPANY	-8.45%	0.27%	-8.70%	-22.81%	-3.51%
371537	DALTON TEL. CO., INC.	-13.19%	0.64%	-13.74%	-26.53%	-8.17%
371540	DILLER TELEPHONE COMPANY	10.86%	-2.95%	14.22%	81.08%	126.35%
371542	EASTERN NEBRASKA TELEPHONE COMPANY	10.99%	1.03%	9.86%	51.96%	89.95%
371544	ELSIE MUTUAL TELEPHONE COMPANY	-1.02%	6.25%	-6.84%	-26.42%	-8.02%
371545	EUSTIS TELEPHONE EXCHANGE INC.	11.41%	2.93%	8.24%	0.00%	0.00%
371553	GLENWOOD TELEPHONE MEMBERSHIP CORP.	10.08%	1.39%	8.57%	0.00%	0.00%
371555	HAMILTON TELEPHONE COMPANY	4.42%	-3.83%	8.57%	0.00%	0.00%
371556	HARTINGTON TEL. CO.	10.35%	1.64%	8.57%	0.00%	0.00%
371557	HARTMAN TELEPHONE EXCHANGES INC.	-5.95%	-2.02%	-4.01%	-8.53%	14.34%
371558	HEMINGFORD COOP. TELEPHONE COMPANY	2.89%	-0.48%	3.39%	22.18%	52.73%
371559	HENDERSON CO-OP TELEPHONE COMPANY	8.69%	0.11%	8.57%	0.00%	0.00%
371561	HERSHEY COOPERATIVE TELEPHONE CO	13.86%	4.87%	8.57%	0.00%	0.00%
371562	HOME TEL. CO. OF NEBRASKA	3.56%	3.03%	0.52%	5.73%	32.16%
371563	HOOPER TELEPHONE COMPANY	12.65%	3.76%	8.57%	0.00%	0.00%
371565	K & M TELEPHONE COMPANY INC.	1.75%	2.28%	-0.52%	-16.79%	4.01%
371567	KEYSTONE-ARTHUR TELEPHONE COMPANY	-15.82%	-1.95%	-14.15%	-27.71%	-9.64%
371568	LINCOLN TEL. & TELE. CO.	4.07%	6.28%	-2.08%	0.00%	0.00%
371574	NEBRASKA CENTRAL TELEPHONE COMPANY	4.99%	-0.99%	6.04%	10.11%	37.64%

TABLE 3.5

National Exchange Carrier Association
 Universal Service Fund
 Individual Study Areas
 Percentage Changes from 1987 to 1988

STUDY AREA CODE	COMPANY NAME	UNSEPARATED NTS REVENUE REQUIREMENT	NUMBER OF LOOPS	UNSEPARATED NTS REVENUE REQUIREMENT PER LOOP	UNIVERSAL SERVICE FUND AFTER FULL TRANSITION	UNIVERSAL SERVICE FUND APPLICABLE TO LATER YEAR
NEBRASKA (CONT.)						
371576	NORTHEAST NEBRASKA TELEPHONE COMPANY	1.73%	1.87%	-0.14%	-11.59%	10.51%
371577	GREAT PLAINS COMMUNICATIONS, INC.	-3.13%	0.50%	-3.62%	-20.50%	-0.62%
371580	PETERSBURG TELEPHONE COMPANY	-1.99%	2.76%	-4.63%	-6.51%	16.86%
371581	PIERCE TELEPHONE COMPANY	11.54%	2.73%	8.57%	0.00%	0.00%
371582	PLAINVIEW TELEPHONE COMPANY INC.	11.05%	2.29%	8.57%	0.00%	0.00%
371586	ROCK COUNTY TEL. CO.	9.19%	0.82%	8.29%	14.92%	43.65%
371587	RODEO TELEPHONE, INC.	MERGED INTO 371574 NEBRASKA CENTRAL TELEPHONE COMPANY				
371590	SODTOWN TEL. CO.	-5.79%	2.56%	-8.15%	-17.99%	2.51%
371591	SOUTHEAST NEBRASKA TEL. CO.	0.31%	1.32%	-1.00%	-1.32%	23.35%
371592	STANTON TEL. CO., INC.	7.42%	1.11%	6.24%	17.04%	46.30%
371595	UNITED TELEPHONE CO. OF THE WEST-NE	0.34%	1.58%	-1.22%	0.00%	0.00%
371597	WAUNETA TEL. CO.	-16.75%	-2.51%	-14.61%	-22.90%	-3.63%
372455	BENKELMAN TELEPHONE COMPANY INC.	1.39%	5.52%	-3.91%	-3.17%	21.04%
375143	NORTHWESTERN BELL-NEBRASKA	25.32%	2.21%	22.61%	0.00%	0.00%
TOTAL:	NEVADA	0.67%	8.30%	-7.05%	-43.36%	-29.20%
552220	FILER MUTUAL TELEPHONE COMPANY - NV	12.82%	20.81%	-6.61%	-100.00%	-100.00%
552223	GEM STATE UTILITIES CORP-NV	-12.76%	11.00%	-21.41%	-25.95%	-7.44%
552233	RURAL TELEPHONE COMPANY - NV	19.49%	19.11%	0.31%	19.39%	49.24%
552284	BEEHIVE TELEPHONE COMPANY, INC., NV	76.23%	6.90%	64.86%	132.09%	190.11%
552302	CONTEL OF CALIFORNIA - NEVADA	6.97%	4.84%	2.03%	12.67%	40.84%
552304	C P NATIONAL CORP. - NEVADA	8.89%	13.74%	-4.26%	-2.59%	21.76%
552348	CENTRAL TELEPHONE COMPANY - NEVADA	-5.51%	8.85%	-13.20%	0.00%	0.00%
552349	CHURCHILL CO. TEL. & TEL. SYSTEM	15.29%	4.73%	10.08%	62.26%	102.82%
552351	LINCOLN COUNTY TELEPHONE SYSTEM INC.	17.15%	2.88%	13.87%	ERR	ERR
552353	MOAPA VALLEY TELEPHONE COMPANY	-13.41%	6.81%	-18.93%	0.00%	0.00%
552354	NEVADA TELEPHONE-TELEGRAPH COMPANY	9.48%	8.08%	1.30%	29.94%	62.42%
552356	RIO VIRGIN TELEPHONE COMPANY	40.15%	23.80%	13.21%	ERR	ERR
555173	NEVADA BELL	5.14%	7.42%	-2.12%	-88.35%	-85.44%
TOTAL:	NEW HAMPSHIRE	26.64%	5.24%	20.34%	421.04%	551.30%
120038	BRETTON WOODS TEL. CO.	-38.99%	89.71%	-67.84%	-100.00%	-100.00%
120039	GRANITE STATE TEL., INC.	4.77%	8.23%	-3.20%	-16.11%	4.86%
120040	CHICHESTER TEL. CO.	-5.23%	15.34%	-17.83%	0.00%	0.00%
120041	CONTINENTAL TEL. CO. OF NH, INC.	3.11%	3.73%	-0.59%	-6.36%	17.05%
120042	DIXVILLE TEL. CO.	-5.82%	1.92%	-7.59%	-20.13%	-0.16%
120043	DUNBARTON TEL. CO.	17.26%	8.00%	8.57%	0.00%	0.00%
120045	KEARSARGE TEL. CO.	-3.59%	7.83%	-10.59%	0.00%	0.00%
120046	MERIDEN TEL. CO.	1.67%	18.41%	-14.14%	0.00%	0.00%
120047	MERRIMACK COUNTY TEL. CO.	6.55%	8.10%	-1.43%	-52.14%	-40.17%
120049	UNION TEL. CO.	-8.62%	7.52%	-15.02%	0.00%	0.00%
120050	WILTON TEL. CO. - NH	9.47%	2.06%	7.26%	33.48%	66.84%
125113	NEW ENGLAND TEL.-NH	28.33%	5.11%	22.08%	2035.81%	2569.76%
TOTAL:	NEW JERSEY	-1.98%	3.89%	-5.65%	0.00%	0.00%
160135	WARWICK VALLEY TEL. CO.-NJ	-7.04%	6.28%	-12.54%	0.00%	0.00%
160138	UNITED TEL. CO. OF NJ, INC. (160139)	18.11%	6.31%	11.10%	0.00%	0.00%
165120	NEW JERSEY BELL	-2.79%	3.82%	-6.36%	0.00%	0.00%
TOTAL:	NEW MEXICO	5.80%	2.80%	2.92%	-0.80%	24.00%
492066	DELL TELEPHONE CO-OP. INC.-NM	7.15%	-5.30%	13.15%	8.81%	36.02%
492080	GTE SOUTHWEST INC. - NEW MEXICO	-3.95%	1.38%	-5.26%	-40.78%	-25.97%
492176	VALLEY TELEPHONE COOPERATIVE INC-NM	4.24%	6.49%	-2.11%	2.76%	28.45%
492177	CONTEL OF THE WEST - NEW MEXICO	5.49%	3.53%	1.89%	7.40%	34.25%
492259	BACA VALLEY TEL. CO.	-5.54%	2.96%	-8.26%	-7.97%	15.04%
492262	E.N.M.R. TEL COOP. INC.-NM	-0.09%	3.31%	-3.29%	-1.61%	22.98%

TABLE 3.5

PAGE 17

National Exchange Carrier Association
Universal Service Fund
Individual Study Areas
Percentage Changes from 1987 to 1988

STUDY AREA CODE	COMPANY NAME	UNSEPARATED NTS REVENUE REQUIREMENT	NUMBER OF LOOPS	UNSEPARATED NTS REVENUE REQUIREMENT PER LOOP	UNIVERSAL SERVICE FUND AFTER FULL TRANSITION	UNIVERSAL SERVICE FUND APPLICABLE TO LATER YEAR

NEW MEXICO (CONT.)						
492263	LA JICARITA RURAL TEL. COOP. INC.	-4.97%	-1.83%	-3.19%	-8.78%	14.03%
492264	LEACO RURAL TEL. COOPERATIVE INC.	10.03%	-3.57%	14.10%	16.19%	45.24%
492268	WESTERN NEW MEXICO TEL. CO., INC.	-5.82%	1.73%	-7.42%	-7.81%	15.24%
492270	PENASCO VALLEY TEL. COOPERATIVE INC.	5.96%	-0.92%	6.93%	7.96%	34.95%
492272	ROOSEVELT COUNTY RURAL TEL. COOP., INC.	-1.07%	-1.26%	0.19%	-1.22%	23.48%
492274	UNIVERSAL TEL CO OF SOUTHWEST- NM	-1.80%	7.47%	-8.62%	-47.45%	-34.31%
492275	NAVAJO COMMUNICATIONS CO INC.-NM	15.31%	9.13%	5.67%	18.15%	47.68%
495105	MOUNTAIN BELL-NEW MEXICO	7.68%	2.84%	4.71%	0.00%	0.00%

TOTAL:	NEW YORK	-7.95%	2.45%	-10.16%	14.52%	43.15%

150071	ARMSTRONG TELEPHONE CO.- NY (ADDISON)	16.64%	0.88%	15.62%	0.00%	0.00%
150072	AU SABLE VALLEY TEL. CO. INC.	23.13%	4.38%	17.97%	ERR	ERR
150073	BERKSHIRE TEL. CORP.	11.85%	3.03%	8.57%	0.00%	0.00%
150076	CASSADAGA TEL. CORP.	15.15%	6.06%	8.57%	0.00%	0.00%
150077	CHAMPLAIN TEL. CO.	18.19%	16.38%	1.55%	0.00%	0.00%
150078	CHAUTAUQUA & ERIE TEL. CORP.	-6.34%	2.89%	-8.97%	0.00%	0.00%
150079	CHAZY & WESTPORT TEL. CORP.	12.40%	3.53%	8.57%	0.00%	0.00%
150081	CITIZENS TEL. CO. OF HAMMOND, NY	3.19%	5.26%	-1.97%	1.49%	26.86%
150082	CLYMER TEL. CO.	6.12%	4.02%	2.02%	12.18%	40.22%
150084	TACONIC TEL. CORP.	-9.33%	5.36%	-13.94%	0.00%	0.00%
150085	CROWN POINT TELEPHONE CORPORATION	15.56%	5.71%	9.31%	23.20%	54.00%
150088	DELHI TELEPHONE COMPANY	14.46%	5.42%	8.57%	0.00%	0.00%
150089	DEPOSIT TELEPHONE CO. INC.	20.16%	10.68%	8.57%	0.00%	0.00%
150091	DUNKIRK AND FREDONIA TEL. CO.	-2.27%	7.47%	-9.06%	0.00%	0.00%
150092	EDWARDS TELEPHONE CO. INC.	23.40%	8.23%	14.02%	45.72%	82.15%
150093	EMPIRE TELEPHONE CORP - NEW YORK	0.91%	6.74%	-5.47%	-45.45%	-31.82%
150095	THE FISHERS ISLAND TEL. CO.	13.42%	4.47%	8.57%	0.00%	0.00%
150096	CONTINENTAL TEL CO OF NY, INC.	9.14%	5.84%	3.12%	21.62%	52.02%
150097	GERMANTOWN TELEPHONE CO INC.	18.32%	18.58%	-0.22%	17.01%	46.26%
150099	HANCOCK TELEPHONE COMPANY - NY	23.43%	2.66%	20.24%	164.67%	230.84%
150100	HIGHLAND TELEPHONE CO.	7.58%	6.00%	1.48%	0.00%	0.00%
150104	MARGARETVILLE TEL. CO. INC.	16.54%	7.34%	8.57%	0.00%	0.00%
150105	MIDDLEBURGH TELEPHONE CO.	12.88%	19.67%	-5.68%	-2.88%	21.40%
150106	ALLTEL NEW YORK INC.- FULTON	11.86%	8.44%	3.16%	0.00%	0.00%
150107	NEWPORT TELEPHONE CO. INC.	10.04%	1.35%	8.57%	0.00%	0.00%
150108	NICHOLVILLE TEL. CO. INC.	1.81%	7.61%	-5.39%	-18.27%	2.16%
150109	ALLTEL NEW YORK INC. - JAMESTOWN	-0.35%	2.87%	-3.13%	0.00%	0.00%
150110	OGDEN TELEPHONE COMPANY - NY	2.03%	6.20%	-3.93%	0.00%	0.00%
150111	ONEIDA COUNTY RURAL TEL. CO.	12.39%	3.52%	8.57%	0.00%	0.00%
150112	ONTARIO TEL CO INC	12.40%	3.53%	8.57%	0.00%	0.00%
150113	ALLTEL NY INC. - RED JACKET	-6.64%	4.07%	-10.29%	0.00%	0.00%
150114	ORISKANY FALLS TELEPHONE CORP.	11.08%	2.31%	8.57%	0.00%	0.00%
150116	PATTERSONVILLE TEL CO- NEW YORK	5.25%	-2.35%	7.78%	0.00%	0.00%
150118	PORT BYRON TELEPHONE COMPANY	11.39%	2.59%	8.57%	0.00%	0.00%
150119	RED HOOK TELEPHONE COMPANY	-2.18%	8.59%	-9.91%	-80.10%	-75.13%
150121	ROCHESTER TELEPHONE CORPORATION	1.00%	3.44%	-2.36%	0.00%	0.00%
150122	SENECA-GORHAM TEL. CORP.	1.96%	3.96%	-1.92%	0.00%	0.00%
150125	STATE TEL. CO.	11.85%	3.02%	8.57%	0.00%	0.00%
150128	SYLVAN LAKE TELEPHONE COMPANY	16.72%	5.99%	10.13%	0.00%	0.00%
150129	TOWNSHIP TELEPHONE COMPANY INC.	19.67%	10.22%	8.57%	0.00%	0.00%
150131	TRUMANSBURG HOME TELEPHONE COMPANY	20.52%	11.01%	8.57%	0.00%	0.00%
150133	VERNON TELEPHONE COMPANY INC.	0.21%	5.17%	-4.72%	0.00%	0.00%
150135	WARWICK VALLEY TEL. CO.-NY	7.23%	6.56%	0.62%	0.00%	0.00%
150136	WESTERN COUNTIES TELEPHONE CO.	0.13%	0.53%	-0.40%	-2.05%	22.44%
155130	NEW YORK TELEPHONE	-9.23%	2.23%	-11.21%	0.00%	0.00%

TOTAL:	NORTH CAROLINA	10.74%	3.85%	6.64%	13.45%	41.82%

230468	ATLANTIC TELEPHONE MEMB. CORP.	1.42%	3.67%	-2.17%	0.00%	0.00%

TABLE 3.5

National Exchange Carrier Association
Universal Service Fund
Individual Study Areas
Percentage Changes from 1987 to 1988

STUDY AREA CODE	COMPANY NAME	UNSEPARATED NTS REVENUE REQUIREMENT	NUMBER OF LOOPS	UNSEPARATED NTS REVENUE REQUIREMENT PER LOOP	UNIVERSAL SERVICE FUND AFTER FULL TRANSITION	UNIVERSAL SERVICE FUND APPLICABLE TO LATER YEAR
NORTH CAROLINA (CONT.)						
230469	BARNARDSVILLE TELEPHONE COMPANY	-1.32%	2.94%	-4.14%	-100.00%	-100.00%
230470	CAROLINA TELEPHONE & TEL. CO.	19.23%	4.69%	13.89%	0.00%	0.00%
230471	CENTRAL TEL. CO. - NORTH CAROLINA	8.23%	3.99%	4.07%	0.00%	0.00%
230473	CITIZENS TELEPHONE COMPANY - NC	3.05%	2.54%	0.49%	3.11%	28.89%
230474	THE CONCORD TELEPHONE COMPANY	2.67%	1.72%	0.94%	0.00%	0.00%
230476	ALLTEL CAROLINA INC.- NORTH	16.98%	6.40%	9.94%	560.82%	726.02%
230478	ELLERBE TELEPHONE COMPANY	14.19%	5.18%	8.57%	0.00%	0.00%
230479	GTE SOUTH INC. - NORTH CAROLINA	15.96%	5.03%	10.40%	0.00%	0.00%
230481	HEINS TELEPHONE COMPANY	4.45%	3.67%	0.76%	0.00%	0.00%
230483	LEXINGTON TELEPHONE COMPANY	16.99%	7.76%	8.57%	0.00%	0.00%
230485	MEBANE HOME TELEPHONE CO.	14.40%	5.37%	8.57%	0.00%	0.00%
230491	NORTH STATE TELEPHONE CO. - NC	17.59%	8.31%	8.57%	0.00%	0.00%
230494	PINEVILLE TELEPHONE CO.	28.34%	18.21%	8.57%	0.00%	0.00%
230495	RANDOLPH TEL. CO.	13.83%	4.85%	8.57%	0.00%	0.00%
230496	RANDOLPH TELEPHONE MEMB. CORP.	18.04%	8.72%	8.57%	0.00%	0.00%
230497	PIEDMONT TELEPHONE MEMB. CORP.	14.74%	5.68%	8.57%	0.00%	0.00%
230498	SALUDA MOUNTAIN TEL. CO.	14.98%	5.91%	8.57%	0.00%	0.00%
230499	SANDHILL TELEPHONE COMPANY	16.98%	7.74%	8.57%	0.00%	0.00%
230500	SERVICE TELEPHONE COMPANY	11.20%	2.43%	8.57%	0.00%	0.00%
230501	SKYLINE TEL. MEMB. CORP.	15.62%	6.50%	8.57%	0.00%	0.00%
230502	STAR TEL. MEMB. CORP.	-3.19%	1.31%	-4.44%	0.00%	0.00%
230503	SURRY TEL. MEMB. CORP.	14.30%	5.28%	8.57%	0.00%	0.00%
230505	TRI-COUNTY TEL. MEMB. CORP.-NC	13.41%	4.46%	8.57%	0.00%	0.00%
230509	CONTINENTAL TELEPHONE CO OF N.C.	-2.61%	7.59%	-9.48%	-19.83%	0.22%
230510	WILKES TELEPHONE MEMB. CORP.	-2.90%	3.05%	-5.78%	-32.82%	-16.03%
230511	YADKIN VALLEY TEL. MEMB. CORP.	14.07%	5.06%	8.57%	0.00%	0.00%
235193	SOUTHERN BELL-NORTH CAROLINA	8.08%	2.75%	5.19%	90.93%	138.66%
TOTAL:	NORTH DAKOTA	0.83%	1.06%	-0.24%	-13.13%	8.59%
381447	CONTEL OF NORTH DAKOTA, INC.	-7.55%	3.01%	-10.24%	-86.27%	-82.84%
381509	WOLVERTON TEL. CO.	-5.31%	2.18%	-7.33%	-23.77%	-4.71%
381601	ABSARAKA COOP TELEPHONE CO.	0.26%	6.67%	-6.00%	-5.44%	18.20%
381604	BEK TELEPHONE MUTUAL AID CORP.	0.48%	0.55%	-0.06%	-8.58%	14.27%
381607	CONSOLIDATED TELEPHONE COOPERATIVE	-1.91%	-1.46%	-0.46%	-2.70%	21.63%
381610	DAKOTA CENTRAL RURAL TEL COOP ASSN	0.75%	1.83%	-1.07%	-18.89%	1.39%
381611	DICKEY RURAL TEL COOP.	-8.44%	-2.78%	-5.82%	-22.52%	-3.14%
381614	GILBY TELEPHONE COMPANY	1.55%	5.79%	-4.01%	-30.71%	-13.39%
381615	GRIGGS COUNTY TELEPHONE COMPANY	10.45%	1.73%	8.57%	0.00%	0.00%
381616	INTER-COMMUNITY TELEPHONE COMPANY	8.57%	-0.16%	8.75%	21.26%	51.58%
381617	MIDSTATE TELEPHONE COMPANY	-10.27%	-3.46%	-7.05%	-58.13%	-47.66%
381622	MOORE & LIBERTY TELEPHONE COMPANY	13.58%	4.61%	8.57%	0.00%	0.00%
381623	NOONAN FARMERS TELEPHONE COMPANY	-4.39%	0.50%	-4.87%	-23.37%	-4.21%
381624	NORTHERN STATES POWER CO. TEL. DEPT.	9.89%	1.22%	8.57%	0.00%	0.00%
381625	NORTHWEST COMMUNICATIONS COOPERATIVE	-1.25%	0.37%	-1.61%	-18.78%	1.52%
381630	POLAR COMMUNICATIONS MUTUAL AID CORP	-3.82%	-3.39%	-0.44%	0.00%	0.00%
381631	RED RIVER RURAL TEL. ASSN.	-0.33%	4.29%	-4.43%	-27.29%	-9.11%
381632	RESERVATION TELEPHONE COOPERATIVE	2.94%	-1.25%	4.24%	11.00%	38.76%
381634	SOURIS RIVER TEL. MUTUAL AID COOP.	-5.67%	-1.09%	-4.62%	-100.00%	-100.00%
381636	UNITED TELEPHONE MUTUAL AID CORP.	10.09%	1.40%	8.57%	0.00%	0.00%
381637	WEST RIVER MUTUAL AID TELEPHONE CORP	-3.35%	-1.03%	-2.35%	0.00%	0.00%
381638	YORK TELEPHONE COMPANY	-6.18%	0.00%	-6.18%	-12.36%	9.55%
382247	NEMONT TELEPHONE COOPERATIVE - ND	6.27%	21.89%	-12.81%	-15.99%	5.02%
385144	NORTHWESTERN BELL-NORTH DAKOTA	1.16%	1.41%	-0.24%	0.00%	0.00%
TOTAL:	OHIO	7.23%	3.62%	3.48%	81.75%	127.19%
300585	ARCADIA TEL. CO.	7.94%	-0.58%	8.57%	0.00%	0.00%
300586	THE ARTHUR MUTUAL TELEPHONE COMPANY	19.97%	10.50%	8.57%	0.00%	0.00%
300588	AYERSVILLE TELEPHONE COMPANY	11.32%	2.54%	8.57%	0.00%	0.00%

TABLE 3.5

National Exchange Carrier Association
 Universal Service Fund
 Individual Study Areas
 Percentage Changes from 1987 to 1988

STUDY AREA CODE	COMPANY NAME	UNSEPARATED NTS REVENUE REQUIREMENT	NUMBER OF LOOPS	UNSEPARATED NTS REVENUE REQUIREMENT PER LOOP	UNIVERSAL SERVICE FUND AFTER FULL TRANSITION	UNIVERSAL SERVICE FUND APPLICABLE TO LATER YEAR
OHIO (CONT.)						
300589	BASCOM MUTUAL TELEPHONE COMPANY	8.14%	-0.40%	8.57%	0.00%	0.00%
300590	BENTON RIDGE TELEPHONE COMPANY	2.62%	1.29%	1.31%	92.59%	140.73%
300591	BUCKLAND MUTUAL TELEPHONE COMPANY	10.88%	2.12%	8.57%	0.00%	0.00%
300594	THE CHAMPAIGN TELEPHONE COMPANY	14.54%	5.50%	8.57%	0.00%	0.00%
300597	CHILLICOTHE TELEPHONE COMPANY	12.32%	5.08%	6.89%	76.99%	121.23%
300598	MCCLURE TELEPHONE COMPANY	4.57%	-3.68%	8.57%	0.00%	0.00%
300604	COLUMBUS GROVE TELEPHONE COMPANY	10.71%	1.97%	8.57%	0.00%	0.00%
300606	CONNEAUT TELEPHONE COMPANY	17.83%	8.53%	8.57%	0.00%	0.00%
300607	CONTINENTAL TELEPHONE CO OF OHIO	-0.29%	2.04%	-2.29%	-17.82%	2.72%
300609	DOYLESTOWN TELEPHONE COMPANY	12.17%	3.32%	8.57%	0.00%	0.00%
300611	ELYRIA TELEPHONE COMPANY	10.40%	1.69%	8.57%	0.00%	0.00%
300612	THE FARMERS MUTUAL TEL CO - OKOLONA	5.35%	1.04%	4.27%	0.00%	0.00%
300613	FAYETTEVILLE TELEPHONE COMPANY	-14.62%	3.78%	-17.73%	-47.04%	-33.79%
300614	FORT JENNINGS TELEPHONE COMPANY	18.83%	9.45%	8.57%	0.00%	0.00%
300615	GTE NORTH INC. - OHIO	0.47%	1.07%	-0.59%	0.00%	0.00%
300618	GERMANTOWN INDEPENDENT TEL. CO.	12.46%	3.59%	8.57%	0.00%	0.00%
300619	THE GLANDORF TELEPHONE CO. INC.	14.18%	5.17%	8.57%	0.00%	0.00%
300620	HARLAN TELEPHONE COMPANY	34.74%	5.86%	27.29%	ERR	ERR
300625	KALIDA TELEPHONE CO. INC.	17.01%	7.78%	8.57%	0.00%	0.00%
300630	CENTRAL TELEPHONE COMPANY OF OHIO	4.70%	0.86%	3.80%	0.00%	0.00%
300633	MIDDLE POINT HOME TELEPHONE COMPANY	12.59%	3.70%	8.57%	0.00%	0.00%
300634	MINFORD TELEPHONE COMPANY INC.	11.44%	2.64%	8.57%	0.00%	0.00%
300637	ALLTEL OHIO INC - NEWARK	12.12%	3.27%	8.57%	0.00%	0.00%
300639	THE NEW KNOXVILLE TELEPHONE COMPANY	11.66%	2.85%	8.57%	0.00%	0.00%
300644	THE NOVA TELEPHONE COMPANY	6.11%	3.98%	2.05%	0.00%	0.00%
300645	OAKWOOD MUTUAL TELEPHONE COMPANY	13.22%	4.28%	8.57%	0.00%	0.00%
300649	ORWELL TELEPHONE COMPANY	11.85%	3.02%	8.57%	0.00%	0.00%
300650	THE OTTOVILLE MUTUAL TEL. COMPANY	13.08%	4.15%	8.57%	0.00%	0.00%
300651	PATTERSONVILLE TELEPHONE CO- OH	0.19%	-0.32%	0.52%	0.74%	25.92%
300654	RIDGEVILLE TELEPHONE COMPANY	25.24%	15.35%	8.57%	0.00%	0.00%
300656	SHERWOOD MUTUAL TEL. ASSOC.	12.08%	3.24%	8.57%	0.00%	0.00%
300658	SYCAMORE TELEPHONE COMPANY	12.88%	4.04%	8.50%	0.00%	0.00%
300659	TELEPHONE SERVICE COMPANY	14.03%	5.03%	8.57%	0.00%	0.00%
300661	UNITED TELEPHONE CO. OF OHIO	7.41%	4.41%	2.88%	203.44%	279.30%
300662	VANLUE TELEPHONE COMPANY	33.57%	23.03%	8.57%	0.00%	0.00%
300663	VAUGHNSVILLE TELEPHONE COMPANY	2.05%	6.54%	-4.21%	-32.41%	-15.52%
300664	WABASH MUTUAL TELEPHONE COMPANY	12.40%	3.53%	8.57%	0.00%	0.00%
300665	ALLTEL OHIO INC - WESTERN OHIO	7.96%	2.48%	5.35%	ERR	ERR
300666	WESTERN RESERVE TELEPHONE COMPANY	13.40%	4.45%	8.57%	0.00%	0.00%
300682	C, C & S TELCO, INC.- OHIO	27.27%	8.64%	17.14%	0.00%	0.00%
305062	CINCINNATI BELL-OHIO	-6.12%	3.49%	-9.29%	0.00%	0.00%
305150	OHIO BELL TEL CO	10.71%	4.09%	6.35%	0.00%	0.00%
TOTAL:	OKLAHOMA	1.75%	-0.52%	2.28%	4.72%	30.91%
431704	LAVACA TELEPHONE CO.- OK	10.18%	1.48%	8.57%	0.00%	0.00%
431788	KANOKLA TELEPHONE ASSN. INC. - OK	8.75%	-2.11%	11.09%	26.21%	57.76%
431831	SOUTH CENTRAL TEL. ASSN., INC.-OK	-18.64%	-0.25%	-18.44%	-62.28%	-52.85%
431965	ALLTEL OKLAHOMA, INC.	8.77%	1.31%	7.37%	17.02%	46.28%
431966	ATLAS TELEPHONE CO.	6.83%	2.62%	4.10%	14.01%	42.51%
431968	BEGGS TELEPHONE COMPANY	12.04%	3.20%	8.57%	0.00%	0.00%
431969	BIXBY TELEPHONE CO.	12.48%	3.60%	8.57%	0.00%	0.00%
431974	CANADIAN VALLEY TELEPHONE CO.	-6.89%	-0.86%	-6.09%	-14.47%	6.92%
431976	CARNEGIE TELEPHONE CO. INC.	-1.02%	2.20%	-3.16%	-24.93%	-6.16%
431977	CENTRAL OKLAHOMA TELEPHONE CO.	-0.08%	0.74%	-0.81%	-15.46%	5.67%
431979	CHEROKEE TELEPHONE CO.	-2.88%	-0.29%	-2.60%	0.00%	0.00%
431980	CHICKASAW TELEPHONE CO.	-7.65%	-0.06%	-7.60%	-81.95%	-77.43%
431981	CHOUTEAU TELEPHONE CO.	12.15%	2.04%	9.91%	25.72%	57.15%
431982	CIMARRON TEL. CO.	9.62%	0.97%	8.57%	0.00%	0.00%
431984	OKLAHOMA COMMUNICATION SYSTEMS INC.	-1.89%	0.73%	-2.59%	-5.57%	18.03%

TABLE 3.5

National Exchange Carrier Association
Universal Service Fund
Individual Study Areas
Percentage Changes from 1987 to 1988

STUDY AREA CODE	COMPANY NAME	UNSEPARATED NTS REVENUE REQUIREMENT	NUMBER OF LOOPS	UNSEPARATED NTS REVENUE REQUIREMENT PER LOOP	UNIVERSAL SERVICE FUND AFTER FULL TRANSITION	UNIVERSAL SERVICE FUND APPLICABLE TO LATER YEAR
OKLAHOMA (CONT.)						
431985	CROSS TELEPHONE CO.	-4.91%	2.86%	-7.56%	-37.76%	-22.20%
431988	DOBSON TELEPHONE CO.	22.14%	0.05%	22.08%	41.93%	77.41%
431994	GRAND TELEPHONE CO. INC.	17.30%	1.84%	15.19%	84.83%	131.04%
431995	HINTON TELEPHONE CO.	-2.98%	-0.32%	-2.67%	-10.30%	12.13%
432006	MLOUD TELEPHONE CO.	3.61%	0.21%	3.40%	22.72%	53.40%
432008	MEDICINE PARK TELEPHONE CO.	9.76%	1.09%	8.57%	0.00%	0.00%
432010	MID-AMERICA TEL., INC.	-3.45%	1.00%	-4.41%	-94.04%	-92.56%
432011	OKLAHOMA ALLTEL, INC.	8.60%	3.85%	4.57%	15.23%	44.04%
432013	OKLAHOMA TELEPHONE & TELEGRAPH INC.	-4.79%	-0.97%	-3.86%	-10.15%	12.31%
432014	OKLAHOMA WESTERN TELEPHONE CO.	-18.25%	-1.90%	-16.67%	-28.89%	-11.11%
432016	PANHANDLE TELEPHONE COOPERATIVE INC.	-8.68%	-0.12%	-8.57%	-16.76%	4.05%
432017	PINE TELEPHONE CO INC- OK	14.50%	5.47%	8.57%	0.00%	0.00%
432018	PIONEER TEL. COOP. INC.	-3.37%	-0.93%	-2.46%	-15.96%	5.06%
432020	POTTAWATOMIE TELEPHONE CO.	-4.49%	-1.09%	-3.44%	-5.99%	17.51%
432022	SALINA-SPAVINAW TEL. CO., INC.	24.01%	14.23%	8.57%	0.00%	0.00%
432023	SHIDLER TEL. CO.	-5.26%	0.22%	-5.47%	-24.01%	-5.01%
432025	SOUTHWEST OKLAHOMA TEL. CO.	-5.13%	0.22%	-5.34%	-23.66%	-4.57%
432029	TERRAL TEL. CO.	-0.23%	0.34%	-0.57%	-13.18%	8.53%
432030	TOTAH TELEPHONE CO. INC.	9.08%	-0.18%	9.28%	14.77%	43.46%
432032	VALLIANT TELEPHONE COMPANY	-11.06%	0.41%	-11.42%	-33.03%	-16.29%
432034	WYANDOTTE TELEPHONE COMPANY	31.09%	1.70%	28.90%	72.79%	115.99%
432080	GTE SOUTHWEST INC. - OKLAHOMA	6.00%	5.15%	0.81%	6.64%	33.30%
432141	SANTA ROSA TELEPHONE COOP. INC.	-2.79%	2.02%	-4.72%	-24.08%	-5.10%
435215	SOUTHWESTERN BELL-OKLAHOMA	1.22%	-1.17%	2.42%	ERR	ERR
TOTAL:	OREGON	6.87%	4.59%	2.17%	-2.41%	21.99%
532226	MIDVALE TEL. EXCH. INC. - OR	-25.72%	-19.72%	-7.48%	-28.08%	-10.10%
532304	C P NATIONAL CORP. - OREGON	-0.16%	1.25%	-1.40%	-3.71%	20.36%
532359	BEAVER CREEK COOPERATIVE TEL. CO.	-15.74%	2.00%	-17.39%	-82.44%	-78.05%
532361	TELEPHONE UTILITIES OF OREGON INC.	3.67%	2.34%	1.29%	4.90%	31.12%
532362	CANBY TELEPHONE ASSOCIATION	-6.84%	1.23%	-7.98%	0.00%	0.00%
532363	CLEAR CREEK MUTUAL TELEPHONE CO.	9.25%	6.09%	2.98%	17.80%	47.25%
532364	COLTON TELEPHONE COMPANY	-11.28%	7.46%	-17.44%	-43.66%	-29.57%
532369	EAGLE TELEPHONE SYSTEM INC.	1.09%	0.64%	0.45%	0.29%	25.36%
532371	CASCADE UTILITIES INC.	-5.87%	3.48%	-9.04%	-100.00%	-100.00%
532373	GERVAIS TELEPHONE COMPANY	15.64%	6.51%	8.57%	0.00%	0.00%
532375	RTI/HALSEY TEL. CO.	11.71%	0.89%	10.72%	30.87%	63.59%
532376	HELIX TELEPHONE COMPANY	-4.56%	-4.86%	0.31%	-4.68%	19.15%
532377	HOME TELEPHONE COMPANY	-3.22%	-0.74%	-2.49%	-5.34%	18.33%
532378	TRANS-CASCADES TELEPHONE COMPANY	-16.78%	-6.38%	-11.10%	-18.23%	2.22%
532383	MOLALLA TELEPHONE COMPANY	-9.40%	-2.85%	-6.74%	-22.80%	-3.50%
532384	MONITOR COOPERATIVE TELEPHONE CO	11.90%	3.07%	8.57%	0.00%	0.00%
532385	MONROE TELEPHONE COMPANY	14.12%	-1.03%	15.31%	250.61%	338.26%
532386	MT. ANGEL TELEPHONE COMPANY	10.43%	1.72%	8.57%	0.00%	0.00%
532387	NEHALEM TELEPHONE AND TELEGRAPH	-4.36%	10.02%	-13.07%	-100.00%	-100.00%
532388	NORTH STATE TELEPHONE COMPANY - OR	-6.16%	3.59%	-9.41%	-19.38%	0.78%
532389	OREGON TELEPHONE CORPORATION	-18.27%	-2.13%	-16.49%	-68.64%	-60.80%
532391	PEOPLES TELEPHONE COMPANY - OR	12.78%	3.88%	8.57%	0.00%	0.00%
532392	PINE TELEPHONE SYSTEM INC. - OR	-2.45%	4.61%	-6.74%	-10.11%	12.37%
532393	PIONEER TELEPHONE COOPERATIVE	2.75%	5.46%	-2.57%	0.00%	0.00%
532396	ST. PAUL COOP. TEL. ASSN.	9.47%	3.04%	6.24%	0.00%	0.00%
532397	SCIO MUTUAL TEL. ASSOCIATION	-1.46%	1.17%	-2.60%	-13.52%	8.10%
532399	STAYTON COOP. TEL CO	12.37%	3.50%	8.57%	0.00%	0.00%
532400	UNITED TELEPHONE CO OF THE NW - OR	6.53%	5.83%	0.67%	7.25%	34.06%
532404	ASOTIN TELEPHONE COMPANY - OREGON	3.18%	0.00%	3.18%	3.57%	29.46%
532416	GTE NORTHWEST INC. - OREGON	32.47%	5.78%	25.23%	ERR	ERR
532449	CONTEL OF THE NORTHWEST INC.- OR	-2.08%	3.75%	-5.62%	-19.86%	0.17%
532456	MALHEUR HOME TELEPHONE COMPANY	-2.27%	3.76%	-5.81%	-100.00%	-100.00%
535163	PACIFIC NORTHWEST BELL-OREGON	1.90%	4.46%	-2.45%	0.00%	0.00%

TABLE 3.5

National Exchange Carrier Association
 Universal Service Fund
 Individual Study Areas
 Percentage Changes from 1987 to 1988

STUDY AREA CODE	COMPANY NAME	UNSEPARATED NTS REVENUE REQUIREMENT	NUMBER OF LOOPS	UNSEPARATED NTS REVENUE REQUIREMENT PER LOOP	UNIVERSAL SERVICE FUND AFTER FULL TRANSITION	UNIVERSAL SERVICE FUND APPLICABLE TO LATER YEAR
TOTAL:	PENNSYLVANIA	3.41%	3.50%	-0.09%	-4.07%	19.91%
170145	THE BENTLEYVILLE TEL. CO.	13.01%	4.09%	8.57%	0.00%	0.00%
170149	BREEZEWOOD TELEPHONE COMPANY	12.53%	3.64%	8.57%	0.00%	0.00%
170150	BROOKVILLE TELEPHONE COMPANY	11.79%	2.97%	8.57%	0.00%	0.00%
170151	BUFFALO VALLEY TELEPHONE COMPANY	8.03%	-0.49%	8.57%	0.00%	0.00%
170152	CANTON TELEPHONE COMPANY	16.16%	6.99%	8.57%	0.00%	0.00%
170156	CITIZENS TEL CO OF KECKSBURG	10.31%	1.60%	8.57%	0.00%	0.00%
170157	CITIZENS UTILITIES CO. OF PA	11.31%	2.53%	8.57%	0.00%	0.00%
170161	C-TEC CORPORATION	20.02%	10.55%	8.57%	0.00%	0.00%
170162	THE CONESTOGA TEL. AND TEL. CO.	9.35%	0.72%	8.57%	0.00%	0.00%
170165	DENVER AND EPHRATA TEL. & TEL. CO.	23.00%	13.29%	8.57%	0.00%	0.00%
170168	ENTERPRISE TELEPHONE COMPANY	30.86%	20.54%	8.57%	0.00%	0.00%
170169	GTE NORTH INC. - PENNSYLVANIA	1.73%	6.51%	-4.49%	0.00%	0.00%
170170	CONTINENTAL TELEPHONE CO OF PA	12.97%	8.95%	3.69%	0.00%	0.00%
170171	HICKORY TELEPHONE COMPANY	3.99%	-4.22%	8.57%	0.00%	0.00%
170175	IRONTON TELEPHONE COMPANY	18.17%	8.84%	8.57%	0.00%	0.00%
170176	ALLTEL PENNSYLVANIA INC.	7.05%	-1.40%	8.57%	0.00%	0.00%
170177	LACKAWAXEN TELEPHONE COMPANY	-11.43%	18.34%	-25.15%	-81.13%	-76.41%
170178	LAKEWOOD RURAL TELEPHONE COMPANY	10.16%	1.47%	8.57%	0.00%	0.00%
170179	LAUREL HIGHLAND TELEPHONE COMPANY	13.46%	4.51%	8.57%	0.00%	0.00%
170183	MAHANOY & MAHANTONGO TEL. CO.	8.69%	2.80%	5.74%	40.21%	75.27%
170185	MARIANNA - SCENERY HILL TEL. CO.	9.92%	1.24%	8.57%	0.00%	0.00%
170189	ARMSTRONG TEL. CO.-PA (MURDOCKSVILLE)	-15.91%	3.80%	-18.99%	-100.00%	-100.00%
170190	MURRAYSVILLE TELEPHONE COMPANY	11.39%	2.59%	8.57%	0.00%	0.00%
170191	THE NORTH EASTERN PA. TEL. CO.	22.29%	12.63%	8.57%	0.00%	0.00%
170192	NORTH PENN TELEPHONE COMPANY	1.67%	7.31%	-5.25%	-100.00%	-100.00%
170193	NORTH PITTSBURGH TEL. CO.	19.69%	10.24%	8.57%	0.00%	0.00%
170194	OSWAYO RIVER TELEPHONE COMPANY	-3.33%	8.33%	-10.77%	-52.52%	-40.66%
170195	OTTO TELEPHONE COMPANY	10.21%	1.51%	8.57%	0.00%	0.00%
170196	PALMERTON TELEPHONE COMPANY	15.06%	5.97%	8.57%	0.00%	0.00%
170197	PENNSYLVANIA TELEPHONE COMPANY	17.11%	7.87%	8.57%	0.00%	0.00%
170200	PYMATUNING IND. TELEPHONE COMPANY	10.86%	2.11%	8.57%	0.00%	0.00%
170201	QUAKER STATE TELEPHONE COMPANY	12.24%	13.46%	-1.08%	6.21%	32.76%
170204	SOUTH CANAAN TEL. CO.	11.68%	2.87%	8.57%	0.00%	0.00%
170206	SUGAR VALLEY TELEPHONE COMPANY	12.58%	17.98%	-4.58%	-1.09%	23.64%
170209	UNITED TELEPHONE COMPANY OF PA	11.11%	4.38%	6.44%	0.00%	0.00%
170210	VENUS TELEPHONE CORPORATION	8.88%	0.29%	8.57%	0.00%	0.00%
170215	YUKON-WALTZ TELEPHONE COMPANY	9.80%	1.14%	8.57%	0.00%	0.00%
170277	WEST SIDE TELEPHONE COMPANY-PA	-4.86%	0.00%	-4.86%	-9.32%	13.35%
175000	BELL OF PENNSYLVANIA	1.14%	2.83%	-1.65%	0.00%	0.00%
TOTAL:	PUERTO RICO	2.92%	9.23%	-5.78%	ERR	ERR
633200	PUERTO RICO COMMUNICATION AUTHORITY	30.01%	11.43%	16.67%	ERR	ERR
633201	PUERTO RICO TEL. CO.	-0.33%	8.94%	-8.51%	0.00%	0.00%
TOTAL:	RHODE ISLAND	7.16%	4.61%	2.44%	0.00%	0.00%
585114	NEW ENGLAND TEL.-RI	7.16%	4.61%	2.44%	0.00%	0.00%
TOTAL:	SOUTH CAROLINA	9.42%	3.98%	5.23%	23.83%	54.79%
240479	GTE SOUTH INC. - SOUTH CAROLINA	6.60%	4.79%	1.73%	31.36%	64.20%
240506	UNITED TELEPHONE CO. OF THE CAROLINAS	11.06%	5.53%	5.24%	ERR	ERR
240512	BLUFFTON TEL. & APPL. CO. INC.	21.50%	5.32%	15.36%	100.71%	150.89%
240515	CHESNEE TELEPHONE COMPANY	15.66%	6.53%	8.57%	0.00%	0.00%
240516	CHESTER TELEPHONE COMPANY- SC	14.48%	5.45%	8.57%	0.00%	0.00%
240517	ALLTEL SOUTH CAROLINA INC.	18.70%	9.33%	8.57%	0.00%	0.00%
240520	FARMERS TEL COOP INC - SC	8.63%	7.93%	0.65%	9.96%	37.44%
240521	FORT MILL TELEPHONE COMPANY	19.21%	9.80%	8.57%	0.00%	0.00%
240523	HARGRAY TEL. CO. INC.	-8.29%	2.31%	-10.36%	-100.00%	-100.00%

TABLE 3.5

National Exchange Carrier Association
Universal Service Fund
Individual Study Areas
Percentage Changes from 1987 to 1988

STUDY AREA CODE	COMPANY NAME	UNSEPARATED NTS REVENUE REQUIREMENT	NUMBER OF LOOPS	UNSEPARATED NTS REVENUE REQUIREMENT PER LOOP	UNIVERSAL SERVICE FUND AFTER FULL TRANSITION	UNIVERSAL SERVICE FUND APPLICABLE TO LATER YEAR
SOUTH CAROLINA (CONT.)						
240524	HEATH SPRINGS TEL. CO.	0.34%	-7.58%	8.57%	0.00%	0.00%
240526	CONTINENTAL TELEPHONE CO OF S.C.	4.50%	10.47%	-5.40%	-75.40%	-69.25%
240527	HOME TELEPHONE COMPANY INC - SC	15.86%	6.71%	8.57%	0.00%	0.00%
240528	HORRY TEL. COOP. INC.	-1.99%	5.47%	-7.08%	0.00%	0.00%
240531	LANCASTER TEL. CO.	12.55%	3.66%	8.57%	0.00%	0.00%
240532	LOCKHART TELEPHONE COMPANY, INC.	12.64%	3.75%	8.57%	0.00%	0.00%
240533	MCCLELLANVILLE TEL. CO. INC.	-11.52%	0.18%	-11.68%	-76.61%	-70.76%
240535	NORWAY TELEPHONE CO. INC.	9.12%	0.51%	8.57%	0.00%	0.00%
240536	PALMETTO RURAL TEL. COOP., INC.	7.86%	-0.66%	8.57%	0.00%	0.00%
240538	PIEDMONT RURAL TEL. COOP.	14.33%	5.31%	8.57%	0.00%	0.00%
240539	POND BRANCH TEL. CO. INC.	-6.62%	1.66%	-8.14%	-100.00%	-100.00%
240540	RIDGE TEL. CO. INC.	12.78%	3.87%	8.57%	0.00%	0.00%
240541	RIDGEWAY TELEPHONE COMPANY, INC.	22.29%	12.63%	8.57%	0.00%	0.00%
240542	ROCK HILL TEL. CO.	17.35%	8.09%	8.57%	0.00%	0.00%
240543	ST. MATTHEWS TELEPHONE COMPANY	MERGED INTO 240517 ALLTEL SOUTH CAROLINA INC.				
240544	ST. STEPHEN TELEPHONE COMPANY	12.55%	3.66%	8.57%	0.00%	0.00%
240546	SANDHILL TEL. COOP. - SC	10.86%	2.11%	8.57%	0.00%	0.00%
240550	WEST CAROLINA RURAL TEL. COOP.	12.83%	3.93%	8.57%	0.00%	0.00%
240551	WILLISTON TELEPHONE COMPANY	-1.23%	2.20%	-3.36%	-15.79%	5.26%
245194	SOUTHERN BELL-SOUTH CAROLINA	10.01%	3.25%	6.55%	37.77%	72.21%
TOTAL:	SOUTH DAKOTA	-2.70%	2.48%	-5.05%	-3.30%	20.88%
391640	ARMOUR INDEPENDENT TELEPHONE CO.	10.29%	1.58%	8.57%	0.00%	0.00%
391642	BALTIC TELECOM COOPERATIVE	12.39%	3.52%	8.57%	0.00%	0.00%
391643	CONTEL OF SOUTH DAKOTA (BISON STATE)	-2.58%	5.99%	-7.90%	-28.77%	-10.96%
391647	CHEYENNE RIVER SIOUX TRIBAL TEL AUTH	3.12%	4.02%	-0.86%	1.12%	26.39%
391649	BERESFORD MUNICIPAL TEL. CO.	7.08%	-1.38%	8.57%	0.00%	0.00%
391650	CITY OF BROOKINGS MUNICIPAL TEL. DEPT	21.63%	12.03%	8.57%	0.00%	0.00%
391652	DAKOTA COOP TELECOMMUNICATIONS CO INC	10.19%	1.49%	8.57%	0.00%	0.00%
391653	CITY OF FAITH MUNICIPAL TEL CO	2.52%	2.87%	-0.34%	-16.75%	4.06%
391654	INTERSTATE TELECOMMUNICATIONS (DEUEL)	5.88%	2.03%	3.77%	0.00%	0.00%
391657	SPLITROCK TELECOM COOPERATIVE INC.	14.64%	5.59%	8.57%	0.00%	0.00%
391659	GOLDEN WEST TELECOMM. COOP, INC.	1.49%	-1.42%	2.94%	10.74%	38.43%
391660	MT. RUSHMORE TEL. CO.	-0.35%	0.70%	-1.04%	-16.82%	3.98%
391661	HANSON COUNTY TELEPHONE COMPANY	10.51%	1.79%	8.57%	0.00%	0.00%
391664	JAMES VALLEY COOPERATIVE TEL CO	-1.25%	2.34%	-3.50%	-24.48%	-5.60%
391666	JEFFERSON TELEPHONE COMPANY - SD	-18.92%	-0.43%	-18.58%	-100.00%	-100.00%
391667	KADOKA TELEPHONE COMPANY	12.64%	3.01%	9.34%	0.00%	0.00%
391668	KENNEBEC TELEPHONE COMPANY	-3.04%	0.00%	-3.04%	-5.23%	18.46%
391669	MCCOOK COOPERATIVE TELEPHONE CO.	-4.72%	0.66%	-5.35%	-23.62%	-4.53%
391670	MIDSTATE TELEPHONE COMPANY	-0.41%	1.99%	-2.35%	-22.91%	-3.64%
391674	ROBERTS COUNTY TEL. COOP. ASSN.	6.62%	-4.05%	11.12%	50.84%	88.55%
391676	SANBORN TEL. COOP.	2.63%	0.75%	1.86%	ERR	ERR
391677	SIOUX VALLEY TELEPHONE COMPANY	10.90%	2.14%	8.57%	0.00%	0.00%
391679	STOCKHOLM-STRANDBURG TEL. CO.	-3.91%	1.52%	-5.34%	-24.01%	-5.02%
391680	SULLY BUTTES TELEPHONE COOP. INC.	-0.14%	3.17%	-3.21%	-25.70%	-7.12%
391682	TRI-COUNTY MUTUAL TEL. CO.-SD	-4.52%	-0.91%	-3.64%	-21.72%	-2.15%
391684	UNION TELEPHONE COMPANY	15.02%	5.95%	8.57%	0.00%	0.00%
391685	VALLEY TELECOMM. COOP. ASSN., INC.	-1.53%	-0.71%	-0.83%	-14.07%	7.41%
391686	VIVIAN TELEPHONE COMPANY	-4.05%	5.10%	-8.70%	-19.97%	0.03%
391688	WESTERN TELEPHONE COMPANY	8.59%	2.50%	5.94%	0.00%	0.00%
391689	WEST RIVER COOPERATIVE TEL. CO.	12.16%	1.28%	10.75%	21.86%	52.32%
395145	NORTHWESTERN BELL-SOUTH DAKOTA	-5.38%	2.28%	-7.49%	0.00%	0.00%
TOTAL:	TENNESSEE	8.73%	3.86%	4.68%	2.47%	28.08%
290280	ARDMORE TELEPHONE COMPANY INC.	16.01%	6.85%	8.57%	0.00%	0.00%
290479	GTE SOUTH INC. - TENNESSEE	8.53%	3.31%	5.05%	37.70%	72.12%
290552	ADAMSVILLE TELEPHONE COMPANY INC.	3.47%	3.89%	-0.40%	0.76%	25.95%

TABLE 3.5

National Exchange Carrier Association
Universal Service Fund
Individual Study Areas
Percentage Changes from 1987 to 1988

STUDY AREA CODE	COMPANY NAME	UNSEPARATED NTS REVENUE REQUIREMENT	NUMBER OF LOOPS	UNSEPARATED NTS REVENUE REQUIREMENT PER LOOP	UNIVERSAL SERVICE FUND AFTER FULL TRANSITION	UNIVERSAL SERVICE FUND APPLICABLE TO LATER YEAR
TENNESSEE (CONT.)						
290553	BEN LOMAND RURAL TEL. COOP. INC.	13.89%	4.90%	8.57%	0.00%	0.00%
290554	BLEDSOE TELEPHONE COOPERATIVE	14.41%	5.38%	8.57%	0.00%	0.00%
290557	CLAIBORNE TELEPHONE COMPANY INC.	16.51%	7.31%	8.57%	0.00%	0.00%
290559	CONCORD TEL. EXCHANGE INC.	26.34%	16.37%	8.57%	0.00%	0.00%
290561	CROCKETT TEL., INC.	6.63%	-1.79%	8.57%	0.00%	0.00%
290562	DEKALB TELEPHONE COOP, INC.	12.15%	3.30%	8.57%	0.00%	0.00%
290565	HIGHLAND TEL COOP INC - TENNESSEE	13.18%	4.25%	8.57%	0.00%	0.00%
290566	HUMPHREY'S COUNTY TEL. COMPANY	13.55%	4.58%	8.57%	0.00%	0.00%
290567	UNITED INTER-MOUNTAIN TEL. COMPANY-TN	6.60%	2.33%	4.18%	0.00%	0.00%
290570	LORETTO TELEPHONE COMPANY INC.	13.07%	4.15%	8.57%	0.00%	0.00%
290571	MILLINGTON TELEPHONE COMPANY INC.	20.55%	5.67%	14.08%	0.00%	0.00%
290573	NORTH CENTRAL TEL COOP, INC.	13.07%	4.15%	8.57%	0.00%	0.00%
290574	OOTTEWAH-COLLEGEDALE TEL. CO.	4.90%	-3.38%	8.57%	0.00%	0.00%
290575	TENNESSEE TELEPHONE COMPANY	2.54%	10.37%	-7.09%	-41.55%	-26.93%
290576	PEOPLES TEL. CO. INC.	9.74%	1.08%	8.57%	0.00%	0.00%
290577	ALLTEL TENNESSEE INC.	15.85%	6.70%	8.57%	0.00%	0.00%
290578	TELLICO TEL. CO., INC.	13.83%	4.85%	8.57%	0.00%	0.00%
290579	TWIN LAKES TEL. COOP. CORP.	12.23%	3.50%	8.43%	0.00%	0.00%
290581	UNITED TEL. CO.-TN	16.81%	7.59%	8.57%	0.00%	0.00%
290583	WEST TENNESSEE TEL. CO., INC.	7.90%	-0.62%	8.57%	0.00%	0.00%
290584	YORKVILLE TELEPHONE COOPERATIVE INC.	6.44%	-2.85%	9.57%	0.00%	0.00%
295185	SOUTH CENTRAL BELL-TENNESSEE	8.57%	3.80%	4.60%	0.00%	0.00%
TOTAL:	TEXAS	7.53%	1.43%	6.02%	0.23%	25.29%
440425	CAMERON TELEPHONE COMPANY - TEXAS	-21.95%	1.44%	-23.06%	-56.92%	-46.15%
442038	BLOSSOM TELEPHONE COMPANY	23.65%	13.89%	8.57%	0.00%	0.00%
442039	BIG BEND TELEPHONE COMPANY INC.	25.19%	7.19%	16.79%	31.26%	64.08%
442040	BRAZORIA TEL. CO.	29.13%	3.16%	25.17%	96.65%	145.81%
442041	BRAZOS TELEPHONE COOPERATIVE INC.	-16.37%	-0.09%	-16.30%	-23.57%	-4.46%
442043	BYERS AND PETROLIA TELEPHONE CO.	4.54%	-0.26%	4.81%	0.00%	0.00%
442046	CAP ROCK TELEPHONE COMPANY INC.	-16.40%	-2.98%	-13.83%	-32.76%	-15.95%
442052	CENTRAL TEXAS TELEPHONE CO-OP. INC.	4.16%	1.47%	2.65%	5.11%	31.39%
442057	COLEMAN COUNTY TELEPHONE CO-OP. INC.	0.42%	0.44%	-0.01%	-7.84%	15.21%
442059	COLORADO VALLEY TELEPHONE CO-OP. INC.	-6.35%	0.25%	-6.58%	-16.52%	4.35%
442060	COMANCHE COUNTY TEL COMPANY INC.	11.22%	2.44%	8.57%	0.00%	0.00%
442061	COMMUNITY TELEPHONE COMPANY, INC.	-1.62%	1.99%	-3.53%	-24.10%	-5.12%
442065	CUMBY TELEPHONE COOPERATIVE INC.	8.96%	0.36%	8.57%	0.00%	0.00%
442066	DELL TELEPHONE CO-OP. INC. - TX	14.51%	-2.56%	17.52%	16.63%	45.78%
442068	EASTEX TELEPHONE COOPERATIVE INC.	2.73%	0.41%	2.31%	6.22%	32.77%
442069	ELECTRA TELEPHONE COMPANY	16.50%	7.30%	8.57%	0.00%	0.00%
442070	ETEX TELEPHONE COOPERATIVE INC.	4.99%	0.45%	4.52%	37.88%	72.35%
442071	FIVE AREA TELEPHONE CO-OP. INC.	-2.13%	-1.23%	-0.91%	-2.66%	21.67%
442072	FORT BEND TELEPHONE COMPANY	5.61%	3.60%	1.94%	10.25%	37.81%
442076	GANADO TELEPHONE COMPANY INC.	11.79%	2.33%	9.24%	40.10%	75.13%
442080	GTE SOUTHWEST INC. - TEXAS	7.15%	5.37%	1.69%	11.07%	38.84%
442083	GUADALUPE VALLEY TEL CO-OP. INC.	0.45%	3.82%	-3.25%	-11.67%	10.41%
442084	UNITED TELEPHONE CO. OF TEXAS INC.	-4.29%	3.57%	-7.59%	-20.70%	-0.87%
442086	HILL COUNTRY TELEPHONE CO-OP. INC.	-1.64%	1.46%	-3.06%	-5.24%	18.45%
442090	ALENCO COMMUNICATIONS, INC.	-2.63%	1.95%	-4.50%	-9.56%	13.05%
442093	INDUSTRY TELEPHONE COMPANY	14.28%	-1.09%	15.54%	23.04%	53.79%
442097	KERRVILLE TELEPHONE COMPANY	-0.52%	3.60%	-3.97%	0.00%	0.00%
442099	KNIPPA TELEPHONE COMPANY					
442101	LAKE DALLAS TELEPHONE COMPANY, INC.	57.37%	-1.27%	59.40%	297.83%	397.29%
442103	LA WARD TELEPHONE EXCHANGE INC.	1.78%	2.96%	-1.14%	0.47%	25.59%
442104	LAKE LIVINGSTON TEL. CO.	4.02%	2.39%	1.59%	5.27%	31.58%
442105	LIPAN TELEPHONE COMPANY	9.05%	4.85%	4.00%	0.00%	0.00%
442107	LIVINGSTON TELEPHONE COMPANY	9.88%	1.21%	8.57%	0.00%	0.00%
442109	LUFKIN-CONROE TELEPHONE EXCHANGE, INC	1.45%	2.52%	-1.05%	-14.83%	6.46%
442112	MID-PLAINS RURAL TEL. CO-OP. INC.	1.71%	0.25%	1.45%	2.51%	28.14%

TABLE 3.5

National Exchange Carrier Association
Universal Service Fund
Individual Study Areas
Percentage Changes from 1987 to 1988

STUDY AREA CODE	COMPANY NAME	UNSEPARATED NTS REVENUE REQUIREMENT	NUMBER OF LOOPS	UNSEPARATED NTS REVENUE REQUIREMENT PER LOOP	UNIVERSAL SERVICE FUND AFTER FULL TRANSITION	UNIVERSAL SERVICE FUND APPLICABLE TO LATER YEAR

TEXAS (CONT.)						
442114	CENTRAL TELEPHONE COMPANY OF TEXAS	1.60%	5.61%	-3.79%	-24.38%	-5.47%
442116	MUNSTER TELEPHONE CORP. OF TEXAS	-0.69%	1.76%	-2.41%	-17.77%	2.79%
442117	MUSTANG TELEPHONE COMPANY	1.64%	5.22%	-3.40%	-6.44%	16.96%
442121	ALLTEL TEXAS INC.	-2.96%	-1.20%	-1.77%	-12.85%	8.94%
442129	PEEPLS TELEPHONE COMPANY	MERGED INTO 442147 SUGAR LAND TEL. CO.				
442130	PEOPLES TELEPHONE COOPERATIVE - TX	10.02%	-0.07%	10.10%	56.74%	95.93%
442131	POKA-LAMBRO RURAL TEL. CO-OP. INC.	-14.81%	-0.28%	-14.58%	-26.16%	-7.70%
442134	RIVIERA TELEPHONE COMPANY INC.	3.19%	0.49%	2.69%	5.17%	31.46%
442135	SOUTHWEST TEXAS TELEPHONE COMPANY	40.15%	23.26%	13.70%	47.60%	84.50%
442136	ROMAIN TELEPHONE COMPANY	-19.46%	-0.83%	-18.79%	-30.24%	-12.80%
442140	SAN MARCOS TEL. CO., INC.	7.21%	-1.25%	8.57%	0.00%	0.00%
442141	SANTA ROSA TEL. COOP., INC.	-4.51%	2.70%	-7.02%	-25.41%	-6.77%
442143	SOUTH PLAINS TEL. COOP., INC.	-1.07%	4.46%	-5.29%	-26.61%	-8.26%
442147	SUGAR LAND TEL. CO.	11.77%	1.81%	9.79%	-27.18%	-8.98%
442148	SWEENEY-OLD OCEAN	MERGED INTO 442147 SUGAR LAND TEL. CO.				
442150	TATUM TEL. CO.	-6.14%	-5.01%	-1.19%	0.00%	0.00%
442151	TAYLOR TEL. CO-OP., INC.	19.76%	-0.50%	20.36%	109.56%	161.94%
442153	TEXAS-MIDLAND TELEPHONE COMPANY	7.24%	3.36%	3.76%	10.08%	37.60%
442154	CONTINENTAL TELEPHONE CO OF TEXAS	0.18%	-0.99%	1.18%	1.10%	26.38%
442155	TRI-COUNTY TEL. CO. INC.-TX	50.62%	0.78%	49.44%	115.28%	169.10%
442156	TRINITY VALLEY TELEPHONE COMPANY INC.	-0.18%	-1.95%	1.80%	1.13%	26.42%
442159	VALLEY TELEPHONE CO-OP. INC. - TX	2.82%	4.98%	-2.06%	1.68%	27.09%
442160	VALLEY VIEW TELEPHONE COMPANY	MERGED INTO 442116 MUNSTER TELEPHONE CORP. OF TEXAS				
442163	WATERWOOD COMMUNICATIONS INC.	14.55%	0.53%	13.95%	30.18%	62.73%
442166	WEST TEXAS RURAL TEL. CO-OP. INC.	4.78%	2.70%	2.03%	5.92%	32.40%
442168	WES-TEX TELEPHONE CO-OP.	-15.87%	-0.94%	-15.06%	-38.21%	-22.77%
442170	XIT RURAL TELEPHONE CO-OP. INC.	-5.70%	1.93%	-7.48%	-9.22%	13.47%
442262	E.N.M.R. TEL. COOP., INC.-TX	4.23%	2.04%	2.14%	10.71%	38.39%
445216	SOUTHWESTERN BELL-TEXAS	8.60%	0.72%	7.83%	ERR	ERR

TOTAL:	UTAH	7.18%	2.23%	4.84%	27.61%	59.51%

502177	CONTEL OF THE WEST - UTAH	10.96%	1.52%	9.30%	33.95%	67.44%
502275	NAVAJO COMMUNICATIONS CO. INC. - UT	-0.55%	9.19%	-8.92%	-4.90%	18.88%
502277	CENTRAL UTAH TEL. INC.	-1.24%	-0.27%	-0.97%	-18.75%	1.57%
502278	EMERY COUNTY FARMERS UNION TEL ASSN	0.45%	-1.15%	1.61%	0.00%	0.00%
502279	GUNNISON TEL. CO.	17.50%	8.23%	8.57%	0.00%	0.00%
502280	KAMAS-WOODLAND TEL. CO.	0.97%	3.47%	-2.42%	-5.53%	18.08%
502282	MANTLE TELEPHONE COMPANY	15.18%	6.09%	8.57%	0.00%	0.00%
502283	SKYLINE TELECOM	9.38%	0.74%	8.57%	0.00%	0.00%
502284	BEEHIVE TELEPHONE CO., INC., UT	31.17%	8.67%	20.71%	54.15%	92.69%
502286	SOUTH CENTRAL UTAH TEL. ASSN. INC.	6.78%	6.17%	0.58%	0.00%	0.00%
502287	UINTAH BASIN TEL. ASSN. INC.	2.89%	-13.60%	19.09%	27.82%	59.78%
502288	UTAH-WYOMING TELECOM - UT	4.07%	-0.46%	4.55%	64.55%	105.68%
505107	MOUNTAIN BELL-UTAH	7.07%	2.29%	4.68%	0.00%	0.00%

TOTAL:	VERMONT	20.60%	5.26%	14.58%	41.80%	77.25%

140053	FRANKLIN TEL. CO. - VT	11.04%	2.27%	8.57%	0.00%	0.00%
140058	LUDLOW TEL. CO.	5.39%	10.08%	-4.26%	0.00%	0.00%
140061	NORTHFIELD TEL. CO.	-2.21%	3.57%	-5.58%	0.00%	0.00%
140062	PERKINSVILLE TEL. CO.	14.95%	7.47%	6.97%	ERR	ERR
140064	SHOREHAM TEL. CO.	10.59%	13.51%	-2.57%	-100.00%	-100.00%
140068	TOPSHAM TEL. CO., INC.	-4.55%	7.92%	-11.55%	-100.00%	-100.00%
140069	WAITSFIELD/FAYSTON TEL. CO.	-14.98%	2.86%	-17.34%	-58.70%	-48.37%
140070	CONTINENTAL TEL CO OF VT, INC.	8.66%	7.81%	0.78%	9.57%	36.97%
145115	NEW ENGLAND TEL.-VT	23.82%	4.85%	18.10%	207.70%	284.63%

TABLE 3.5

National Exchange Carrier Association
Universal Service Fund
Individual Study Areas
Percentage Changes from 1987 to 1988

STUDY AREA CODE	COMPANY NAME	UNSEPARATED NTS REVENUE REQUIREMENT	NUMBER OF LOOPS	UNSEPARATED NTS REVENUE REQUIREMENT PER LOOP	UNIVERSAL SERVICE FUND AFTER FULL TRANSITION	UNIVERSAL SERVICE FUND APPLICABLE TO LATER YEAR
TOTAL:	VIRGIN ISLANDS	-0.28%	7.43%	-7.18%	-12.22%	9.73%
643300	VIRGIN ISLANDS TELEPHONE CORPORATION	-0.28%	7.43%	-7.18%	-12.22%	9.73%
TOTAL:	VIRGINIA	2.26%	4.95%	-2.57%	-39.81%	-24.76%
190217	AMELIA TEL. CORP.	22.88%	43.56%	-14.40%	-6.37%	17.04%
190219	BUGGS ISLAND TELEPHONE COOP.	16.75%	7.54%	8.57%	0.00%	0.00%
190220	BURKE'S GARDEN TELEPHONE COMPANY INC.	-7.38%	0.00%	-7.38%	-19.36%	0.80%
190225	CITIZENS TELEPHONE COOP - VIRGINIA	14.05%	5.04%	8.57%	0.00%	0.00%
190226	CLIFTON FORGE WAYNESBORO TEL CO	11.21%	2.43%	8.57%	0.00%	0.00%
190233	CONTEL OF VIRGINIA, INC.	6.27%	12.48%	-5.53%	-64.55%	-55.69%
190236	NORTH RIVER TELEPHONE COOPERATIVE	19.52%	10.09%	8.57%	0.00%	0.00%
190237	HIGHLAND TEL COOP - VIRGINIA	4.02%	5.46%	-1.36%	-35.95%	-19.94%
190238	MOUNTAIN GROVE-WILLIAMSVILLE TEL. CO.	-4.65%	-2.06%	-2.64%	-19.52%	0.60%
190239	NEW HOPE TELEPHONE COMPANY - VA	13.69%	4.72%	8.57%	0.00%	0.00%
190243	PEMBROKE TELEPHONE COOPERATIVE	10.78%	2.04%	8.57%	0.00%	0.00%
190244	PEOPLES MUTUAL TEL CO - VA	12.70%	3.81%	8.57%	0.00%	0.00%
190248	SCOTT COUNTY TEL. COOP. INC.	11.38%	2.59%	8.57%	0.00%	0.00%
190249	ROANOKE & BOTETOURT TEL. CO.	-5.92%	5.14%	-10.52%	-59.54%	-49.43%
190250	SHENANDOAH TEL. CO.	15.53%	6.41%	8.57%	0.00%	0.00%
190253	VIRGINIA HOT SPRINGS TEL. CO.	10.53%	1.81%	8.57%	0.00%	0.00%
190254	CENTRAL TELEPHONE COMPANY OF VA	6.97%	4.98%	1.90%	0.00%	0.00%
190479	GTE SOUTH INC. - VIRGINIA	4.84%	2.32%	2.46%	13.35%	41.69%
190567	UNITED INTER-MOUNTAIN TELEPHONE CO-VA	-1.12%	6.41%	-7.07%	-83.49%	-79.36%
195040	C & P TELEPHONE COMPANY OF VIRGINIA	0.99%	3.98%	-2.88%	0.00%	0.00%
TOTAL:	WASHINGTON	8.85%	2.73%	5.96%	7.16%	33.95%
522400	UNITED TELEPHONE CO OF THE NW - WA	5.25%	6.04%	-0.74%	0.85%	26.07%
522404	ASOTIN TELEPHONE COMPANY - WA	5.77%	2.14%	3.55%	9.37%	36.71%
522408	TELEPHONE UTILITIES OF WA INC.	3.48%	7.74%	-3.95%	-19.45%	0.69%
522410	COWICHE TELEPHONE CO. INC.	-1.04%	2.38%	-3.34%	0.00%	0.00%
522412	ELLENSBURG TELEPHONE COMPANY	-16.23%	3.85%	-19.33%	0.00%	0.00%
522416	GTE NORTHWEST INC. - WASHINGTON	22.16%	1.15%	20.78%	ERR	ERR
522417	HAT ISLAND TELEPHONE COMPANY	-45.30%	8.51%	-49.59%	-100.00%	-100.00%
522419	HOOD CANAL TELEPHONE COMPANY	-0.39%	5.19%	-5.30%	-19.96%	0.05%
522423	INLAND TELEPHONE COMPANY - WA	-4.06%	4.42%	-8.12%	-13.75%	7.82%
522426	KALAMA TELEPHONE COMPANY	-7.63%	4.25%	-11.39%	-46.08%	-32.60%
522427	LEWIS RIVER TELEPHONE COMPANY INC.	6.75%	7.23%	-0.45%	3.28%	29.09%
522430	MCDANIEL TELEPHONE COMPANY	17.98%	8.67%	8.57%	0.00%	0.00%
522431	MASHELL TELEPHONE COMPANY INC.	-0.93%	5.66%	-6.23%	-14.56%	6.80%
522436	PENINSULA TELECOMMUNICATIONS, INC.	21.10%	3.33%	17.20%	14324.08%	17930.10%
522437	PIONEER TELEPHONE COMPANY	-4.93%	2.97%	-7.68%	-10.55%	11.81%
522442	ST. JOHN TELEPHONE CO.	0.87%	-2.54%	3.50%	13.35%	41.68%
522446	TENINO TEL. CO.	7.42%	4.74%	2.55%	14.92%	43.65%
522447	TOLEDO TELEPHONE COMPANY INC.	-8.89%	3.52%	-11.99%	-33.62%	-17.02%
522449	CONTEL OF THE NORTHWEST INC.- WA	7.69%	6.25%	1.36%	9.55%	36.93%
522451	WESTERN WAHIAKUM COUNTY TEL COMPANY	17.91%	0.84%	16.93%	98.36%	147.94%
522452	WHIDBEY TEL. CO.	57.54%	21.93%	29.21%	292.68%	390.85%
522453	YELM TELEPHONE COMPANY	3.95%	7.30%	-3.12%	-48.54%	-35.67%
525161	PACIFIC NORTHWEST BELL-WASHINGTON	5.42%	2.66%	2.69%	0.00%	0.00%
TOTAL:	WEST VIRGINIA	1.88%	1.83%	0.05%	12.02%	40.02%
200256	ARMSTRONG TELEPHONE COMPANY - WV	7.96%	-0.56%	8.57%	0.00%	0.00%
200257	SPRUCE KNOB SENECA ROCKS TEL., INC.	11.98%	3.15%	8.57%	0.00%	0.00%
200259	HARDY TELEPHONE COMPANY	-5.99%	5.21%	-10.65%	-16.04%	4.95%
200267	ARMSTRONG TELEPHONE COMPANY (RITCHIE)	9.35%	0.72%	8.57%	0.00%	0.00%
200270	MOUNTAIN STATE TELEPHONE CO.	16.37%	3.97%	11.93%	36.34%	70.42%
200276	WAR TELEPHONE COMPANY	10.11%	1.42%	8.57%	0.00%	0.00%
200277	WEST SIDE TELEPHONE COMPANY - WV	9.87%	1.20%	8.57%	0.00%	0.00%

TABLE 3.5

National Exchange Carrier Association
 Universal Service Fund
 Individual Study Areas
 Percentage Changes from 1987 to 1988

STUDY AREA CODE	COMPANY NAME	UNSEPARATED NTS REVENUE REQUIREMENT	NUMBER OF LOOPS	UNSEPARATED NTS REVENUE REQUIREMENT PER LOOP	UNIVERSAL SERVICE FUND AFTER FULL TRANSITION	UNIVERSAL SERVICE FUND APPLICABLE TO LATER YEAR	
WEST VIRGINIA (CONT.)							
200278	CONTINENTAL TEL CO OF WEST VIRGINIA	10.77%	8.98%	1.65%	13.16%	41.45%	
200479	GTE SOUTH INC. - WEST VIRGINIA	8.61%	1.85%	6.64%	35.67%	69.59%	
205050	C & P TELEPHONE COMPANY OF W VA	0.49%	1.55%	-1.05%	-4.05%	19.94%	
TOTAL:	WISCONSIN	5.92%	3.39%	2.45%	-14.93%	6.33%	
330841	CENCOM OF WISCONSIN INC.	7.00%	6.44%	0.53%	8.41%	35.51%	
330842	AMERY TELEPHONE COMPANY	17.48%	8.21%	8.57%	0.00%	0.00%	
330843	AMHERST TELEPHONE COMPANY	13.45%	4.50%	8.57%	0.00%	0.00%	
330844	BADGER STATE TELEPHONE CO INC.	-8.17%	0.76%	-8.86%	-100.00%	-100.00%	
330846	BALDWIN TELCOM. INC.	11.34%	2.55%	8.57%	0.00%	0.00%	
330847	BELMONT TELEPHONE COMPANY	10.15%	1.45%	8.57%	0.00%	0.00%	
330848	BERGEN TELEPHONE COMPANY	-8.08%	-1.16%	-7.00%	-19.05%	1.19%	
330849	BLACK EARTH TELEPHONE COMPANY	11.10%	2.33%	8.57%	0.00%	0.00%	
330850	BLOOMER TELEPHONE COMPANY	14.49%	5.46%	8.57%	0.00%	0.00%	
330851	BONDUEL TELEPHONE COMPANY	-6.94%	0.00%	-6.94%	0.00%	0.00%	
330855	BRUCE TELEPHONE COMPANY, INC.	10.44%	1.72%	8.57%	0.00%	0.00%	
330856	BURLINGTON BRIGHTON & WHEATLAND TEL	33.12%	4.71%	27.13%	0.00%	0.00%	
330857	CASCO TELEPHONE COMPANY	10.98%	2.22%	8.57%	0.00%	0.00%	
330858	LAKESHORE TELEPHONE COMPANY	12.89%	3.98%	8.57%	0.00%	0.00%	
330859	CENTRAL STATE TELEPHONE COMPANY	-3.71%	2.69%	-6.24%	-33.78%	-17.22%	
330860	CHEQUAMEGON TELEPHONE COOP INC.	-4.01%	3.29%	-7.06%	0.00%	0.00%	
330861	CHIBARDUN TELEPHONE COOP INC.	10.53%	1.81%	8.57%	0.00%	0.00%	
330863	CITIZENS TELEPHONE COOP INC - WI	-4.97%	-12.47%	8.57%	0.00%	0.00%	
330865	CLEAR LAKE TELEPHONE CO INC - WI	11.46%	2.66%	8.57%	0.00%	0.00%	
330866	COCHRANE COOPERATIVE TELEPHONE CO	8.25%	-0.30%	8.57%	0.00%	0.00%	
330868	COON VALLEY FARMERS TELEPHONE CO., INC	10.49%	1.77%	8.57%	0.00%	0.00%	
330870	CRANDON TELEPHONE COMPANY	-3.61%	4.11%	-7.42%	-30.01%	-12.52%	
330872	CUBA CITY TEL. EXCH. CO.	11.02%	2.26%	8.57%	0.00%	0.00%	
330875	DICKEYVILLE TELEPHONE CO.	11.47%	2.68%	8.57%	0.00%	0.00%	
330876	DODGE COUNTY TELEPHONE COMPANY	10.15%	4.71%	5.20%	0.00%	0.00%	
330877	FAIRWATER-BRANDON-ALTO TEL. CO.	7.50%	-0.98%	8.57%	0.00%	0.00%	
330879	FARMERS IND. TELEPHONE COMPANY - WI	12.40%	3.53%	8.57%	0.00%	0.00%	
330880	FARMERS TELEPHONE COMPANY - WI	10.46%	1.74%	8.57%	0.00%	0.00%	
330881	MID-PLAINS TELEPHONE INC.	27.40%	17.35%	8.57%	0.00%	0.00%	
330882	FENNIMORE TELEPHONE COMPANY	13.38%	1.72%	11.46%	0.00%	0.00%	
330883	FOOTVILLE TELEPHONE COMPANY	-3.24%	-4.33%	1.14%	0.00%	0.00%	
330884	FORESTVILLE TEL. CO. INC.	13.58%	4.61%	8.57%	0.00%	0.00%	
330886	GTE NORTH INC. - WISCONSIN	3.96%	3.69%	0.26%	2.40%	28.00%	
330888	GREENWOOD TELEPHONE COMPANY	MERGED INTO 330844 BADGER STATE TELEPHONE CO INC.					
330889	HAGER CITY TELEPHONE COMPANY	11.99%	3.15%	8.57%	0.00%	0.00%	
330891	HEADWATERS TEL. CO.	-1.06%	6.27%	-6.89%	-56.33%	-45.42%	
330892	HILLSBORO TELEPHONE COMPANY INC.	9.20%	0.58%	8.57%	0.00%	0.00%	
330895	CENTURY TELEPHONE OF WISCONSIN INC.	5.25%	2.54%	2.65%	0.00%	0.00%	
330896	LAKEFIELD TELEPHONE COMPANY	11.36%	2.57%	8.57%	0.00%	0.00%	
330898	LARSEN-READFIELD TEL. CO.	43.11%	2.64%	39.43%	0.00%	0.00%	
330899	LA VALLE TELEPHONE COOPERATIVE	13.39%	4.44%	8.57%	0.00%	0.00%	
330900	LEMONWEIR VALLEY TEL. CO.	10.98%	2.22%	8.57%	0.00%	0.00%	
330902	LUCK TELEPHONE COMPANY	12.69%	3.80%	8.57%	0.00%	0.00%	
330904	MADELINE ISLAND TEL. CO.	1.31%	5.95%	-4.38%	-30.47%	-13.09%	
330905	MANAWA TELEPHONE COMPANY	10.90%	2.14%	8.57%	0.00%	0.00%	
330907	MAPLE TELEPHONE COOP INC.	2.53%	5.23%	-2.57%	-31.89%	-14.86%	
330908	MARQUETTE-ADAMS TEL. COOP. INC.	16.45%	0.72%	15.62%	0.00%	0.00%	
330909	MIDWAY TELEPHONE COMPANY	-3.28%	5.10%	-7.97%	0.00%	0.00%	
330910	MILLTOWN MUTUAL TELEPHONE COMPANY	-13.04%	-19.90%	8.57%	0.00%	0.00%	
330912	MONDOVI TELEPHONE COMPANY	9.41%	0.78%	8.57%	0.00%	0.00%	
330913	MONROE COUNTY TELEPHONE COMPANY	0.66%	2.63%	-1.91%	0.00%	0.00%	
330914	MOSEL & CENTERVILLE TELEPHONE CO	1.68%	3.51%	-1.77%	0.00%	0.00%	
330915	MOSINEE TEL. CO.	13.00%	4.08%	8.57%	0.00%	0.00%	
330916	MOUNT HOREB TELEPHONE COMPANY	-1.72%	9.12%	-9.94%	-100.00%	-100.00%	

TABLE 3.5

National Exchange Carrier Association
Universal Service Fund
Individual Study Areas
Percentage Changes from 1987 to 1988

STUDY AREA CODE	COMPANY NAME	UNSEPARATED NTS REVENUE REQUIREMENT	NUMBER OF LOOPS	UNSEPARATED NTS REVENUE REQUIREMENT PER LOOP	UNIVERSAL SERVICE FUND AFTER FULL TRANSITION	UNIVERSAL SERVICE FUND APPLICABLE TO LATER YEAR	
WISCONSIN (CONT.)							
330917	MOUNT VERNON TELEPHONE COMPANY	-5.22%	10.32%	-14.09%	0.00%	0.00%	
330918	NELSON TELEPHONE COOPERATIVE	10.93%	2.17%	8.57%	0.00%	0.00%	
330920	NIAGARA TELEPHONE COMPANY	12.92%	4.01%	8.57%	0.00%	0.00%	
330922	NORTH-WEST TELEPHONE COMPANY	-4.21%	4.43%	-8.27%	0.00%	0.00%	
330924	NOVY'S TELEPHONE COMPANY	7.73%	-0.77%	8.57%	0.00%	0.00%	
330925	BAYLAND TELEPHONE INC.	13.51%	4.55%	8.57%	0.00%	0.00%	
330930	PEOPLES TELEPHONE COMPANY(MT HOPE)	6.51%	0.49%	5.99%	0.00%	0.00%	
330931	PEOPLES TELEPHONE CO OF RANDOLPH	-9.24%	4.89%	-13.47%	-100.00%	-100.00%	
330934	PLATTEVILLE TELEPHONE COMPANY	-8.13%	0.58%	-8.66%	0.00%	0.00%	
330936	INDIANHEAD TEL. CO.	-21.32%	1.51%	-22.49%	-64.72%	-55.90%	
330937	PRICE COUNTY TELEPHONE COMPANY	25.28%	4.91%	19.42%	745.11%	956.39%	
330938	NORTHEAST TEL. CO.	13.94%	4.95%	8.57%	0.00%	0.00%	
330940	RHINELANDER TEL. CO.	-12.06%	3.86%	-15.33%	0.00%	0.00%	
330941	RIB LAKE TELEPHONE COMPANY	10.01%	1.33%	8.57%	0.00%	0.00%	
330942	RICHLAND-GRANT TEL. COOP. INC.	8.67%	1.10%	7.49%	0.00%	0.00%	
330943	ROCK RIVER TELEPHONE COMPANY	3.80%	4.66%	-0.82%	0.00%	0.00%	
330944	ST. CROIX TEL. CO.	16.05%	6.89%	8.57%	0.00%	0.00%	
330945	SCANDINAVIA TELEPHONE COMPANY	10.95%	3.77%	6.92%	0.00%	0.00%	
330946	SHARON TEL. CO.	21.73%	12.12%	8.57%	0.00%	0.00%	
330948	SHELL LAKE TEL. CO.	12.67%	3.78%	8.57%	0.00%	0.00%	
330949	SIREN TELEPHONE CO., INC.	13.10%	4.18%	8.57%	0.00%	0.00%	
330950	SOLON SPRINGS TEL. CO.	-7.77%	3.66%	-11.02%	0.00%	0.00%	
330951	SOMERSET TEL. CO., INC.	18.83%	9.45%	8.57%	0.00%	0.00%	
330952	SOUTHEAST TEL. CO. OF WIS., INC.	-1.80%	4.91%	-6.39%	0.00%	0.00%	
330953	SPRING VALLEY TEL. CO., INC.	11.41%	2.61%	8.57%	0.00%	0.00%	
330954	STOCKBRIDGE & SHERWOOD TEL. CO.	-11.20%	0.90%	-11.99%	-100.00%	-100.00%	
330955	STATE LONG DISTANCE TEL. CO.	16.25%	7.07%	8.57%	0.00%	0.00%	
330956	UNIVERSAL TEL. CO. OF NORTHERN WIS. IN	-3.74%	3.13%	-6.67%	-100.00%	-100.00%	
330957	SULLIVAN TEL. CO.	13.77%	4.79%	8.57%	0.00%	0.00%	
330958	TENNEY TEL. CO.	5.20%	-3.11%	8.57%	0.00%	0.00%	
330959	THORP TELEPHONE COMPANY	10.65%	1.91%	8.57%	0.00%	0.00%	
330960	TRI-COUNTY TEL. COOP. INC.-WY	10.77%	2.03%	8.57%	0.00%	0.00%	
330961	TURTLE LAKE TELEPHONE CO INC.	11.27%	2.49%	8.57%	0.00%	0.00%	
330962	UNION TELEPHONE COMPANY	11.82%	2.99%	8.57%	0.00%	0.00%	
330963	UTELCO INC.	20.00%	1.47%	18.25%	0.00%	0.00%	
330964	URBAN TELEPHONE CORPORATION	-4.43%	-1.29%	-3.19%	0.00%	0.00%	
330965	VALDERS TELEPHONE COMPANY	15.42%	0.45%	14.90%	0.00%	0.00%	
330966	VERNON TELEPHONE COOP	10.72%	1.98%	8.57%	0.00%	0.00%	
330967	VIROQUA TELEPHONE COMPANY	9.64%	0.99%	8.57%	0.00%	0.00%	
330968	WAUNAKEE TELEPHONE COMPANY	13.32%	4.37%	8.57%	0.00%	0.00%	
330970	WAYSIDE TELEPHONE COMPANY	11.12%	2.35%	8.57%	0.00%	0.00%	
330971	WEST WISCONSIN TELCOM COOP. INC.	10.28%	1.58%	8.57%	0.00%	0.00%	
330973	WITTENBERG TELEPHONE COMPANY	13.26%	4.32%	8.57%	0.00%	0.00%	
330974	WOOD COUNTY TELEPHONE COMPANY	-7.77%	2.49%	-10.01%	0.00%	0.00%	
335220	WISCONSIN BELL	7.18%	3.25%	3.81%	0.00%	0.00%	
TOTAL:	WYOMING	16.48%	1.59%	14.65%	82.77%	128.46%	
511595	UNITED TELEPHONE CO. OF THE WEST-WY	-4.97%	3.23%	-7.95%	0.00%	0.00%	
512251	RANGE TEL. COOPERATIVE INC.-WY	-5.02%	-0.83%	-4.23%	-9.11%	13.62%	
512289	CHUGWATER TELEPHONE COMPANY	-5.25%	-3.02%	-2.30%	-18.27%	2.16%	
512290	UTAH-WYOMING TELECOM WY	-19.50%	1.38%	-20.60%	-78.99%	-73.74%	
512291	DUBOIS TELEPHONE EXCHANGE INC.	0.51%	-1.17%	1.70%	1.58%	26.98%	
512292	EDEN VALLEY TEL. CO.	2.26%	10.14%	-7.16%	-32.22%	-15.28%	
512294	MEDICINE BOW TELEPHONE COMPANY	MERGED INTO 512299 TELEPHONE UTILITIES OF WYOMING, INC.					
512295	SILVER STAR TEL. CO.- WY	19.62%	4.70%	14.25%	204.18%	280.23%	
512296	TRI-COUNTY TEL. ASSN. INC.-WY	-4.27%	-1.40%	-2.91%	-20.36%	-0.45%	
512297	UNION TELEPHONE CO.	5.78%	1.24%	4.48%	26.58%	58.22%	
512299	TELEPHONE UTILITIES OF WYOMING, INC.	25.35%	0.25%	25.04%	ERR	ERR	
515108	MOUNTAIN BELL-WYOMING	17.39%	1.60%	15.55%	97.79%	147.24%	

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 use of the network more efficient and to stimulate traffic growth. To monitor use of this network, the National Exchange Carrier Association (NECA) provides monthly reports to the Commission on the volume of switched interstate usage. 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 this information was not previously collected by any single entity and that reports could be received and consolidated by some other entity (such as NECA). The data reported in this section includes revisions of the data that were contained in our previous reports, as well as annual percentage changes of these data for Tier 1 companies.¹

This report includes data on switched telephone traffic as reflected in the NECA calculations of carrier common line (CCL) access minutes of use from January 1988 through April 1990. Table 4.1 shows the latest available figures on minutes of use for interstate traffic as reported by NECA, derived from the Common Line earned revenues. Tables 4.2 and 4.3 show the figures for large (Tier 1) and small (non-Tier 1) companies, respectively. These figures do not include the minutes from the closed end of WATS. Similar data, extending back to mid-1984, are contained in earlier editions of this report.

Tables 4.4 and 4.5 are summary tables derived from the data for Tier 1A companies.² Table 4.4 gives average annualized growth rates for 1980 through 1983, 1983 through 1988, and 1980 through 1988 for local, state, interstate, and total subscriber line usage (SLU) minutes.³ State and

1 A Tier 1 carrier is a local exchange carrier that has \$100 million or more annually in revenue from regulated telecommunications for five consecutive years.

2 For the purposes of this report, Tier 1A has been defined as these companies for which we have data for all years and Tier 1B are those Tier 1 companies for which complete data is not available.

3 These are derived from the data in Tables 4.17 through 4.20.

interstate SLU have grown faster since 1983 than they did before. However, due to the exclusion of outward WATS minutes from SLU beginning in June 1986, the SLU growth rates for 1986 and 1987 are somewhat lower than they would have been otherwise. Table 4.5 gives similar data for dial equipment minutes (DEM), which include outward WATS minutes, and shows a similar pattern of growth rates.⁴ These two tables suggest that the toll rate decreases that accompanied the imposition of subscriber line charges have stimulated the use of the public switched network.

The NECA compilation of data provided by all cost companies appears in Tables 4.6 through 4.24. Tables 4.6 through 4.10 contain data for the non-Tier 1 cost companies. The companies in these tables are listed in numerical order of their NECA code numbers (FCODE), which are geographically based. (The first two digits of the code number indicate the state.) Tables 4.6 and 4.8 present the number of loops, messages, and subscriber line usage minutes for 1987 and 1988. Tables 4.7 and 4.9 present the number of dial equipment minutes and the SLU, SPF, DEM, and weighted DEM separations factors.

Tables 4.11 through 4.24 show data for Tier 1 companies. Table 4.10 A gives the number of loops for each year from 1980 through 1988, and Table 4.10 B gives the annual growth rates of these loops for each year from 1981 through 1988. Tables 4.11 A and B present the levels and growth rates of state toll messages. Tables 4.12 A and B show the corresponding data for interstate toll messages. Local dial equipment minutes data are in Table 4.13 A and B, state toll dial equipment minutes data are in Tables 4.14 A and B, interstate toll dial equipment minutes data are in Tables 4.15 A and B, and total dial equipment minutes data are in Tables 4.16 A and B. Tables 4.17 through 4.20 give comparable data for subscriber line usage minutes. Table 4.21 presents SPF factors for each year, Table 4.22 presents SLU factors, Table 4.23 presents DEM factors, and Table 4.24 presents weighted DEM factors.

⁴ These are derived from the data in Tables 4.13 through 4.16.

TABLE 4.1

NATIONAL EXCHANGE CARRIER ASSOCIATION, INC.

SUPPLEMENTAL REPORT OF COMMON LINE POOL RESULTS
 REPORTED AS OF JUNE, 1990

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
JAN 88	8,203.256	10,174.234	18,377.490	184.636	579.410	764.045
FEB 88	8,089.788	10,222.180	18,311.968	190.472	598.732	789.205
MAR 88	8,809.150	11,192.075	20,001.225	194.184	613.278	807.461
APR 88	8,238.059	10,348.420	18,586.479	163.015	527.468	690.484
MAY 88	8,452.900	10,584.742	19,037.643	201.527	638.981	840.509
JUN 88	8,707.537	10,919.439	19,626.976	188.624	601.341	789.965
JUL 88	8,421.169	10,441.194	18,862.362	176.559	547.884	724.443
AUG 88	9,373.201	11,661.208	21,034.410	187.930	623.325	811.255
SEP 88	8,847.243	11,047.900	19,895.143	182.510	584.090	766.599
OCT 88	9,058.272	11,236.722	20,294.993	177.368	563.417	740.785
NOV 88	9,086.902	11,288.798	20,375.700	171.987	583.394	755.381
DEC 88	9,571.593	11,807.791	21,379.384	174.508	563.094	737.602
JAN 89	9,470.962	11,724.978	21,195.940	160.218	530.472	690.690
FEB 89	9,087.793	11,465.784	20,553.577	147.219	531.360	678.579
MAR 89	10,224.016	12,816.960	23,040.977	174.195	552.707	726.902
APR 89	9,819.514	12,062.320	21,881.834	170.151	504.822	674.973
MAY 89	10,014.509	12,361.201	22,375.710	171.773	496.832	668.605
JUN 89	10,049.381	12,218.711	22,268.092	187.460	498.978	686.438
JUL 89	9,925.837	11,877.215	21,803.052	166.158	465.947	632.105
AUG 89	10,655.459	12,970.603	23,626.062	176.946	497.725	674.671
SEP 89	10,078.462	12,216.302	22,294.765	176.897	448.081	624.977
OCT 89	10,842.318	13,184.938	24,027.256	162.126	457.826	619.952
NOV 89	10,469.737	12,686.327	23,156.063	173.292	466.935	640.227
DEC 89	10,777.963	12,720.671	23,498.634	169.442	420.073	589.514
JAN 90	11,191.932	13,360.491	24,552.423	165.399	418.821	584.220
FEB 90	10,426.441	12,505.661	22,932.101	159.389	398.099	557.489
MAR 90	11,178.000	13,568.318	24,746.318	154.123	421.912	576.035
APR 90	10,995.815	13,343.446	24,339.261	163.694	451.098	614.793

TABLE 4.2

NATIONAL EXCHANGE CARRIER ASSOCIATION, INC.

SUPPLEMENTAL REPORT OF COMMON LINE POOL RESULTS
 REPORTED AS OF JUNE, 1990

PAGE 1 OF 1

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
JAN 88	7,710.508	9,557.612	17,268.120	174.495	547.559	722.054
FEB 88	7,633.402	9,645.334	17,278.737	179.104	562.939	742.043
MAR 88	8,341.354	10,597.902	18,939.256	181.409	572.785	754.194
APR 88	7,765.392	9,754.519	17,519.912	151.536	490.278	641.814
MAY 88	7,967.709	9,976.896	17,944.605	187.243	593.580	780.822
JUN 88	8,224.721	10,314.340	18,539.061	174.554	556.600	731.153
JUL 88	7,912.887	9,810.523	17,723.409	162.164	503.044	665.208
AUG 88	8,847.965	11,008.225	19,856.189	173.452	575.400	748.852
SEP 88	8,332.965	10,405.658	18,738.624	166.340	532.295	698.635
OCT 88	8,538.858	10,591.566	19,130.424	162.175	514.876	677.051
NOV 88	8,564.669	10,639.369	19,204.038	156.897	532.711	689.608
DEC 88	9,008.073	11,113.578	20,121.651	155.472	500.821	656.293
JAN 89	8,923.067	11,046.488	19,969.555	144.209	477.242	621.451
FEB 89	8,566.890	10,808.570	19,375.460	132.892	482.745	615.636
MAR 89	9,691.465	12,148.752	21,840.217	157.384	499.377	656.761
APR 89	9,070.087	11,441.665	20,511.753	130.623	427.457	558.080
MAY 89	9,296.316	11,757.164	21,053.480	130.938	418.866	549.804
JUN 89	9,332.727	11,622.540	20,955.267	137.715	408.880	546.595
JUL 89	9,195.036	11,284.717	20,479.752	121.471	381.385	502.856
AUG 89	9,873.651	12,340.907	22,214.558	127.960	409.442	537.402
SEP 89	9,311.009	11,607.512	20,918.521	121.677	355.077	476.754
OCT 89	10,057.899	12,555.698	22,613.597	110.500	362.440	472.941
NOV 89	9,686.956	12,066.511	21,753.467	121.253	371.993	493.247
DEC 89	9,966.959	12,089.473	22,056.432	115.026	326.294	441.320
JAN 90	10,433.994	12,694.507	23,128.501	119.058	330.323	449.381
FEB 90	9,691.417	11,847.963	21,539.380	105.872	303.724	409.595
MAR 90	10,448.950	12,919.252	23,368.202	108.035	325.172	433.206
APR 90	10,261.258	12,682.114	22,943.372	118.191	357.648	475.838

TABLE 4.3

NATIONAL EXCHANGE CARRIER ASSOCIATION, INC.

SUPPLEMENTAL REPORT OF COMMON LINE POOL RESULTS
 REPORTED AS OF JUNE, 1990

PAGE 1 OF 1

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
JAN 88	492.748	616.623	1,109.370	10.141	31.850	41.991
FEB 88	456.386	576.846	1,033.231	11.368	35.793	47.161
MAR 88	467.796	594.173	1,061.969	12.775	40.493	53.268
APR 88	472.667	593.900	1,066.567	11.479	37.190	48.670
MAY 88	485.192	607.846	1,093.038	14.285	45.402	59.686
JUN 88	482.816	605.100	1,087.915	14.071	44.741	58.812
JUL 88	508.282	630.671	1,138.953	14.395	44.840	59.235
AUG 88	525.237	652.984	1,178.220	14.478	47.925	62.403
SEP 88	514.278	642.241	1,156.519	16.170	51.795	67.964
OCT 88	519.414	645.156	1,164.570	15.193	48.541	63.735
NOV 88	522.233	649.429	1,171.662	15.090	50.683	65.773
DEC 88	563.520	694.213	1,257.733	19.036	62.273	81.309
JAN 89	547.895	678.489	1,226.385	16.010	53.230	69.240
FEB 89	520.903	657.214	1,178.117	14.328	48.615	62.943
MAR 89	532.552	668.208	1,200.760	16.810	53.331	70.141
APR 89	749.426	620.655	1,370.081	39.528	77.365	116.893
MAY 89	718.193	604.038	1,322.231	40.835	77.966	118.801
JUN 89	716.654	596.171	1,312.825	49.745	90.098	139.844
JUL 89	730.801	592.498	1,323.299	44.686	84.563	129.249
AUG 89	781.808	629.697	1,411.505	48.985	88.283	137.269
SEP 89	767.453	608.790	1,376.243	55.220	93.004	148.223
OCT 89	784.419	629.240	1,413.659	51.626	95.386	147.012
NOV 89	782.781	619.816	1,402.597	52.038	94.942	146.980
DEC 89	811.004	631.198	1,442.201	54.416	93.779	148.194
JAN 90	757.938	665.985	1,423.923	46.341	88.498	134.839
FEB 90	735.024	657.697	1,392.721	53.518	94.376	147.893
MAR 90	729.051	649.066	1,378.116	46.088	96.740	142.828
APR 90	734.557	661.333	1,395.890	45.504	93.451	138.955

Table 4.4

Average Annualized Growth Rates of Total
Tier 1A Company Subscriber Line Usage Minutes

<u>Period</u>	<u>Local SLU</u>	<u>State SLU</u>	<u>Interstate SLU</u>	<u>Total SLU</u>
1980 - 83	2.60%	5.40%	5.96%	3.09%
1983 - 88	2.19%	8.64%	13.15%	3.87%
1980 - 88	2.34%	7.41%	10.40%	3.58%

Table 4.5

Average Annualized Growth Rates of Total
Tier 1A Company Dial Equipment Minutes

<u>Period</u>	<u>Local DEM</u>	<u>State DEM</u>	<u>Interstate DEM</u>	<u>Total DEM</u>
1980 - 83	2.51%	5.16%	7.74%	3.18%
1983 - 88	2.24%	8.03%	12.49%	3.90%
1980 - 88	2.34%	6.94%	10.68%	3.63%

TABLE 4.6

 1987 NONTIER 1 COMPANIES NETWORK USAGE DATA
 (MSG & SLU IN THOUSANDS)

FCODE	YR	CARRIER	NO. LOOPS	ST MSGS	IS MSGS	LOC SLU	ST SLU	IS SLU	TOT SLU
100003	87	LINCOLNVILLE TEL CO	1,124	279	99	5,907	2,461	2,062	10,430
100004	87	CHINA TEL CORP	2,300	0	0	0	0	0	0
100010	87	HAMPDEN TEL CO	2,093	0	0	0	0	0	0
100011	87	HARTLAND & ST ALBANS	1,749	723	154	12,311	6,185	2,473	20,969
100014	87	CONTEL OF MAINE	35,519	10,223	3,783	216,890	89,069	57,917	363,876
100024	87	SOMERSET TEL CO	7,895	2,235	622	38,008	20,157	10,791	68,956
100025	87	STANDISH TEL CO	4,608	0	0	0	0	0	0
100027	87	UNION RIVER TEL CO	737	185	37	2,639	1,644	770	5,054
100029	87	UNITY TEL CO., INC.	2,965	0	0	0	0	0	0
100031	87	WARREN TEL CO	1,037	560	96	4,125	5,133	1,502	10,759
100034	87	WEST PENOBSCOT TEL	1,525	618	95	7,934	5,587	1,582	15,103
120038	87	BRETTON WOODS TEL CO	154	49	60	141	376	624	1,141
120039	87	GRANITE STATE TEL	6,207	1,574	1,054	32,180	15,258	16,043	63,481
120041	87	CONTEL OF NH	9,309	2,423	1,808	48,849	18,417	23,996	91,262
120045	87	KEARSARGE TEL CO	5,100	1,873	1,003	19,927	15,157	12,727	47,810
120046	87	MERIDEN TEL CO	395	94	111	1,623	829	1,514	3,967
120047	87	MERRIMAK COUNTY TEL	5,524	1,643	794	45,695	18,962	14,472	79,129
120049	87	UNION TEL CO	4,913	1,104	567	11,729	9,168	8,330	29,227
120050	87	WILTON TEL CO - NH	2,284	666	436	13,323	6,206	5,835	25,364
140058	87	LUDLOW TEL CO	3,407	720	559	11,190	5,501	6,205	22,896
140061	87	NORTHFIELD TEL CO	2,495	718	501	14,329	6,185	7,667	28,182
140062	87	PERKINSVILLE TEL CO	689	225	119	2,303	2,199	1,724	6,225
140068	87	TOPSHAM TEL CO	936	193	125	5,919	2,133	2,150	10,201
140069	87	WAITSFIELD/FAYSTON	4,257	758	734	19,259	6,107	9,533	34,900
140070	87	CONTEL OF VERMONT	30,452	7,345	5,545	179,724	63,902	75,837	319,463
150071	87	ARMSTRONG TEL CO-NY	2,862	774	271	16,321	7,201	4,207	27,729
150072	87	AU SABLE VALLEY TEL	5,285	269	347	26,287	4,159	6,622	37,067
150073	*	BERKSHIRE TEL CORP	4,171	877	384	33,127	9,008	6,252	48,387
150077	87	CHAMPLAIN TEL CO	4,095	1,278	1,248	29,403	9,947	8,997	48,348
150078	87	CHAUTAUQUA & ERIE	8,746	1,928	1,272	62,290	18,893	16,406	97,590
150079	*	CHAZY & WESTPORT	2,528	492	215	18,565	5,048	3,504	27,117
150081	87	CITIZENS HAMMOND NY	752	327	54	4,298	3,025	1,123	8,446
150082	87	CLYMER TEL CO	736	51	55	1,518	484	638	2,640
150084	87	TACONIC TEL CORP	16,976	4,546	2,486	106,361	52,559	31,842	190,762
150085	87	CROWN POINT TEL CORP	630	242	65	4,107	2,225	1,062	7,394
150088	*	DELHI TEL CO	3,473	537	235	20,276	5,514	3,827	29,616
150091	87	DUNKIRK & FREDONIA	8,088	1,205	503	80,336	18,528	8,001	106,865
150092	87	EDWARDS TEL CO	1,428	629	73	9,412	6,253	1,337	17,002
150093	87	EMPIRE TEL CORP	5,606	2,166	514	26,769	20,101	8,264	55,134
150097	87	GERMANTOWN TEL CO	1,528	726	156	11,006	7,191	2,913	21,110

TABLE 4.6

 1987 NONTIER 1 COMPANIES NETWORK USAGE DATA
 (MSG & SLU IN THOUSANDS)

FCODE	YR	CARRIER	NO. LOOPS	ST MSGS	IS MSGS	LOC SLU	ST SLU	IS SLU	TOT SLU
150099	87	HANCOCK TEL CO	1,255	379	187	7,846	3,100	2,436	13,383
150100	87	HIGHLAND TEL CO	46,719	21,272	8,619	439,682	227,982	150,113	817,776
150104	*	MARGARETVILLE TEL CO	2,268	351	153	13,237	3,600	2,498	19,334
150105	87	MIDDLEBURGH TEL CO	3,685	107	33	25,029	16,676	4,858	46,563
150106	87	ALLTEL NY-FULTON	35,785	1,439	725	125,729	16,822	13,313	155,863
150107	*	NEWPORT TEL CO	1,994	299	131	11,307	3,075	2,134	16,516
150108	87	NICHOLVILLE TEL CO	1,306	595	92	11,085	5,253	2,273	18,611
150109	87	ALLTEL NY-JAMESTOWN	39,370	1,372	1,451	111,165	14,812	20,835	146,811
150110	87	OGDEN TEL CO	16,137	1,657	913	218,425	23,874	18,184	260,483
150111	*	ONEIDA COUNTY RURAL	2,830	415	182	15,659	4,258	2,955	22,872
150113	87	ALLTEL NY-RED JACKET	2,324	664	117	4,723	1,865	561	7,149
150118	*	PORT BYRON TEL CO	2,634	262	115	9,898	2,692	1,868	14,458
150119	87	RED HOOK TEL CO	10,873	3,460	1,137	95,328	44,544	21,524	161,397
150122	87	SENECA-GORHAM TEL	7,231	3,061	413	41,243	30,874	8,183	80,301
150128	87	SYLVAN LAKE TEL CO	12,565	2,901	1,501	156,317	53,274	33,461	243,052
150133	87	VERNON TEL CO	2,083	541	127	16,682	5,937	2,580	25,199
150135	87	WARWICK VALLEY-NY	10,107	2,540	2,025	69,254	39,774	27,502	136,530
150136	87	WESTERN COUNTIES TEL	18,462	5,927	2,051	144,796	65,556	31,284	241,636
160135	87	WARWICK VALLEY-NJ	6,593	3,622	880	32,328	42,865	16,032	91,224
170170	87	CONTEL OF PA	46,548	10,288	4,438	453,469	117,888	71,878	643,234
170177	87	LACKAWAXEN TEL CO	2,034	0	0	0	0	0	0
170189	87	ARMSTRONG TEL CO-PA	1,318	0	0	0	0	0	0
170192	87	NORTH PENN TEL CO	3,676	834	736	23,373	8,283	8,731	40,388
170194	87	OSWAYO RIVER TEL CO	1,508	255	301	11,211	2,670	4,021	17,902
170201	87	QUAKER STATE TEL CO	27,681	5,428	3,839	224,736	56,200	54,645	335,581
170206	87	SUGAR VALLEY TEL CO	840	226	107	4,903	2,198	1,175	8,276
170210	*	VENUS TEL CORP	1,002	139	61	5,257	1,430	992	7,679
180216	87	ARMSTRONG TEL OF MD	4,020	1,430	888	23,038	13,951	10,897	47,887
190217	87	AMELIA TEL CORP	2,128	845	179	27,098	8,665	3,382	39,145
190249	87	ROANOKE & BOTETOURT	6,069	0	0	0	0	0	0
200259	87	HARDY TEL CO	1,789	127	209	18,773	1,440	2,975	23,187
200270	87	MOUNTAIN STATE TEL	15,086	3,695	1,741	230,182	39,280	29,430	298,892
200278	87	CONTEL OF WV	22,420	5,445	2,942	275,753	54,317	43,402	373,473
210291	87	FLORALA TEL CO	2,635	184	128	13,925	2,248	1,925	18,098
210318	87	SOUTHLAND TEL-FL	2,800	205	214	35,242	3,138	4,044	42,423
210329	87	GULF TEL CO	7,099	1,304	649	83,442	13,157	10,960	107,559
210330	87	VISTA-UNITED TELCOM	8,600	1,091	2,433	48,411	18,247	58,713	125,371
210331	87	INDIANTOWN SYSTEM	2,020	959	201	10,278	9,319	3,854	23,451
210335	87	NORTHEAST FLORIDA	4,772	1,203	372	44,224	12,535	6,518	63,278
210336	87	ALLTEL FLORIDA INC.	45,836	11,144	3,957	428,843	117,822	66,297	612,962

TABLE 4.6

 1987 NONTIER 1 COMPANIES NETWORK USAGE DATA
 (MSG & SLU IN THOUSANDS)

FCODE	YR CARRIER	NO. LOOPS	ST MSGS	IS MSGS	LOC SLU	ST SLU	IS SLU	TOT SLU
210338	87 QUINCY TEL CO-FL DIV	8,246	1,940	852	112,888	22,726	11,495	147,109
210339	87 ST JOSEPH TEL & TEL	20,931	4,129	1,997	166,545	40,821	30,492	237,859
220281	87 CONTEL OF SOUTH - GA	59,592	9,853	2,986	504,557	129,836	68,592	702,985
220324	87 VALLEY TEL CO - GA	4,024	384	407	58,841	3,792	4,912	67,545
220338	87 QUINCY TEL CO-GA DIV	555	71	119	9,773	949	1,698	12,421
220344	87 ALMA TEL CO	5,257	1,158	336	57,020	11,287	5,278	73,584
220347	87 BRANTLEY TEL CO	2,790	776	198	28,726	7,520	3,399	39,645
220351	87 CAMDEN TEL & TEL CO	9,304	1,167	2,339	91,629	12,707	30,742	135,078
220355	87 CITIZENS TEL CO - GA	3,738	991	241	44,668	9,320	4,307	58,295
220356	87 COASTAL UTILITIES	19,749	4,077	3,694	173,638	44,284	71,076	288,999
220358	87 DARIEN TEL CO	3,367	812	304	29,999	7,787	5,030	42,815
220360	87 ELLIJAY TEL CO	6,255	1,366	377	64,866	12,123	5,110	82,099
220371	87 INTERSTATE TEL CO	9,659	1,077	1,145	158,138	12,523	15,340	186,001
220377	87 PINELAND TEL COOP	8,368	1,863	414	92,460	19,197	8,033	119,689
220379	87 PLANT TEL. CO.	7,006	1,890	467	71,037	18,080	7,577	96,694
220381	87 PUBLIC SERVICE TEL	7,340	1,952	371	86,944	19,910	7,590	114,444
220386	87 STANDARD TEL CO	31,530	10,005	3,269	362,108	97,886	45,401	505,394
220392	87 WAVERLY HALL TEL CO	872	262	55	6,456	2,709	977	10,142
220394	87 WILKES TEL & ELC CO	8,675	1,493	639	97,571	18,210	11,566	127,348
230468	87 ATLANTIC MEMBERSHIP	18,132	2,569	1,572	145,947	27,159	22,379	195,486
230469	87 BARNARDSVILLE TEL CO	826	246	45	7,206	2,330	681	10,218
230473	87 CITIZENS TEL CO	13,190	1,784	1,364	145,117	18,846	23,838	187,801
230474	87 CONCORD TEL CO	73,252	12,246	4,636	858,581	107,655	90,164	1,056,400
230476	87 ALLTEL CAROLINA-NO	86,880	16,465	8,721	1,065,995	187,139	151,314	1,404,448
230481	87 HEINS TEL CO	22,983	4,391	1,906	280,641	46,938	32,567	360,147
230502	87 STAR MEMBERSHIP CORP	11,699	2,648	450	141,042	27,649	12,290	180,981
230509	87 CONTEL OF NC	76,426	11,064	6,417	920,035	144,511	152,147	1,216,694
230510	87 WILKES MEMBERSHIP	7,038	807	230	107,253	9,421	4,617	121,291
240512	87 BLUFFTON TEL. CO.	2,547	842	498	9,076	6,954	5,994	22,024
240520	87 FARMERS TEL COOP	34,188	5,850	3,353	518,953	58,156	66,394	643,503
240523	87 HARGRAY TEL CO	30,662	2,757	8,431	179,058	32,335	107,917	319,310
240526	87 CONTEL OF SC	13,318	1,853	1,082	188,147	21,328	25,505	234,980
240528	87 HORRY TEL COOP	37,544	5,525	4,040	319,001	52,154	66,523	437,677
240533	87 MCCLELLANVILLE TEL	1,127	363	85	8,228	3,617	1,775	13,620
240539	87 POND BRANCH TEL CO	7,224	1,917	388	70,905	16,668	8,144	95,717
240551	87 WILLISTON TEL CO	3,418	855	281	34,410	8,461	4,372	47,243
250281	87 CONTEL OF THE SOUTH	75,929	15,009	5,414	1,046,719	189,268	111,551	1,347,538
250284	87 BUTLER TEL CO	3,228	571	522	45,670	6,725	6,477	58,871
250295	* GRACEBA TOTAL COMM	3,365	707	310	26,700	7,261	5,039	39,000
250297	87 GROVE HILL TEL CORP	1,680	557	117	17,624	5,426	2,183	25,234

TABLE 4.6

 1987 NONTIER 1 COMPANIES NETWORK USAGE DATA
 (MSG & SLU IN THOUSANDS)

FCODE	YR	CARRIER	NO. LOOPS	ST MSGS	IS MSGS	LOC SLU	ST SLU	IS SLU	TOT SLU
250298	87	GULF TEL CO - AL	22,521	3,280	3,449	185,791	33,119	45,792	264,702
250300	87	HOPPER TEL. CO INC	2,606	807	121	24,832	7,271	2,182	34,285
250304	87	MILLRY TEL CO	4,696	959	473	50,127	9,275	6,210	65,612
250306	87	MONROEVILLE TEL CO	9,496	1,581	909	122,057	18,000	18,694	158,751
250314	87	PEOPLES TEL CO	9,533	1,726	907	116,219	16,450	12,298	144,966
250315	*	PINE BELT TEL CO	1,749	243	106	9,160	2,491	1,729	13,380
250316	87	RAGLAND TEL CO	974	273	46	9,062	2,796	857	12,714
250318	87	SOUTHLAND TEL CO-AL	9,064	531	898	136,178	18,765	16,962	171,905
250461	87	SOUTHEAST MS TEL CO	1,806	392	190	9,736	3,457	2,631	15,824
260410	87	CONTEL OF KENTUCKY	56,187	9,914	3,643	791,299	100,413	93,920	985,632
270422	87	ATHENS TEL CO	286	127	18	1,866	1,102	403	3,372
270423	87	CENTRAL LOUISIANA	12,546	3,284	853	155,467	28,729	17,105	201,301
270424	87	COASTAL TEL & ELECTR	9,411	3,123	590	98,224	24,834	9,941	132,999
270425	87	CAMERON TEL CO - LA	5,953	1,500	590	53,188	15,172	8,381	76,741
270427	*	CHATHAM TEL CO	1,206	132	58	4,968	1,351	938	7,256
270429	87	EAST ASCENSION TEL	20,621	7,198	2,119	282,371	51,596	28,517	362,484
270430	87	ELIZABETH TEL CO	2,285	455	108	25,189	5,441	2,645	33,275
270431	87	CADDOAN TEL CO	7,995	1,623	934	80,079	15,531	14,532	110,143
270433	87	LAFOURCHE TEL CO	11,341	2,737	1,099	113,606	19,411	9,657	142,674
270434	87	EVANGELINE TEL CO	25,480	7,189	1,485	303,107	63,229	24,840	391,176
270435	87	NORTHEAST LOUISIANA	825	306	68	7,564	3,120	1,357	12,041
270436	87	CENTURY NORTH LA	1,012	286	97	8,432	2,440	1,717	12,589
270437	87	PLAIN DEALING TEL CO	1,490	423	137	18,047	3,553	2,567	24,166
270439	*	RINGGOLD TEL CO	1,469	214	93	8,064	2,193	1,522	11,779
270440	87	CENTURY TEL CO	1,450	635	129	20,901	6,204	2,579	29,684
270442	87	LOUISIANA WESTERN	2,975	954	245	33,231	8,508	4,507	46,247
270443	87	UTC OF LOUISIANA	2,499	742	267	28,233	6,684	4,086	39,003
280446	87	BAY SPRINGS TEL CO	8,167	1,740	507	107,176	16,781	9,714	133,671
280451	*	DECATUR TEL CO -MS	1,469	184	81	6,959	1,892	1,313	10,165
280452	87	DELTA TEL CO	2,915	507	203	30,516	4,581	3,429	38,526
280454	87	FRANKLIN TEL CO - MS	6,057	1,122	410	70,214	10,565	8,490	89,269
280458	87	HOME TEL CO-OLIVE BR	7,314	0	0	0	0	0	0
280459	87	HUGHES TEL CO	4,975	513	285	70,524	5,302	7,315	83,142
280464	87	NOXAPATER TEL CO	848	117	39	14,005	1,281	1,173	16,459
280466	*	SLEDGE TEL CO	394	85	37	3,206	872	605	4,682
290552	87	ADAMSVILLE TEL CO	5,537	0	0	0	0	0	0
290571	87	MILLINGTON TEL CO	16,235	1,368	2,586	258,975	19,025	47,148	325,148
290575	87	TENNESSEE TEL CO	32,841	4,411	3,614	518,962	44,558	48,457	611,977
290579	87	TWIN LAKES TEL COOP	22,897	3,279	1,466	290,489	32,296	25,908	348,692
300597	87	THE CHILLICOTHE TEL	24,778	3,474	1,058	344,674	45,573	25,860	416,108

TABLE 4.6

 1987 NONTIER 1 COMPANIES NETWORK USAGE DATA
 (MSG & SLU IN THOUSANDS)

FCODE	YR	CARRIER	NO. LOOPS	ST MSGS	IS MSGS	LOC SLU	ST SLU	IS SLU	TOT SLU
300607	87	CONTEL OF OHIO	1,987	430	93	15,861	3,796	1,433	21,090
300613	87	LITTLE MIAMI COMM.	1,145	306	58	9,604	2,997	1,048	13,649
300649	*	ORWELL TEL CO	4,980	793	347	29,952	8,145	5,653	43,749
300665	87	ALLTEL OHIO-WEST OH	17,561	5,099	1,231	143,921	50,235	20,223	214,379
300682	87	C, C & S TELCO -OHIO	429	117	51	2,147	1,119	768	4,034
310678	*	BLANCHARD TEL ASSN	938	81	35	3,057	831	577	4,465
310679	87	BLOOMINGDALE TEL CO	1,445	689	83	5,443	6,070	1,526	13,040
310680	87	CHIPPEWA COUNTY TEL	773	243	37	2,799	2,094	781	5,674
310681	87	ALLTEL MICHIGAN INC.	36,967	13,552	3,980	294,332	134,720	56,281	485,332
310682	87	C, C & S TELCO - MI	17,141	4,242	1,252	120,841	45,983	21,500	188,324
310683	87	CARR TEL CO	1,202	239	22	3,168	2,310	466	5,945
310685	87	CHATHAM TEL CO - MI	2,133	525	110	15,607	4,733	2,118	22,458
310687	87	CLAYTON TEL CO	568	286	42	1,781	2,754	649	5,185
310699	87	HICKORY TEL CO	1,177	185	79	13,571	2,651	1,562	17,785
310702	87	CENTURY OF MICHIGAN	39,163	12,308	1,637	224,957	121,343	27,722	374,022
310704	87	ACE TEL OF MICHIGAN	3,219	1,101	99	9,193	10,068	1,774	21,035
310711	87	MIDWAY TEL CO	724	168	44	3,832	1,740	811	6,382
310713	87	HIAWATHA TEL CO	3,373	223	709	19,215	7,270	3,842	30,327
310717	87	ONTONAGON COUNTY TEL	3,775	549	294	29,645	5,729	4,866	40,240
310721	87	PIGEON TEL CO	2,541	1,116	129	12,157	10,427	2,019	24,602
310728	87	SPRINGPORT TEL CO	1,560	651	47	6,894	5,818	1,016	13,728
310732	87	UPPER PENINSULA TEL	2,997	1,083	298	16,478	10,330	5,093	31,902
310734	*	WALDRON TEL CO	551	130	57	4,895	1,331	924	7,151
310735	*	WESTPHALIA TEL CO	754	34	15	1,287	350	243	1,880
310738	87	WOLVERINE TEL CO	7,040	2,575	249	60,682	27,351	5,540	93,573
320753	87	CLAY CTY RURAL COOP	7,742	1,989	455	78,827	19,027	6,522	104,376
320762	87	ELNORA TEL CO	418	85	20	3,213	825	313	4,351
320778	87	HOME TEL CO INC	1,804	342	77	17,956	3,751	1,429	23,136
320779	87	CONTEL OF INDIANA	135,094	26,681	15,906	1,337,823	282,716	219,729	1,840,268
320797	87	NEW PARIS TEL INC	1,535	368	155	13,630	3,249	2,373	19,251
320800	87	NORTHWESTERN INDIANA	7,310	2,666	967	69,705	26,385	14,570	110,659
320807	*	PERRY-SPENCER RURAL	3,804	517	227	19,538	5,313	3,687	28,538
320813	*	PULASKI-WHITE RURAL	1,564	190	83	7,162	1,948	1,352	10,461
320830	*	TRI-COUNTY TEL CO	2,702	419	183	15,817	4,301	2,985	23,104
320839	*	YEOMAN TEL CO, INC	971	115	50	4,350	1,183	821	6,354
330841	87	CENCOM OF WISCONSIN	21,170	3,699	1,290	142,398	40,893	20,692	203,982
330842	*	AMERY TEL CO	4,648	1,284	562	48,499	13,189	9,153	70,841
330843	*	AMHERST TEL CO	3,184	434	190	16,402	4,460	3,095	23,958
330844	87	BADGER TELECOM, INC.	3,868	808	211	35,661	7,926	3,607	47,194
330851	87	BONDUEL TEL CO	1,426	315	57	11,902	315	57	12,274

TABLE 4.6

 1987 MONTIER 1 COMPANIES NETWORK USAGE DATA
 (MSG & SLU IN THOUSANDS)

FCODE	YR	CARRIER	NO. LOOPS	ST MSGS	IS MSGS	LOC SLU	ST SLU	IS SLU	TOT SLU
330855	*	BRUCE TEL CO, INC	1,332	253	111	9,540	2,594	1,800	13,935
330856	87	BURLINGTON B&W	2,690	771	316	14,048	3,965	885	18,898
330857	*	CASCO TEL CO	1,003	70	31	2,660	723	502	3,885
330858	*	LAKESHORE TEL CO	1,486	107	47	4,026	1,095	760	5,881
330859	87	CENTRAL STATE TEL CO	6,916	1,723	359	48,244	16,436	6,488	71,167
330860	87	CHEQUAMEGON TEL COOP	5,523	956	439	21,900	8,557	7,087	37,544
330861	*	CHIBARDUN TEL COOP	4,314	671	294	25,344	6,892	4,783	37,019
330870	87	CRANDON TEL CO	2,239	411	90	14,262	4,421	1,886	20,570
330876	87	DODGE COUNTY TEL CO	872	215	25	6,123	2,433	400	8,956
330882	87	FENNIMORE TEL CO	1,539	400	120	11,541	4,412	1,484	17,438
330883	87	FOOTVILLE TEL CO	826	123	48	9,204	1,314	740	11,258
330888	87	GREENWOOD TEL CO	1,318	197	51	12,816	2,633	984	16,432
330889	*	HAGER TELECOM INC.	1,553	387	169	14,604	3,971	2,756	21,332
330891	87	HEADWATERS TEL CO	3,345	139	149	13,007	5,488	2,949	21,444
330892	*	HILLSBORO TEL CO	1,405	159	70	6,010	1,634	1,134	8,779
330895	87	CENTURY OF WISCONSIN	43,971	4,270	4,404	425,449	62,896	87,730	576,075
330898	87	LARSEN-READFIELD TEL	1,955	545	73	13,817	4,939	1,117	19,874
330900	*	LEMONWEIR VALLEY TEL	2,341	509	223	19,223	5,227	3,628	28,078
330905	*	MANAWA TEL CO	1,827	196	86	7,413	2,016	1,399	10,828
330908	87	MARQUETTE-ADAMS COOP	2,561	639	299	11,960	5,927	6,672	24,560
330909	87	MIDWAY TEL CO	6,168	1,367	617	52,178	12,246	5,937	70,361
330910	*	MILLTOWN MUTUAL TEL	1,742	449	196	16,948	4,609	3,198	24,756
330913	87	MONROE COUNTY TEL CO	8,664	1,759	898	67,783	17,347	14,672	99,802
330914	87	EASTCOAST TELECOM	2,818	530	131	27,670	6,226	2,049	35,945
330916	87	MOUNT HOREB TEL CO	2,674	405	176	27,002	4,567	3,013	34,582
330917	87	MT VERNON TEL CO	4,956	884	397	51,710	10,253	6,742	68,705
330920	*	NIAGARA TEL CO	3,069	1,613	706	60,913	16,564	11,496	88,973
330922	87	NORTH-WEST TEL CO	52,921	10,278	3,645	450,383	113,195	66,064	629,642
330925	*	BAYLAND TEL CO	1,203	163	71	6,144	1,671	1,160	8,975
330931	87	PEOPLES TEL CO	5,397	1,393	291	38,305	13,101	4,471	55,876
330934	+	PLATTEVILLE TEL CO	7,588	1,147	666	46,841	14,729	9,827	71,397
330936	87	INDIANHEAD TEL CO	1,598	365	89	7,513	3,479	1,727	12,718
330937	+	PRICE COUNTY TEL CO	3,356	699	305	25,168	7,343	4,664	37,175
330940	87	RHINELANDER TEL CO	9,211	1,703	662	84,861	18,822	12,657	116,341
330941	*	RIB LAKE TEL CO	1,053	116	51	4,381	1,191	827	6,399
330943	87	RIVERSIDE TELECOM	1,383	352	116	9,315	4,210	1,701	15,226
330945	87	SCANDINAVIA TEL CO	1,883	472	127	10,785	5,080	1,417	17,282
330948	*	SHELL LAKE TEL CO	1,864	336	147	12,673	3,446	2,392	18,510
330949	*	SIREN TEL CO, INC	1,692	374	164	14,113	3,838	2,663	20,614
330950	87	OLON SPRINGS TEL CO	13,527	2,313	1,522	77,178	23,004	21,089	121,271

TABLE 4.6

 1987 NONTIER 1 COMPANIES NETWORK USAGE DATA
 (MSG & SLU IN THOUSANDS)

FCODE	YR CARRIER	NO. LOOPS	ST MSGS	IS MSGS	LOC SLU	ST SLU	IS SLU	TOT SLU
330952	87 SE TEL OF WISCONSIN	5,468	1,472	380	45,408	14,865	7,984	68,257
330954	87 STOCKBRIDGE & SHERWD	2,263	525	65	15,609	5,735	1,071	22,415
330956	87 UNIVERSAL OF N WISC	9,849	2,134	695	59,884	21,534	12,199	93,617
330959	* THORP TEL CO	1,876	284	124	10,722	2,916	2,023	15,661
330961	* TURTLE LAKE TEL CO	1,120	179	79	6,774	1,842	1,278	9,894
330963	87 UTELCO, INC	12,615	2,030	1,067	88,195	21,246	19,014	128,455
330964	87 URBAN TEL CORP	16,968	3,301	793	148,891	35,227	12,937	197,054
330965	87 VALDERS TEL CO	1,861	487	68	15,194	4,710	1,270	21,174
330967	* VIROQUA TEL CO	3,061	472	207	17,836	4,850	3,366	26,053
330973	* WITTENBERG TEL CO	1,699	179	78	6,752	1,836	1,274	9,862
330974	87 WOOD COUNTY TEL CO	21,163	3,085	1,332	193,659	30,315	21,568	245,542
341000	87 ALLTEL ILLINOIS INC.	39,236	9,749	4,602	331,800	102,255	82,032	516,087
341003	* EGYPTIAN COOP ASSN	2,499	356	156	13,430	3,652	2,534	19,616
341004	87 EL PASO TEL CO	1,576	596	129	9,850	5,440	1,733	17,024
341009	* C-R TEL CO	876	110	48	4,165	1,133	786	6,084
341011	87 LAKESIDE TEL CO	740	221	57	5,151	2,326	639	8,115
341023	87 GRIDLEY TEL CO	1,109	546	141	5,214	5,165	1,546	11,925
341036	87 CONTEL OF ILLINOIS	159,388	47,105	14,199	1,165,987	526,852	258,011	1,950,850
341037	87 IL CONSOLIDATED TEL	75,242	34,153	8,024	648,381	224,051	103,332	975,765
341038	87 INLAND TEL CO	4,036	1,860	195	21,060	18,886	4,005	43,952
341045	87 LEAF RIVER VLY TEL	560	229	24	2,262	2,170	467	4,899
341055	87 MIDLAND TEL CO	4,061	1,562	220	22,905	16,520	3,646	43,071
341060	87 MOULTRIE INDEPENDENT	685	238	22	4,283	2,333	532	7,149
341073	87 PRAIRIE TEL CO	952	294	46	6,234	2,983	878	10,096
351105	87 AYRSHIRE FARMERS MUT	395	155	18	1,442	1,309	317	3,068
351110	87 BERNARD TEL CO INC	469	179	29	3,829	1,572	553	5,954
351113	* BROOKLYN MUTUAL TEL	1,355	175	77	6,613	1,798	1,248	9,659
351153	* DUNKERTON TEL COOP	638	106	46	4,006	1,089	756	5,851
351207	87 CONTEL OF IOWA, INC.	69,941	17,817	4,820	566,607	178,063	74,617	819,286
351214	* KALONA COOP TEL CO	1,486	313	137	11,802	3,209	2,227	17,238
351229	87 LOST NATION-ELWOOD	600	193	30	5,466	1,711	637	7,814
351316	87 UNITED FARMERS TEL	547	0	0	0	0	0	0
351327	87 WEBB-DICKENS TEL	446	196	27	1,559	1,854	579	3,992
351329	* WELLMAN COOP TEL	1,097	168	74	6,358	1,729	1,200	9,286
351346	87 ACE TEL ASSN-IA	3,787	573	232	22,580	5,987	3,235	31,801
351888	87 GRAND RIVER MUT-IA	5,515	1,141	585	45,634	12,078	8,817	66,530
361140	87 CONTEL OF MINNESOTA	95,435	23,041	6,477	745,343	268,265	104,578	1,118,187
361346	87 ACE TEL ASSN-MN	8,835	1,560	912	75,625	16,662	12,530	104,817
361350	87 ARVIG TEL CO	8,659	1,268	373	37,964	13,357	6,638	57,959
361357	* BLACKDUCK TEL CO	1,006	154	67	5,821	1,583	1,099	8,503

TABLE 4.6

 1987 NONTIER 1 COMPANIES NETWORK USAGE DATA
 (MSG & SLU IN THOUSANDS)

FCODE	YR	CARRIER	NO. LOOPS	ST MSGS	IS MSGS	LOC SLU	ST SLU	IS SLU	TOT SLU
361362	87	BRIDGEWATER TEL CO	4,426	1,733	345	32,847	17,131	3,870	53,848
361370	87	CLARA CITY TEL EXCH	1,509	423	77	8,421	4,422	1,310	14,152
361373	*	CONSOLIDATED TEL CO	5,794	710	311	26,818	7,293	5,061	39,171
361374	87	ARROWHEAD COMM CORP	557	61	10	1,844	1,423	379	3,645
361379	87	DEER RIVER TEL CO	1,589	0	0	0	0	0	0
361383	*	EAGLE VALLEY TEL CO	629	64	28	2,404	654	454	3,512
361385	87	EAST OTTER TAIL TEL	12,846	1,861	691	84,568	20,509	11,606	116,683
361387	*	EMILY COOP TEL CO	946	106	46	3,985	1,084	752	5,821
361395	87	GARDEN VALLEY TEL CO	12,976	3,303	807	93,259	34,396	13,263	140,918
361399	*	GRANADA TEL CO	257	28	12	1,055	287	199	1,541
361401	*	HALSTAD TEL CO	1,507	389	170	14,684	3,993	2,771	21,448
361410	87	JOHNSON TEL CO	1,324	241	52	5,417	2,325	1,038	8,781
361414	87	LAKEDALE TEL CO	9,262	3,048	418	45,592	29,050	7,184	81,826
361425	*	MADELIA TEL CO	1,511	202	88	7,616	2,071	1,437	11,125
361433	87	MID STATE TEL CO	5,287	1,096	249	41,421	12,985	4,713	59,118
361442	87	NEW ULM TELECOM, INC	8,477	1,990	632	63,222	19,508	10,234	92,965
361443	87	NORMAN COUNTY TEL CO	3,673	522	368	31,886	5,953	5,231	43,069
361445	*	NORTHLAND TEL CO	594	87	38	3,276	891	618	4,785
361451	87	PAUL BUNYAN RURAL	5,001	916	230	39,453	10,755	5,754	55,962
361482	*	SHERBURNE CTY RURAL	5,084	680	298	25,681	6,984	4,847	37,511
361483	87	SLEEPY EYE TEL CO	5,222	1,460	247	35,942	15,189	3,576	54,707
361487	*	STARBUCK TEL CO	1,275	124	54	4,694	1,277	886	6,857
361491	+	TWIN VALLEY-ULEN TEL	2,745	601	192	25,839	6,542	2,983	35,364
361499	*	CROSSLAKE TEL CO	1,249	138	60	5,199	1,414	981	7,594
371516	87	ARAPAHOE TEL CO	1,038	250	61	6,995	2,453	1,008	10,457
371517	87	ARLINGTON TEL CO	903	368	89	6,028	3,580	1,290	10,898
371524	87	BLAIR TEL CO	5,119	1,637	712	43,891	14,248	9,018	67,157
371525	87	THREE RIVER TELCO	1,215	291	107	7,526	3,010	1,642	12,177
371530	*	CONSOLIDATED TELCO	1,480	268	117	10,105	2,748	1,907	14,760
371531	*	CLARKS TEL CO	961	118	51	4,440	1,208	838	6,486
371534	87	COZAD TEL CO	2,415	774	246	15,853	6,336	2,844	25,033
371536	87	CURTIS TEL CO	743	184	50	5,239	2,267	915	8,421
371537	87	DALTON TEL CO, INC	1,292	371	145	6,870	3,540	2,413	12,823
371540	87	DILLER TEL CO	920	289	66	5,173	2,477	906	8,557
371542	87	EASTERN NEBRASKA TEL	2,409	747	308	16,235	6,482	3,811	26,527
371553	*	GLENWOOD TEL MEMBER	2,536	377	165	14,245	3,874	2,688	20,807
371557	87	HARTMAN TEL EXCH INC	450	89	77	2,807	951	1,023	4,781
371558	87	HEMINGFORD COOP TEL	852	102	64	8,609	1,097	1,018	10,723
371561	*	HERSHEY COOP TEL CO	656	164	72	6,190	1,683	1,168	9,041
371565	*	K & M TEL CO, INC	671	98	43	3,704	1,007	699	5,411

TABLE 4.6

 1987 NONTIER 1 COMPANIES NETWORK USAGE DATA
 (MSG & SLU IN THOUSANDS)

FCODE	YR	CARRIER	NO. LOOPS	ST MSGS	IS MSGS	LOC SLU	ST SLU	IS SLU	TOT SLU
371567	87	KEYSTONE-ARTHUR TEL	569	114	37	971	1,017	631	2,620
371574	87	NEBRASKA CENTRAL TEL	3,520	832	140	22,578	8,383	2,719	33,679
371576	*	NORTHEAST NEBRASKA	3,938	645	282	24,343	6,620	4,594	35,556
371577	87	GREAT PLAINS COMMUN	25,313	6,809	2,350	164,480	66,205	37,472	268,157
371580	87	PETERSBURG TEL CO	435	151	16	2,351	1,439	268	4,058
371581	*	PIERCE TEL CO	1,630	198	87	7,467	2,030	1,409	10,906
371586	87	ROCK COUNTY TEL CO	1,010	259	96	7,381	2,957	1,369	11,707
371587	*	RODEO TEL, INC	2,467	381	167	14,368	3,907	2,712	20,987
371591	87	SE NEBRASKA TEL CO	3,873	0	0	0	0	0	0
371592	87	STANTON TEL CO, INC	1,040	313	126	7,960	2,777	995	11,732
371597	87	WAUNETA TEL CO	642	173	62	3,587	1,610	920	6,116
372455	87	BENKELMAN TEL CO	1,194	0	0	0	0	0	0
381447	87	CONTEL OF N. DAKOTA	10,346	1,547	535	76,739	19,322	11,804	107,864
381604	*	BEK TEL MUTUAL AID	3,753	616	270	23,253	6,323	4,388	33,965
381607	87	CONSOLIDATED COOP	4,164	754	344	38,258	8,018	6,039	52,315
381610	*	DAKOTA CENTRAL RURAL	2,275	425	186	16,032	4,360	3,025	23,417
381611	*	DICKEY RURAL COOP	2,706	554	243	20,923	5,690	3,949	30,562
381616	87	INTER-COMMUNITY TEL	1,239	408	87	9,124	3,710	1,716	14,549
381617	87	MIDSTATE TEL CO	1,514	342	149	7,875	3,368	2,468	13,711
381625	*	NORTHWEST COMM COOP	3,590	633	277	23,886	6,495	4,508	34,889
381630	87	POLAR COMM MUT AID	8,539	1,661	769	82,052	17,427	12,559	112,038
381632	87	RESERVATION TEL COOP	4,325	1,061	337	35,863	10,179	6,455	52,497
381634	87	SOURIS RIVER TEL MUT	11,795	2,334	1,228	88,639	24,555	27,816	141,010
381636	*	UNITED TEL MUTUAL	4,496	825	361	31,162	8,474	5,881	45,517
381637	87	W. RIVER MUTUAL AID	8,766	1,704	602	80,182	20,232	14,747	115,160
391643	87	CONTEL OF S. DAKOTA	7,652	1,295	534	53,827	15,691	13,906	83,424
391645	*		2,556	496	217	18,725	5,092	3,534	27,351
391647	87	CHEYENNE RIVER SIOUX	1,788	419	159	20,686	4,180	3,236	28,101
391659	87	GOLDEN WEST TELECOMM	11,592	2,371	1,377	94,168	23,054	22,131	139,354
391666	87	JEFFERSON TEL CO -SD	470	77	146	1,859	628	1,741	4,229
391667	87	KADOKA TELEPHONE CO	509	108	99	2,696	1,014	943	4,652
391668	87	KENNEBEC TEL CO	278	95	28	1,299	916	363	2,579
391669	*	MCCOOK COOP TEL CO	814	122	53	4,597	1,250	867	6,714
391670	*	MIDSTATE TEL COMPANY	2,412	443	194	16,738	4,552	3,159	24,449
391676	*	SANBORN TEL COOP	2,454	360	157	13,586	3,694	2,564	19,844
391680	*	SULLY BUTTES TEL	3,976	796	348	30,047	8,171	5,670	43,888
391689	87	WEST RIVER COOP	1,530	255	181	16,159	3,102	2,678	21,939
401691	87	ALLTEL ARKANSAS INC	56,787	16,277	7,045	621,221	152,340	102,612	876,173
401692	87	ARKANSAS TEL CO	5,491	949	506	48,802	7,565	9,057	65,424
401697	87	CENTRAL ARKANSAS TEL	1,957	565	113	18,391	5,089	2,419	25,899

TABLE 4.6

 1987 NONTIER 1 COMPANIES NETWORK USAGE DATA
 (MSG & SLU IN THOUSANDS)

FCODE	YR	CARRIER	NO. LOOPS	ST MSGS	IS MSGS	LOC SLU	ST SLU	IS SLU	TOT SLU
401698	87	CLEVELAND COUNTY TEL	1,424	663	96	15,020	6,652	2,061	23,733
401699	87	DECATUR TEL CO INC	698	315	132	3,508	2,214	1,773	7,496
401702	87	SOUTH ARKANSAS TEL	3,177	776	168	27,688	6,913	3,480	38,082
401705	87	CENTURY OF ARKANSAS	10,720	1,983	1,098	103,482	18,129	18,139	139,750
401709	87	MADISON COUNTY TEL	1,973	597	212	22,202	5,400	4,342	31,943
401711	87	MOUNTAIN HOME TEL	13,751	1,288	1,599	95,879	12,303	28,238	136,420
401713	87	NORTH ARKANSAS TEL	3,753	1,211	483	22,992	10,086	9,497	42,575
401720	87	REDFIELD TEL CO	1,295	440	55	9,251	3,783	1,292	14,326
401722	*	E RITTER TEL CO	3,907	1,065	466	40,204	10,933	7,587	58,724
401724	*	SW ARKANSAS TEL COOP	4,296	1,106	484	41,750	11,353	7,879	60,983
401726	87	TRI-COUNTY TEL CO-AR	3,743	708	276	42,364	6,794	6,533	55,691
401727	87	UNION TEL CO INC	857	93	66	3,166	886	897	4,949
401729	87	WALNUT HILL TEL CO	4,299	950	553	30,619	10,543	8,673	49,835
401730	87	CONTEL OF ARKANSAS	62,707	18,412	6,915	764,812	170,744	125,403	1,060,958
401733	87	YELCOT TEL CO INC	2,498	566	262	22,469	5,292	4,937	32,697
401734	87	YELL COUNTY TEL CO	4,089	1,117	231	33,890	10,272	4,824	48,986
411741	87	ASSARIA TEL EXCHANGE	433	38	245	2,100	2,181	796	5,077
411746	87	BLUE VALLEY TEL CO	2,673	994	203	13,325	8,933	3,016	25,274
411761	87	CUNNINGHAM TEL CO	1,576	445	62	7,918	4,859	1,723	14,499
411764	87	ELKHART TEL CO INC	1,560	237	259	9,178	2,335	3,470	14,983
411777	*	GOLDEN BELT TEL ASSN	3,704	567	248	21,392	5,817	4,037	31,246
411780	*	HAVILAND TEL CO	3,565	519	227	19,605	5,331	3,700	28,636
411781	87	H & B COMMUNICATIONS	979	358	70	3,978	3,319	1,194	8,491
411782	87	HOME TEL CO	1,205	550	81	6,261	4,922	1,480	12,663
411785	87	J. B. N. TEL CO INC	2,149	746	143	12,065	7,389	2,961	22,415
411788	87	KANOKLA TEL ASSN-KS	2,303	590	215	11,446	5,894	3,149	20,489
411789	87	KANSAS STATE TEL CO	5,262	656	1,172	42,671	7,095	13,543	63,309
411790	87	CONTEL OF KANSAS	45,413	16,795	3,148	258,847	167,448	66,316	492,612
411801	87	MADISON TEL CO INC	757	200	35	4,331	1,738	753	6,821
411807	87	MOKAN DIAL INC-KS	1,893	711	255	10,110	6,756	3,379	20,244
411808	87	MOUNDRIDGE TEL CO	2,143	757	190	13,773	6,388	3,856	24,017
411814	87	PEOPLES MUTUAL TEL	1,008	296	172	6,131	2,675	1,834	10,641
411818	87	CRAW-KAN TEL COOP	11,766	3,631	1,136	73,874	33,876	17,470	125,221
411820	*	RAINBOW TEL COOP	1,793	306	134	11,563	3,144	2,182	16,889
411826	87	RURAL TEL SERVICE CO	6,743	2,236	409	40,600	21,199	7,882	69,681
411827	87	S & T TEL COOP ASSN	1,608	582	144	8,366	5,836	2,546	16,747
411829	*	S & A TEL CO INC	680	110	48	4,168	1,133	787	6,087
411831	87	S. CENTRAL TEL - KS	1,077	408	80	4,551	3,830	1,545	9,926
411833	*	SOUTHERN KANSAS TEL	3,295	552	242	20,845	5,668	3,934	30,447
411835	87	SUNFLOWER TEL CO	3,980	948	408	26,786	9,256	6,656	42,698

TABLE 4.6

 1987 MONTIER 1 COMPANIES NETWORK USAGE DATA
 (MSG & SLU IN THOUSANDS)

FCODE	YR	CARRIER	NO. LOOPS	ST MSGS	IS MSGS	LOC SLU	ST SLU	IS SLU	TOT SLU
411839	*	TRI-COUNTY TEL ASSN	3,220	458	201	17,301	4,705	3,265	25,271
411840	87	TWIN VALLEY TEL INC	2,192	706	103	10,796	6,494	2,341	19,632
411841	87	UNITED TEL ASSN	4,655	1,799	459	23,436	16,300	7,268	47,005
411845	*	WAMEGO TEL CO INC	3,688	634	277	23,922	6,505	4,515	34,942
411847	87	THE WHEAT STATE TEL	1,936	794	143	9,794	7,189	2,379	19,361
411849	87	WILSON TEL CO INC	2,110	623	104	10,794	6,063	2,268	19,126
411852	87	ZENDA TEL COMPANY	230	104	12	1,049	1,082	218	2,349
412030	87	TOTAH TELEPHONE CO	1,303	447	146	4,855	4,251	2,433	11,539
421807	87	MOKAN DIAL INC-MO	581	238	51	4,108	2,178	758	7,044
421846	87	CONTINENTAL SYS. -MO	35,416	10,641	3,999	335,632	97,079	57,201	489,912
421859	87	BOURBEUSE TEL	1,628	535	75	8,823	5,400	1,740	15,963
421865	87	CITIZENS TEL CO - MO	3,513	1,051	254	15,268	10,761	4,677	30,706
421873	87	EASTERN MISSOURI TEL	2,494	934	112	13,624	8,621	2,322	24,567
421882	87	FIDELITY TEL CO	9,969	2,704	630	72,386	27,295	12,044	111,725
421885	87	ALLTEL MISSOURI	20,176	6,497	1,696	187,544	62,357	34,034	283,935
421886	87	GOODMAN TEL CO	1,359	506	159	6,784	4,392	2,771	13,947
421888	87	GRAND RIVER MUT-MO	12,476	2,657	932	103,794	26,844	14,057	144,695
421901	87	KINGDOM TELEPHONE CO	2,572	1,294	218	14,755	11,493	3,359	29,607
421904	87	MISSOURI TEL CO	15,631	3,422	1,119	126,304	32,584	19,825	178,713
421908	87	LE-RU TELEPHONE CO	935	269	140	5,019	2,367	2,276	9,662
421917	*	MID-MISSOURI TEL CO	3,292	391	171	14,782	4,020	2,790	21,592
421920	*	MILLER TEL CO - MO	862	129	57	4,886	1,329	922	7,136
421922	87	CONTEL OF MISSOURI	131,780	54,168	13,905	896,698	490,882	230,838	1,618,418
421929	87	HOLWAY TEL CO	619	185	41	4,529	1,656	612	6,797
421931	87	NE MISSOURI RURAL	3,325	807	247	25,513	7,936	4,758	38,206
421932	87	LATHROP TEL COMPANY	1,071	401	70	7,706	3,771	1,461	12,938
421934	87	ORCHARD FARM TEL CO	643	490	36	1,932	4,384	557	6,874
421945	*	SENECA TEL CO	2,163	543	238	20,514	5,579	3,871	29,964
421951	87	STOUTLAND TEL CO	870	281	40	6,477	2,611	914	10,002
421963	87	WEBSTER COUNTY TEL	4,648	1,269	305	34,294	11,912	5,783	51,988
421964	*	WHEELING TEL CO	317	47	21	1,787	486	337	2,610
431788	87	KANOKLA TEL ASSN-OK	1,297	385	159	7,292	3,844	2,252	13,388
431831	87	S. CENTRAL TEL - OK	399	118	56	2,026	1,139	813	3,978
431965	87	ALLTEL OKLAHOMA INC	10,824	4,703	929	77,232	45,657	17,197	140,086
431974	87	CANADIAN VALLEY TEL	821	251	40	3,587	2,580	973	7,140
431976	87	CARNEGIE TEL CO INC	1,523	502	94	11,055	4,931	2,006	17,992
431977	*	CENTRAL OKLAHOMA TEL	2,155	321	141	12,131	3,299	2,289	17,719
431979	87	CHEROKEE TEL CO	4,161	1,104	769	32,049	10,427	10,694	53,170
431980	87	CHICKASAW TEL CO	7,164	2,833	397	50,457	28,325	8,986	87,767
431981	87	CHOUTEAU TEL CO	2,667	844	225	15,426	8,338	3,219	26,983

TABLE 4.6

 1987 NONTIER 1 COMPANIES NETWORK USAGE DATA
 (MSG & SLU IN THOUSANDS)

FCODE	YR CARRIER	NO. LOOPS	ST MSGS	IS MSGS	LOC SLU	ST SLU	IS SLU	TOT SLU
431984	87 OKLAMOMA COMM SYSTEM	12,555	4,678	772	113,284	46,120	17,794	177,197
431985	87 CROSS TEL CO	7,125	2,391	492	51,036	23,940	8,558	83,533
431988	87 DOBSON TEL CO	4,129	1,260	356	34,506	12,165	6,052	52,723
431994	87 GRAND TEL CO INC	2,155	804	247	16,530	7,741	3,895	28,165
431995	87 HINTON TEL CO	3,174	1,124	182	21,134	10,726	3,442	35,303
432006	87 MLCLOUD TEL CO	5,799	1,675	378	117,368	16,998	6,778	141,144
432010	87 MID-AMERICA TEL INC	1,414	601	74	7,697	6,026	1,489	15,212
432011	87 OKLAHOMA ALLTEL, INC	9,758	3,186	1,719	95,061	33,304	21,743	150,108
432013	87 OKLAHOMA TEL & TEL	1,765	657	121	10,335	6,418	2,299	19,052
432014	87 OKLAHOMA WESTERN TEL	2,533	714	161	14,008	7,657	3,563	25,228
432016	87 PANHANDLE TEL COOP	4,388	1,223	1,089	23,819	12,755	12,732	49,305
432018	87 PIONEER TEL COOP INC	35,983	13,027	2,451	282,654	121,640	41,491	445,785
432020	87 POTTAWATOMIE TEL CO	1,759	675	83	10,423	7,368	1,877	19,667
432030	87 TOTAH TELEPHONE CO	1,677	859	163	6,615	9,132	2,736	18,483
432032	87 VALLIANT TEL CO	1,753	492	183	15,849	4,652	2,994	23,495
432034	87 WYANDOTTE TEL CO	353	0	0	0	0	0	0
432141	* SANTA ROSA TEL COOP	630	147	65	5,567	1,514	1,051	8,131
440425	87 CAMERON TEL CO TEXAS	994	338	47	4,378	3,009	515	7,902
442039	87 BIG BEND TEL CO INC	2,502	817	223	11,552	8,879	3,734	24,165
442040	87 BRAZORIA TEL CO	5,156	1,323	167	50,117	15,699	4,104	69,919
442041	87 BRAZOS TEL COOP INC	1,141	457	29	3,012	4,829	659	8,500
442046	87 CAP ROCK TEL CO INC	2,312	850	82	13,745	9,144	1,697	24,585
442052	87 CENTRAL TEXAS CO-OP	3,476	834	86	22,230	10,184	1,733	34,147
442057	* COLEMAN COUNTY CO-OP	1,814	128	56	4,851	1,319	916	7,086
442059	87 COLORADO VALLEY TEL	4,878	1,333	154	29,153	14,759	3,383	47,295
442060	* COMANCHE COUNTY TEL	4,703	310	136	11,719	3,187	2,212	17,118
442066	87 DELL TEL. CO-OP - TX	479	143	78	2,060	1,434	1,143	4,638
442068	87 EASTEX TEL COOP INC	20,280	4,703	1,098	151,779	52,020	16,298	220,097
442070	87 ETEX TEL COOP INC	9,084	3,263	359	47,163	35,102	7,587	89,852
442071	87 FIVE AREA TEL CO-OP	1,482	479	129	12,071	5,368	2,211	19,651
442072	87 FORT BEND TEL CO	17,157	3,248	1,096	208,590	37,450	20,224	266,264
442076	87 GANADO TELEPHONE CO	1,274	462	31	7,968	4,827	715	13,511
442083	87 GUADALUPE VALLEY TEL	14,956	6,392	663	74,019	62,188	15,406	151,613
442086	87 HILL COUNTRY CO-OP	8,965	2,306	318	50,721	25,521	6,623	82,865
442093	87 INDUSTRY TEL CO	1,600	523	36	6,447	5,344	731	12,521
442097	87 KERRVILLE TEL CO	14,639	3,571	980	114,642	43,596	18,475	176,713
442101	87 LAKE DALLAS TEL CO	4,360	2,940	457	17,546	25,194	9,517	52,256
442103	87 LA WARD TEL EXCHANGE	864	342	20	2,399	3,675	563	6,638
442104	87 LAKE LIVINGSTON TEL	924	204	29	2,273	2,255	611	5,139
442109	87 LUFKIN-CONROE TEL EX	62,438	17,340	4,263	653,213	198,735	71,744	923,691

TABLE 4.6

1987 NONTIER 1 COMPANIES NETWORK USAGE DATA
(MSG & SLU IN THOUSANDS)

FCODE	YR CARRIER	NO. LOOPS	ST MSGS	IS MSGS	LOC SLU	ST SLU	IS SLU	TOT SLU
442112	87 MID-PLAINS RURAL TEL	2,062	878	108	14,151	9,243	2,073	25,466
442116	87 MÜNSTER TEL CORP-TX	1,659	548	85	11,639	5,437	1,636	18,712
442117	87 MUSTANG TEL CO	2,293	1,008	230	6,244	9,125	3,437	18,805
442121	87 ALLTEL TEXAS INC	2,778	755	153	20,444	8,566	2,769	31,779
442129	87 PEEPLES TELEPHONE CO	903	436	33	4,071	3,804	566	8,441
442130	87 PEOPLES TEL COOP -TX	6,882	2,188	260	44,936	23,735	5,955	74,626
442131	87 POKA-LAMBRO TEL COOP	3,305	1,306	121	22,936	13,004	2,154	38,094
442134	87 RIVIERA TEL CO INC	834	368	32	3,606	3,345	716	7,666
442135	87 SOUTHWEST TEXAS TEL	2,038	686	69	10,922	7,991	1,531	20,444
442136	87 ROMAIN TELEPHONE CO	873	257	95	5,899	3,038	1,373	10,310
442141	* SANTA ROSA TEL COOP	1,592	118	52	4,453	1,211	840	6,505
442143	* SOUTH PLAINS TEL	3,544	362	158	13,658	3,714	2,578	19,950
442147	87 SUGAR LAND TEL CO	24,756	2,046	2,934	362,288	39,635	65,002	466,926
442148	87 SWEENEY-OLD OCEAN	2,757	1,491	143	19,186	15,681	3,689	38,556
442151	87 TAYLOR TEL CO-OP INC	5,284	1,574	142	41,008	18,484	4,557	64,048
442153	87 TEXAS-MIDLAND TEL	9,276	3,840	437	49,334	40,072	8,369	97,775
442155	87 TRI-COUNTY TEL - TX	769	269	24	4,719	3,073	473	8,264
442156	87 TRINITY VALLEY TEL	5,422	1,805	313	40,623	16,376	4,954	61,953
442159	87 VALLEY TEL CO-OP -TX	4,235	1,926	138	27,302	17,978	2,577	47,857
442160	87 VALLEY VIEW TEL CO	870	468	67	3,317	4,401	1,067	8,785
442163	87 WATERWOOD COMM INC	380	111	17	228	1,054	369	1,651
442166	87 WEST TEXAS RURAL TEL	1,751	722	217	14,175	7,271	3,085	24,532
442168	87 WES-TEX TEL CO-OP	3,139	1,001	110	28,228	11,519	2,360	42,107
442170	87 XIT RURAL TEL CO-OP	1,014	296	186	5,363	3,423	2,706	11,492
442262	87 ENMR TEL COOP-TX	751	127	55	6,673	1,372	821	8,866
452171	87 ARIZONA TELEPHONE CO	1,703	536	154	3,085	5,241	2,722	11,048
452172	87 CITIZENS UTILITIES	42,007	6,446	8,241	246,080	62,053	125,845	433,978
452175	87 UNIVERSAL TEL OF SW	1,063	254	98	6,600	2,423	1,586	10,609
452176	87 VALLEY TEL COOP-AZ	1,770	588	290	8,797	6,029	2,213	17,040
452177	87 CONTEL OF WEST-AZ	23,100	5,453	2,569	151,229	54,478	40,014	245,721
452275	87 NAVAJO COMMUN-AZ	7,278	2,370	1,947	36,031	23,838	23,526	83,396
452302	87 CONTEL CALIF - AZ	5,058	898	966	27,259	8,078	12,211	47,548
461835	87 SUNFLOWER TEL - CO	295	110	48	1,374	1,036	838	3,248
462181	87 BIJOU TEL COOP ASSOC	973	380	71	4,453	3,906	1,479	9,838
462182	87 BLANCA TEL CO	471	139	50	1,866	1,247	926	4,039
462184	87 DELTA COUNTY TEL CO	5,925	769	433	53,781	10,197	9,724	73,703
462185	87 EAGLE TELECOMMUN INC	5,297	1,571	580	23,273	13,621	9,634	46,528
462186	87 EASTERN SLOPE RURAL	4,090	1,366	371	25,005	13,199	6,572	44,777
462187	87 EL PASO COUNTY TEL	1,812	820	148	10,579	7,123	3,809	21,510
462188	87 FARMERS TEL CO - CO	270	103	45	1,308	838	509	2,656

TABLE 4.6

 1987 MONTIER 1 COMPANIES NETWORK USAGE DATA
 (MSG & SLU IN THOUSANDS)

FCODE	YR	CARRIER	NO. LOOPS	ST MSGS	IS MSGS	LOC SLU	ST SLU	IS SLU	TOT SLU
462190	87	HAXTUN TEL CO	1,149	412	113	7,929	4,369	1,931	14,229
462192	87	BIG SANDY TELCOMM	672	229	41	3,521	2,485	1,029	7,035
462193	87	NUCLA-NATURITA TEL	1,041	247	119	5,473	2,735	2,435	10,643
462194	87	NUNN TEL CO	256	88	31	992	803	584	2,379
462196	87	PEETZ COOP TEL CO	183	42	31	1,248	501	514	2,263
462197	*	PHILLIPS COUNTY TEL	1,676	392	172	14,819	4,030	2,797	21,645
462199	87	PLAINS COOP TEL ASSN	1,468	489	113	8,153	4,831	1,828	14,812
462203	87	RYE TELEPHONE CO	1,223	368	144	7,441	3,344	2,267	13,052
462204	87	COLUMBINE TEL CO	615	185	66	2,931	2,227	1,891	7,049
462207	87	STRASBURG TEL CO	891	369	65	3,945	3,481	1,348	8,774
462208	87	UNIVERSAL TEL CO -CO	3,808	554	602	32,374	5,984	10,549	48,907
462209	87	WIGGINS TEL ASSOC	1,092	449	82	5,461	4,454	1,426	11,341
472177	87	CONTEL OF WEST-ID	12,331	3,045	1,289	69,325	31,050	22,755	123,130
472213	87	ALBION TEL CO INC	922	255	140	6,674	2,451	1,902	11,026
472215	87	CAMBRIDGE TEL CO	821	179	64	3,962	2,043	1,155	7,160
472218	87	CUSTER TEL COOP	1,332	235	149	10,216	2,643	2,841	15,700
472223	87	GEM STATE UTIL-ID	855	297	95	6,774	2,826	1,741	11,341
472225	87	CENTURY TEL OF IDAHO	2,395	299	347	21,971	3,820	4,345	30,136
472226	87	MIDVALE TEL EXCH INC	268	21	46	744	429	318	1,491
472231	87	PROJECT MUTUAL TEL	6,039	830	650	84,935	7,978	9,044	101,956
472232	87	ROCKLAND TEL CO INC	349	107	24	2,239	928	390	3,557
472233	87	RURAL TEL CO - ID	223	47	16	417	526	292	1,236
472234	87	TROY TELEPHONE CO	648	202	90	2,873	1,900	1,415	6,188
472295	87	SILVER STAR TEL- ID	317	76	37	1,467	916	644	3,028
472423	87	INLAND TEL-ID	194	87	30	916	990	456	2,362
482235	87	BLACKFOOT TEL COOP	4,616	1,735	464	22,949	16,546	8,602	48,097
482242	87	INTERBEL TEL COOP	821	130	91	5,961	1,192	1,715	8,869
482244	87	LINCOLN TEL CO INC	728	165	50	2,816	1,670	805	5,291
482246	87	MID-RIVERS TEL COOP	6,153	232	504	47,238	18,253	8,776	74,267
482247	87	NEMONT TEL COOP-MT	2,429	734	294	8,571	7,207	4,300	20,078
482248	87	NORTHERN TEL COOP	1,346	517	162	7,104	4,964	2,760	14,828
482249	87	NW TEL SYSTEMS, INC.	28,700	8,231	4,863	199,762	77,721	75,070	352,553
482250	87	PROJECT TEL CO	2,529	757	212	12,418	7,215	3,931	23,565
482251	87	RANGE TEL COOP-MT	2,734	736	360	19,244	7,570	5,433	32,247
482254	87	SOUTHERN MONTANA TEL	648	190	65	2,171	2,037	1,413	5,620
482255	87	3-RIVERS TEL COOP	8,392	2,168	726	45,095	22,564	12,397	80,056
482257	87	TRIANGLE TEL COOP	8,283	2,356	638	58,389	25,697	11,455	95,541
482258	87	VALLEY RURAL TEL	741	187	42	3,559	2,039	782	6,380
492066	87	DELL TEL CO-OP - NM	266	40	32	1,062	476	540	2,078
492176	87	VALLEY TEL COOP - NM	1,090	220	201	6,744	1,996	3,177	11,917

TABLE 4.6

 1987 NONTIER 1 COMPANIES NETWORK USAGE DATA
 (MSG & SLU IN THOUSANDS)

FCODE	YR CARRIER	NO. LOOPS	ST MSGS	IS MSGS	LOC SLU	ST SLU	IS SLU	TOT SLU
492177	87 CONTEL OF WEST - NM	25,905	6,335	3,137	167,947	61,241	46,893	276,082
492259	87 BACA VALLEY TEL CO	545	126	75	3,286	1,358	1,166	5,811
492262	87 ENMR TEL COOP INC-NM	8,916	1,406	1,357	66,558	14,491	18,768	99,817
492263	87 LA JICARITA RURAL	1,422	314	85	15,844	3,356	1,687	20,887
492264	87 LEACO RURAL TEL COOP	815	314	171	4,159	2,903	2,297	9,359
492268	87 WESTERN NEW MEXICO	4,043	1,007	843	24,695	9,919	9,584	44,198
492270	87 PENASCO VALLEY TEL	1,985	553	200	11,632	5,638	3,698	20,968
492272	87 ROOSEVELT CNTY RURAL	1,450	320	177	13,236	3,708	3,187	20,130
492274	87 UNIVERSAL TEL OF SW	3,155	913	307	17,700	7,754	5,487	30,941
492275	87 NAVAJO COMMUN - NM	2,928	1,021	604	13,536	8,028	8,713	30,278
502177	87 CONTEL THE WEST - UT	14,262	3,148	2,497	125,521	32,576	36,617	194,715
502275	87 NAVAJO COMMUN - UT	280	57	135	699	539	1,431	2,669
502277	87 CENTRAL UTAH TEL INC	741	185	46	7,150	2,014	894	10,058
502278	87 EMERY COUNTY FARMERS	2,494	724	239	26,638	6,587	2,686	35,911
502280	87 KAMAS-WOODLAND TEL	1,511	444	71	7,576	4,291	1,473	13,340
502283	* SKYLINE TELECOM	527	60	26	2,283	621	431	3,335
502286	87 SOUTH CENTRAL UTAH	2,581	471	295	16,466	4,614	4,385	25,466
502287	87 UINTAH BASIN TEL	2,562	793	171	18,317	8,729	3,719	30,765
502288	87 UT-WY TELECOM	439	85	77	9,067	956	855	10,877
512251	87 RANGE TEL COOP - WY	1,398	292	261	10,331	3,411	3,916	17,658
512290	87 UTAH-WYOMING TELECOM	290	34	77	1,537	329	917	2,783
512291	87 DUBOIS TEL EXCHANGE	1,566	279	257	6,844	2,656	3,893	13,394
512294	87 MEDICINE BOW TEL CO	250	48	17	1,085	519	349	1,953
512295	87 SILVER STAR TEL-WY	973	176	213	4,634	1,273	2,616	8,524
512297	87 UNION TELEPHONE CO	2,800	496	687	23,183	5,142	8,631	36,956
512299	87 TEL. UTIL. OF WY.	2,851	472	444	14,794	4,959	7,431	27,183
522404	87 ASOTIN TEL - WA	808	68	74	8,185	934	1,274	10,393
522408	87 TEL UTIL OF WA INC	71,156	27,465	7,476	463,087	275,436	128,794	867,317
522410	87 COWICHE TELEPHONE CO	1,445	646	92	6,721	5,812	1,481	14,014
522412	87 ELLENSBURG TEL CO	13,936	2,918	1,501	109,213	34,514	20,605	164,332
522417	87 HAT ISLAND TEL CO	47	0	0	0	0	0	0
522419	87 HOOD CANAL TEL CO	686	265	50	1,440	2,388	926	4,754
522423	87 INLAND TEL CO -WA	1,385	287	121	7,998	3,171	1,863	13,031
522426	87 KALAMA TEL CO	1,559	704	320	7,603	5,799	2,691	16,093
522427	87 LEWIS RIVER TEL CO	2,271	969	392	10,803	9,093	5,540	25,435
522431	87 MASHHELL TEL CO INC	1,774	830	123	7,214	8,188	2,241	17,643
522436	87 PENINSULA TELECOMM	4,148	1,261	411	29,064	14,397	8,166	51,626
522437	87 PIONEER TEL CO	725	222	59	4,002	2,276	866	7,144
522442	87 ST JOHN TEL CO	569	194	56	2,072	2,167	771	5,010
522446	87 TENINO TELEPHONE CO	2,033	993	156	10,667	8,777	2,929	22,374

TABLE 4.6

 1987 NONTIER 1 COMPANIES NETWORK USAGE DATA
 (MSG & SLU IN THOUSANDS)

FCODE	YR CARRIER	NO. LOOPS	ST MSGS	IS MSGS	LOC SLU	ST SLU	IS SLU	TOT SLU
522447	87 TOLEDO TELEPHONE CO	1,292	506	138	9,306	5,068	2,386	16,760
522449	87 CONTEL OF THE NW-WA	46,048	5,639	15,372	374,554	143,250	81,383	599,187
522451	87 WESTERN WAHAKIUM	852	222	91	5,359	2,567	1,205	9,131
522452	87 WHIDBEY TEL CO.	5,739	1,666	499	42,111	17,047	5,705	64,863
522453	87 YELM TELEPHONE CO	4,715	2,304	349	35,942	21,418	6,788	64,147
532226	87 MIDVALE TEL EXCH -OR	213	82	30	1,992	753	382	3,127
532304	87 C P NATIONAL CORP-OR	9,555	3,979	1,044	50,874	32,677	19,838	103,390
532359	87 BEAVER CREEK COOP	3,076	798	231	37,320	9,277	5,117	51,713
532361	87 TEL UTIL OF OREGON	35,384	12,725	3,926	239,420	122,819	64,834	427,073
532362	87 CANBY TEL ASSN	7,570	2,997	647	56,015	26,972	9,108	92,095
532363	87 CLEAR CREEK MUTUAL	2,557	689	214	31,907	7,366	4,269	43,541
532364	87 COLTON TEL CO	894	360	64	7,286	3,453	1,337	12,076
532371	87 CASCADE UTIL INC	6,957	1,908	264	62,083	18,764	9,325	90,172
532375	87 RTI/HALSEY TEL CO	621	463	111	2,054	4,612	2,825	9,491
532376	87 HELIX TEL CO.	251	81	19	665	847	368	1,880
532377	87 HOME TELEPHONE CO	565	132	35	2,848	1,572	545	4,965
532378	87 TRANS-CASCADES TEL	94	29	11	577	352	212	1,141
532383	87 MOLALLA TEL CO.	4,477	1,762	318	34,787	15,819	5,097	55,702
532385	87 MONROE TELEPHONE CO.	688	292	38	3,117	2,745	747	6,608
532387	87 NEHALEM TEL & TEL	1,691	460	106	5,529	4,351	1,695	11,576
532388	87 NORTH STATE TEL CO.	374	151	27	1,497	1,455	506	3,457
532389	87 OREGON TEL CORP	1,368	555	113	6,032	5,544	2,053	13,629
532392	87 PINE TEL SYSTEM INC.	646	127	66	4,006	1,405	1,253	6,664
532393	87 PIONEER TEL COOP	9,625	2,399	654	56,957	23,878	13,098	93,933
532397	87 SCIO MUTUAL TEL ASSN	1,287	505	83	7,940	4,906	1,615	14,460
532399	* STAYTON COOP TEL CO	4,524	951	416	35,919	9,768	6,779	52,466
532404	87 ASOTIN TEL - OR	88	16	12	151	160	185	497
532449	87 CONTEL OF THE NW- OR	20,609	7,570	1,933	166,016	73,301	34,977	274,293
532456	87 MALHEUR HOME TEL CO	10,257	594	1,700	107,566	13,359	31,788	152,713
542301	87 CALAVERAS TEL CO	1,532	665	59	5,480	5,382	975	11,837
542304	87 C P NATIONAL CORP-CA	11,032	4,323	1,069	62,326	41,330	12,381	116,036
542306	*	401	52	23	1,977	538	373	2,888
542308	87 CITIZENS UTIL OF CA	53,447	14,515	3,596	485,223	156,572	55,254	697,049
542311	87 CALIF-OREGON TEL CO	2,010	393	483	9,695	4,839	4,695	19,229
542313	87 DUCOR TELEPHONE CO	535	273	17	2,105	2,755	357	5,217
542315	87 EVANS TEL CO.	7,617	3,476	383	44,165	29,395	4,598	78,159
542318	87 FORESTHILL TEL CO.	1,695	0	0	0	0	0	0
542321	87 HAPPY VALLEY TEL CO	2,437	0	0	0	0	0	0
542322	87 HORNITOS TEL CO	425	0	0	0	0	0	0
542324	87 KERMAN TELEPHONE CO	4,164	955	145	40,522	14,105	2,890	57,517

TABLE 4.6

 1987 NONTIER 1 COMPANIES NETWORK USAGE DATA
 (MSG & SLU IN THOUSANDS)

FCODE	YR CARRIER	NO. LOOPS	ST MSGS	IS MSGS	LOC SLU	ST SLU	IS SLU	TOT SLU
542332	87 THE PONDEROSA TEL CO	5,542	2,305	191	27,619	19,986	2,877	50,482
542334	87 ROSEVILLE TEL CO	62,289	17,391	4,472	605,801	137,835	54,690	798,326
542338	87 SIERRA TELEPHONE CO	10,878	0	0	0	0	0	0
542339	87 THE SISKIYOU TEL CO	3,139	1,236	280	13,681	15,119	4,214	33,014
542342	87 TUOLUMNE TEL CO	4,118	2,022	162	18,651	18,781	3,402	40,834
542343	87 THE VOLCANO TEL CO	7,181	2,040	185	26,008	31,697	3,985	61,690
542346	+ PINNACLES TEL CO	109	220	33	279	1,723	482	2,484
552223	87 GEM STATE UTIL-NV	304	42	58	1,509	437	661	2,606
552233	87 RURAL TEL CO - NV	303	40	16	220	368	341	929
552302	87 CONTEL OF CALIF-NV	18,562	3,476	5,908	102,721	30,491	58,575	191,787
552304	87 CP NATIONAL-NV	9,876	1,896	2,991	55,951	18,378	32,825	107,153
552349	87 CHURCHILL COUNTY TEL	8,051	1,137	1,343	61,561	9,419	20,956	91,935
552351	87 LINCOLN CTY TEL SYS	1,583	369	212	7,200	3,926	3,320	14,446
552353	87 MOAPA VALLEY TEL CO.	1,923	374	311	12,729	3,721	4,307	20,757
552354	87 NEVADA TEL-TELEGRAPH	2,463	594	558	12,895	4,941	7,799	25,635
552356	87 RIO VIRGIN TEL CO	901	135	456	5,406	1,029	4,126	10,561
613000	87 ANCHORAGE TEL UTIL	128,759	11,594	12,065	1,809,209	134,842	297,498	2,241,548
613001	87 ARCTIC SLOPE TEL	1,301	796	527	8,033	9,302	8,272	25,606
613003	87 BRISTOL BAY TEL COOP	1,065	307	139	5,440	2,647	2,172	10,260
613004	87 BUSH-TELL INC.	530	237	24	3,087	2,095	419	5,602
613006	87 COPPER VALLEY TEL	3,029	670	365	20,431	7,240	7,379	35,049
613007	87 CORDOVA TEL COOP	1,371	231	200	10,048	2,459	3,634	16,140
613008	87 FAIRBANKS MUNICIPAL	26,260	0	0	0	0	0	0
613009	87 GTE ALASKA INC.	12,280	2,670	1,435	93,300	33,023	27,498	153,821
613010	87 GLACIER STATE TEL CO	28,778	4,707	2,993	290,151	46,945	80,377	417,473
613011	87 INTERIOR TEL CO INC	2,329	643	508	10,797	6,834	8,248	25,879
613012	87 JUNEAU & DOUGLAS TEL	15,083	1,815	2,468	162,738	23,282	41,062	227,082
613013	87 KETCHIKAN PUBLIC UT	6,897	0	0	0	0	0	0
613015	87 MATANUSKA TEL ASSOC	27,284	5,742	1,733	294,407	62,645	54,539	411,591
613016	87 MUKLUK TEL CO INC	614	253	34	2,542	2,463	617	5,622
613018	87 NUSHAGAK TEL COOP	1,316	363	145	10,274	3,913	2,683	16,870
613019	87 OTZ TEL COOPERATIVE	1,710	614	118	13,175	6,526	2,013	21,714
613020	87 SITKA TELEPHONE CO	7,989	2,026	1,213	49,636	20,182	20,087	89,905
613022	87 TEL UTIL OF ALASKA	2,387	166	343	17,359	1,537	8,139	27,035
613023	87 UNITED UTILITIES INC	2,899	0	0	0	0	0	0
613025	87 YUKON TEL CO INC	393	147	28	1,455	1,427	687	3,569
633200	87 PUERTO RICO COMM	88,704	0	0	0	0	0	0
643300	87 VIRGIN ISLANDS TEL	42,012	0	9,109	1,005,897	0	189,300	1,195,196
694	TOTAL	5332725	1233710	508513	45659103	12662940	8364632	66686662

- GTE'S DEM MINUTES ARE WEIGHTED

* - COMPANIES WHO NECA COMPUTED DATA FOR

+ - COMPANIES WHO SUBMITTED 1986 DATA RATHER THAN 1987

TABLE 4.7

1987 NONTIER 1 COMPANIES NETWORK USAGE DATA

FCODE	YEAR	CARRIER	DEM MINUTES IN THOUSANDS				FACTORS			
			LOC DEM	ST DEM	IS DEM	TOT DEM	IS SLU	IS SPF	IS DEM	W DEM
100003	87	LINCOLNVILLE TEL CO	5,907	2,461	2,074	10,442	0.1986	0.5914	0.1986	0.2714
100004	87	CHINA TEL CORP	0	0	0	0	0.1462	0.3300	0.1466	0.1739
100010	87	HAMPDEN TEL CO	0	0	0	0	0.1088	0.2841	0.1411	0.1825
100011	87	HARTLAND & ST ALBANS	12,311	6,234	2,607	21,151	0.1232	0.3000	0.1232	0.1837
100014	87	CONTEL OF MAINE	216,890	90,633	59,159	366,682	0.1592	0.3456	0.1613	0.2155
100024	87	SOMERSET TEL CO	38,008	20,871	11,265	70,144	0.1606	0.3148	0.1565	0.2030
100025	87	STANDISH TEL CO	0	0	0	0	0.1837	0.4654	0.1837	0.2211
100027	87	UNION RIVER TEL CO	2,639	1,409	770	4,818	0.1456	0.4158	0.1599	0.2028
100029	87	UNITY TEL CO., INC.	0	0	0	0	0.1297	0.3279	0.1337	0.1675
100031	87	WARREN TEL CO	4,125	5,147	1,691	10,964	0.1543	0.3274	0.1543	0.1698
100034	87	WEST PENOBSCOT TEL	7,934	5,628	1,582	15,144	0.1069	0.2538	0.1045	0.1364
120038	87	BRETTON WOODS TEL CO	141	376	624	1,141	0.5470	0.7500	0.5470	0.5881
120039	87	GRANITE STATE TEL	32,180	15,258	16,043	63,481	0.2527	0.4172	0.2527	0.3195
120041	87	CONTEL OF NH	48,849	20,173	25,008	94,030	0.2629	0.5542	0.2660	0.3195
120045	87	KEARSARGE TEL CO	19,927	15,937	13,321	49,185	0.2709	0.5978	0.2708	0.3194
120046	87	MERIDEN TEL CO	1,623	829	1,514	3,967	0.3826	0.7300	0.3818	0.4966
120047	87	MERRIMAK COUNTY TEL	45,695	19,215	14,920	79,830	0.1829	0.4968	0.1869	0.2360
120049	87	UNION TEL CO	11,729	9,168	8,330	29,227	0.2850	0.7400	0.2850	0.3413
120050	87	WILTON TEL CO - NH	13,323	6,355	6,619	26,297	0.2301	0.7200	0.2517	0.3029
140058	87	LUDLOW TEL CO	11,190	5,661	6,350	23,202	0.2738	0.4470	0.2737	0.3341
140061	87	NORTHFIELD TEL CO	14,329	6,493	8,229	29,051	0.2833	0.6143	0.2833	0.3476
140062	87	PERKINSVILLE TEL CO	2,303	2,199	1,724	6,225	0.2769	0.4708	0.2769	0.3358
140068	87	TOPSHAM TEL CO	5,919	2,133	2,150	10,201	0.2107	0.3607	0.2107	0.2693
140069	87	WAITSFIELD/FAYSTON	19,259	6,281	10,446	35,986	0.2902	0.7222	0.2902	0.3444
140070	87	CONTEL OF VERMONT	179,724	66,487	81,767	327,978	0.2374	0.4884	0.2493	0.3128
150071	87	ARMSTRONG TEL CO-NY	16,321	7,238	4,207	27,766	0.1517	0.2457	0.1515	0.2167
150072	87	AU SABLE VALLEY TEL	25,261	4,175	6,109	35,545	0.1368	0.3096	0.1719	0.2167
150073	*	BERKSHIRE TEL CORP	33,128	9,818	6,805	49,751	0.1292	0.2544	0.1292	0.1368
150077	87	CHAMPLAIN TEL CO	29,403	9,947	8,997	48,348	0.1861	0.4678	0.1861	0.2410
150078	87	CHAUTAUQUA & ERIE	62,290	19,680	17,410	99,380	0.1752	0.3891	0.1752	0.2291
150079	*	CHAZY & WESTPORT	18,565	5,502	3,813	27,881	0.1292	0.3178	0.1292	0.1368
150081	87	CITIZENS HAMMOND NY	4,298	3,025	1,123	8,446	0.1329	0.2305	0.1329	0.1576
150082	87	CLYMER TEL CO	1,518	492	662	2,672	0.2417	0.4821	0.2479	0.3565
150084	87	TACONIC TEL CORP	106,361	52,559	31,842	190,762	0.1671	0.3441	0.1671	0.2194
150085	87	CROWN POINT TEL CORP	4,107	2,225	1,062	7,394	0.1436	0.2632	0.1436	0.2050
150088	*	DELHI TEL CO	20,277	6,010	4,165	30,451	0.1292	0.2602	0.1292	0.1368
150091	87	DUNKIRK & FREDONIA	80,336	18,989	8,377	107,702	0.0773	0.2409	0.0778	0.1072
150092	87	EDWARDS TEL CO	9,412	6,290	1,345	17,047	0.0786	0.1980	0.0789	0.1141
150093	87	EMPIRE TEL CORP	26,769	20,129	8,300	55,198	0.1504	0.2604	0.1504	0.1877
150097	87	GERMANTOWN TEL CO	11,006	7,191	2,913	21,110	0.1380	0.2791	0.1380	0.1595
150099	87	HANCOCK TEL CO	7,846	3,118	2,436	13,400	0.1817	0.2925	0.1818	0.2511

TABLE 4.7

1987 NONTIER 1 COMPANIES NETWORK USAGE DATA

FCODE	YEAR	CARRIER	DEM MINUTES IN THOUSANDS				FACTORS			
			LOC DEM	ST DEM	IS DEM	TOT DEM	IS SLU	IS SPF	IS DEM	W DEM
150100	87	HIGHLAND TEL CO	434,650	227,982	150,113	812,745	0.1836	0.2910	0.1847	0.2800
150104	*	MARGARETVILLE TEL CO	13,237	3,923	2,719	19,879	0.1292	0.2369	0.1292	0.1368
150105	87	MIDDLEBURGH TEL CO	25,029	16,676	4,858	46,563	0.1043	0.2160	0.1043	0.1249
150106	87	ALLTEL NY-FULTON	125,729	16,955	13,547	156,231	0.0854	0.1996	0.0867	0.1174
150107	*	NEWPORT TEL CO	11,307	3,351	2,323	16,981	0.1292	0.1728	0.1292	0.1368
150108	87	NICHOLVILLE TEL CO	11,085	5,299	2,273	18,657	0.1221	0.2133	0.1218	0.1584
150109	87	ALLTEL NY-JAMESTOWN	111,165	15,016	21,351	147,531	0.1419	0.2494	0.1447	0.1983
150110	87	OGDEN TEL CO	218,425	23,881	18,224	260,531	0.0699	0.2009	0.0700	0.1037
150111	*	ONEIDA COUNTY RURAL	15,659	4,641	3,216	23,516	0.1292	0.1668	0.1292	0.1368
150113	87	ALLTEL NY-RED JACKET	4,723	1,865	578	7,166	0.0785	0.2195	0.0806	0.0952
150118	*	PORT BYRON TEL CO	9,899	2,934	2,033	14,866	0.1292	0.1768	0.1292	0.1368
150119	87	RED HOOK TEL CO	95,328	44,703	21,691	161,723	0.1334	0.2853	0.1341	0.1761
150122	87	SENECA-GORHAM TEL	41,243	30,924	8,642	80,810	0.1070	0.2139	0.1069	0.1306
150128	87	SYLVAN LAKE TEL CO	156,317	53,274	33,461	243,052	0.1386	0.2788	0.1377	0.1839
150133	87	VERNON TEL CO	16,682	5,937	2,580	25,199	0.1022	0.2571	0.1024	0.1336
150135	87	WARWICK VALLEY-NY	69,254	40,269	27,516	137,039	0.2010	0.3534	0.2008	0.2483
150136	87	WESTERN COUNTIES TEL	144,796	65,677	31,349	241,822	0.1295	0.2385	0.1296	0.1859
160135	87	WARWICK VALLEY-NJ	32,328	43,068	16,045	91,441	0.1755	0.3603	0.1755	0.2025
170170	87	CONTEL OF PA	453,469	126,899	79,735	660,102	0.1117	0.2589	0.1208	0.1729
170177	87	LACKAWAXEN TEL CO	0	0	0	0	0.3418	0.6653	0.4460	0.3993
170189	87	ARMSTRONG TEL CO-PA	0	0	0	0	0.1184	0.2235	0.1180	0.1414
170192	87	NORTH PENN TEL CO	23,373	8,346	8,772	40,491	0.2166	0.3168	0.2166	0.3025
170194	87	OSWAYO RIVER TEL CO	11,211	2,670	4,021	17,902	0.2246	0.4710	0.2246	0.3280
170201	87	QUAKER STATE TEL CO	224,736	56,887	55,970	337,593	0.1628	0.2993	0.1658	0.2512
170206	87	SUGAR VALLEY TEL CO	4,903	2,252	1,175	8,330	0.1419	0.2527	0.1411	0.2091
170210	*	VENUS TEL CORP	5,257	1,558	1,080	7,895	0.1292	0.1382	0.1292	0.1368
180216	87	ARMSTRONG TEL OF MD	23,038	15,205	10,897	49,140	0.2275	0.3664	0.2218	0.2755
190217	87	AMELIA TEL CORP	27,098	8,880	3,382	39,361	0.0885	0.1844	0.0859	0.1272
190249	87	ROANOKE & BOTETOURT	0	0	0	0	0.1211	0.2359	0.1191	0.1591
200259	87	HARDY TEL CO	18,773	1,440	2,975	23,187	0.1283	0.2520	0.1283	0.2298
200270	87	MOUNTAIN STATE TEL	230,182	40,463	29,780	300,425	0.0977	0.2269	0.0991	0.1563
200278	87	CONTEL OF WV	275,753	56,131	46,271	378,156	0.1162	0.2309	0.1224	0.1845
210291	87	FLORALA TEL CO	13,925	5,154	4,427	23,506	0.1063	0.3253	0.0000	0.1883
210318	87	SOUTHLAND TEL-FL	35,242	3,138	4,044	42,423	0.0953	0.2774	0.0953	0.1627
210329	87	GULF TEL CO	83,442	26,485	22,070	131,997	0.1019	0.2728	0.0000	0.1672
210330	87	VISTA-UNITED TELCOM	48,411	26,962	70,910	146,283	0.4683	0.5859	0.4847	0.5324
210331	87	INDIANTOWN SYSTEM	10,278	10,031	3,854	24,163	0.1642	0.3906	0.1595	0.1899
210335	87	NORTHEAST FLORIDA	44,224	12,725	6,633	63,582	0.1043	0.2169	0.1043	0.1406
210336	87	ALLTEL FLORIDA INC.	428,843	123,270	66,731	618,844	0.1086	0.2587	0.1078	0.1474
210338	87	QUINCY TEL CO-FL DIV	112,888	24,734	12,139	149,760	0.0816	0.2198	0.0811	0.1186
210339	87	ST JOSEPH TEL & TEL	166,545	81,202	56,045	303,792	0.1282	0.3275	0.0000	0.4674

TABLE 4.7

1987 NONTIER 1 COMPANIES NETWORK USAGE DATA

FCODE	YEAR	CARRIER	DEM MINUTES IN THOUSANDS				FACTORS			
			LOC DEM	ST DEM	IS DEM	TOT DEM	IS SLU	IS SPF	IS DEM	W DEM
220281	87	CONTEL OF SOUTH - GA	504,557	134,572	75,035	714,164	0.0976	0.2143	0.1051	0.1611
220324	87	VALLEY TEL CO - GA	58,841	4,084	5,362	68,287	0.0727	0.3459	0.0785	0.1164
220338	87	QUINCY TEL CO-GA DIV	9,773	949	1,698	12,421	0.1454	0.2728	0.1367	0.2463
220344	87	ALMA TEL CO	57,020	11,782	5,306	74,107	0.0718	0.1883	0.0716	0.1106
220347	87	BRANTLEY TEL CO	28,726	7,607	3,461	39,794	0.0869	0.2004	0.0870	0.1295
220351	87	CAMDEN TEL & TEL CO	91,629	12,796	31,497	135,922	0.2286	0.5067	0.2317	0.3074
220355	87	CITIZENS TEL CO - GA	44,668	9,320	4,307	58,295	0.0739	0.2100	0.0739	0.0999
220356	87	COASTAL UTILITIES	173,638	46,122	73,018	292,779	0.2503	0.4869	0.2494	0.3563
220358	87	DARIEN TEL CO	29,999	8,326	5,030	43,354	0.1173	0.2624	0.1160	0.1587
220360	87	ELLIJAY TEL CO	64,866	12,549	5,702	83,117	0.0687	0.1854	0.0686	0.0942
220371	87	INTERSTATE TEL CO	158,138	14,011	19,675	191,824	0.0928	0.2483	0.1026	0.1640
220377	87	PINELAND TEL COOP	92,560	19,336	8,033	119,928	0.0670	0.1766	0.0670	0.1057
220379	87	PLANT TEL. CO.	71,037	18,402	7,577	97,016	0.0782	0.2271	0.0781	0.1140
220381	87	PUBLIC SERVICE TEL	86,944	19,964	7,590	114,498	0.0663	0.1827	0.0663	0.1105
220386	87	STANDARD TEL CO	362,108	100,881	47,533	510,522	0.0931	0.2019	0.0931	0.1454
220392	87	WAVERLY HALL TEL CO	6,456	2,709	977	10,142	0.0964	0.2404	0.0964	0.1223
220394	87	WILKES TEL & ELC CO	97,571	18,837	11,640	128,048	0.0913	0.1971	0.0909	0.1491
230468	87	ATLANTIC MEMBERSHIP	145,947	27,941	22,585	196,473	0.1150	0.2271	0.1150	0.1634
230469	87	BARNARDSVILLE TEL CO	7,206	2,384	681	10,271	0.0704	0.2108	0.0663	0.1110
230473	87	CITIZENS TEL CO	145,117	20,041	23,838	188,996	0.1267	0.2487	0.1261	0.1752
230474	87	CONCORD TEL CO	858,581	113,626	95,793	1,068,000	0.0854	0.1709	0.0897	0.1186
230476	87	ALLTEL CAROLINA-NO	1,065,995	192,683	152,775	1,411,453	0.1095	0.2142	0.1082	0.1525
230481	87	HEINS TEL CO	280,641	53,739	35,215	369,595	0.0945	0.2156	0.0953	0.1584
230502	87	STAR MEMBERSHIP CORP	141,042	27,593	12,276	180,912	0.0679	0.1543	0.0679	0.1167
230509	87	CONTEL OF NC	920,035	150,692	162,368	1,233,096	0.1257	0.2783	0.1317	0.2181
230510	87	WILKES MEMBERSHIP	107,253	9,723	4,825	121,800	0.0396	0.1258	0.0396	0.0626
240512	87	BLUFFTON TEL. CO.	9,076	7,223	5,994	22,294	0.2722	0.5334	0.2689	0.3428
240520	87	FARMERS TEL COOP	518,953	61,239	67,252	647,444	0.1043	0.2720	0.1039	0.1400
240523	87	HARGRAY TEL CO	179,058	38,706	116,160	333,924	0.3526	0.5930	0.3479	0.4173
240526	87	CONTEL OF SC	188,147	22,312	27,917	238,376	0.1173	0.2778	0.1171	0.1599
240528	87	HORRY TEL COOP	319,001	52,368	66,927	438,296	0.1520	0.2853	0.1527	0.2002
240533	87	MCCLELLANVILLE TEL	8,228	3,617	1,775	13,620	0.1303	0.3036	0.1303	0.1979
240539	87	POND BRANCH TEL CO	70,905	17,286	8,177	96,368	0.0852	0.2061	0.0848	0.1214
240551	87	WILLISTON TEL CO	34,410	8,757	4,504	47,671	0.0953	0.2157	0.0945	0.1570
250281	87	CONTEL OF THE SOUTH	1,046,719	193,566	127,971	1,368,256	0.0867	0.2242	0.0935	0.1450
250284	87	BUTLER TEL CO	45,670	6,779	6,477	58,925	0.1177	0.2831	0.1099	0.1709
250295	*	GRACEBA TOTAL COMM	26,701	7,914	5,485	40,100	0.1292	0.2808	0.1292	0.1368
250297	87	GROVE HILL TEL CORP	17,624	5,642	2,183	25,449	0.0921	0.2216	0.0858	0.1362
250298	87	GULF TEL CO - AL	185,791	33,659	46,993	266,443	0.1730	0.3495	0.1764	0.2655
250300	87	HOPPER TEL. CO INC	24,832	7,271	2,182	34,285	0.0636	0.1656	0.0836	0.1078
250304	87	MILLRY TEL CO	50,127	70,740	12,167	133,034	0.0946	0.3108	0.0000	0.3776

TABLE 4.7

1987 NONTIER 1 COMPANIES NETWORK USAGE DATA

FCODE	YEAR	CARRIER	DEM MINUTES IN THOUSANDS				FACTORS			
			LOC DEM	ST DEM	IS DEM	TOT DEM	IS SLU	IS SPF	IS DEM	W DEM
250306	87	MONROEVILLE TEL CO	122,057	19,644	21,051	162,752	0.1178	0.2431	0.1293	0.2099
250314	87	PEOPLES TEL CO	116,219	17,133	12,658	146,010	0.0870	0.2073	0.0867	0.1451
250315	*	PINE BELT TEL CO	9,160	2,715	1,882	13,757	0.1292	0.1645	0.1292	0.1368
250316	87	RAGLAND TEL CO	9,062	2,796	857	12,714	0.0674	0.2040	0.0674	0.1128
250318	87	SOUTHLAND TEL CO-AL	136,178	18,980	17,245	172,404	0.0987	0.2625	0.0987	0.1616
250461	87	SOUTHEAST MS TEL CO	9,736	3,511	2,631	15,878	0.1658	0.4292	0.1657	0.2352
260410	87	CONTEL OF KENTUCKY	791,299	102,466	103,401	997,166	0.0971	0.1911	0.1037	0.1694
270422	87	ATHENS TEL CO	1,866	1,102	403	3,372	0.1196	0.2883	0.1196	0.1600
270423	87	CENTRAL LOUISIANA	155,682	28,641	17,086	201,409	0.0850	0.1944	0.0848	0.1369
270424	87	COASTAL TEL & ELECTR	98,224	24,831	9,943	132,999	0.0747	0.1766	0.0748	0.1015
270425	87	CAMERON TEL CO - LA	53,188	15,172	8,381	76,741	0.1092	0.3368	0.1092	0.1476
270427	*	CHATHAM TEL CO	4,968	1,472	1,020	7,461	0.1292	0.1764	0.1292	0.1368
270429	87	EAST ASCENSION TEL	282,371	51,596	28,517	362,484	0.0787	0.1962	0.0787	0.1191
270430	87	ELIZABETH TEL CO	25,189	5,441	2,645	33,275	0.0795	0.2061	0.0795	0.1389
270431	87	CADDOAN TEL CO	80,079	15,547	14,517	110,143	0.1321	0.2878	0.1321	0.2002
270433	87	LAFOURCHE TEL CO	113,606	20,216	9,829	143,651	0.0684	0.2490	0.0683	0.0984
270434	87	EVANGELINE TEL CO	585,107	62,889	24,657	672,653	0.0781	0.1716	0.0780	0.1176
270435	87	NORTHEAST LOUISIANA	7,564	3,120	1,357	12,041	0.1127	0.2650	0.1127	0.1747
270436	87	CENTURY NORTH LA	8,432	2,439	1,718	12,589	0.1364	0.2944	0.1365	0.2084
270437	87	PLAIN DEALING TEL CO	18,047	3,553	2,567	24,166	0.1062	0.2041	0.1062	0.1712
270439	*	RINGGOLD TEL CO	8,064	2,390	1,656	12,111	0.1292	0.2728	0.1292	0.1368
270440	87	CENTURY TEL CO	20,901	6,205	2,579	29,684	0.0869	0.1649	0.0869	0.1330
270442	87	LOUISIANA WESTERN	33,231	8,501	4,515	46,247	0.1129	0.2259	0.1126	0.1727
270443	87	UTC OF LOUISIANA	28,233	6,686	4,084	39,003	0.1048	0.2446	0.1047	0.1604
280446	87	BAY SPRINGS TEL CO	107,176	16,781	9,714	133,671	0.0727	0.2098	0.0727	0.1301
280451	*	DECATUR TEL CO -MS	6,960	2,063	1,430	10,452	0.1292	0.1555	0.1292	0.1368
280452	87	DELTA TEL CO	30,516	4,591	3,429	38,537	0.0890	0.2424	0.0890	0.1611
280454	87	FRANKLIN TEL CO - MS	70,214	10,639	8,490	89,342	0.0948	0.2181	0.0950	0.1589
280458	87	HOME TEL CO-OLIVE BR	0	0	0	0	0.1887	0.5326	0.1885	0.2880
280459	87	HUGHES TEL CO	70,524	5,302	7,315	83,142	0.0880	0.1983	0.0880	0.1279
280464	87	NOXAPATER TEL CO	14,005	1,281	1,173	16,459	0.0776	0.1954	0.0713	0.1373
280466	*	SLEDGE TEL CO	3,206	950	658	4,814	0.1292	0.2628	0.1292	0.1368
290552	87	ADAMSVILLE TEL CO	0	0	0	0	0.0807	0.2448	0.0824	0.1356
290571	87	MILLINGTON TEL CO	258,975	23,028	47,148	329,152	0.1450	0.3556	0.1432	0.1868
290575	87	TENNESSEE TEL CO	518,962	48,875	54,922	622,759	0.0884	0.1931	0.0882	0.1194
290579	87	TWIN LAKES TEL COOP	290,489	32,296	25,908	348,692	0.0743	0.1938	0.0743	0.1404
300597	87	THE CHILLICOTHE TEL	344,674	47,255	31,312	423,242	0.0709	0.1644	0.0709	0.1137
300607	87	CONTEL OF OHIO	15,861	3,994	143	19,998	0.0758	0.1840	0.0761	0.1030
300613	87	LITTLE MIAMI COMM.	9,604	2,997	1,048	13,649	0.0768	0.1752	0.0768	0.1003
300649	*	ORWELL TEL CO	29,953	8,877	6,152	44,983	0.1292	0.2195	0.1292	0.1368
300665	87	ALLTEL OHIO-WEST OH	143,921	50,235	20,223	214,379	0.0943	0.2139	0.0943	0.1429

TABLE 4.7

1987 NONTIER 1 COMPANIES NETWORK USAGE DATA

FCODE	YEAR	CARRIER	DEM MINUTES IN THOUSANDS				FACTORS			
			LOC DEM	ST DEM	IS DEM	TOT DEM	IS SLU	IS SPF	IS DEM	W DEM
300682	87	C, C & S TELCO -OHIO	2,147	3,249	768	6,164	0.1871	0.2728	0.2652	0.2771
310678	*	BLANCHARD TEL ASSN	3,057	906	628	4,591	0.1292	0.1599	0.1292	0.1368
310679	87	BLOOMINGDALE TEL CO	5,443	6,116	1,526	13,086	0.1170	0.2581	0.1166	0.1386
310680	87	CHIPPEWA COUNTY TEL	2,799	2,094	781	5,674	0.1376	0.2639	0.1376	0.1908
310681	87	ALLTEL MICHIGAN INC.	294,332	134,720	56,281	485,332	0.1160	0.2414	0.1160	0.1609
310682	87	C, C & S TELCO - MI	120,841	46,671	21,500	189,013	0.1141	0.2122	0.1138	0.1699
310683	87	CARR TEL CO	3,168	2,347	466	5,981	0.1116	0.3647	0.1121	0.1331
310685	87	CHATHAM TEL CO - MI	15,607	4,733	2,118	22,458	0.0948	0.2395	0.0943	0.1450
310687	87	CLAYTON TEL CO	1,781	2,754	649	5,185	0.1252	0.2279	0.1252	0.1554
310699	87	HICKORY TEL CO	13,571	3,222	1,562	18,355	0.0878	0.2025	0.0851	0.1161
310702	87	CENTURY OF MICHIGAN	224,957	121,760	28,083	374,800	0.0999	0.2145	0.0994	0.1243
310704	87	ACE TEL OF MICHIGAN	9,193	9,925	1,774	20,891	0.0843	0.2184	0.0849	0.1110
310711	87	MIDWAY TEL CO	3,832	1,740	811	6,382	0.1271	0.2761	0.1271	0.1924
310713	87	HIAWATHA TEL CO	19,215	7,583	3,842	30,640	0.1273	0.2882	0.1254	0.1840
310717	87	ONTONAGON COUNTY TEL	29,645	5,729	4,866	40,240	0.1209	0.2943	0.1209	0.2068
310721	87	PIGEON TEL CO	12,157	10,427	2,019	24,602	0.0821	0.1863	0.0821	0.1011
310728	87	SPRINGPORT TEL CO	6,894	5,818	1,016	13,728	0.0740	0.2103	0.0740	0.0914
310732	87	UPPER PENINSULA TEL	16,478	10,330	4,992	31,801	0.1676	0.3490	0.1676	0.2255
310734	*	WALDRON TEL CO	4,896	1,451	1,006	7,352	0.1292	0.3801	0.1292	0.1368
310735	*	WESTPHALIA TEL CO	1,287	382	264	1,933	0.1292	0.1137	0.1292	0.1368
310738	87	WOLVERINE TEL CO	60,682	28,011	5,570	94,263	0.0595	0.1738	0.0591	0.0807
320753	87	CLAY CTY RURAL COOP	78,827	19,027	6,522	104,376	0.0691	0.2097	0.0691	0.0836
320762	87	ELNORA TEL CO	3,213	825	313	4,351	0.0718	0.1610	0.0720	0.1236
320778	87	HOME TEL CO INC	17,956	3,805	1,429	23,190	0.0624	0.1489	0.0616	0.1101
320779	87	CONTEL OF INDIANA	1,337,823	283,306	220,385	1,841,514	0.1197	0.2622	0.1197	0.1823
320797	87	NEW PARIS TEL INC	13,629	3,249	2,373	19,251	0.1233	0.2509	0.1233	0.1473
320800	87	NORTHWESTERN INDIANA	69,705	26,300	14,524	110,529	0.1317	0.4042	0.1314	0.1721
320807	*	PERRY-SPENCER RURAL	19,539	5,791	4,013	29,343	0.1292	0.2142	0.1292	0.1368
320813	*	PULASKI-WHITE RURAL	7,162	2,123	1,471	10,756	0.1292	0.2256	0.1292	0.1368
320830	*	TRI-COUNTY TEL CO	15,818	4,688	3,249	23,755	0.1292	0.1783	0.1292	0.1368
320839	*	YEOMAN TEL CO, INC	4,351	1,289	894	6,534	0.1292	0.2325	0.1292	0.1368
330841	87	CENCOM OF WISCONSIN	142,398	40,605	20,297	203,300	0.1024	0.2427	0.1025	0.1496
330842	*	AMERY TEL CO	48,501	14,375	9,962	72,838	0.1292	0.2825	0.1292	0.1368
330843	*	AMHERST TEL CO	16,403	4,861	3,369	24,633	0.1292	0.2058	0.1292	0.1368
330844	87	BADGER TELECOM, INC.	35,661	8,232	3,609	47,502	0.0760	0.1707	0.0760	0.1142
330851	87	BONDUEL TEL CO	2,554	4,674	885	8,113	0.0769	0.1363	0.0770	0.1222
330855	*	BRUCE TEL CO, INC	9,540	2,828	1,960	14,327	0.1292	0.2748	0.1292	0.1368
330856	87	BURLINGTON B&W	11,902	8,952	4,867	25,721	0.2001	0.2925	0.2001	0.2310
330857	*	CASCO TEL CO	2,660	788	546	3,995	0.1292	0.1245	0.1292	0.1368
330858	*	LAKESHORE TEL CO	4,027	1,193	827	6,047	0.1292	0.1940	0.1292	0.1368
330859	87	CENTRAL STATE TEL CO	48,244	16,436	6,488	71,167	0.1088	0.2142	0.0912	0.1328

TABLE 4.7

1987 NONTIER 1 COMPANIES NETWORK USAGE DATA

FCODE	YEAR	CARRIER	DEM MINUTES IN THOUSANDS				FACTORS			
			LOC DEM	ST DEM	IS DEM	TOT DEM	IS SLU	IS SPF	IS DEM	W DEM
330860	87	CHEQUAMEGON TEL COOP	21,900	8,591	7,113	37,604	0.1892	0.3825	0.1982	0.2308
330861	*	CHIBARDUN TEL COOP	25,345	7,512	5,206	38,063	0.1292	0.2108	0.1292	0.1368
330870	87	CRANDON TEL CO	14,262	4,446	1,886	20,595	0.0916	0.1943	0.0916	0.1318
330876	87	DODGE COUNTY TEL CO	6,123	2,610	400	9,133	0.0587	0.1375	0.0590	0.0869
330882	87	FENNIMORE TEL CO	11,541	4,754	1,484	17,780	0.0936	0.2362	0.0939	0.1416
330883	87	FOOTVILLE TEL CO	9,204	1,257	695	11,156	0.0658	0.1805	0.0623	0.1168
330888	87	GREENWOOD TEL CO	12,816	2,552	970	16,337	0.0828	0.1788	0.0787	0.1275
330889	*	HAGER TELECOM INC.	14,605	4,329	3,000	21,933	0.1292	0.2728	0.1292	0.1368
330891	87	HEADWATERS TEL CO	13,007	5,528	2,949	21,484	0.1698	0.3058	0.1694	0.2100
330892	*	HILLSBORO TEL CO	6,011	1,781	1,235	9,027	0.1292	0.1628	0.1292	0.1368
330895	87	CENTURY OF WISCONSIN	425,449	62,850	73,086	561,385	0.1467	0.2593	0.1782	0.2055
330898	87	LARSEN-READFIELD TEL	13,817	4,971	1,117	19,906	0.0561	0.1653	0.0561	0.0792
330900	*	LEMONWEIR VALLEY TEL	19,223	5,697	3,949	28,869	0.1292	0.3297	0.1292	0.1368
330905	*	MANAWA TEL CO	7,414	2,197	1,523	11,134	0.1292	0.1887	0.1292	0.1368
330908	87	MARQUETTE-ADAMS COOP	11,960	5,927	6,672	24,560	0.2744	0.4874	0.2717	0.3659
330909	87	MIDWAY TEL CO	52,178	13,505	8,822	74,506	0.1184	0.2140	0.1184	0.1547
330910	*	MILLTOWN MUTUAL TEL	16,949	5,023	3,481	25,453	0.1292	0.2782	0.1292	0.1368
330913	87	MONROE COUNTY TEL CO	67,783	18,394	16,240	102,418	0.1586	0.2965	0.1586	0.2108
330914	87	EASTCOAST TELECOM	27,670	6,733	2,117	36,520	0.0915	0.2088	0.0915	0.1315
330916	87	MOUNT HOREB TEL CO	27,002	4,571	3,068	34,641	0.0886	0.2728	0.0886	0.1228
330917	87	MT VERNON TEL CO	51,710	10,554	7,166	69,430	0.1032	0.2254	0.1032	0.1249
330920	*	NIAGARA TEL CO	60,915	18,054	12,512	91,482	0.1292	0.3330	0.1292	0.1368
330922	87	NORTH-WEST TEL CO	450,383	114,113	67,196	631,691	0.1163	0.2481	0.1209	0.1640
330925	*	BAYLAND TEL CO	6,145	1,821	1,262	9,228	0.1292	0.1566	0.1292	0.1368
330931	87	PEOPLES TEL CO	38,305	13,427	4,782	56,514	0.0846	0.2021	0.0846	0.1059
330934	+	PLATTEVILLE TEL CO	46,841	14,980	9,841	71,662	0.1376	0.3118	0.1373	0.1833
330936	87	INDIANHEAD TEL CO	7,513	3,465	1,727	12,705	0.1477	0.3561	0.1479	0.2190
330937	+	PRICE COUNTY TEL CO	25,168	7,343	4,664	37,175	0.1255	0.2806	0.1255	0.1868
330940	87	RHINELANDER TEL CO	84,861	19,900	13,302	118,063	0.1233	0.2351	0.1280	0.1597
330941	*	RIB LAKE TEL CO	4,381	1,299	900	6,580	0.1292	0.2728	0.1292	0.1368
330943	87	RIVERSIDE TELECOM	9,315	4,925	1,743	15,983	0.1106	0.2192	0.1106	0.1257
330945	87	SCANDINAVIA TEL CO	10,785	5,334	1,571	17,691	0.1198	0.2560	0.1153	0.1447
330948	*	SHELL LAKE TEL CO	12,673	3,756	2,603	19,032	0.1292	0.2411	0.1292	0.1368
330949	*	SIREN TEL CO, INC	14,113	4,183	2,899	21,195	0.1292	0.3959	0.1292	0.1368
330950	87	SOLON SPRINGS TEL CO	77,178	23,099	21,989	122,266	0.1798	0.3881	0.1798	0.2546
330952	87	SE TEL OF WISCONSIN	45,408	14,865	7,984	68,257	0.1168	0.2016	0.1170	0.1446
330954	87	STOCKBRIDGE & SHERWD	15,609	6,297	1,071	22,977	0.0656	0.1489	0.0657	0.0801
330956	87	UNIVERSAL OF N WISC	59,884	21,720	12,749	94,352	0.1351	0.4758	0.1351	0.2041
330959	*	THORP TEL CO	10,722	3,178	2,202	16,103	0.1292	0.2202	0.1292	0.1368
330961	*	TURTLE LAKE TEL CO	6,774	2,008	1,391	10,173	0.1292	0.2982	0.1292	0.1368
330963	87	UTELCO, INC	88,195	22,962	23,125	134,283	0.1711	0.2697	0.1722	0.2304

TABLE 4.7

1987 NONTIER 1 COMPANIES NETWORK USAGE DATA

FCODE	YEAR	CARRIER	DEM MINUTES IN THOUSANDS				FACTORS			
			LOC DEM	ST DEM	IS DEM	TOT DEM	IS SLU	IS SPF	IS DEM	W DEM
330964	87	URBAN TEL CORP	148,891	37,175	13,520	199,586	0.0791	0.2144	0.0816	0.1052
330965	87	VALDERS TEL CO	15,194	4,710	1,270	21,174	0.0620	0.1684	0.0600	0.0895
330967	*	VIROQUA TEL CO	17,837	5,286	3,664	26,787	0.1292	0.1991	0.1292	0.1368
330973	*	WITTENBERG TEL CO	6,752	2,001	1,387	10,140	0.1292	0.1398	0.1292	0.1368
330974	87	WOOD COUNTY TEL CO	193,659	35,440	27,798	256,897	0.1086	0.2150	0.1082	0.1417
341000	87	ALLTEL ILLINOIS INC.	331,800	102,255	82,032	516,087	0.1590	0.3233	0.1590	0.2119
341003	*	EGYPTIAN COOP ASSN	13,430	3,980	2,759	20,169	0.1292	0.2360	0.1292	0.1368
341004	87	EL PASO TEL CO	9,850	5,440	1,733	17,024	0.1018	0.2471	0.1018	0.1300
341009	*	C-R TEL CO	4,165	1,234	856	6,255	0.1292	0.1874	0.1292	0.1368
341011	87	LAKESIDE TEL CO	5,151	2,326	639	8,115	0.0788	0.2010	0.0788	0.1228
341023	87	GRIDLEY TEL CO	5,214	5,165	1,546	11,925	0.1297	0.2547	0.1297	0.1551
341036	87	CONTEL OF ILLINOIS	1,165,987	526,852	258,011	1,950,850	0.1323	0.2646	0.1323	0.1675
341037	87	IL CONSOLIDATED TEL	648,381	228,888	107,990	985,260	0.1059	0.2297	0.1096	0.1396
341038	87	INLAND TEL CO	21,060	18,886	4,005	43,952	0.0911	0.2038	0.0911	0.1250
341045	87	LEAF RIVER VLY TEL	2,262	2,170	467	4,899	0.0952	0.2193	0.0952	0.1288
341055	87	MIDLAND TEL CO	22,905	16,520	3,646	43,071	0.0847	0.2049	0.0847	0.1210
341060	87	MOULTRIE INDEPENDENT	4,283	2,333	532	7,149	0.0745	0.1797	0.0745	0.1126
341073	87	PRAIRIE TEL CO	6,234	2,983	878	10,096	0.0870	0.2172	0.0870	0.1337
351105	87	AYRSHIRE FARMERS MUT	1,442	1,309	317	3,068	0.1032	0.2347	0.1032	0.1253
351110	87	BERNARD TEL CO INC	3,829	1,560	402	5,791	0.0928	0.1998	0.0694	0.0858
351113	*	BROOKLYN MUTUAL TEL	6,613	1,960	1,358	9,931	0.1292	0.2043	0.1292	0.1368
351153	*	DUNKERTON TEL COOP	4,006	1,187	823	6,016	0.1292	0.1814	0.1292	0.1368
351207	87	CONTEL OF IOWA, INC.	566,607	180,073	76,099	822,778	0.0925	0.2377	0.0925	0.1577
351214	*	KALONA COOP TEL CO	11,802	3,498	2,424	17,724	0.1292	0.2520	0.1292	0.1368
351229	87	LOST NATION-ELWOOD	5,466	1,701	493	7,659	0.0815	0.1788	0.0644	0.0915
351316	87	UNITED FARMERS TEL	0	0	0	0	0.4772	0.3011	0.1772	0.5416
351327	87	WEBB-DICKENS TEL	1,559	1,854	579	3,992	0.1450	0.2658	0.1450	0.1861
351329	*	WELLMAN COOP TEL	6,358	1,884	1,306	9,548	0.1292	0.1923	0.1292	0.1368
351346	87	ACE TEL ASSN-IA	22,580	5,969	3,222	31,770	0.1103	0.2045	0.1103	0.1721
351888	87	GRAND RIVER MUT-IA	45,634	12,078	8,817	66,530	0.1325	0.2728	0.1325	0.1851
361140	87	CONTEL OF MINNESOTA	745,343	268,265	104,578	1,118,187	0.0933	0.2187	0.0933	0.1469
361346	87	ACE TEL ASSN-MN	75,625	16,574	12,375	104,574	0.1985	0.2571	0.1985	0.2703
361350	87	ARVIG TEL CO	37,964	14,175	7,013	59,152	0.1145	0.3354	0.1186	0.1450
361357	*	BLACKDUCK TEL CO	5,821	1,725	1,196	8,742	0.1292	0.2307	0.1292	0.1368
361362	87	BRIDGEWATER TEL CO	32,847	17,948	10,043	60,839	0.0719	0.2964	0.1651	0.2033
361370	87	CLARA CITY TEL EXCH	8,421	4,545	1,368	14,334	0.0925	0.2805	0.0955	0.1187
361373	*	CONSOLIDATED TEL CO	26,819	7,948	5,509	40,276	0.1292	0.2196	0.1292	0.1368
361374	87	ARROWHEAD COMM CORP	1,844	1,423	379	3,645	0.1437	0.2769	0.1437	0.1862
361379	87	DEER RIVER TEL CO	0	0	0	0	0.0927	0.2265	0.0927	0.1182
361383	*	EAGLE VALLEY TEL CO	2,404	713	494	3,611	0.1292	0.1677	0.1292	0.1368
361385	87	EAST OTTER TAIL TEL	84,568	20,509	11,606	116,683	0.0995	0.2667	0.0995	0.1348

TABLE 4.7

1987 NONTIER 1 COMPANIES NETWORK USAGE DATA

FCODE	YEAR	CARRIER	DEM MINUTES IN THOUSANDS				FACTORS			
			LOC DEM	ST DEM	IS DEM	TOT DEM	IS SLU	IS SPF	IS DEM	W DEM
361387	*	EMILY COOP TEL CO	3,985	1,181	819	5,985	0.1292	0.2232	0.1292	0.1368
361395		87 GARDEN VALLEY TEL CO	93,259	34,396	13,263	140,918	0.0941	0.2383	0.0941	0.1375
361399	*	GRANADA TEL CO	1,055	313	217	1,584	0.1292	0.1765	0.1292	0.1368
361401	*	HALSTAD TEL CO	14,685	4,352	3,016	22,053	0.1292	0.2685	0.1292	0.1368
361410		87 JOHNSON TEL CO	5,417	2,370	1,056	8,843	0.1183	0.2982	0.1194	0.1523
361414		87 LAKEDALE TEL CO	45,592	28,792	7,022	81,405	0.8265	0.1722	0.8301	0.1127
361425	*	MADELIA TEL CO	7,616	2,257	1,564	11,438	0.1292	0.2090	0.1292	0.1368
361433		87 MID STATE TEL CO	41,421	12,985	4,713	59,118	0.0797	0.2048	0.0797	0.1078
361442		87 NEW ULM TELECOM, INC	63,222	20,963	12,188	96,374	0.1101	0.2579	0.1265	0.1802
361443		87 NORMAN COUNTY TEL CO	31,886	6,061	5,336	43,282	0.1214	0.2453	0.1233	0.1656
361445	*	NORTHLAND TEL CO	3,276	971	673	4,920	0.1292	0.2106	0.1292	0.1368
361451		87 PAUL BUNYAN RURAL	39,453	10,755	5,754	55,962	0.1028	0.2380	0.1028	0.1492
361482	*	SHERBURNE CTY RURAL	25,682	7,612	5,275	38,569	0.1292	0.1879	0.1292	0.1368
361483		87 SLEEPY EYE TEL CO	35,942	15,330	4,511	55,783	0.0654	0.1893	0.0809	0.1103
361487	*	STARBUCK TEL CO	4,695	1,391	964	7,050	0.1292	0.2528	0.1292	0.1368
361491	+	TWIN VALLEY-ULEN TEL	25,839	6,542	2,983	35,364	0.0844	0.2181	0.0844	0.1382
361499	*	CROSSLAKE TEL CO	5,199	1,541	1,068	7,808	0.1292	0.3207	0.1292	0.1368
371516		87 ARAPAHOE TEL CO	6,995	2,453	1,008	10,457	0.1191	0.3093	0.1191	0.1765
371517		87 ARLINGTON TEL CO	6,028	3,558	1,221	10,807	0.1184	0.2887	0.1130	0.1650
371524		87 BLAIR TEL CO	43,891	14,248	9,018	67,157	0.1343	0.3052	0.1343	0.1732
371525		87 THREE RIVER TELCO	7,526	3,010	1,642	12,177	0.1348	0.3630	0.1348	0.1951
371530	*	CONSOLIDATED TELCO	10,106	2,995	2,076	15,176	0.1292	0.2397	0.1292	0.1368
371531	*	CLARKS TEL CO	4,441	1,316	912	6,669	0.1292	0.1992	0.1292	0.1368
371534		87 COZAD TEL CO	15,853	6,336	2,844	25,033	0.1136	0.2728	0.1136	0.1663
371536		87 CURTIS TEL CO	5,239	2,267	915	8,421	0.1087	0.1944	0.1087	0.1431
371537		87 DALTON TEL CO, INC	6,870	3,796	2,564	13,230	0.1882	0.4367	0.1942	0.2722
371540		87 DILLER TEL CO	5,173	2,477	906	8,557	0.1059	0.2728	0.1059	0.1522
371542		87 EASTERN NEBRASKA TEL	16,235	6,482	3,811	26,527	0.1436	0.3365	0.1436	0.1879
371553	*	GLENWOOD TEL MEMBER	14,245	4,222	2,926	21,393	0.1292	0.2008	0.1292	0.1368
371557		87 HARTMAN TEL EXCH INC	2,807	951	1,023	4,781	0.2140	0.2728	0.2140	0.3203
371558		87 HEMINGFORD COOP TEL	8,609	1,097	1,018	10,723	0.0949	0.2817	0.0949	0.1586
371561	*	HERSHEY COOP TEL CO	6,190	1,835	1,271	9,296	0.1292	0.2922	0.1292	0.1368
371565	*	K & M TEL CO, INC	3,704	1,098	761	5,563	0.1292	0.2016	0.1292	0.1368
371567		87 KEYSTONE-ARTHUR TEL	971	1,011	567	2,550	0.2409	0.5049	0.2225	0.2463
371574		87 NEBRASKA CENTRAL TEL	22,578	8,383	2,719	33,679	0.0807	0.2571	0.0807	0.1236
371576	*	NORTHEAST NEBRASKA	24,343	7,215	5,000	36,558	0.1292	0.2405	0.1292	0.1368
371577		87 GREAT PLAINS COMMUN	164,480	66,205	37,472	268,157	0.1397	0.2772	0.1397	0.2118
371580		87 PETERSBURG TEL CO	2,351	1,439	268	4,058	0.0661	0.2284	0.0661	0.0844
371581	*	PIERCE TEL CO	7,467	2,213	1,534	11,214	0.1292	0.1839	0.1292	0.1368
371586		87 ROCK COUNTY TEL CO	7,381	2,887	1,367	11,636	0.1170	0.2824	0.1175	0.1841
371587	*	RODEO TEL, INC	14,369	4,259	2,951	21,578	0.1292	0.1842	0.1292	0.1368

TABLE 4.7

1987 NONTIER 1 COMPANIES NETWORK USAGE DATA

FCODE	YEAR	CARRIER	DEM MINUTES IN THOUSANDS				FACTORS			
			LOC DEM	ST DEM	IS DEM	TOT DEM	IS SLU	IS SPF	IS DEM	W DEM
371591	87	SE NEBRASKA TEL CO	0	0	0	0	0.1653	0.3248	0.1653	0.2044
371592	87	STANTON TEL CO, INC	7,960	2,777	995	11,732	0.0848	0.1965	0.0848	0.1284
371597	87	WAUNETA TEL CO	3,587	1,610	920	6,116	0.1505	0.2728	0.1505	0.1929
372455	87	BENKELMAN TEL CO	0	0	0	0	0.1609	0.3919	0.1609	0.2473
381447	87	CONTEL OF N. DAKOTA	59,325	22,701	15,136	97,162	0.1094	0.2807	0.1558	0.1745
381604	*	BEK TEL MUTUAL AID	23,254	6,892	4,776	34,922	0.1292	0.1998	0.1292	0.1368
381607	87	CONSOLIDATED COOP	38,258	8,018	6,039	52,315	0.1154	0.3192	0.1154	0.1683
381610	*	DAKOTA CENTRAL RURAL	16,032	4,752	3,293	24,077	0.1292	0.2295	0.1292	0.1368
381611	*	DICKEY RURAL COOP	20,924	6,201	4,298	31,424	0.1292	0.2460	0.1292	0.1368
381616	87	INTER-COMMUNITY TEL	9,124	3,710	1,716	14,549	0.1179	0.2230	0.1179	0.1522
381617	87	MIDSTATE TEL CO	7,875	3,368	2,468	13,711	0.1800	0.3911	0.1800	0.2425
381625	*	NORTHWEST COMM COOP	23,886	7,079	4,906	35,872	0.1292	0.3465	0.1292	0.1368
381630	87	POLAR COMM MUT AID	82,052	17,427	12,559	112,038	0.1121	0.2470	0.1121	0.1647
381632	87	RESERVATION TEL COOP	35,863	10,170	6,079	52,112	0.1230	0.3241	0.1167	0.1683
381634	87	SOURIS RIVER TEL MUT	88,639	25,695	27,816	142,150	0.1973	0.4029	0.1957	0.2587
381636	*	UNITED TEL MUTUAL	31,163	9,236	6,401	46,800	0.1292	0.2355	0.1292	0.1368
381637	87	W. RIVER MUTUAL AID	80,182	20,232	14,747	115,160	0.1281	0.3463	0.1281	0.1938
391643	87	CONTEL OF S. DAKOTA	53,827	15,691	13,906	83,424	0.1663	0.3723	0.1667	0.2410
391645	*		18,726	5,550	3,846	28,122	0.1292	0.2817	0.1292	0.1368
391647	87	CHEYENNE RIVER SIOUX	20,686	4,180	3,236	28,101	0.1151	0.2820	0.1151	0.1646
391659	87	GOLDEN WEST TELECOMM	94,168	23,142	22,314	139,625	0.1588	0.3665	0.1588	0.2193
391666	87	JEFFERSON TEL CO -SD	1,859	628	1,741	4,229	0.4118	0.7300	0.4118	0.5479
391667	87	KADOKA TELEPHONE CO	2,696	1,014	943	4,652	0.2027	0.6113	0.2027	0.3014
391668	87	KENNEBEC TEL CO	1,299	916	363	2,579	0.1409	0.2901	0.1409	0.1883
391669	*	MCCOOK COOP TEL CO	4,597	1,362	944	6,903	0.1292	0.2412	0.1292	0.1368
391670	*	MIDSTATE TEL COMPANY	16,739	4,961	3,438	25,138	0.1292	0.2245	0.1292	0.1368
391676	*	SANBORN TEL COOP	13,586	4,027	2,791	20,403	0.1292	0.2232	0.1292	0.1368
391680	*	SULLY BUTTES TEL	30,048	8,906	6,172	45,126	0.1292	0.2329	0.1292	0.1368
391689	87	WEST RIVER COOP	16,159	3,121	2,678	21,958	0.1219	0.3115	0.1219	0.1927
401691	87	ALLTEL ARKANSAS INC	621,221	154,419	107,130	882,769	0.1171	0.2972	0.1214	0.1867
401692	87	ARKANSAS TEL CO	48,802	7,892	9,768	66,461	0.1470	0.2727	0.1470	0.2220
401697	87	CENTRAL ARKANSAS TEL	18,391	5,089	2,419	25,899	0.0934	0.2479	0.0934	0.1509
401698	87	CLEVELAND COUNTY TEL	15,020	6,652	2,061	23,733	0.0889	0.2899	0.0868	0.1326
401699	87	DECATUR TEL CO INC	3,508	2,214	1,773	7,496	0.2365	0.6309	0.2365	0.2802
401702	87	SOUTH ARKANSAS TEL	27,688	6,913	3,480	38,082	0.0914	0.2754	0.0914	0.1414
401705	87	CENTURY OF ARKANSAS	103,482	18,129	18,139	139,750	0.1435	0.3402	0.1430	0.2228
401709	87	MADISON COUNTY TEL	22,202	5,454	4,342	31,997	0.1359	0.2897	0.1357	0.2152
401711	87	MOUNTAIN HOME TEL	95,879	12,293	28,238	136,410	0.2517	0.4303	0.2531	0.3413
401713	87	NORTH ARKANSAS TEL	22,992	10,086	9,497	42,575	0.2231	0.4734	0.2231	0.3211
401720	87	REDFIELD TEL CO	9,251	3,783	1,292	14,326	0.1067	0.3534	0.1067	0.1477
401722	*	E RITTER TEL CO	40,205	11,916	8,258	60,379	0.1292	0.3183	0.1292	0.1368

TABLE 4.7

1987 NONTIER 1 COMPANIES NETWORK USAGE DATA

FCODE	YEAR	CARRIER	DEM MINUTES IN THOUSANDS				FACTORS			
			LOC DEM	ST DEM	IS DEM	TOT DEM	IS SLU	IS SPF	IS DEM	W DEM
401724	*	SW ARKANSAS TEL COOP	41,752	12,374	8,576	62,702	0.1292	0.2955	0.1292	0.1368
401726	87	TRI-COUNTY TEL CO-AR	42,363	6,902	6,533	55,798	0.1173	0.2560	0.1171	0.1928
401727	87	UNION TEL CO INC	3,166	886	897	4,949	0.1971	0.3623	0.1969	0.2955
401729	87	WALNUT HILL TEL CO	30,619	10,543	8,673	49,835	0.1740	0.4114	0.1740	0.2560
401730	87	CONTEL OF ARKANSAS	764,812	172,096	128,884	1,065,792	0.1182	0.2880	0.1209	0.1724
401733	87	YELCOT TEL CO INC	22,469	5,292	4,937	32,697	0.1510	0.3481	0.1510	0.2387
401734	87	YELL COUNTY TEL CO	33,890	10,272	4,824	48,986	0.0985	0.2346	0.0985	0.1485
411741	87	ASSARIA TEL EXCHANGE	2,100	2,181	796	5,077	0.1568	0.3011	0.1568	0.1856
411746	87	BLUE VALLEY TEL CO	13,325	8,933	3,016	25,274	0.1193	0.2745	0.1193	0.1700
411761	87	CUNNINGHAM TEL CO	7,918	4,859	1,723	14,499	0.1188	0.2868	0.1188	0.1638
411764	87	ELKHART TEL CO INC	9,178	2,385	3,715	15,278	0.2316	0.4786	0.2432	0.3339
411777	*	GOLDEN BELT TEL ASSN	21,393	6,340	4,394	32,127	0.1292	0.4216	0.1292	0.1368
411780	*	HAVILAND TEL CO	19,606	5,811	4,027	29,443	0.1292	0.2790	0.1292	0.1368
411781	87	H & B COMMUNICATIONS	3,978	3,329	1,194	8,501	0.1406	0.3135	0.1405	0.1600
411782	87	HOME TEL CO	6,261	4,922	1,480	12,663	0.1169	0.2866	0.1169	0.1435
411785	87	J. B. N. TEL CO INC	12,065	7,398	2,961	22,425	0.1320	0.2803	0.4618	0.6333
411788	87	KANOKLA TEL ASSN-KS	11,446	5,894	3,149	20,489	0.1620	0.3456	0.1620	0.2084
411789	87	KANSAS STATE TEL CO	42,671	7,095	13,746	63,511	0.2139	0.2728	0.2164	0.2818
411790	87	CONTEL OF KANSAS	258,847	167,448	71,474	497,769	0.1346	0.3024	0.1436	0.1836
411801	87	MADISON TEL CO INC	4,331	1,738	753	6,821	0.1103	0.2897	0.1103	0.1550
411807	87	MOKAN DIAL INC-KS	10,110	6,813	3,669	20,592	0.1669	0.3133	0.1782	0.2365
411808	87	MOUNDRIDGE TEL CO	13,773	6,426	3,978	24,177	0.1606	0.2912	0.1645	0.2055
411814	87	PEOPLES MUTUAL TEL	6,131	2,675	1,834	10,641	0.1723	0.4002	0.1723	0.2199
411818	87	CRAW-KAN TEL COOP	73,874	33,876	17,470	125,221	0.1395	0.2925	0.1395	0.1950
411820	*	RAINBOW TEL COOP	11,563	3,427	2,375	17,365	0.1292	0.2336	0.1292	0.1368
411826	87	RURAL TEL SERVICE CO	40,600	21,199	7,882	69,681	0.1131	0.2710	0.1131	0.1474
411827	87	S & T TEL COOP ASSN	8,366	5,889	2,738	16,993	0.1520	0.3699	0.1611	0.2058
411829	*	S & A TEL CO INC	4,168	1,235	856	6,259	0.1292	0.2354	0.1292	0.1368
411831	87	S. CENTRAL TEL - KS	4,551	3,830	1,545	9,926	0.1556	0.2973	0.1556	0.1979
411833	*	SOUTHERN KANSAS TEL	20,845	6,178	4,282	31,305	0.1292	0.2930	0.1292	0.1368
411835	87	SUNFLOWER TEL CO	26,786	9,413	7,360	43,559	0.1559	0.4101	0.1690	0.2307
411839	*	TRI-COUNTY TEL ASSN	17,302	5,128	3,554	25,984	0.1292	0.2256	0.1292	0.1368
411840	87	TWIN VALLEY TEL INC	10,796	6,494	2,341	19,632	0.1192	0.2520	0.1192	0.1660
411841	87	UNITED TEL ASSN	23,436	16,468	7,962	47,867	0.1546	0.4108	0.1663	0.2074
411845	*	WAMEGO TEL CO INC	23,923	7,090	4,914	35,927	0.1292	0.2720	0.1292	0.1368
411847	87	THE WHEAT STATE TEL	9,794	7,189	2,379	19,361	0.1228	0.2853	0.1228	0.1572
411849	87	WILSON TEL CO INC	10,794	6,063	2,268	19,126	0.1186	0.2499	0.1186	0.1595
411852	87	ZENDA TEL COMPANY	1,049	1,082	218	2,349	0.0927	0.2114	0.0927	0.1165
412030	87	TOTAH TELEPHONE CO	4,855	4,251	2,433	11,539	0.2108	0.4273	0.2108	0.2555
421807	87	MOKAN DIAL INC-MO	4,108	2,178	758	7,044	0.1076	0.2417	0.1076	0.1605
421846	87	CONTINENTAL SYS. -MO	335,632	97,079	57,201	489,912	0.1156	0.3418	0.1168	0.1841

TABLE 4.7

1987 NONTIER 1 COMPANIES NETWORK USAGE DATA

FCODE	YEAR	CARRIER	DEM MINUTES IN THOUSANDS				FACTORS			
			LOC DEM	ST DEM	IS DEM	TOT DEM	IS SLU	IS SPF	IS DEM	W DEM
421859	87	BOURBEUSE TEL	8,823	5,400	1,740	15,963	0.1090	0.2728	0.1090	0.1313
421865	87	CITIZENS TEL CO - MO	15,268	10,967	4,678	30,913	0.1523	0.2392	0.1513	0.1849
421873	87	EASTERN MISSOURI TEL	13,624	8,621	2,346	24,591	0.0954	0.2012	0.0954	0.1199
421882	87	FIDELITY TEL CO	72,386	27,295	12,044	111,725	0.1078	0.2226	0.1078	0.1433
421885	87	ALLTEL MISSOURI	187,544	62,367	34,034	283,945	0.1199	0.2430	0.1199	0.1681
421886	87	GOODMAN TEL CO	6,784	4,392	2,771	13,947	0.1987	0.4007	0.1987	0.2333
421888	87	GRAND RIVER MUT-MO	103,794	26,844	14,057	144,695	0.0972	0.2461	0.0972	0.1385
421901	87	KINGDOM TELEPHONE CO	14,755	11,493	3,359	29,607	0.1135	0.3711	0.1135	0.1579
421904	87	MISSOURI TEL CO	126,304	32,968	19,825	179,097	0.1109	0.2317	0.1107	0.1745
421908	87	LE-RU TELEPHONE CO	5,019	2,367	2,276	9,662	0.2356	0.2727	0.2356	0.3280
421917	*	MID-MISSOURI TEL CO	14,783	4,381	3,036	22,200	0.1292	0.1954	0.1292	0.1368
421920	*	MILLER TEL CO - MO	4,886	1,448	1,004	7,337	0.1292	0.2733	0.1292	0.1368
421922	87	CONTEL OF MISSOURI	896,698	492,697	237,152	1,626,547	0.1261	0.2758	0.1458	0.1791
421929	87	HOLWAY TEL CO	4,529	1,656	612	6,797	0.0997	0.2803	0.0997	0.1516
421931	87	NE MISSOURI RURAL	25,513	7,936	4,758	38,206	0.1245	0.2810	0.1245	0.1963
421932	87	LATHROP TEL COMPANY	7,706	3,771	1,461	12,938	0.1129	0.2009	0.1129	0.1544
421934	87	ORCHARD FARM TEL CO	1,932	4,384	557	6,874	0.0810	0.2669	0.0810	0.0963
421945	*	SENECA TEL CO	20,515	6,080	4,214	30,809	0.1292	0.3408	0.1292	0.1368
421951	87	STOUTLAND TEL CO	6,477	2,611	914	10,002	0.0914	0.2774	0.0914	0.1442
421963	87	WEBSTER COUNTY TEL	34,294	11,937	5,839	52,070	0.1074	0.3439	0.1121	0.1628
421964	*	WHEELING TEL CO	1,787	530	367	2,683	0.1292	0.1824	0.1292	0.1368
431788	87	KANOKLA TEL ASSN-OK	7,292	3,844	2,252	13,388	0.1754	0.3325	0.1754	0.2286
431831	87	S. CENTRAL TEL - OK	2,026	1,139	813	3,978	0.2043	0.3873	0.2043	0.2784
431965	87	ALLTEL OKLAHOMA INC	77,127	45,763	17,197	140,086	0.1228	0.3213	0.1228	0.1582
431974	87	CANADIAN VALLEY TEL	3,587	2,580	973	7,140	0.1356	0.3490	0.1356	0.1831
431976	87	CARNEGIE TEL CO INC	11,055	4,931	2,006	17,992	0.1115	0.2655	0.1115	0.1543
431977	*	CENTRAL OKLAHOMA TEL	12,131	3,595	2,492	18,218	0.1292	0.2048	0.1292	0.1368
431979	87	CHEROKEE TEL CO	32,049	10,478	10,711	53,238	0.2011	0.3830	0.2012	0.2544
431980	87	CHICKASAW TEL CO	50,457	28,436	8,986	87,878	0.1024	0.3080	0.1092	0.1373
431981	87	CHOUTEAU TEL CO	15,426	8,338	3,338	27,102	0.1193	0.3012	0.1232	0.1422
431984	87	OKLAHOMA COMM SYSTEM	113,284	46,332	17,835	177,450	0.1008	0.2400	0.1005	0.1218
431985	87	CROSS TEL CO	51,036	23,940	8,558	83,533	0.1024	0.2718	0.1024	0.1573
431988	87	DOBSON TEL CO	34,506	12,165	6,052	52,723	0.1148	0.3685	0.1148	0.1768
431994	87	GRAND TEL CO INC	16,530	7,787	3,895	28,211	0.1383	0.4319	0.1381	0.1900
431995	87	HINTON TEL CO	21,134	10,726	3,442	35,303	0.0975	0.2253	0.0975	0.1240
432006	87	MCLLOUD TEL CO	117,368	16,998	6,778	141,144	0.0480	0.2113	0.0480	0.0647
432010	87	MID-AMERICA TEL INC	7,697	6,026	1,489	15,212	0.0979	0.3144	0.0979	0.1371
432011	87	OKLAHOMA ALLTEL, INC	94,600	33,764	21,743	150,108	0.1448	0.3070	0.1448	0.2059
432013	87	OKLAHOMA TEL & TEL	10,335	6,418	2,299	19,052	0.1207	0.2753	0.1207	0.2526
432014	87	OKLAHOMA WESTERN TEL	14,008	7,657	3,563	25,228	0.1412	0.3646	0.1412	0.1913
432016	87	PANHANDLE TEL COOP	23,819	12,755	12,732	49,305	0.2582	0.5262	0.2582	0.3174

TABLE 4.7

1987 NONTIER 1 COMPANIES NETWORK USAGE DATA

FCODE	YEAR	CARRIER	DEM MINUTES IN THOUSANDS				FACTORS			
			LOC DEM	ST DEM	IS DEM	TOT DEM	IS SLU	IS SPF	IS DEM	W DEM
432018	87	PIONEER TEL COOP INC	282,654	122,264	41,735	446,653	0.0931	0.2859	0.0934	0.2286
432020	87	POTTAWATOMIE TEL CO	10,423	7,402	2,097	19,921	0.0954	0.2559	0.1052	0.1392
432030	87	TOTAH TELEPHONE CO	6,615	9,132	2,736	18,483	0.1480	0.3230	0.1480	0.1949
432032	87	VALLIANT TEL CO	15,846	4,649	2,993	23,488	0.1152	0.2728	0.1152	0.1553
432034	87	WYANDOTTE TEL CO	0	0	0	0	0.2508	0.6543	0.2508	0.3286
432141	*	SANTA ROSA TEL COOP	5,567	1,650	1,143	8,360	0.1292	0.3192	0.1292	0.1368
440425	87	CAMERON TEL CO TEXAS	4,378	3,009	515	7,902	0.0651	0.2353	0.0651	0.0949
442039	87	BIG BEND TEL CO INC	11,552	8,879	3,734	24,165	0.1750	0.3711	0.1750	0.1919
442040	87	BRAZORIA TEL CO	50,117	16,198	4,104	70,418	0.0587	0.1702	0.0583	0.0757
442041	87	BRAZOS TEL COOP INC	3,012	4,829	659	8,500	0.0776	0.1854	0.0776	0.0816
442046	87	CAP ROCK TEL CO INC	13,745	9,144	1,697	24,585	0.0846	0.1884	0.0846	0.0946
442052	87	CENTRAL TEXAS CO-OP	22,230	10,197	1,733	34,160	0.0508	0.1703	0.0507	0.0786
442057	*	COLEMAN COUNTY CO-OP	4,852	1,438	997	7,286	0.1292	0.2136	0.1292	0.1368
442059	87	COLORADO VALLEY TEL	29,153	14,798	3,383	47,334	0.0715	0.1676	0.0715	0.0938
442060	*	COMANCHE COUNTY TEL	11,720	3,473	2,407	17,600	0.1292	0.1512	0.1292	0.1368
442066	87	DELL TEL. CO-OP - TX	2,060	1,434	1,143	4,638	0.2466	0.5719	0.2466	0.3026
442068	87	EASTEX TEL COOP INC	151,779	52,168	16,319	220,265	0.0740	0.2144	0.0741	0.1135
442070	87	ETEX TEL COOP INC	47,163	35,115	7,587	89,865	0.0844	0.1882	0.0844	0.0937
442071	87	FIVE AREA TEL CO-OP	12,071	5,368	2,211	19,651	0.1125	0.2616	0.1125	0.1522
442072	87	FORT BEND TEL CO	208,590	38,864	20,224	267,677	0.0760	0.2726	0.0756	0.1065
442076	87	GANADO TELEPHONE CO	7,968	4,933	715	13,616	0.0529	0.1329	0.0525	0.0688
442083	87	GUADALUPE VALLEY TEL	74,019	62,337	15,405	151,762	0.1016	0.2341	0.1015	0.1199
442086	87	HILL COUNTRY CO-OP	50,721	25,545	6,623	82,889	0.0799	0.2502	0.0799	0.1014
442093	87	INDUSTRY TEL CO	6,447	5,636	731	12,813	0.0584	0.1672	0.0570	0.0710
442097	87	KERRVILLE TEL CO	114,642	49,344	19,643	183,629	0.1046	0.3175	0.1070	0.1255
442101	87	LAKE DALLAS TEL CO	17,546	25,194	9,517	52,256	0.2055	0.3123	0.2055	0.3482
442103	87	LA WARD TEL EXCHANGE	2,399	3,675	563	6,638	0.0848	0.1872	0.0848	0.0971
442104	87	LAKE LIVINGSTON TEL	2,273	2,255	611	5,139	0.1189	0.3039	0.2709	0.1336
442109	87	LUFKIN-CONROE TEL EX	655,107	354,821	133,238	1,143,166	0.0777	0.1942	0.0000	0.1166
442112	87	MID-PLAINS RURAL TEL	14,151	9,323	2,073	25,546	0.0963	0.2096	0.0959	0.1108
442116	87	MUENSTER TEL CORP-TX	11,639	5,639	1,636	18,914	0.0874	0.1989	0.0865	0.1230
442117	87	MUSTANG TEL CO	6,244	9,125	3,402	18,770	0.1559	0.5954	0.1574	0.1761
442121	87	ALLTEL TEXAS INC	20,405	8,605	2,769	31,779	0.0871	0.2545	0.0871	0.1241
442129	87	PEEPLS TELEPHONE CO	4,071	3,804	566	8,441	0.0670	0.1731	0.0670	0.0686
442130	87	PEOPLES TEL COOP -TX	44,936	23,735	5,955	74,626	0.0952	0.1841	0.0952	0.1049
442131	87	POKA-LAMBRO TEL COOP	22,936	13,004	2,154	38,094	0.0566	0.1668	0.0566	0.0854
442134	87	RIVIERA TEL CO INC	3,606	3,345	716	7,666	0.0934	0.2345	0.0934	0.1400
442135	87	SOUTHWEST TEXAS TEL	10,922	8,045	1,531	20,498	0.0749	0.2029	0.0747	0.0983
442136	87	ROMAIN TELEPHONE CO	5,899	3,038	1,373	10,310	0.1332	0.2788	0.1332	0.1932
442141	*	SANTA ROSA TEL COOP	4,454	1,320	915	6,688	0.1292	0.1911	0.1292	0.1368
442143	*	SOUTH PLAINS TEL	13,659	4,048	2,806	20,513	0.1292	0.1796	0.1292	0.1368

TABLE 4.7

1987 NONTIER 1 COMPANIES NETWORK USAGE DATA

FCODE	YEAR	CARRIER	DEM MINUTES IN THOUSANDS				FACTORS			
			LOC DEM	ST DEM	IS DEM	TOT DEM	IS SLU	IS SPF	IS DEM	W DEM
442147	87	SUGAR LAND TEL CO	362,288	41,920	65,978	470,186	0.1392	0.2930	0.1403	0.1602
442148	87	SWEENEY-OLD OCEAN	19,186	15,791	3,689	38,665	0.0957	0.2271	0.0954	0.1144
442151	87	TAYLOR TEL CO-OP INC	41,008	18,506	4,557	64,071	0.0712	0.1815	0.0711	0.1486
442153	87	TEXAS-MIDLAND TEL	49,334	40,072	8,369	97,775	0.0856	0.1955	0.0856	0.1225
442155	87	TRI-COUNTY TEL - TX	4,719	3,073	473	8,264	0.0572	0.1818	0.0572	0.0683
442156	87	TRINITY VALLEY TEL	40,623	16,376	4,954	61,953	0.0800	0.2454	0.0800	0.1100
442159	87	VALLEY TEL CO-OP -TX	27,302	18,039	2,577	47,918	0.0539	0.2013	0.0538	0.0776
442160	87	VALLEY VIEW TEL CO	3,317	4,522	1,067	8,906	0.1214	0.2333	0.1198	0.1351
442163	87	WATERWOOD COMM INC	228	1,054	369	1,651	0.2237	0.6151	0.2237	0.2024
442166	87	WEST TEXAS RURAL TEL	14,175	7,271	3,085	24,532	0.1382	0.3218	0.1382	0.1554
442168	87	WES-TEX TEL CO-OP	28,228	11,519	2,360	42,107	0.0560	0.1734	0.0560	0.0849
442170	87	XIT RURAL TEL CO-OP	5,363	3,687	2,895	11,946	0.2354	0.4209	0.2424	0.2684
442262	87	ENMR TEL COOP-TX	6,673	1,375	821	8,869	0.0940	0.4150	0.0939	0.1276
452171	87	ARIZONA TELEPHONE CO	3,085	5,241	2,722	11,048	0.2463	0.7500	0.2463	0.2930
452172	87	CITIZENS UTILITIES	246,080	62,053	125,845	433,978	0.3045	0.6252	0.3045	0.4082
452175	87	UNIVERSAL TEL OF SW	6,600	2,435	1,586	10,621	0.1493	0.4947	0.1493	0.2305
452176	87	VALLEY TEL COOP-AZ	8,797	6,029	2,213	17,040	0.2602	0.6099	0.2602	0.3391
452177	87	CONTEL OF WEST-AZ	151,229	105,100	75,433	331,762	0.1628	0.3771	0.2274	0.2274
452275	87	NAVAJO COMMUN-AZ	36,031	23,838	23,526	83,396	0.2821	0.7206	0.2821	0.3613
452302	87	CONTEL CALIF - AZ	27,259	8,940	13,002	49,201	0.2649	0.5271	0.2643	0.3846
461835	87	SUNFLOWER TEL - CO	1,374	1,036	838	3,248	0.2579	0.4267	0.2579	0.3389
462181	87	BIJOU TEL COOP ASSOC	2,962	2,944	1,083	6,989	0.1503	0.3657	0.1549	0.2037
462182	87	BLANCA TEL CO	1,866	1,247	926	4,039	0.2292	0.6548	0.2292	0.3312
462184	87	DELTA COUNTY TEL CO	53,430	9,674	9,805	72,909	0.1319	0.2890	0.1345	0.2123
462185	87	EAGLE TELECOMMUN INC	23,273	13,788	9,789	46,851	0.2071	0.5373	0.2090	0.2680
462186	87	EASTERN SLOPE RURAL	25,005	13,293	7,271	45,568	0.1468	0.3531	0.1596	0.2047
462187	87	EL PASO COUNTY TEL	10,579	7,123	3,809	21,510	0.1771	0.3408	0.1771	0.2171
462188	87	FARMERS TEL CO - CO	1,308	838	509	2,656	0.1918	0.4374	0.1918	0.2347
462190	87	HAXTUN TEL CO	7,929	4,369	1,931	14,229	0.1357	0.3216	0.1357	0.1858
462192	87	BIG SANDY TELCOMM	3,521	2,504	1,198	7,223	0.1463	0.3209	0.1659	0.1801
462193	87	NUCLA-NATURITA TEL	5,473	2,735	2,435	10,643	0.2288	0.4296	0.2288	0.3106
462194	87	NUNN TEL CO	992	803	584	2,379	0.2455	0.5217	0.2455	0.2866
462196	87	PEETZ COOP TEL CO	1,248	501	514	2,263	0.2271	0.4080	0.2271	0.3143
462197	*	PHILLIPS COUNTY TEL	14,819	4,392	3,044	22,256	0.1292	0.3666	0.1292	0.1368
462199	87	PLAINS COOP TEL ASSN	8,153	4,831	1,828	14,812	0.1234	0.2600	0.1234	0.1753
462203	87	RYE TELEPHONE CO	7,441	3,344	2,267	13,052	0.1737	0.4162	0.1737	0.2216
462204	87	COLUMBINE TEL CO	2,931	2,227	1,891	7,049	0.2682	0.6117	0.2682	0.3178
462207	87	STRASBURG TEL CO	3,945	3,481	1,348	8,774	0.1536	0.3728	0.1536	0.2060
462208	87	UNIVERSAL TEL CO -CO	32,374	5,984	10,549	48,907	0.2157	0.6651	0.2157	0.3171
462209	87	WIGGINS TEL ASSOC	5,461	4,465	1,513	11,439	0.1257	0.2832	0.1323	0.1727
472177	87	CONTEL OF WEST-ID	69,325	68,523	50,617	188,465	0.1848	0.4309	0.2686	0.2686

TABLE 4.7

1987 NONTIER 1 COMPANIES NETWORK USAGE DATA

FCODE	YEAR	CARRIER	DEM MINUTES IN THOUSANDS				FACTORS			
			LOC DEM	ST DEM	IS DEM	TOT DEM	IS SLU	IS SPF	IS DEM	W DEM
472213	87	ALBION TEL CO INC	6,674	2,451	1,902	11,026	0.1725	0.3769	0.1725	0.2332
472215	87	CAMBRIDGE TEL CO	3,962	2,043	1,155	7,160	0.1613	0.3790	0.1613	0.2134
472218	87	CUSTER TEL COOP	10,216	2,643	2,841	15,700	0.1810	0.7500	0.1810	0.2683
472223	87	GEM STATE UTIL-ID	6,774	2,826	1,741	11,341	0.1535	0.4527	0.1535	0.2196
472225	87	CENTURY TEL OF IDAHO	21,971	3,820	4,345	30,136	0.1794	0.3932	0.1798	0.2783
472226	87	MIDVALE TEL EXCH INC	744	429	318	1,491	0.2134	0.3018	0.2134	0.2734
472231	87	PROJECT MUTUAL TEL	84,935	8,219	9,244	102,398	0.0887	0.2970	0.0903	0.1303
472232	87	ROCKLAND TEL CO INC	2,239	928	390	3,557	0.1095	0.3220	0.1095	0.1598
472233	87	RURAL TEL CO - ID	417	526	292	1,236	0.2366	0.7000	0.2366	0.2907
472234	87	TROY TELEPHONE CO	2,873	1,900	1,415	6,188	0.2286	0.4437	0.2286	0.2768
472295	87	SILVER STAR TEL- ID	1,467	916	644	3,028	0.2128	0.5617	0.2128	0.2601
472423	87	INLAND TEL-ID	916	990	456	2,362	0.1931	0.3588	0.1931	0.2473
482235	87	BLACKFOOT TEL COOP	22,949	16,546	8,602	48,097	0.1788	0.4764	0.1788	0.2164
482242	87	INTERBEL TEL COOP	5,961	1,192	1,715	8,869	0.1934	0.5215	0.1934	0.2586
482244	87	LINCOLN TEL CO INC	2,816	1,670	805	5,291	0.1522	0.4757	0.1522	0.1919
482246	87	MID-RIVERS TEL COOP	47,238	18,253	8,776	74,267	0.1182	0.3168	0.1182	0.1680
482247	87	NEMONT TEL COOP-MT	8,571	7,198	4,163	19,932	0.2142	0.3731	0.2089	0.2330
482248	87	NORTHERN TEL COOP	7,104	4,964	2,760	14,828	0.1862	0.4831	0.1862	0.2269
482249	87	NW TEL SYSTEMS, INC.	199,762	82,012	81,996	363,770	0.2129	0.4158	0.2254	0.2992
482250	87	PROJECT TEL CO	12,418	7,215	3,931	23,565	0.1668	0.3663	0.1668	0.2092
482251	87	RANGE TEL COOP-MT	19,244	7,570	5,433	32,247	0.1685	0.4388	0.1685	0.2334
482254	87	SOUTHERN MONTANA TEL	2,171	2,037	1,413	5,620	0.2513	0.6929	0.2513	0.2942
482255	87	3-RIVERS TEL COOP	45,095	22,564	12,397	80,056	0.1549	0.4287	0.1549	0.1958
482257	87	TRIANGLE TEL COOP	58,389	25,697	11,455	95,541	0.1199	0.3254	0.1199	0.1591
482258	87	VALLEY RURAL TEL	3,559	2,039	782	6,380	0.1225	0.7135	0.1225	0.1560
492066	87	DELL TEL CO-OP - NM	1,062	476	540	2,078	0.2600	0.2728	0.2600	0.3283
492176	87	VALLEY TEL COOP - NM	6,744	2,050	3,177	11,971	0.2666	0.5413	0.2654	0.3814
492177	87	CONTEL OF WEST - NM	167,947	101,139	73,794	342,881	0.1699	0.3936	0.2152	0.2152
492259	87	BACA VALLEY TEL CO	3,286	1,358	1,166	5,811	0.2007	0.5777	0.2007	0.2547
492262	87	ENMR TEL COOP INC-NM	66,558	14,491	18,768	99,817	0.1880	0.3774	0.1880	0.2384
492263	87	LA JICARITA RURAL	15,844	3,356	1,687	20,887	0.0808	0.2565	0.0808	0.1301
492264	87	LEACO RURAL TEL COOP	4,159	3,220	2,297	9,676	0.2454	0.5157	0.2374	0.2817
492268	87	WESTERN NEW MEXICO	24,695	9,919	9,584	44,198	0.2168	0.4133	0.2168	0.2742
492270	87	PENASCO VALLEY TEL	11,632	5,495	3,437	20,563	0.1764	0.5233	0.1671	0.2029
492272	87	ROOSEVELT CNTY RURAL	13,236	3,708	3,187	20,130	0.1583	0.3346	0.1583	0.2317
492274	87	UNIVERSAL TEL OF SW	17,700	7,754	5,487	30,941	0.1773	0.4301	0.1773	0.2621
492275	87	NAVAJO COMMUN - NM	13,536	8,028	8,713	30,278	0.2878	0.6887	0.2878	0.3553
502177	87	CONTEL THE WEST - UT	125,521	59,177	68,837	253,535	0.1881	0.3575	0.2715	0.2715
502275	87	NAVAJO COMMUN - UT	699	539	1,431	2,669	0.5363	0.7500	0.5363	0.6294
502277	87	CENTRAL UTAH TEL INC	7,150	2,014	894	10,058	0.0889	0.2089	0.0889	0.1212
502278	87	EMERY COUNTY FARMERS	26,638	6,587	2,686	35,911	0.0748	0.2603	0.0748	0.3930

TABLE 4.7

1987 NONTIER 1 COMPANIES NETWORK USAGE DATA

FCODE	YEAR	CARRIER	DEM MINUTES IN THOUSANDS				FACTORS			
			LOC DEM	ST DEM	IS DEM	TOT DEM	IS SLU	IS SPF	IS DEM	W DEM
502280	87	KAMAS-WOODLAND TEL	7,576	4,291	1,473	13,340	0.1104	0.2474	0.1104	0.1626
502283	*	SKYLINE TELECOM	2,283	677	469	3,429	0.1292	0.1707	0.1292	0.1368
502286	87	SOUTH CENTRAL UTAH	16,466	4,614	4,385	25,466	0.1722	0.4022	0.1722	0.2381
502287	87	UINTAH BASIN TEL	18,317	8,729	3,719	30,765	0.1209	0.2907	0.1209	0.1652
502288	87	UT-WY TELECOM	9,067	956	855	10,877	0.0786	0.5146	0.0786	0.1486
512251	87	RANGE TEL COOP - WY	10,331	3,411	3,916	17,658	0.2218	0.5439	0.2218	0.2953
512290	87	UTAH-WYOMING TELECOM	1,537	329	917	2,783	0.3294	0.7300	0.3294	0.4789
512291	87	DUBOIS TEL EXCHANGE	6,844	2,643	3,893	13,381	0.2907	0.7016	0.2910	0.3587
512294	87	MEDICINE BOW TEL CO	1,085	519	349	1,953	0.1787	0.6947	0.1787	0.2604
512295	87	SILVER STAR TEL-WY	4,634	1,273	2,616	8,524	0.3069	0.7200	0.3069	0.3921
512297	87	UNION TELEPHONE CO	23,183	5,142	8,631	36,956	0.2335	0.6944	0.2335	0.6583
512299	87	TEL. UTIL. OF WY.	14,794	5,130	7,522	27,445	0.2734	0.6820	0.2741	0.3801
522404	87	ASOTIN TEL - WA	8,185	934	1,274	10,393	0.1226	0.2682	0.1226	0.2209
522408	87	TEL UTIL OF WA INC	463,087	281,879	131,715	876,681	0.1485	0.3914	0.1502	0.1978
522410	87	COWICHE TELEPHONE CO	6,721	5,843	1,481	14,045	0.1057	0.2912	0.1054	0.1278
522412	87	ELLENSBURG TEL CO	109,213	34,514	20,605	164,332	0.1254	0.2855	0.1254	0.1791
522417	87	HAT ISLAND TEL CO	0	0	0	0	0.0000	0.2728	0.0000	0.0000
522419	87	HOOD CANAL TEL CO	1,440	2,388	926	4,754	0.1947	0.4136	0.1947	0.2197
522423	87	INLAND TEL CO -WA	7,998	3,171	1,863	13,031	0.1429	0.3978	0.1429	0.1945
522426	87	KALAMA TEL CO	7,603	5,866	3,051	16,521	0.1672	0.4248	0.1847	0.2233
522427	87	LEWIS RIVER TEL CO	10,803	9,093	5,540	25,435	0.2178	0.3929	0.2178	0.2611
522431	87	MASHELL TEL CO INC	7,214	8,188	2,241	17,643	0.1270	0.2755	0.1270	0.1490
522436	87	PENINSULA TELECOMM	29,064	14,804	8,169	52,036	0.1582	0.3241	0.1570	0.1996
522437	87	PIONEER TEL CO	4,002	2,276	866	7,144	0.1212	0.2919	0.1212	0.1534
522442	87	ST JOHN TEL CO	2,072	2,167	771	5,010	0.1539	0.2418	0.1539	0.1821
522446	87	TENINO TELEPHONE CO	10,667	8,871	2,990	22,529	0.1309	0.2390	0.1327	0.1614
522447	87	TOLEDO TELEPHONE CO	9,306	5,068	2,386	16,760	0.1424	0.2373	0.1424	0.1932
522449	87	CONTEL OF THE NW-WA	374,554	235,182	134,900	744,636	0.1358	0.3104	0.1812	0.1812
522451	87	WESTERN WAHAKIAKUM	5,359	2,567	1,205	9,131	0.1320	0.2934	0.1320	0.1875
522452	87	WHIDBEY TEL CO.	42,111	17,074	6,020	65,204	0.0880	0.2728	0.0923	0.1334
522453	87	YELM TELEPHONE CO	35,942	21,572	6,928	64,442	0.1058	0.2769	0.1075	0.1331
532226	87	MIDVALE TEL EXCH -OR	1,992	753	382	3,127	0.1223	0.3030	0.1223	0.1961
532304	87	C P NATIONAL CORP-OR	50,874	32,778	19,970	103,622	0.1919	0.4449	0.1927	0.2444
532359	87	BEAVER CREEK COOP	37,320	9,277	5,117	51,713	0.0989	0.2550	0.0989	0.1157
532361	87	TEL UTIL OF OREGON	239,420	125,963	68,994	434,377	0.1518	0.3522	0.1588	0.2151
532362	87	CANBY TEL ASSN	56,015	26,972	9,108	92,095	0.0989	0.2872	0.0989	0.1261
532363	87	CLEAR CREEK MUTUAL	31,907	7,366	4,269	43,541	0.1049	0.2526	0.1049	0.1305
532364	87	COLTON TEL CO	7,286	3,453	1,337	12,076	0.1017	0.3132	0.1017	0.1460
532371	87	CASCADE UTIL INC	62,083	18,764	9,325	90,172	0.1034	0.3035	0.1034	0.1450
532375	87	RTI/HALSEY TEL CO	2,054	4,612	2,825	9,491	0.2977	0.3856	0.2977	0.3392
532376	87	HELIX TEL CO.	665	847	368	1,880	0.1960	0.4147	0.1960	0.2217

TABLE 4.7

1987 NONTIER 1 COMPANIES NETWORK USAGE DATA

FCODE	YEAR	CARRIER	DEM MINUTES IN THOUSANDS				FACTORS			
			LOC DEM	ST DEM	IS DEM	TOT DEM	IS SLU	IS SPF	IS DEM	W DEM
532377	87	HOME TELEPHONE CO	2,848	1,572	545	4,965	0.1098	0.3162	0.1098	0.1625
532378	87	TRANS-CASCADES TEL	577	352	212	1,141	0.1855	0.4460	0.1855	0.2599
532383	87	MOLALLA TEL CO.	34,787	15,819	5,097	55,702	0.0092	0.2576	0.0092	0.1195
532385	87	MONROE TELEPHONE CO.	3,117	2,745	747	6,608	0.1130	0.3825	0.1130	0.1453
532387	87	NEHALEM TEL & TEL	5,529	4,351	1,695	11,576	0.1465	0.4131	0.1465	0.1784
532388	87	NORTH STATE TEL CO.	1,497	1,455	506	3,457	0.1463	0.3291	0.1463	0.1746
532389	87	OREGON TEL CORP	6,032	5,544	2,053	13,629	0.4068	0.3782	0.1507	0.1972
532392	87	PINE TEL SYSTEM INC.	4,006	1,405	1,253	6,664	0.1880	0.2838	0.1880	0.2587
532393	87	PIONEER TEL COOP	56,957	23,878	13,098	93,933	0.1394	0.3740	0.1394	0.1836
532397	87	SCIO MUTUAL TEL ASSN	7,940	4,906	1,615	14,460	0.1117	0.2451	0.1117	0.1406
532399	*	STAYTON COOP TEL CO	35,921	10,646	7,378	53,945	0.1292	0.3024	0.1292	0.1368
532404	87	ASOTIN TEL - OR	151	160	185	497	0.3731	0.7500	0.3731	0.4506
532449	87	CONTEL OF THE NW- OR	166,016	138,518	66,278	370,812	0.1275	0.2949	0.1787	0.1787
532456	87	MALHEUR HOME TEL CO	107,566	13,359	31,788	152,713	0.2082	0.3484	0.2082	0.2315
542301	87	CALAVERAS TEL CO	5,480	5,382	975	11,837	0.0824	0.2488	0.0824	0.0905
542304	87	C P NATIONAL CORP-CA	62,326	41,415	12,469	116,210	0.1067	0.2772	0.1073	0.1409
542306	*		1,977	586	406	2,969	0.1292	0.2748	0.1292	0.1368
542308	87	CITIZENS UTIL OF CA	485,223	156,572	55,254	697,049	0.0793	0.2319	0.0793	0.1107
542311	87	CALIF-OREGON TEL CO	9,695	4,839	4,695	19,229	0.2442	0.4166	0.2442	0.3212
542313	87	DUCOR TELEPHONE CO	2,105	2,755	357	5,217	0.6850	0.2156	0.6850	0.8873
542315	87	EVANS TEL CO.	44,165	29,395	4,598	78,159	0.0614	0.1941	0.0588	0.0776
542318	87	FORESTHILL TEL CO.	0	0	0	0	0.0000	0.0000	0.0000	0.0000
542321	87	HAPPY VALLEY TEL CO	0	0	0	0	0.0000	0.0000	0.0000	0.0000
542322	87	HORNITOS TEL CO	0	0	0	0	0.0000	0.0000	0.0000	0.0000
542324	87	KERMAN TELEPHONE CO	40,522	14,443	3,095	58,061	0.0502	0.1489	0.0533	0.0702
542332	87	THE PONDEROSA TEL CO	27,619	19,986	2,877	50,482	0.0570	0.1972	0.0570	0.0714
542334	87	ROSEVILLE TEL CO	605,801	143,049	53,814	802,663	0.7022	0.1991	0.6704	0.8102
542338	87	SIERRA TELEPHONE CO	0	0	0	0	0.0619	0.2088	0.0621	0.0882
542339	87	THE SISKIYOU TEL CO	13,681	25,536	7,230	46,448	0.1277	0.3105	0.1557	0.1557
542342	87	TUOLUMNE TEL CO	18,651	18,828	3,403	40,882	0.0833	0.2634	0.0832	0.0982
542343	87	THE VOLCANO TEL CO	26,008	32,450	4,162	62,620	0.0646	0.2036	0.0665	0.0833
542346	+	PINNACLES TEL CO	279	1,723	482	2,484	0.1940	0.4069	0.1940	0.2072
552223	87	GEM STATE UTIL-NV	1,509	437	661	2,606	0.2537	0.5780	0.2537	0.3240
552233	87	RURAL TEL CO - NV	220	368	341	929	0.3670	0.7000	0.3670	0.3932
552302	87	CONTEL OF CALIF-NV	102,721	31,712	70,869	205,302	0.3129	0.7300	0.3452	0.4097
552304	87	CP NATIONAL-NV	55,951	18,774	33,600	108,325	0.3063	0.7200	0.3102	0.3896
552349	87	CHURCHILL COUNTY TEL	61,561	9,419	20,956	91,935	0.2279	0.5470	0.2279	0.3004
552351	87	LINCOLN CTY TEL SYS	7,200	3,926	3,320	14,446	0.2298	0.5709	0.2298	0.3048
552353	87	MOAPA VALLEY TEL CO.	12,729	3,721	4,307	20,757	0.2075	0.6200	0.2075	0.3176
552354	87	NEVADA TEL-TELEGRAPH	12,895	5,089	7,800	25,783	0.3042	0.7500	0.3025	0.3849
552356	87	RIO VIRGIN TEL CO	5,406	1,029	4,126	10,561	0.3907	0.3250	0.3907	0.4835

TABLE 4.7

1987 NONTIER 1 COMPANIES NETWORK USAGE DATA

FCODE	YEAR	CARRIER	DEM MINUTES IN THOUSANDS				FACTORS			
			LOC DEM	ST DEM	IS DEM	TOT DEM	IS SLU	IS SPF	IS DEM	W DEM
613000	87	ANCHORAGE TEL UTIL	1,809,209	134,842	297,498	2,241,548	0.1327	0.4752	0.1327	0.1524
613001	87	ARCTIC SLOPE TEL	8,033	9,302	8,272	25,606	0.3231	0.7500	0.3231	0.3378
613003	87	BRISTOL BAY TEL COOP	5,440	2,647	2,172	10,260	0.2117	0.7500	0.2117	0.2643
613004	87	BUSH-TELL INC.	3,087	2,095	419	5,602	0.0749	0.4284	0.0749	0.0953
613006	87	COPPER VALLEY TEL	20,431	7,240	7,379	35,049	0.2105	0.5457	0.2105	0.2752
613007	87	CORDOVA TEL COOP	10,048	2,459	3,634	16,140	0.2252	0.7400	0.2251	0.2937
613008	87	FAIRBANKS MUNICIPAL	0	0	0	0	0.1397	0.4401	0.1397	0.1968
613009	87	GTE ALASKA INC.	93,300	33,023	27,498	153,821	0.1788	0.4997	0.1788	0.2570
613010	87	GLACIER STATE TEL CO	290,151	46,945	61,395	398,490	0.1925	0.5877	0.1541	0.2113
613011	87	INTERIOR TEL CO INC	10,797	6,834	8,248	25,879	0.3187	0.7500	0.3187	0.3791
613012	87	JUNEAU & DOUGLAS TEL	162,738	23,282	41,887	227,906	0.1808	0.5489	0.1838	0.2545
613013	87	KETCHIKAN PUBLIC UT	0	0	0	0	0.2095	0.8359	0.2095	0.3217
613015	87	MATANUSKA TEL ASSOC	294,407	62,645	54,539	411,591	0.1325	0.3969	0.1325	0.1819
613016	87	MUKLUK TEL CO INC	2,542	2,463	617	5,622	0.1098	0.2728	0.1098	0.1475
613018	87	NUSHAGAK TEL COOP	10,274	3,913	2,683	16,870	0.1590	0.5702	0.1590	0.2287
613019	87	OTZ TEL COOPERATIVE	13,175	6,526	2,013	21,714	0.0927	0.3409	0.0927	0.1328
613020	87	SITKA TELEPHONE CO	49,636	20,182	20,294	90,113	0.2234	0.5799	0.2252	0.3109
613022	87	TEL UTIL OF ALASKA	17,359	1,537	8,197	27,094	0.3010	0.7500	0.3026	0.3982
613023	87	UNITED UTILITIES INC	0	0	0	0	0.0794	0.3030	0.0794	0.1194
613025	87	YUKON TEL CO INC	1,455	1,427	687	3,569	0.1925	0.3887	0.1925	0.2270
633200	87	PUERTO RICO COMM	0	0	0	0	0.0666	0.2270	0.0666	0.0926
643300	87	VIRGIN ISLANDS TEL	1,005,897	0	277,075	1,282,972	0.1584	0.4101	0.0000	0.2160
694		TOTAL	45905945	13497884	8988256	68392075				

- GTE'S DEM MINUTES ARE WEIGHTED

* - THOSE COMPANIES WHO NECCA COMPUTED DATA FOR

+ - THOSE COMPANIES WHO SUBMITTED 1986 DATA RATHER THAN 1987

TABLE 4.8

 1988 NONTIER 1 COMPANIES NETWORK USAGE DATA
 (MSG & SLU IN THOUSANDS)

FCD	YR	CARRIER	NO. LOOPS	ST MSGS	IS MSGS	LOC SLU	ST SLU	IS SLU	TOT SLU
100003	88	LINCOLNVILLE TEL CO	1,180	318	116	6,941	2,755	2,472	12,169
100004	88	CHINA TEL CORP	2,376	1,076	190	9,069	8,646	3,733	21,448
100010	*	HAMPDEN TEL CO	2,246	592	174	20,899	6,231	3,055	30,185
100011	88	HARTLAND & ST ALBANS	2,756	840	186	14,361	7,423	3,458	25,242
100014	88	CONTEL OF MAINE	38,255	11,486	4,419	223,419	98,844	66,608	388,871
100024	88	SOMERSET TEL CO	8,984	2,571	745	38,090	24,146	12,769	75,004
100025	88	STANDISH TEL CO	5,119	2,187	524	21,964	19,595	9,959	51,517
100027	88	UNION RIVER TEL CO	947	296	62	3,216	2,648	1,353	7,217
100029	88	UNITY TEL CO., INC.	3,199	1,242	261	17,352	9,594	4,317	31,263
100031	88	WARREN TEL CO	1,297	666	121	4,477	5,765	1,871	12,113
100034	88	WEST PENOBSCOT TEL	1,661	694	106	7,803	6,125	1,807	15,735
120038	88	BRETTON WOODS TEL CO	332	75	84	392	570	685	1,647
120039	88	GRANITE STATE TEL	6,739	1,712	1,204	35,042	16,364	17,584	68,990
120040	*	CHICHESTER TEL CO	1,096	304	124	11,285	3,082	2,096	16,463
120041	88	CONTEL OF NH	9,671	2,642	2,051	54,104	20,894	28,123	103,121
120045	88	KEARSARGE TEL CO	5,493	2,054	1,134	21,765	17,388	15,135	54,287
120046	88	MERIDEN TEL CO	471	108	136	1,719	966	1,872	4,557
120047	88	MERRIMAK COUNTY TEL	5,946	1,823	964	48,078	21,036	17,463	86,577
120049	88	UNION TEL CO	5,253	1,312	684	17,920	11,441	11,633	40,994
120050	88	WILTON TEL CO - NH	2,284	705	1,083	16,332	5,337	10,303	31,972
140058	88	LUDLOW TEL CO	3,749	811	673	11,835	6,400	7,796	26,031
140061	88	NORTHFIELD TEL CO	2,624	733	526	14,502	6,750	8,957	30,210
140062	88	PERKINSVILLE TEL CO	739	297	153	2,101	2,698	1,853	6,652
140068	88	TOPSHAM TEL CO	1,008	205	144	7,715	1,976	2,164	11,856
140069	88	WAITSFIELD/FAYSTON	4,345	847	899	16,249	7,327	13,585	37,161
140070	88	CONTEL OF VERMONT	32,905	8,079	6,208	186,531	69,623	81,163	337,318
150072	88	AU SABLE VALLEY TEL	5,506	1,821	461	27,132	17,433	8,457	53,022
150077	88	CHAMPLAIN TEL CO	4,498	1,334	1,243	31,371	9,672	10,498	51,542
150078	88	CHAUTAUQUA & ERIE	8,967	2,086	1,377	68,995	21,612	18,435	109,043
150081	88	CITIZENS HAMMOND NY	789	356	54	4,357	3,609	805	8,771
150082	88	CLYMER TEL CO	765	225	239	6,273	2,250	2,819	11,342
150084	88	TACONIC TEL CORP	18,046	4,953	3,009	130,028	56,834	38,335	225,197
150085	88	CROWN POINT TEL CORP	665	251	71	5,704	2,545	1,040	9,288
150091	88	DUNKIRK & FREDONIA	8,681	1,364	598	82,572	21,102	9,816	113,490
150092	88	EDWARDS TEL CO	1,544	703	73	9,373	6,799	1,580	17,752
150093	88	EMPIRE TEL CORP	5,962	2,270	559	26,928	20,978	9,063	56,969
150097	88	GERMANTOWN TEL CO	1,811	827	183	11,538	8,558	3,046	23,142
150099	88	HANCOCK TEL CO	1,285	415	213	7,981	3,756	2,669	14,406
150100	88	HIGHLAND TEL CO	48,738	22,398	10,063	472,242	241,814	168,590	882,646
150105	88	MIDDLEBURGH TEL CO	4,380	1,672	312	25,808	18,456	6,023	50,287
150106	88	ALLTEL NY-FULTON	38,897	6,040	3,159	523,568	72,821	59,044	655,433

TABLE 4.8

 1988 NONTIER 1 COMPANIES NETWORK USAGE DATA
 (MSG & SLU IN THOUSANDS)

FCODE	YR CARRIER	NO. LOOPS	ST MSGS	IS MSGS	LOC SLU	ST SLU	IS SLU	TOT SLU
150108	88 NICHOLVILLE TEL CO	1,401	548	101	11,699	5,094	2,016	18,809
150109	88 ALLTEL NY-JAMESTOWN	41,005	6,445	6,563	455,918	70,022	92,890	618,831
150110	88 OGDEN TEL CO	16,899	1,812	1,084	230,220	24,659	23,390	278,270
150113	88 ALLTEL NY-RED JACKET	2,412	806	150	19,020	8,042	2,259	29,321
150116	* PATTERSONVILLE TEL	1,123	264	108	9,818	2,681	1,824	14,323
150119	88 RED HOOK TEL CO	11,580	3,467	1,119	98,653	48,772	25,119	172,543
150122	88 SENECA-GORHAM TEL	7,492	3,367	487	42,915	33,894	10,132	86,941
150128	88 SYLVAN LAKE TEL CO	13,368	3,561	1,849	182,619	65,409	40,775	288,803
150133	88 VERNON TEL CO	2,174	597	151	16,747	6,813	3,000	26,559
150135	88 WARWICK VALLEY-NY	10,740	4,410	2,404	71,058	44,203	30,491	145,752
150136	88 WESTERN COUNTIES TEL	18,708	6,318	2,149	143,004	68,173	37,950	249,127
160135	88 WARWICK VALLEY-NJ	6,938	3,925	981	34,215	46,587	17,925	98,727
170170	88 CONTEL OF PA	50,312	13,033	4,102	457,487	149,894	72,382	679,763
170177	* LACKAWAXEN TEL CO	2,387	554	385	6,374	4,333	5,669	16,376
170183	88 MAHANAY & MAHANTONGO	3,462	929	119	21,927	9,964	2,116	34,008
170192	88 NORTH PENN TEL CO	3,946	845	769	24,432	8,346	9,214	41,993
170194	88 OSWAYO RIVER TEL CO	1,615	284	335	11,501	2,971	4,600	19,072
170201	88 QUAKER STATE TEL CO	31,248	5,791	5,335	228,155	64,872	59,358	352,385
170206	88 SUGAR VALLEY TEL CO	869	262	125	5,216	2,557	1,359	9,132
190217	88 AMELIA TEL CORP	3,065	1,049	251	28,492	11,140	4,788	44,420
190249	88 ROANOKE & BOTETOURT	6,552	1,384	1,012	77,124	18,594	11,063	106,782
200259	88 HARDY TEL CO	1,886	145	238	22,928	1,451	3,450	27,829
200270	88 MOUNTAIN STATE TEL	15,722	4,031	2,037	235,200	41,202	34,089	310,490
200278	88 CONTEL OF WV	24,306	6,262	2,855	303,190	63,667	42,030	408,887
210291	88 FLORALA TEL CO	2,716	204	129	17,438	2,757	2,175	22,370
210318	88 SOUTHLAND TEL-FL	2,906	293	272	42,686	3,554	4,602	50,841
210329	88 GULF TEL CO	7,462	1,570	810	84,203	20,709	14,437	119,348
210330	88 VISTA-UNITED TELCOM	10,175	1,860	3,961	92,193	25,783	61,432	179,408
210331	88 INDIANTOWN SYSTEM	2,225	1,223	288	11,083	11,786	5,665	28,533
210335	88 NORTHEAST FLORIDA	5,125	1,405	510	44,575	15,433	10,427	70,435
210336	88 ALLTEL FLORIDA INC.	48,530	11,712	4,772	487,879	122,989	75,944	686,811
210338	88 QUINCY TEL CO-FL DIV	8,818	2,225	979	116,938	24,000	16,277	157,215
210339	88 ST JOSEPH TEL & TEL	21,869	4,362	2,073	172,216	46,028	30,946	249,190
220281	88 CONTEL OF SOUTH - GA	61,778	13,782	4,853	612,983	153,022	86,881	852,886
220338	88 QUINCY TEL CO-GA DIV	589	59	135	10,229	868	2,054	13,152
220344	88 ALMA TEL CO	5,358	1,355	388	56,991	13,173	5,868	76,032
220347	88 BRANTLEY TEL CO	3,028	876	226	30,105	8,110	3,417	41,633
220351	88 CAMDEN TEL & TEL CO	10,317	1,438	2,914	103,085	17,105	34,528	154,719
220355	88 CITIZENS TEL CO - GA	3,918	1,045	246	45,678	9,945	4,413	60,036
220356	88 COASTAL UTILITIES	20,513	4,590	4,293	182,578	50,212	82,307	315,097
220358	88 DARIEN TEL CO	3,495	918	333	31,419	9,339	5,076	45,834

TABLE 4.8

 1988 NONTIER 1 COMPANIES NETWORK USAGE DATA
 (MSG & SLU IN THOUSANDS)

FCODE	YR	CARRIER	NO. LOOPS	ST MSGS	IS MSGS	LOC SLU	ST SLU	IS SLU	TOT SLU
220360	88	ELLIJAY TEL CO	6,622	1,586	484	61,173	16,651	6,448	84,272
220371	*	INTERSTATE TEL CO	9,795	1,233	1,340	151,332	16,536	20,575	188,443
220377	88	PINELAND TEL COOP	8,822	2,055	469	94,335	21,661	9,128	125,124
220379	88	PLANT TEL. CO.	7,351	2,067	520	74,067	20,041	8,061	102,170
220381	88	PUBLIC SERVICE TEL	7,682	2,233	447	90,172	22,656	9,491	122,319
220386	88	STANDARD TEL CO	34,223	10,388	3,514	386,437	114,230	60,211	560,878
220392	88	WAVERLY HALL TEL CO	945	302	71	5,366	3,328	1,248	9,943
220394	*	WILKES TEL & ELC CO	8,897	1,601	723	102,020	19,111	13,059	134,190
230468	88	ATLANTIC MEMBERSHIP	18,813	2,920	1,840	157,582	30,808	25,288	213,678
230469	88	BARNARDSVILLE TEL CO	846	118	54	11,055	1,342	1,253	13,651
230473	88	CITIZENS TEL CO	13,512	1,953	1,493	144,870	19,178	28,608	192,656
230474	88	CONCORD TEL CO	74,883	13,714	5,340	870,839	123,958	92,893	1,087,690
230476	88	ALLTEL CAROLINA-NO	92,133	17,648	10,893	1,140,447	197,243	183,872	1,521,561
230481	88	HEINS TEL CO	23,778	4,417	2,591	300,551	52,125	46,798	399,473
230502	88	STAR MEMBERSHIP CORP	11,886	3,084	561	148,616	32,710	13,640	194,967
230509	88	CONTEL OF NC	81,290	14,116	10,751	981,618	147,778	174,547	1,303,943
230510	88	WILKES MEMBERSHIP	7,254	865	260	112,683	9,981	5,325	127,990
240512	88	BLUFFTON TEL. CO.	2,639	850	589	9,648	7,548	7,091	24,287
240520	88	FARMERS TEL COOP	36,488	7,046	4,173	548,781	70,892	79,555	699,228
240523	88	HARGRAY TEL CO	31,384	3,113	10,001	215,296	34,587	123,192	373,075
240526	88	CONTEL OF SC	13,990	2,620	2,141	181,710	24,335	32,297	238,342
240528	*	HORRY TEL COOP	39,595	9,035	7,228	453,263	85,687	123,140	662,090
240533	88	MCCLELLANVILLE TEL	1,131	454	97	9,204	4,209	2,153	15,566
240539	88	POND BRANCH TEL CO	7,368	2,283	479	77,611	19,406	9,679	106,696
240551	88	WILLISTON TEL CO	3,485	951	298	38,256	9,714	4,987	52,957
250281	88	CONTEL OF THE SOUTH	78,357	19,073	9,308	1,115,732	180,281	114,423	1,410,435
250284	*	BUTLER TEL CO	3,267	589	597	49,285	7,263	8,088	64,636
250297	88	GROVE HILL TEL CORP	1,715	702	127	17,014	6,638	2,369	26,022
250298	88	GULF TEL CO - AL	24,022	4,073	4,547	220,486	30,947	50,600	302,032
250300	88	HOPPER TEL. CO INC	2,649	895	138	24,792	8,073	2,469	35,334
250304	88	MILLRY TEL CO	4,829	1,100	592	52,354	10,685	7,342	70,381
250306	88	MONROEVILLE TEL CO	10,226	1,959	1,139	163,741	22,389	22,468	208,598
250314	88	PEOPLES TEL CO	10,065	1,788	1,174	126,632	16,865	16,443	159,940
250316	88	RAGLAND TEL CO	1,005	312	54	9,691	3,197	991	13,879
250318	88	SOUTHLAND TEL CO-AL	9,277	2,020	1,074	152,422	24,874	18,942	196,237
250461	88	SOUTHEAST MS TEL CO	3,448	774	338	33,462	7,009	5,233	45,705
260410	88	CONTEL OF KENTUCKY	61,543	12,305	6,394	830,076	122,898	108,354	1,061,327
270422	88	ATHENS TEL CO	292	126	19	1,871	1,362	495	3,727
270423	88	CENTRAL LOUISIANA	12,839	3,509	1,084	160,119	35,434	22,595	218,148
270424	88	COASTAL TEL & ELECTR	9,539	3,185	622	100,122	28,147	12,046	140,315
270425	88	CAMERON TEL CO - LA	6,134	1,637	658	49,108	18,489	13,857	81,454

TABLE 4.8

 1988 NONTIER 1 COMPANIES NETWORK USAGE DATA
 (MSG & SLU IN THOUSANDS)

FCODE	YR CARRIER	NO. LOOPS	ST MSGS	IS MSGS	LOC SLU	ST SLU	IS SLU	TOT SLU
270429	88 EAST ASCENSION TEL	21,481	7,276	2,855	295,622	59,114	39,242	393,979
270430	* ELIZABETH TEL CO	2,271	461	117	26,228	4,827	3,249	34,303
270431	88 CADDOAN TEL CO	8,098	1,806	1,228	95,124	18,907	19,414	133,445
270433	88 LAFOURCHE TEL CO	11,608	2,887	1,334	116,265	21,254	10,964	148,483
270434	88 EVANGELINE TEL CO	25,913	3,808	931	150,289	36,168	18,592	205,049
270435	88 NORTHEAST LOUISIANA	800	331	73	9,469	3,942	1,604	15,015
270436	88 CENTURY NORTH LA	997	294	106	8,131	2,738	2,102	12,971
270437	88 PLAIN DEALING TEL CO	1,516	444	147	17,579	4,036	3,119	24,733
270440	88 CENTURY TEL CO	1,519	675	138	23,243	7,384	3,307	33,934
270442	88 LOUISIANA WESTERN	3,024	524	158	16,951	5,208	3,195	25,353
270443	88 UTC OF LOUISIANA	2,510	752	275	27,842	7,460	4,673	39,974
280446	88 BAY SPRINGS TEL CO	8,200	2,020	530	112,843	19,415	10,218	142,476
280452	88 DELTA TEL CO	3,197	628	213	35,388	5,349	3,912	44,649
280454	88 FRANKLIN TEL CO - MS	6,176	1,478	425	64,386	13,580	8,565	86,531
280458	88 HOME TEL CO-OLIVE BR	7,800	818	1,999	92,352	10,717	31,124	134,192
280459	88 HUGHES TEL CO	5,166	618	351	76,899	5,830	7,482	90,212
290552	88 ADAMSVILLE TEL CO	5,744	655	574	82,427	7,731	9,113	99,271
290571	88 MILLINGTON TEL CO	17,134	1,531	2,798	269,080	19,785	51,571	340,436
290575	88 TENNESSEE TEL CO	36,321	5,155	4,453	544,056	54,990	65,992	665,038
290579	88 TWIN LAKES TEL COOP	23,935	3,671	1,603	279,307	37,347	30,594	347,247
300597	* THE CHILLICOTHE TEL	25,453	5,536	2,131	366,406	58,774	29,491	454,672
300607	* CONTEL OF OHIO	2,030	525	126	19,415	4,982	2,077	26,473
300613	88 LITTLE MIAMI COMM.	1,186	353	70	11,176	3,103	1,619	15,898
300620	88 HARLAN TEL CO	691	227	53	7,210	2,263	1,195	10,667
300665	88 ALLTEL OHIO-WEST OH	17,400	5,482	1,436	144,996	55,981	27,646	228,623
300682	88 C, C & S TELCO -OHIO	466	126	63	2,413	1,290	936	4,639
310679	88 BLOOMINGDALE TEL CO	1,470	775	95	5,562	6,961	1,795	14,319
310680	88 CHIPPEWA COUNTY TEL	823	289	44	3,025	2,496	934	6,454
310681	88 ALLTEL MICHIGAN INC.	38,604	14,762	4,511	299,102	153,546	62,881	515,529
310682	88 C, C & S TELCO - MI	17,688	4,806	1,343	127,814	51,520	23,025	202,360
310683	88 CARR TEL CO	1,353	336	37	3,466	3,542	873	7,881
310685	88 CHATHAM TEL CO - MI	2,245	585	127	16,352	5,295	2,464	24,112
310687	88 CLAYTON TEL CO	0	303	43	1,893	2,906	653	5,452
310699	88 HICKORY TEL CO	0	203	83	14,369	2,981	1,649	19,000
310702	88 CENTURY OF MICHIGAN	40,942	14,427	2,324	232,352	146,890	39,917	419,159
310704	88 ACE TEL OF MICHIGAN	3,446	1,267	111	10,094	11,406	2,049	23,549
310711	88 MIDWAY TEL CO	742	180	46	3,891	1,846	840	6,577
310713	* HIAWATHA TEL CO	3,509	886	262	21,525	9,602	4,691	35,818
310714	* OGDEN TEL CO	412	0	0	0	0	0	0
310717	88 ONTONAGON COUNTY TEL	3,835	640	345	30,541	6,686	5,629	42,856
310721	88 PIGEON TEL CO	2,604	1,205	158	12,307	11,319	2,458	26,085

TABLE 4.8

 1988 NONTIER 1 COMPANIES NETWORK USAGE DATA
 (MSG & SLU IN THOUSANDS)

F CODE	YR CARRIER	NO. LOOPS	ST MSGS	IS MSGS	LOC SLU	ST SLU	IS SLU	TOT SLU
310728	88 SPRINGPORT TEL CO	1,622	739	54	7,826	6,614	1,176	15,616
310732	* UPPER PENINSULA TEL	3,223	1,278	363	17,647	12,381	6,125	36,154
310737	88 WINN TEL CO	553	387	28	1,701	3,433	1,074	6,208
310738	88 WOLVERINE TEL CO	7,237	2,905	295	65,588	30,750	6,539	102,877
320753	88 CLAY CTY RURAL COOP	7,949	2,275	526	79,843	23,225	9,231	112,300
320762	88 ELNORA TEL CO	0	96	24	3,322	1,047	438	4,806
320776	* COMM CORP OF INDIANA	7,380	0	0	0	0	0	0
320778	88 HOME TEL CO INC	0	391	89	20,422	4,496	1,895	26,813
320779	88 CONTEL OF INDIANA	136,586	29,289	17,889	1,501,217	313,086	235,658	2,049,960
320797	88 NEW PARIS TEL INC	1,555	420	195	15,878	3,562	2,708	22,148
320800	88 NORTHWESTERN INDIANA	7,790	2,963	1,135	69,081	29,182	17,103	115,366
330841	88 CENCOM OF WISCONSIN	22,325	4,430	1,502	146,751	44,736	20,790	212,277
330844	88 BADGER TELECOM, INC.	0	916	237	33,620	7,978	3,327	44,925
330851	88 BONDUDEL TEL CO	0	389	77	11,755	3,610	1,140	16,506
330856	88 BURLINGTON B&W	0	927	414	16,116	8,968	6,590	31,673
330859	88 CENTRAL STATE TEL CO	7,137	1,989	431	51,279	19,994	10,211	81,483
330860	88 CHEQUAMEGON TEL COOP	5,689	1,091	549	23,403	9,994	8,616	42,013
330870	88 CRANDON TEL CO	2,329	461	102	15,052	4,985	2,126	22,163
330876	88 DODGE COUNTY TEL CO	0	239	32	7,440	2,396	699	10,535
330882	88 FENNIMORE TEL CO	0	469	133	12,273	5,016	1,886	19,175
330888	88 GREENWOOD TEL CO	0	256	68	9,667	2,664	1,158	13,489
330891	* HEADWATERS TEL CO	3,546	628	189	13,488	6,496	4,266	24,250
330895	88 CENTURY OF WISCONSIN	46,106	4,978	6,141	485,966	64,869	105,552	656,387
330898	88 LARSEN-READFIELD TEL	0	635	90	11,806	6,603	1,512	19,921
330908	88 MARQUETTE-ADAMS COOP	2,575	700	333	10,206	5,707	6,563	22,477
330909	88 MIDWAY TEL CO	6,711	1,573	689	56,645	17,003	11,144	84,792
330913	88 MONROE COUNTY TEL CO	8,846	1,859	1,000	71,945	18,995	18,280	109,220
330914	88 EASTCOAST TELECOM	0	711	188	29,273	7,622	3,896	40,791
330916	* MOUNT HOREB TEL CO	2,924	458	194	28,099	5,036	3,692	36,826
330917	88 MT VERNON TEL CO	5,457	1,047	472	53,170	11,227	7,982	72,379
330922	* NORTH-WEST TEL CO	54,539	13,362	4,928	475,397	140,859	85,674	701,931
330931	88 PEOPLES TEL CO	5,656	1,538	371	39,123	14,719	6,131	59,973
330934	* PLATTEVILLE TEL CO	7,627	1,291	754	51,317	17,556	12,516	81,389
330936	88 INDIANHEAD TEL CO	1,618	450	119	7,666	4,134	2,139	13,939
330937	88 PRICE COUNTY TEL CO	3,523	660	263	22,587	6,613	4,403	33,604
330940	* RHINELANDER TEL CO	9,588	2,175	885	89,089	25,481	16,961	131,531
330945	88 SCANDINAVIA TEL CO	0	595	180	13,234	6,256	2,770	22,261
330950	88 SOLON SPRINGS TEL CO	14,046	2,589	1,828	81,889	25,705	26,256	133,850
330952	88 SE TEL OF WISCONSIN	5,792	1,675	435	48,140	17,654	8,258	74,052
330954	88 STOCKBRIDGE & SHERWD	0	672	102	15,937	6,269	1,905	24,110
330956	88 UNIVERSAL OF N WISC	10,152	2,378	801	60,911	24,135	14,712	99,759

TABLE 4.8

 1988 MONTIER 1 COMPANIES NETWORK USAGE DATA
 (MSG & SLU IN THOUSANDS)

FCODE	YR CARRIER	NO. LOOPS	ST MSGS	IS MSGS	LOC SLU	ST SLU	IS SLU	TOT SLU
330963	88 UTELCO, INC	12,812	2,283	1,149	133,618	23,113	17,386	174,116
330964	88 URBAN TEL CORP	16,800	3,941	987	135,709	46,716	15,999	198,424
330965	88 VALDERS TEL CO	0	529	88	15,515	5,087	1,664	22,267
330974	88 WOOD COUNTY TEL CO	21,668	3,451	1,514	191,305	32,992	24,077	248,375
341000	* ALLTEL ILLINOIS INC.	39,944	10,412	4,854	304,765	110,121	80,247	495,133
341004	88 EL PASO TEL CO	1,549	633	161	10,279	6,254	2,142	18,675
341011	88 LAKESIDE TEL CO	0	240	72	5,401	2,509	970	8,881
341023	88 GRIDLEY TEL CO	1,104	549	132	5,139	5,184	1,450	11,773
341036	88 CONTEL OF ILLINOIS	161,126	50,222	14,692	1,199,164	569,825	254,732	2,023,722
341037	88 IL CONSOLIDATED TEL	75,444	24,871	8,318	693,940	237,785	113,725	1,045,450
341038	88 INLAND TEL CO	4,120	1,899	213	20,269	19,659	4,359	44,287
341045	88 LEAF RIVER VLY TEL	543	245	29	2,460	2,323	571	5,354
341055	88 MIDLAND TEL CO	3,981	1,670	239	23,350	17,562	3,810	44,721
341060	88 MOULTRIE INDEPENDENT	673	246	23	4,332	2,408	562	7,302
341073	88 PRAIRIE TEL CO	0	296	52	6,466	3,127	1,005	10,598
351105	88 AYRSHIRE FARMERS MUT	389	175	22	1,454	1,387	389	3,230
351110	* BERNARD TEL CO INC	454	187	32	3,728	1,654	602	5,984
351127	88 CENTEL OF IOWA	0	12,433	6,646	391,329	116,252	93,284	600,866
351207	88 CONTEL OF IOWA, INC.	71,555	18,118	4,223	544,748	192,312	84,246	821,306
351229	* LOST NATION-ELWOOD	595	201	33	3,837	1,750	738	6,324
351316	* UNITED FARMERS TEL	563	0	474	2,997	1	1,729	4,727
351327	88 WEBB-DICKENS TEL	459	225	38	1,421	2,079	695	4,196
351346	88 ACE TEL ASSN-IA	3,723	791	330	28,317	8,104	4,466	40,887
351888	88 GRAND RIVER MUT-IA	5,228	1,258	913	46,202	13,494	10,747	70,443
361140	88 CONTEL OF MINNESOTA	95,956	22,192	5,022	770,400	294,844	131,325	1,196,570
361346	88 ACE TEL ASSN-MN	8,819	1,628	3,364	77,957	17,246	21,716	116,919
361350	* ARVIG TEL CO	8,135	1,266	424	38,327	13,338	7,533	59,198
361370	88 CLARA CITY TEL EXCH	1,455	442	78	8,350	4,244	1,210	13,804
361374	88 ARROWHEAD COMM CORP	589	193	37	2,038	1,784	623	4,445
361379	88 DEER RIVER TEL CO	1,591	250	90	13,957	2,740	1,819	18,515
361385	* EAST OTTER TAIL TEL	13,027	2,251	875	93,241	35,152	21,422	149,816
361395	88 GARDEN VALLEY TEL CO	13,066	2,564	620	94,433	37,421	15,260	147,113
361410	88 JOHNSON TEL CO	1,353	256	56	5,883	2,492	1,333	9,708
361414	88 LAKEDALE TEL CO	9,522	3,544	474	57,878	35,008	7,358	100,244
361433	88 MID STATE TEL CO	5,590	1,196	280	39,894	12,836	5,055	57,786
361442	88 NEW ULM TELECOM, INC	8,494	2,087	714	69,676	19,997	11,459	101,132
361443	88 NORMAN COUNTY TEL CO	3,575	563	387	32,466	6,357	5,519	44,343
361451	88 PAUL BUNYAN RURAL	4,967	1,041	263	43,995	11,694	5,861	61,549
361483	88 SLEEPY EYE TEL CO	5,159	1,553	296	35,330	15,440	5,138	55,909
361491	* TWIN VALLEY-ULEN TEL	2,729	651	224	19,615	6,235	3,388	29,238
371516	88 ARAPAHOE TEL CO	1,031	264	70	6,720	2,467	1,283	10,471

TABLE 4.8

 1988 NONTIER 1 COMPANIES NETWORK USAGE DATA
 (MSG & SLU IN THOUSANDS)

FCODE	YR	CARRIER	NO. LOOPS	ST MSGS	IS MSGS	LOC SLU	ST SLU	IS SLU	TOT SLU
371517	88	ARLINGTON TEL CO	915	349	49	6,152	3,713	1,606	11,471
371524	88	BLAIR TEL CO	5,416	1,560	700	46,077	15,339	11,500	72,916
371525	88	THREE RIVER TELCO	1,227	305	118	7,327	3,108	1,873	12,308
371526	*	CAMBRIDGE TEL CO -NE	0	211	86	7,830	2,138	1,454	11,422
371531	*	CLARKS TEL CO	0	139	57	5,178	1,414	962	7,554
371534	88	COZAD TEL CO	2,577	661	252	16,047	6,411	3,922	26,380
371536	88	CURTIS TEL CO	751	185	54	5,006	2,108	1,028	8,143
371537	88	DALTON TEL CO, INC	1,278	392	147	7,747	4,073	2,588	14,408
371540	88	DILLER TEL CO	890	302	69	5,023	2,526	1,007	8,556
371542	88	EASTERN NEBRASKA TEL	2,420	782	341	16,633	6,876	4,264	27,773
371557	88	HARTMAN TEL EXCH INC	444	92	83	2,541	1,045	1,220	4,807
371558	88	HEMINGFORD COOP TEL	865	113	76	9,186	1,346	1,444	11,976
371567	*	KEYSTONE-ARTHUR TEL	557	116	38	996	946	658	2,599
371574	88	NEBRASKA CENTRAL TEL	6,071	879	348	22,986	9,022	7,412	39,420
371577	88	GREAT PLAINS COMMUN	25,431	6,954	2,490	167,954	67,821	41,012	276,786
371580	88	PETERSBURG TEL CO	447	160	18	2,520	1,573	348	4,441
371586	88	ROCK COUNTY TEL CO	1,019	259	91	7,996	3,288	1,764	13,048
371591	*	SE NEBRASKA TEL CO	3,923	548	452	33,558	5,099	8,191	46,848
371592	88	STANTON TEL CO, INC	1,051	331	610	7,335	2,876	2,129	12,341
371597	88	WAUNETA TEL CO	624	184	68	4,386	1,553	1,109	7,047
372455	88	BENKELMAN TEL CO	1,259	178	135	7,940	1,784	1,959	11,684
381447	88	CONTEL OF N. DAKOTA	10,267	1,747	681	95,064	21,831	14,627	131,522
381607	*	CONSOLIDATED COOP	4,103	743	348	37,900	7,550	5,894	51,344
381616	88	INTER-COMMUNITY TEL	1,233	431	94	9,447	4,117	1,799	15,363
381617	88	MIDSTATE TEL CO	1,388	366	165	8,727	3,796	2,771	15,295
381630	*	POLAR COMM MUT AID	8,252	1,763	810	82,973	18,428	1,451	102,852
381632	*	RESERVATION TEL COOP	4,281	1,184	384	36,766	11,043	7,192	55,001
381634	*	SOURIS RIVER TEL MUT	11,811	2,459	1,311	96,284	26,227	30,086	152,597
381637	88	W. RIVER MUTUAL AID	8,898	2,015	832	82,577	19,361	15,228	117,167
391643	88	CONTEL OF S. DAKOTA	7,834	1,574	611	58,129	19,369	17,643	95,141
391647	88	CHEYENNE RIVER SIOUX	1,872	448	166	20,548	4,052	3,376	27,976
391659	88	GOLDEN WEST TELECOMM	12,104	2,735	1,616	94,744	25,818	28,041	148,603
391666	88	JEFFERSON TEL CO -SD	472	84	164	2,189	596	1,798	4,583
391667	88	KADOKA TELEPHONE CO	525	126	102	2,532	992	1,020	4,544
391668	88	KENNEBEC TEL CO	276	94	30	1,264	902	351	2,518
391689	88	WEST RIVER COOP	1,553	283	215	14,973	3,206	3,402	21,581
401691	88	ALLTEL ARKANSAS INC	58,893	17,959	7,830	617,210	169,866	123,073	910,148
401692	88	ARKANSAS TEL CO	5,763	1,047	547	54,072	8,298	10,057	72,427
401697	88	CENTRAL ARKANSAS TEL	1,972	602	120	20,043	5,523	2,470	28,035
401698	88	CLEVELAND COUNTY TEL	2,240	743	111	16,391	7,477	2,467	26,335
401699	88	DECATUR TEL CO INC	953	301	115	3,727	2,413	1,623	7,763

TABLE 4.8

 1988 NONTIER 1 COMPANIES NETWORK USAGE DATA
 (MSG & SLU IN THOUSANDS)

FCODE	YR	CARRIER	NO. LOOPS	ST MSGS	IS MSGS	LOC SLU	ST SLU	IS SLU	TOT SLU
401702	88	SOUTH ARKANSAS TEL	3,298	873	190	29,002	8,076	4,152	41,229
401705	88	CENTURY OF ARKANSAS	11,175	2,247	1,285	106,490	20,927	24,129	151,546
401709	88	MADISON COUNTY TEL	2,035	683	253	21,072	5,744	4,564	31,380
401711	88	MOUNTAIN HOME TEL	14,380	1,746	1,961	87,606	18,398	37,001	143,005
401713	88	NORTH ARKANSAS TEL	3,962	1,321	566	24,949	10,826	11,455	47,230
401720	88	REDFIELD TEL CO	1,332	563	75	9,979	4,941	1,963	16,883
401726	88	TRI-COUNTY TEL CO-AR	3,771	733	249	35,438	6,758	5,924	48,120
401727	88	UNION TEL CO INC	875	219	160	6,795	2,169	2,267	11,231
401729	88	WALNUT HILL TEL CO	4,373	1,030	605	32,491	10,932	9,847	53,270
401730	88	CONTEL OF ARKANSAS	65,680	20,579	7,793	783,674	198,239	143,493	1,125,406
401733	88	YELCOT TEL CO INC	2,657	628	287	25,049	5,735	5,459	36,243
401734	88	YELL COUNTY TEL CO	4,093	1,185	242	36,029	10,580	5,111	51,721
411741	88	ASSARIA TEL EXCHANGE	455	245	38	2,092	2,401	925	5,418
411746	88	BLUE VALLEY TEL CO	2,761	1,045	220	12,859	9,377	3,295	25,531
411761	88	CUNNINGHAM TEL CO	1,598	477	88	6,915	4,857	1,838	13,609
411764	88	ELKHART TEL CO INC	1,565	271	292	8,081	2,552	3,971	14,605
411781	88	H & B COMMUNICATIONS	979	366	73	3,876	3,303	1,330	8,510
411782	88	HOME TEL CO	1,273	550	81	6,261	4,922	1,480	12,663
411785	88	J. B. N. TEL CO INC	2,312	1,280	192	12,443	12,724	3,526	28,693
411788	88	KANOKLA TEL ASSN-KS	2,245	603	220	12,161	5,843	3,528	21,532
411789	88	KANSAS STATE TEL CO	5,258	753	1,398	41,385	7,470	14,119	62,974
411790	88	CONTEL OF KANSAS	45,498	18,090	4,280	256,343	176,874	68,725	501,941
411801	88	MADISON TEL CO INC	729	208	43	4,359	1,791	971	7,122
411807	88	MOKAN DIAL INC-KS	1,964	793	290	11,836	7,263	4,121	23,221
411808	88	MOUNDRIDGE TEL CO	2,145	799	259	13,883	6,713	4,821	25,417
411814	88	PEOPLES MUTUAL TEL	1,010	310	187	6,179	2,680	2,124	10,984
411817	88	PIONEER TEL ASSN INC	11,372	3,041	1,556	85,758	28,082	24,404	138,244
411818	88	CRAW-KAN TEL COOP	11,594	3,897	1,247	75,042	36,022	19,569	130,633
411826	88	RURAL TEL SERVICE CO	6,740	2,224	416	39,353	21,117	8,160	68,630
411827	88	S & T TEL COOP ASSN	1,617	613	145	7,131	6,069	2,610	15,810
411831	*	S. CENTRAL TEL - KS	1,080	417	77	3,538	3,904	1,406	8,847
411835	88	SUNFLOWER TEL CO	3,969	969	448	30,282	10,009	8,096	48,387
411840	88	TWIN VALLEY TEL INC	2,249	737	109	11,057	6,715	2,542	20,315
411841	88	UNITED TEL ASSN	4,613	1,909	478	25,344	16,684	8,184	50,211
411847	88	THE WHEAT STATE TEL	1,951	815	166	10,234	7,355	2,648	20,237
411849	88	WILSON TEL CO INC	2,252	653	106	12,033	6,734	2,493	21,259
411852	88	ZENDA TEL COMPANY	232	106	11	981	1,097	214	2,292
412030	88	TOTAH TELEPHONE CO	1,301	464	147	4,917	4,357	2,564	11,838
421807	88	MOKAN DIAL INC-MO	601	268	70	4,692	2,416	1,235	8,343
421846	88	CONTINENTAL SYS. -MO	37,682	11,113	4,122	346,951	102,447	60,482	509,880
421859	88	BOURBEUSE TEL	0	632	93	9,426	6,384	2,097	17,907

TABLE 4.8

 1988 NONTIER 1 COMPANIES NETWORK USAGE DATA
 (MSG & SLU IN THOUSANDS)

FCODE	YR CARRIER	NO. LOOPS	ST MSGS	IS MSGS	LOC SLU	ST SLU	IS SLU	TOT SLU
421865	88 CITIZENS TEL CO - MO	3,472	1,102	253	14,683	11,211	4,697	30,591
421873	88 EASTERN MISSOURI TEL	2,544	1,015	140	14,022	9,619	2,777	26,418
421882	88 FIDELITY TEL CO	9,868	3,062	769	76,144	27,361	12,480	115,985
421885	88 ALLTEL MISSOURI	20,680	7,016	1,860	199,640	67,736	36,998	304,373
421886	88 GOODMAN TEL CO	1,414	537	168	6,540	4,626	2,964	14,130
421888	88 GRAND RIVER MUT-MO	12,138	2,868	1,003	105,720	29,558	14,922	150,200
421901	88 KINGDOM TELEPHONE CO	2,490	1,253	224	15,691	11,268	3,609	30,568
421904	88 MISSOURI TEL CO	15,668	3,588	1,161	132,062	33,221	21,411	186,693
421908	88 LE-RU TELEPHONE CO	967	280	154	5,299	2,458	2,506	10,263
421922	88 CONTEL OF MISSOURI	143,689	58,488	14,822	1,040,377	474,737	332,610	1,847,724
421929	* HOLWAY TEL CO	556	196	34	5,206	1,709	539	7,454
421931	88 NE MISSOURI RURAL	3,367	859	281	26,457	8,549	5,641	40,646
421934	* ORCHARD FARM TEL CO	664	506	42	1,946	4,521	656	7,124
421951	88 STOUTLAND TEL CO	892	309	43	7,013	2,876	988	10,877
421963	* WEBSTER COUNTY TEL	0	821	335	30,473	8,323	5,661	44,456
431788	88 KANOKLA TEL ASSN-OK	1,273	389	161	6,325	3,782	2,560	12,666
431831	* S. CENTRAL TEL - OK	403	144	56	2,048	1,093	822	3,962
431965	88 ALLTEL OKLAHOMA INC	10,958	4,858	956	76,187	47,475	18,980	142,642
431966	88 ATLAS TEL CO	1,416	529	305	7,935	5,362	3,703	17,001
431974	88 CANADIAN VALLEY TEL	812	198	30	2,108	2,021	765	4,894
431976	88 CARNEGIE TEL CO INC	1,550	494	93	11,170	4,921	2,052	18,144
431979	88 CHEROKEE TEL CO	4,154	1,114	828	30,048	10,647	11,685	52,381
431980	88 CHICKASAW TEL CO	7,160	2,962	431	47,130	29,719	9,576	86,426
431981	88 CHOUTEAU TEL CO	2,720	881	238	16,618	8,774	3,396	28,788
431984	88 OKLAMOMA COMM SYSTEM	12,642	4,793	868	110,137	47,011	20,787	177,935
431985	88 CROSS TEL CO	7,265	2,530	545	51,311	25,012	10,329	86,652
431988	88 DOBSON TEL CO	4,131	1,334	383	34,367	12,731	6,445	53,543
431994	88 GRAND TEL CO INC	2,172	818	252	13,830	7,514	4,065	25,409
431995	88 HINTON TEL CO	3,172	1,162	203	23,519	10,662	3,742	37,923
432006	88 M-CLOUD TEL CO	5,806	1,759	371	69,918	16,226	10,092	96,236
432010	88 MID-AMERICA TEL INC	0	609	83	7,656	6,111	1,648	15,415
432011	88 OKLAHOMA ALLTEL, INC	10,129	3,412	1,857	100,967	34,550	23,567	159,083
432013	88 OKLAHOMA TEL & TEL	1,748	713	142	10,644	6,460	2,140	19,244
432014	88 OKLAHOMA WESTERN TEL	2,486	802	183	13,618	8,517	3,963	26,098
432016	88 PANHANDLE TEL COOP	4,404	1,305	1,157	21,894	14,532	14,271	50,697
432018	88 PIONEER TEL COOP INC	35,726	13,279	2,561	289,122	123,316	43,090	455,528
432020	88 POTTAWATOMIE TEL CO	1,749	626	85	10,148	6,875	2,220	19,243
432030	88 TOTAH TELEPHONE CO	1,675	825	176	6,839	8,592	3,158	18,590
432032	88 VALLIANT TEL CO	1,757	548	207	18,527	5,216	3,140	26,884
432034	88 WYANDOTTE TEL CO	359	135	84	1,712	1,313	1,143	4,168
440425	* CAMERON TEL CO TEXAS	1,005	358	70	4,013	3,413	1,012	8,437

TABLE 4.8

 1988 NONTIER 1 COMPANIES NETWORK USAGE DATA
 (MSG & SLU IN THOUSANDS)

F CODE	YR CARRIER	NO. LOOPS	ST MSGS	IS MSGS	LOC SLU	ST SLU	IS SLU	TOT SLU
442039	88 BIG BEND TEL CO INC	2,667	884	269	12,887	9,256	3,906	26,049
442040	88 BRAZORIA TEL CO	5,283	1,384	190	53,558	16,607	4,633	74,797
442041	88 BRAZOS TEL COOP INC	1,140	553	39	1,423	5,172	852	7,447
442046	88 CAP ROCK TEL CO INC	2,292	957	85	13,156	9,881	1,537	24,574
442052	88 CENTRAL TEXAS CO-OP	3,527	647	75	16,757	7,984	1,535	26,276
442059	88 COLORADO VALLEY TEL	4,875	1,322	162	27,940	15,641	3,677	47,258
442066	88 DELL TEL. CO-OP - TX	469	129	82	3,240	1,353	1,208	5,801
442068	* EASTEX TEL COOP INC	20,345	6,626	1,647	178,243	77,330	28,864	284,438
442070	88 ETEX TEL COOP INC	9,125	3,478	455	76,153	40,373	12,083	128,610
442071	88 FIVE AREA TEL CO-OP	1,477	349	99	9,111	4,149	1,808	15,069
442072	88 FORT BEND TEL CO	17,622	3,592	1,526	216,712	40,911	28,017	285,640
442076	88 GANADO TELEPHONE CO	1,302	489	39	7,375	5,098	934	13,407
442083	88 GUADALUPE VALLEY TEL	15,432	6,983	859	70,402	73,019	21,872	165,293
442086	* HILL COUNTRY CO-OP	9,118	3,055	492	57,572	38,270	12,709	108,551
442093	88 INDUSTRY TEL CO	1,586	405	31	4,821	4,213	701	9,735
442097	88 KERRVILLE TEL CO	15,433	3,306	938	114,642	43,594	18,477	176,713
442101	88 LAKE DALLAS TEL CO	4,279	2,952	476	13,540	25,277	7,628	46,446
442103	88 LA WARD TEL EXCHANGE	891	359	22	2,532	3,886	688	7,106
442104	88 LAKE LIVINGSTON TEL	946	198	31	2,184	2,211	684	5,080
442109	88 LUFKIN-CONROE TEL EX	63,799	19,415	5,219	690,370	224,966	102,081	1,017,416
442112	88 MID-PLAINS RURAL TEL	2,084	880	107	13,193	9,698	2,052	24,943
442116	88 MUENSTER TEL CORP-TX	2,571	1,032	155	13,801	10,196	2,239	26,237
442117	88 MUSTANG TEL CO	2,411	1,006	330	5,909	8,180	3,616	17,705
442121	88 ALLTEL TEXAS INC	2,747	718	151	20,065	8,310	3,022	31,398
442129	88 PEEPLES TELEPHONE CO	0	441	47	3,910	3,967	828	8,705
442130	88 PEOPLES TEL COOP -TX	6,869	2,297	275	44,906	24,149	5,474	74,529
442131	88 POKA-LAMBRO TEL COOP	3,295	1,286	127	22,271	12,812	2,361	37,444
442134	88 RIVIERA TEL CO INC	834	394	38	3,677	3,512	1,000	8,188
442135	* SOUTHWEST TEXAS TEL	2,549	1,142	153	16,024	14,130	3,676	33,830
442136	88 ROMAIN TELEPHONE CO	900	266	108	6,041	3,110	1,610	10,762
442147	88 SUGAR LAND TEL CO	28,913	2,195	3,412	438,080	26,632	58,025	522,737
442148	88 SWEENEY-OLD OCEAN	0	1,242	145	17,958	13,570	2,807	34,335
442151	* TAYLOR TEL CO-OP INC	5,282	1,589	153	38,636	19,676	6,919	65,231
442153	88 TEXAS-MIDLAND TEL	9,613	4,179	512	50,317	44,864	11,881	107,062
442155	88 TRI-COUNTY TEL - TX	784	316	29	5,280	3,006	669	8,956
442156	88 TRINITY VALLEY TEL	5,338	1,963	340	45,125	18,639	5,871	69,635
442159	* VALLEY TEL CO-OP -TX	4,491	2,574	202	31,620	25,244	4,864	61,728
442163	88 WATERWOOD COMM INC	382	130	22	0	1,495	503	1,999
442166	88 WEST TEXAS RURAL TEL	1,798	714	209	15,001	7,399	3,152	25,551
442168	88 WES-TEX TEL CO-OP	3,131	1,017	113	23,912	11,885	2,735	38,531
442170	88 XIT RURAL TEL CO-OP	1,033	307	196	3,843	3,966	3,635	11,443

TABLE 4.8

 1988 NONTIER 1 COMPANIES NETWORK USAGE DATA
 (MSG & SLU IN THOUSANDS)

F CODE	YR	CARRIER	NO. LOOPS	ST MSGS	IS MSGS	LOC SLU	ST SLU	IS SLU	TOT SLU
442262	88	ENMR TEL COOP-TX	774	129	60	6,177	1,386	829	8,392
452171	88	ARIZONA TELEPHONE CO	1,757	544	162	3,202	5,454	2,945	11,601
452172	88	CITIZENS UTILITIES	41,783	4,954	10,248	290,163	43,904	137,666	471,734
452173	88	PAPAGO TRIBAL UTIL.	1,494	161	28	3,360	1,446	654	5,461
452175	88	UNIVERSAL TEL OF SW	1,126	277	110	7,129	2,678	1,764	11,571
452176	88	VALLEY TEL COOP-AZ	1,873	590	323	9,562	5,856	6,035	21,452
452177	88	CONTEL OF WEST-AZ	24,541	5,460	2,809	150,135	53,914	50,286	254,334
452275	88	NAVAJO COMMUN-AZ	7,831	2,668	2,195	42,374	26,388	27,136	95,899
452302	88	CONTEL CALIF - AZ	5,254	828	1,118	29,765	9,149	14,311	53,224
461835	88	SUNFLOWER TEL - CO	297	122	50	1,422	1,150	866	3,438
462181	88	BIJOU TEL COOP ASSOC	981	384	73	4,731	3,799	1,670	10,201
462182	88	BLANCA TEL CO	466	143	106	2,062	1,214	1,131	4,407
462184	88	DELTA COUNTY TEL CO	5,980	833	484	56,340	10,474	11,673	78,487
462185	88	EAGLE TELECOMMUN INC	5,435	2,092	852	27,039	17,362	11,958	56,359
462186	88	EASTERN SLOPE RURAL	3,840	1,388	315	22,209	14,284	5,590	42,083
462187	88	EL PASO COUNTY TEL	1,943	887	159	12,242	9,104	3,742	25,088
462188	88	FARMERS TEL CO - CO	284	104	36	1,268	846	406	2,520
462190	88	HAXTUN TEL CO	1,218	410	115	7,484	4,388	2,093	13,965
462192	88	BIG SANDY TELCOMM	661	233	36	3,480	2,522	922	6,924
462193	88	NUCLA-NATURITA TEL	1,069	224	98	5,877	2,347	1,921	10,145
462194	88	NUNN TEL CO	264	96	28	1,281	853	552	2,687
462196	88	PEETZ COOP TEL CO	186	47	31	1,338	587	507	2,431
462199	88	PLAINS COOP TEL ASSN	1,352	510	124	8,185	4,976	2,043	15,204
462203	88	RYE TELEPHONE CO	1,277	388	171	7,977	3,684	2,634	14,295
462204	88	COLUMBINE TEL CO	626	189	71	2,431	1,516	1,622	5,569
462207	88	STRASBURG TEL CO	897	359	64	3,945	3,332	1,375	8,652
462208	88	UNIVERSAL TEL CO -CO	3,879	559	623	34,314	5,924	10,839	51,076
462209	88	WIGGINS TEL ASSOC	1,102	452	74	5,464	4,474	1,352	11,290
472177	88	CONTEL OF WEST-ID	12,800	3,295	1,445	71,542	33,338	25,616	130,496
472213	88	ALBION TEL CO INC	921	271	149	6,361	2,496	2,024	10,880
472215	88	CAMBRIDGE TEL CO	826	190	66	4,072	2,161	1,195	7,429
472218	88	CUSTER TEL COOP	1,449	267	171	10,287	2,998	3,233	16,518
472223	88	GEM STATE UTIL-ID	918	374	125	6,545	3,556	1,731	11,832
472225	*	CENTURY TEL OF IDAHO	2,509	354	481	23,905	4,179	8,436	36,520
472226	88	MIDVALE TEL EXCH INC	254	86	32	310	790	401	1,502
472231	88	PROJECT MUTUAL TEL	6,318	867	750	78,307	8,873	11,001	98,181
472232	88	ROCKLAND TEL CO INC	328	110	33	2,358	959	522	3,839
472233	88	RURAL TEL CO - ID	277	50	16	438	552	307	1,298
472234	88	TROY TELEPHONE CO	648	224	105	3,091	2,029	1,644	6,765
472295	88	SILVER STAR TEL- ID	314	87	42	1,480	1,007	786	3,273
472423	88	INLAND TEL-ID	251	73	26	887	833	402	2,122

TABLE 4.8

 1988 NONTIER 1 COMPANIES NETWORK USAGE DATA
 (MSG & SLU IN THOUSANDS)

F CODE	YR	CARRIER	NO. LOOPS	ST MSGS	IS MSGS	LOC SLU	ST SLU	IS SLU	TOT SLU
482235	88	BLACKFOOT TEL COOP	4,732	1,916	532	25,133	18,303	9,847	53,283
482241	*	HOT SPRINGS TEL CO	0	120	49	4,452	1,216	827	6,495
482242	88	INTERBEL TEL COOP	866	142	94	6,290	1,275	1,843	9,408
482244	88	LINCOLN TEL CO INC	719	187	61	2,815	1,966	978	5,758
482246	88	MID-RIVERS TEL COOP	6,049	1,622	538	48,282	18,896	9,349	76,527
482247	88	NEMONT TEL COOP-MT	2,301	768	298	9,572	6,373	3,726	19,671
482248	88	NORTHERN TEL COOP	1,385	561	195	6,761	5,681	3,342	15,783
482249	88	NW TEL SYSTEMS, INC.	30,007	9,706	5,714	137,413	74,765	55,767	267,944
482250	88	PROJECT TEL CO	2,584	847	282	11,005	9,109	5,149	25,263
482251	88	RANGE TEL COOP-MT	2,767	828	387	18,886	8,684	5,950	33,520
482254	88	SOUTHERN MONTANA TEL	609	213	70	2,647	2,292	1,534	6,473
482255	88	3-RIVERS TEL COOP	8,452	2,199	803	48,315	25,028	13,774	87,117
482257	88	TRIANGLE TEL COOP	8,287	2,512	666	57,901	27,808	11,787	97,496
482258	88	VALLEY RURAL TEL	830	215	49	3,585	2,329	915	6,829
492066	88	DELL TEL CO-OP - NM	250	39	34	1,370	451	550	2,372
492176	88	VALLEY TEL COOP - NM	1,164	242	234	7,153	2,293	3,797	13,243
492177	88	CONTEL OF WEST - NM	27,299	6,678	3,030	161,383	63,843	50,576	275,802
492259	88	BACA VALLEY TEL CO	563	135	79	3,342	1,425	1,270	6,038
492262	88	ENMR TEL COOP INC-NM	9,153	1,473	1,100	65,093	15,360	16,143	96,596
492263	88	LA JICARITA RURAL	1,396	315	86	16,586	3,281	1,797	21,664
492264	*	LEACO RURAL TEL COOP	787	329	171	4,740	2,653	2,227	9,620
492268	88	WESTERN NEW MEXICO	4,115	1,067	680	25,447	10,435	8,682	44,564
492270	88	PENASCO VALLEY TEL	1,973	555	209	9,679	5,462	4,031	19,172
492272	88	ROOSEVELT CNTY RURAL	1,424	326	176	13,744	3,732	3,226	20,701
492274	88	UNIVERSAL TEL OF SW	3,388	983	343	19,214	8,687	6,390	34,292
492275	88	NAVAJO COMMUN - NM	3,257	1,153	774	13,684	8,655	9,246	31,585
502177	88	CONTEL THE WEST - UT	14,415	3,221	2,599	130,762	30,672	33,175	194,608
502275	88	NAVAJO COMMUN - UT	304	61	150	821	571	1,431	2,823
502277	88	CENTRAL UTAH TEL INC	739	198	44	7,079	2,152	882	10,112
502278	88	EMERY COUNTY FARMERS	2,487	686	203	28,271	7,086	3,238	38,595
502280	88	KAMAS-WOODLAND TEL	1,572	497	87	7,595	4,802	1,801	14,198
502284	88	BEEHIVE TEL CO - UT	494	131	48	8,621	1,254	688	10,564
502286	88	SOUTH CENTRAL UTAH	2,734	487	296	19,181	4,711	4,334	28,226
502287	88	UINTAH BASIN TEL	2,204	589	171	17,580	6,463	3,759	27,801
502288	88	UT-WY TELECOM	448	83	78	3,581	934	871	5,386
512251	88	RANGE TEL COOP - WY	1,393	298	280	11,759	3,404	3,946	19,109
512290	88	UTAH-WYOMING TELECOM	293	32	71	1,442	307	844	2,593
512291	88	DUBOIS TEL EXCHANGE	1,545	284	267	6,600	2,728	4,024	13,351
512294	*	MEDICINE BOW TEL CO	0	87	35	3,218	879	598	4,695
512295	88	SILVER STAR TEL-WY	1,016	190	227	5,309	1,336	2,842	9,487
512297	88	UNION TELEPHONE CO	2,807	550	796	24,826	5,681	10,030	40,536

TABLE 4.8

 1988 NONTIER 1 COMPANIES NETWORK USAGE DATA
 (MSG & SLU IN THOUSANDS)

FCODE	YR CARRIER	NO. LOOPS	ST MSGS	IS MSGS	LOC SLU	ST SLU	IS SLU	TOT SLU
512299	88 TEL. UTIL. OF WY.	2,944	566	593	14,791	5,962	7,593	28,346
522404	* ASOTIN TEL - WA	824	55	87	8,629	1,252	1,500	11,380
522408	88 TEL UTIL OF WA INC	76,475	30,157	9,954	520,588	283,484	101,228	905,301
522410	88 COWICHE TELEPHONE CO	1,472	664	97	6,856	5,961	1,494	14,312
522412	88 ELLENSBURG TEL CO	14,454	2,979	1,901	115,983	35,842	27,215	179,040
522417	* HAT ISLAND TEL CO	51	9	1	0	94	13	106
522419	88 HOOD CANAL TEL CO	719	270	52	1,498	2,434	953	4,885
522423	88 INLAND TEL CO -WA	1,446	315	126	8,245	3,154	1,905	13,304
522426	88 KALAMA TEL CO	1,624	726	342	7,907	5,973	2,772	16,652
522427	88 LEWIS RIVER TEL CO	2,422	1,074	460	11,053	9,931	6,503	27,488
522431	88 MASHELL TEL CO INC	1,878	909	141	7,687	8,857	2,574	19,117
522436	88 PENINSULA TELECOMM	4,400	2,125	653	54,002	24,352	10,527	88,880
522437	88 PIONEER TEL CO	743	224	60	4,042	2,298	874	7,215
522442	88 ST JOHN TEL CO	555	194	57	2,114	2,167	785	5,065
522446	88 TENINO TELEPHONE CO	2,127	1,048	162	10,987	9,206	3,046	23,239
522447	88 TOLEDO TELEPHONE CO	1,342	545	167	8,124	4,704	2,640	15,469
522449	88 CONTEL OF THE NW-WA	49,912	16,106	6,181	393,547	152,409	82,942	628,898
522451	88 WESTERN WAHKIAKUM	868	217	109	5,784	2,568	1,476	9,828
522452	88 WHIDBEY TEL CO.	6,973	1,924	887	31,169	20,110	10,184	61,463
522453	88 YELM TELEPHONE CO	5,023	2,219	500	38,357	20,724	9,687	68,768
532226	88 MIDVALE TEL EXCH -OR	171	48	22	781	450	334	1,566
532304	88 C P NATIONAL CORP-OR	9,920	4,014	1,003	51,982	33,980	17,854	103,817
532359	88 BEAVER CREEK COOP	3,137	862	221	39,396	10,052	4,423	53,871
532361	88 TEL UTIL OF OREGON	36,120	13,643	4,787	215,164	130,478	51,291	396,934
532362	88 CANBY TEL ASSN	7,630	3,277	722	61,000	29,485	10,180	100,665
532363	88 CLEAR CREEK MUTUAL	2,715	706	234	33,872	7,378	4,392	45,642
532364	88 COLTON TEL CO	971	386	86	7,043	4,034	1,659	12,736
532371	88 CASCADE UTIL INC	7,069	2,023	666	64,579	20,067	11,113	95,759
532375	88 RTI/HALSEY TEL CO	618	559	194	2,639	3,534	2,037	8,210
532376	88 HELIX TEL CO.	239	90	22	440	892	319	1,651
532377	88 HOME TELEPHONE CO	536	145	36	2,306	1,721	597	4,624
532378	88 TRANS-CASCADES TEL	88	30	8	420	420	163	1,003
532383	88 MOLALLA TEL CO.	4,313	1,890	339	37,248	16,935	5,422	59,605
532385	88 MONROE TELEPHONE CO.	686	323	46	2,951	3,037	900	6,887
532387	88 NEHALEM TEL & TEL	1,858	516	124	5,655	4,882	1,982	12,519
532388	88 NORTH STATE TEL CO.	385	154	38	1,542	1,489	714	3,744
532389	88 OREGON TEL CORP	1,336	594	147	6,485	5,921	2,598	15,004
532392	88 PINE TEL SYSTEM INC.	665	131	75	3,283	1,468	1,411	6,162
532393	88 PIONEER TEL COOP	10,156	2,665	759	59,302	26,924	15,124	101,350
532397	88 SCIO MUTUAL TEL ASSN	1,302	552	107	8,376	5,382	2,086	15,843
532404	* ASOTIN TEL - OR	88	20	15	279	262	221	762

TABLE 4.8

 1988 NONTIER 1 COMPANIES NETWORK USAGE DATA
 (MSG & SLU IN THOUSANDS)

FCODE	YR CARRIER	NO. LOOPS	ST MSGS.	IS MSGS	LOC SLU	ST SLU	IS SLU	TOT SLU
532449	88 CONTEL OF THE NW- OR	21,365	7,972	2,156	168,648	77,373	36,882	282,902
532456	88 MALHEUR HOME TEL CO	10,606	968	2,592	108,628	13,777	34,830	157,235
542301	88 CALAVERAS TEL CO	1,679	786	78	5,819	7,580	1,455	14,854
542304	88 C P NATIONAL CORP-CA	11,663	4,720	1,229	64,835	44,913	14,673	124,421
542308	88 CITIZENS UTIL OF CA	57,067	16,394	4,594	576,962	183,661	72,481	833,104
542311	88 CALIF-OREGON TEL CO	2,080	367	654	10,280	6,320	6,159	22,759
542313	88 DUCOR TELEPHONE CO	591	297	19	2,258	2,995	411	5,664
542315	88 EVANS TEL CO.	8,065	4,998	665	50,880	40,596	6,274	97,750
542318	* FORESTHILL TEL CO.	1,849	885	65	6,954	8,846	1,841	17,641
542321	* HAPPY VALLEY TEL CO	2,485	500	108	23,043	6,699	2,062	31,804
542322	* HORNITOS TEL CO	453	235	20	424	2,004	308	2,736
542324	88 KERMAN TELEPHONE CO	4,351	1,063	163	48,055	13,388	3,385	64,828
542332	88 THE PONDEROSA TEL CO	5,617	2,473	199	25,500	23,683	3,881	53,064
542334	88 ROSEVILLE TEL CO	64,937	20,591	5,322	754,711	171,264	68,633	994,608
542338	* SIERRA TELEPHONE CO	11,255	4,297	547	80,356	42,988	9,854	133,197
542339	88 THE SISKIYOU TEL CO	3,221	1,344	382	15,279	14,860	4,530	34,669
542342	88 TUOLUMNE TEL CO	4,256	2,230	188	19,636	21,677	4,082	45,396
542343	88 THE VOLCANO TEL CO	7,559	2,727	442	30,399	30,618	6,137	67,154
542346	88 PINNACLES TEL CO	120	204	17	215	1,685	323	2,223
552223	88 GEM STATE UTIL-NV	337	60	89	1,637	606	937	3,180
552233	88 RURAL TEL CO - NV	360	42	17	231	386	358	975
552284	88 BEEHIVE TEL CO - NV	31	40	32	419	107	264	789
552302	88 CONTEL OF CALIF-NV	19,323	4,197	6,859	107,008	37,095	75,859	219,962
552304	88 CP NATIONAL-NV	11,501	2,676	4,189	82,610	26,494	48,112	157,217
552349	88 CHURCHILL COUNTY TEL	8,426	1,362	1,667	66,937	11,328	26,006	104,271
552351	88 LINCOLN CTY TEL SYS	1,615	403	234	7,591	4,268	3,659	15,518
552353	88 MOAPA VALLEY TEL CO.	2,047	413	386	15,314	5,313	5,634	26,261
552354	88 NEVADA TEL-TELEGRAPH	2,754	640	701	13,827	5,491	8,858	28,177
552356	88 RIO VIRGIN TEL CO	1,103	186	579	6,687	1,410	5,262	13,359
613000	88 ANCHORAGE TEL UTIL	125,239	12,314	14,085	1,822,367	160,491	336,277	2,319,135
613001	88 ARCTIC SLOPE TEL	1,342	823	423	8,259	11,048	8,795	28,102
613003	88 BRISTOL BAY TEL COOP	1,093	213	181	6,021	3,200	2,795	12,017
613004	* BUSH-TELL INC.	539	264	29	3,194	2,330	509	6,032
613006	* COPPER VALLEY TEL	3,211	744	452	24,481	8,287	8,368	41,135
613007	88 CORDOVA TEL COOP	1,464	270	248	10,297	2,876	4,501	17,675
613008	88 FAIRBANKS MUNICIPAL	28,668	2,909	3,165	336,580	36,681	68,451	441,712
613009	88 GTE ALASKA INC.	13,579	3,015	1,750	89,551	37,478	31,643	158,672
613010	88 GLACIER STATE TEL CO	30,172	5,123	3,800	298,286	54,594	81,970	434,850
613011	88 INTERIOR TEL CO INC	2,624	794	762	12,525	8,101	11,315	31,940
613012	88 JUNEAU & DOUGLAS TEL	16,083	1,907	2,014	151,378	25,648	42,514	219,539
613013	88 KETCHIKAN PUBLIC UT	7,189	855	1,546	25,183	855	1,546	27,583

TABLE 4.8

 1988 NONTIER 1 COMPANIES NETWORK USAGE DATA
 (MSG & SLU IN THOUSANDS)

FCODE	YR	CARRIER	NO. LOOPS	ST MSGS	IS MSGS	LOC SLU	ST SLU	IS SLU	TOT SLU
613015	88	MATANUSKA TEL ASSOC	26,765	5,715	1,903	253,473	62,355	59,614	375,442
613016	*	MUKLUK TEL CO INC	652	284	40	2,694	2,798	756	6,248
613018	88	NUSHAGAK TEL COOP	1,355	418	183	10,683	4,500	3,381	18,564
613019	*	OTZ TEL COOPERATIVE	1,662	780	179	11,617	8,403	2,995	23,015
613020	88	SITKA TELEPHONE CO	7,620	2,315	1,567	52,531	23,162	25,591	101,285
613022	88	TEL UTIL OF ALASKA	2,417	213	453	21,283	1,967	12,167	35,418
613023	88	UNITED UTILITIES INC	3,195	1,303	169	20,873	12,846	3,511	37,230
613025	88	YUKON TEL CO INC	365	159	33	1,610	1,598	664	3,871
633200	*	PUERTO RICO COMM	98,857	28,376	3,636	1,154,159	288,813	87,469	1,530,440
643300	88	VIRGIN ISLANDS TEL	45,130	0	12,288	902,981	0	173,158	1,076,139
598		TOTAL	5292686	1396269	604543	49644291	14236655	9761661	73642618

* - COMPANIES WHO NECA COMPUTED DATA FOR

TABLE 4.9

1988 NONTIER 1 COMPANIES NETWORK USAGE DATA

FCODE	YEAR	CARRIER	DEM MINUTES IN THOUSANDS				FACTORS			
			LOC DEM	ST DEM	IS DEM	TOT DEM	IS SLU	IS SPF	IS DEM	TR DEM
100003	88	LINCOLNVILLE TEL CO	6,941	2,755	2,472	12,169	0.2032	0.5345	0.2032	0.5855
100004	88	CHINA TEL CORP	9,069	8,740	3,759	21,569	0.1740	0.3167	0.1743	0.3288
100010 *		HAMPDEN TEL CO	20,899	10,392	3,066	34,357	0.1273	0.2784	0.1294	0.3006
100011	88	HARTLAND & ST ALBANS	14,361	7,423	3,458	25,242	0.1370	0.2916	0.1370	0.2920
100014	88	CONTEL OF MAINE	210,401	100,912	68,635	379,948	0.1713	0.3297	0.1806	0.3195
100024	88	SOMERSET TEL CO	38,090	23,235	12,171	73,495	0.1702	0.3040	0.1656	0.2857
100025	88	STANDISH TEL CO	21,964	19,595	9,959	51,517	0.1933	0.4295	0.1933	0.4590
100027	88	UNION RIVER TEL CO	3,216	2,711	1,369	7,296	0.1875	0.3881	0.1876	0.3115
100029	88	UNITY TEL CO., INC.	17,352	9,683	4,479	31,513	0.1381	0.3149	0.1421	0.3123
100031	88	WARREN TEL CO	4,477	5,742	1,683	11,901	0.1545	0.3145	0.1414	0.2993
100034	88	WEST PENOBSCOT TEL	7,803	6,112	1,792	15,706	0.1148	0.2532	0.1141	0.2303
120038	88	BRETTON WOODS TEL CO	392	615	701	1,708	0.4158	0.6250	0.4106	0.6739
120039	88	GRANITE STATE TEL	35,042	16,364	17,584	68,990	0.2549	0.3894	0.2549	0.4626
120040 *		CHICHESTER TEL CO	11,270	3,118	2,137	16,525	0.1273	0.3063	0.1294	0.3006
120041	88	CONTEL OF NH	54,104	22,607	29,071	105,782	0.2727	0.5042	0.2748	0.5862
120045	88	KEARSARGE TEL CO	21,765	17,388	15,135	54,287	0.2788	0.5455	0.2788	0.6201
120046	88	MERIDEN TEL CO	1,719	948	1,857	4,524	0.4108	0.6800	0.4105	0.6697
120047	88	MERRIMAK COUNTY TEL	48,078	21,275	17,849	87,203	0.2017	0.4557	0.2047	0.5115
120049	88	UNION TEL CO	17,920	11,666	11,734	41,320	0.2838	0.6900	0.2840	0.6918
120050	88	WILTON TEL CO - NH	16,332	5,556	12,280	34,169	0.3223	0.6357	0.3594	0.6127
140058	88	LUDLOW TEL CO	11,835	6,374	7,772	25,981	0.2995	0.4142	0.2992	0.5099
140061	88	NORTHFIELD TEL CO	14,502	6,750	8,957	30,210	0.2965	0.5643	0.2965	0.6434
140062	88	PERKINSVILLE TEL CO	2,101	2,698	1,853	6,652	0.2786	0.4340	0.2786	0.4994
140068	88	TOPSHAM TEL CO	7,715	1,976	2,164	11,856	0.1825	0.3423	0.1825	0.3745
140069	88	WAITSFIELD/FAYSTON	16,249	7,327	13,585	37,161	0.3656	0.6000	0.3656	0.7451
140070	88	CONTEL OF VERMONT	186,525	71,885	86,479	344,889	0.2406	0.4487	0.2507	0.4951
150072	88	AU SABLE VALLEY TEL	27,132	17,433	8,457	53,022	0.1595	0.2996	0.1595	0.2561
150077	88	CHAMPLAIN TEL CO	31,371	9,672	11,591	52,634	0.2037	0.4315	0.2202	0.4792
150078	88	CHAUTAUQUA & ERIE	68,995	21,664	18,453	109,112	0.1691	0.3659	0.1691	0.3784
150081	88	CITIZENS HAMMOND NY	4,357	3,609	805	8,771	0.0918	0.2337	0.0918	0.1855
150082	88	CLYMER TEL CO	6,273	2,254	2,856	11,383	0.2486	0.4434	0.2509	0.4444
150084	88	TACONIC TEL CORP	130,028	56,834	38,335	225,197	0.1702	0.3284	0.1702	0.3316
150085	88	CROWN POINT TEL CORP	5,704	2,545	1,040	9,288	0.1119	0.2610	0.1119	0.2431
150091	88	DUNKIRK & FREDONIA	82,572	21,102	9,857	113,531	0.0865	0.2424	0.0868	0.2127
150092	88	EDWARDS TEL CO	9,373	6,799	1,580	17,752	0.0890	0.2067	0.0890	0.1496
150093	88	EMPIRE TEL CORP	26,928	20,978	9,063	56,969	0.1591	0.2584	0.1591	0.2469
150097	88	GERMANTOWN TEL CO	11,538	8,553	3,046	23,137	0.1316	0.2743	0.1316	0.2164
150099	88	HANCOCK TEL CO	7,981	3,726	2,669	14,376	0.1853	0.2854	0.1857	0.3120
150100	88	HIGHLAND TEL CO	472,242	241,814	168,590	882,646	0.1910	0.2842	0.1910	0.2909
150105	88	MIDDLEBURGH TEL CO	25,808	18,456	6,023	50,287	0.1198	0.2216	0.1198	0.1767
150106	88	ALLTEL NY-FULTON	523,568	73,085	59,715	656,368	0.0901	0.2080	0.0910	0.1576

TABLE 4.9

1988 NONTIER 1 COMPANIES NETWORK USAGE DATA

FCODE	YEAR	CARRIER	DEM MINUTES IN THOUSANDS				FACTORS			
			LOC DEM	ST DEM	IS DEM	TOT DEM	IS SLU	IS SPF	IS DEM	TR DEM
150108	88	NICHOLVILLE TEL CO	11,699	5,090	2,016	18,805	0.1072	0.2194	0.1072	0.1877
150109	88	ALLTEL NY-JAMESTOWN	455,918	70,777	95,020	621,715	0.1501	0.2495	0.1528	0.2352
150110	88	OGDEN TEL CO	230,220	24,659	23,390	278,270	0.0841	0.2090	0.0841	0.1510
150113	88	ALLTEL NY-RED JACKET	19,020	8,042	2,259	29,321	0.0770	0.2246	0.0770	0.1626
150116 *		PATTERSONVILLE TEL	9,804	2,712	1,860	14,376	0.1273	0.3063	0.1294	0.3006
150119	88	RED HOOK TEL CO	98,653	48,990	25,275	172,918	0.1456	0.2794	0.1462	0.2706
150122	88	SENECA-GORHAM TEL	42,915	33,894	10,132	86,941	0.1165	0.2199	0.1165	0.2273
150128	88	SYLVAN LAKE TEL CO	182,619	65,409	40,775	288,803	0.1412	0.2740	0.1412	0.2725
150133	88	VERNON TEL CO	16,747	6,813	3,000	26,559	0.1129	0.2559	0.1129	0.2346
150135	88	WARWICK VALLEY-NY	71,058	44,473	30,491	146,021	0.2092	0.3362	0.2088	0.3737
150136	88	WESTERN COUNTIES TEL	143,004	68,590	38,212	249,806	0.1523	0.2443	0.1530	0.2271
160135	88	WARWICK VALLEY-NJ	34,215	46,587	17,925	98,727	0.1816	0.3362	0.1816	0.3656
170170	88	CONTEL OF PA	457,487	157,706	80,913	696,105	0.1065	0.2574	0.1162	0.2319
170177 *		LACKAWAXEN TEL CO	6,374	4,333	5,669	16,376	0.1273	0.5960	0.1294	0.3006
170183	88	MAHANAY & MAHANTONGO	21,927	10,193	2,116	34,236	0.0622	0.1989	0.0618	0.1590
170192	88	NORTH PENN TEL CO	24,432	8,369	9,260	42,061	0.2194	0.3057	0.2202	0.3653
170194	88	OSWAYO RIVER TEL CO	11,501	2,971	4,600	19,072	0.2412	0.3881	0.2412	0.4590
170201	88	QUAKER STATE TEL CO	228,155	65,579	61,264	354,998	0.1684	0.2911	0.1726	0.2926
170206	88	SUGAR VALLEY TEL CO	5,216	2,611	1,359	9,186	0.1488	0.2569	0.1480	0.2547
190217	88	AMELIA TEL CORP	28,492	11,352	4,706	44,550	0.1078	0.1953	0.1056	0.1558
190249	88	ROANOKE & BOTETOURT	77,124	24,697	11,960	113,782	0.1036	0.2382	0.1051	0.2257
200259	88	HARDY TEL CO	22,928	1,451	3,450	27,829	0.1240	0.2516	0.1240	0.2797
200270	88	MOUNTAIN STATE TEL	235,200	41,955	34,618	311,773	0.1098	0.2308	0.1110	0.2124
200278	88	CONTEL OF WV	303,190	63,785	42,220	409,195	0.1028	0.2340	0.1032	0.2132
210291	88	FLORALA TEL CO	17,438	2,757	2,175	22,370	0.0972	0.2889	0.0972	0.2377
210318	88	SOUTHLAND TEL-FL	42,686	3,554	4,602	50,841	0.0905	0.2721	0.0905	0.2443
210329	88	GULF TEL CO	84,203	21,142	14,813	120,157	0.1210	0.2185	0.1233	0.2117
210330	88	VISTA-UNITED TELCOM	92,193	27,187	66,916	186,296	0.3424	0.5221	0.3592	0.6842
210331	88	INDIANTOWN SYSTEM	11,083	12,633	5,710	29,425	0.1985	0.3671	0.1941	0.3952
210335	88	NORTHEAST FLORIDA	44,575	15,433	10,427	70,435	0.1480	0.2207	0.1480	0.2173
210336	88	ALLTEL FLORIDA INC.	487,879	123,842	75,944	687,665	0.1106	0.2554	0.1104	0.2156
210338	88	QUINCY TEL CO-FL DIV	116,938	24,796	17,307	159,041	0.1035	0.2157	0.1088	0.1960
210339	88	ST JOSEPH TEL & TEL	172,216	46,811	31,796	250,823	0.1242	0.3262	0.1268	0.2991
220281	88	CONTEL OF SOUTH - GA	612,983	157,677	89,384	860,043	0.1019	0.2250	0.1039	0.1852
220338	88	QUINCY TEL CO-GA DIV	10,229	784	1,917	12,930	0.1562	0.3632	0.1482	0.3243
220344	88	ALMA TEL CO	56,991	13,507	5,889	76,387	0.0772	0.1986	0.0771	0.1584
220347	88	BRANTLEY TEL CO	30,105	8,233	3,520	41,858	0.0821	0.2087	0.0841	0.1768
220351	88	CAMDEN TEL & TEL CO	103,085	17,494	37,639	158,218	0.2232	0.4639	0.2379	0.5421
220355	88	CITIZENS TEL CO - GA	45,678	10,016	4,473	60,167	0.0735	0.2166	0.0743	0.1585
220356	88	COASTAL UTILITIES	182,578	52,301	83,375	318,254	0.2612	0.4474	0.2620	0.5122
220358	88	DARIEN TEL CO	31,419	9,609	5,076	46,103	0.1107	0.2603	0.1101	0.2459

TABLE 4.9

1988 NONTIER 1 COMPANIES NETWORK USAGE DATA

FCODE	YEAR	CARRIER	DEM MINUTES IN THOUSANDS				FACTORS			
			LOC DEM	ST DEM	IS DEM	TOT DEM	IS SLU	IS SPF	IS DEM	TR DEM
220360	88	ELLIJAY TEL CO	61,173	16,813	6,448	84,434	0.0765	0.1962	0.0764	0.1526
220371	*	INTERSTATE TEL CO	151,332	18,930	22,287	192,549	0.1273	0.2486	0.1294	0.3006
220377	88	PINELAND TEL COOP	94,335	22,481	9,224	126,040	0.0729	0.1888	0.0732	0.1354
220379	88	PLANT TEL. CO.	73,363	20,457	8,061	101,881	0.0789	0.1991	0.0791	0.1621
220381	88	PUBLIC SERVICE TEL	90,172	22,776	9,440	122,388	0.0776	0.1934	0.0771	0.1377
220386	88	STANDARD TEL CO	386,437	114,230	60,211	560,878	0.1074	0.2099	0.1074	0.1928
220392	88	WAVERLY HALL TEL CO	5,366	3,328	1,248	9,943	0.1256	0.2420	0.1256	0.1792
220394	*	WILKES TEL & ELC CO	102,020	19,440	13,122	134,583	0.1273	0.2059	0.1294	0.3006
230468	88	ATLANTIC MEMBERSHIP	157,582	31,755	25,596	214,933	0.1183	0.2309	0.1191	0.2167
230469	88	BARNARDSVILLE TEL CO	11,055	1,342	1,218	13,616	0.0918	0.2174	0.0895	0.1532
230473	88	CITIZENS TEL CO	144,870	20,699	29,488	195,057	0.1485	0.2489	0.1512	0.2447
230474	88	CONCORD TEL CO	870,839	130,457	98,528	1,099,824	0.0854	0.1841	0.0896	0.1341
230476	88	ALLTEL CAROLINA-NO	1,140,447	196,562	183,493	1,520,502	0.1208	0.2196	0.1207	0.1820
230481	88	HEINS TEL CO	300,551	52,324	46,798	399,672	0.1171	0.2213	0.1171	0.1923
230502	88	STAR MEMBERSHIP CORP	148,616	32,636	13,618	194,870	0.0700	0.1703	0.0699	0.1747
230509	88	CONTEL OF NC	981,618	153,065	177,587	1,312,271	0.1339	0.2736	0.1353	0.2555
230510	88	WILKES MEMBERSHIP	112,683	10,286	5,549	128,518	0.0416	0.1465	0.0432	0.0840
240512	88	BLUFFTON TEL. CO.	9,648	7,763	7,091	24,503	0.2920	0.4861	0.2894	0.5841
240520	88	FARMERS TEL COOP	548,781	76,094	80,684	705,558	0.1138	0.2683	0.1144	0.2447
240523	88	HARGRAY TEL CO	202,751	40,156	127,862	370,769	0.3302	0.5269	0.3449	0.5841
240526	88	CONTEL OF SC	181,710	24,822	32,837	239,369	0.1355	0.2731	0.1372	0.2731
240528	*	HORRY TEL COOP	453,263	87,073	125,287	665,622	0.1273	0.2782	0.1294	0.2877
240533	88	MCCLELLANVILLE TEL	9,204	4,209	2,153	15,566	0.1383	0.2946	0.1383	0.1447
240539	88	POND BRANCH TEL CO	77,611	19,777	9,699	107,087	0.0907	0.2134	0.0906	0.1769
240551	88	WILLISTON TEL CO	38,256	9,974	5,054	53,284	0.0942	0.2214	0.0949	0.1890
250281	88	CONTEL OF THE SOUTH	1,115,732	184,904	119,518	1,420,153	0.0811	0.2285	0.0842	0.1814
250284	*	BUTLER TEL CO	49,285	6,921	7,461	63,668	0.1273	0.2775	0.1294	0.3006
250297	88	GROVE HILL TEL CORP	17,014	6,656	2,279	25,949	0.0910	0.2264	0.0878	0.1869
250298	88	GULF TEL CO - AL	220,486	32,006	51,887	304,379	0.1675	0.3332	0.1705	0.3529
250300	88	HOPPER TEL. CO INC	24,792	8,073	2,469	35,334	0.0699	0.1797	0.0699	0.1260
250304	88	MILLRY TEL CO	52,354	10,685	7,342	70,381	0.1043	0.3006	0.1043	0.2749
250306	88	MONROEVILLE TEL CO	163,741	24,678	26,216	214,635	0.1077	0.2443	0.1221	0.2440
250314	88	PEOPLES TEL CO	126,632	17,404	16,443	160,479	0.1028	0.2145	0.1025	0.2015
250316	88	RAGLAND TEL CO	9,691	3,197	991	13,879	0.0714	0.2117	0.0714	0.1522
250318	88	SOUTHLAND TEL CO-AL	152,422	24,897	18,978	196,298	0.0965	0.2604	0.0967	0.2230
250461	88	SOUTHEAST MS TEL CO	33,462	6,971	5,133	45,566	0.1145	0.2963	0.1126	0.3813
260410	88	CONTEL OF KENTUCKY	830,076	125,744	110,509	1,066,328	0.1021	0.2001	0.1036	0.1673
270422	88	ATHENS TEL CO	1,871	1,362	495	3,727	0.1328	0.2819	0.1328	0.2247
270423	88	CENTRAL LOUISIANA	160,119	35,434	22,595	218,148	0.1036	0.2037	0.1036	0.1710
270424	88	COASTAL TEL & ELECTR	100,122	28,147	12,046	140,315	0.0858	0.1889	0.0858	0.1521
270425	88	CAMERON TEL CO - LA	49,108	18,489	13,857	81,454	0.1613	0.3223	0.1613	0.2743

TABLE 4.9

1988 NONTIER 1 COMPANIES NETWORK USAGE DATA

FCODE	YEAR	CARRIER	DEM MINUTES IN THOUSANDS				FACTORS			
			LOC DEM	ST DEM	IS DEM	TOT DEM	IS SLU	IS SPF	IS DEM	TR DEM
270429	88	EAST ASCENSION TEL	295,622	59,114	39,242	393,979	0.0996	0.2052	0.0996	0.1564
270430 *		ELIZABETH TEL CO	26,228	4,827	3,249	34,303	0.1273	0.2134	0.1294	0.3006
270431	88	CADDOAN TEL CO	95,124	18,907	19,414	133,445	0.1455	0.2815	0.1455	0.2798
270433	88	LAFOURCHE TEL CO	116,265	21,254	10,964	148,483	0.0738	0.2492	0.0738	0.1953
270434	88	EVANGELINE TEL CO	150,666	36,286	18,468	205,420	0.0907	0.1782	0.0899	0.1419
270435	88	NORTHEAST LOUISIANA	9,469	3,942	1,604	15,015	0.1069	0.2711	0.1069	0.2246
270436	88	CENTURY NORTH LA	8,131	2,738	2,102	12,971	0.1621	0.2870	0.1621	0.2804
270437	88	PLAIN DEALING TEL CO	17,579	4,036	3,119	24,733	0.1261	0.2118	0.1261	0.2103
270440	88	CENTURY TEL CO	23,243	7,483	3,307	34,033	0.0975	0.1790	0.0972	0.1547
270442	88	LOUISIANA WESTERN	16,951	5,257	3,195	25,402	0.1260	0.2279	0.1258	0.2166
270443	88	UTC OF LOUISIANA	27,842	7,460	4,673	39,974	0.1169	0.2455	0.1169	0.2228
280446	88	BAY SPRINGS TEL CO	112,843	19,415	10,218	142,476	0.0717	0.2166	0.0717	0.1738
280452	88	DELTA TEL CO	35,388	5,349	3,912	44,649	0.0876	0.2621	0.0876	0.2111
280454	88	FRANKLIN TEL CO - MS	64,386	13,580	8,565	86,531	0.0990	0.2235	0.0990	0.2036
280458	88	HOME TEL CO-OLIVE BR	92,352	10,971	31,224	134,547	0.2468	0.4892	0.2472	0.4822
280459	88	HUGHES TEL CO	76,899	5,830	7,482	90,212	0.0829	0.2069	0.0829	0.1721
290552	88	ADAMSVILLE TEL CO	82,427	7,863	9,429	99,718	0.0943	0.2456	0.0971	0.2248
290571	88	MILLINGTON TEL CO	269,080	24,225	51,571	344,876	0.1515	0.3381	0.1495	0.2609
290575	88	TENNESSEE TEL CO	544,056	56,309	65,992	666,357	0.0992	0.2026	0.0990	0.1718
290579	88	TWIN LAKES TEL COOP	279,307	37,067	30,047	346,421	0.0881	0.2032	0.0867	0.1735
300597 *		THE CHILLICOTHE TEL	366,406	58,774	29,491	454,672	0.1273	0.1786	0.1294	0.2877
300607 *		CONTEL OF OHIO	19,415	4,982	2,077	26,473	0.1273	0.1950	0.1294	0.3006
300613	88	LITTLE MIAMI COMM.	11,176	3,101	1,619	15,896	0.1018	0.1877	0.1018	0.1477
300620	88	HARLAN TEL CO	7,210	2,263	1,173	10,645	0.1120	0.3226	0.1102	0.2807
300665	88	ALLTEL OHIO-WEST OH	144,996	55,981	27,646	228,623	0.1209	0.2200	0.1209	0.1966
300682	88	C, C & S TELCO -OHIO	2,413	1,290	936	4,639	0.2017	0.2726	0.2017	0.2415
310679	88	BLOOMINGDALE TEL CO	5,562	7,196	1,839	14,597	0.1254	0.2567	0.1260	0.2410
310680	88	CHIPPEWA COUNTY TEL	3,025	2,496	934	6,454	0.1446	0.2585	0.1446	0.2418
310681	88	ALLTEL MICHIGAN INC.	299,102	153,546	62,881	515,529	0.1220	0.2477	0.1220	0.2015
310682	88	C, C & S TELCO - MI	127,208	52,170	23,025	202,403	0.1138	0.2185	0.1138	0.1917
310683	88	CARR TEL CO	3,466	3,563	873	7,902	0.1107	0.3456	0.1104	0.3309
310685	88	CHATHAM TEL CO - MI	16,352	5,268	2,457	24,078	0.1022	0.2412	0.1021	0.1989
310687	88	CLAYTON TEL CO	1,893	2,906	653	5,452	0.1198	0.2316	0.1198	0.1894
310699	88	HICKORY TEL CO	14,369	3,694	1,649	19,713	0.0868	0.2104	0.0837	0.1500
310702	88	CENTURY OF MICHIGAN	232,352	150,154	40,285	422,791	0.0952	0.2204	0.0953	0.1771
310704	88	ACE TEL OF MICHIGAN	10,094	11,345	2,049	23,488	0.0870	0.2287	0.0873	0.1776
310711	88	MIDWAY TEL CO	3,891	1,846	840	6,577	0.1277	0.2770	0.1277	0.2567
310713 *		HIAWATHA TEL CO	21,525	10,047	4,831	36,403	0.1273	0.2818	0.1294	0.3006
310714 *		OGDEN TEL CO	0	0	0	0	0.1273	0.2818	0.1294	0.3006
310717	88	ONTONAGON COUNTY TEL	30,541	6,686	5,629	42,856	0.1314	0.2869	0.1314	0.2824
310721	88	PIGEON TEL CO	12,307	11,417	2,458	26,183	0.0942	0.1981	0.0939	0.1534

TABLE 4.9

1988 NONTIER 1 COMPANIES NETWORK USAGE DATA

FCODE	YEAR	CARRIER	DEM MINUTES IN THOUSANDS				FACTORS			
			LOC DEM	ST DEM	IS DEM	TOT DEM	IS SLU	IS SPF	IS DEM	TR DEM
310728	88	SPRINGPORT TEL CO	7,826	6,614	1,176	15,616	0.0753	0.2168	0.0753	0.1718
310732 *		UPPER PENINSULA TEL	17,647	12,381	6,125	36,154	0.1273	0.3325	0.1294	0.3006
310737	88	WINN TEL CO	1,701	3,433	1,074	6,208	0.1729	0.4904	0.1729	0.3450
310738	88	WOLVERINE TEL CO	65,588	31,231	6,539	103,358	0.0636	0.1827	0.0633	0.1300
320753	88	CLAY CTY RURAL COOP	79,843	23,225	9,231	112,300	0.0822	0.2637	0.0822	0.2200
320762	88	ELNORA TEL CO	3,322	1,027	438	4,787	0.0912	0.1758	0.0915	0.1447
320776 *		COMM CORP OF INDIANA	0	0	0	0	0.1273	0.3063	0.1294	0.3006
320778	88	HOME TEL CO INC	20,422	4,528	1,879	26,829	0.0707	0.1658	0.0700	0.1236
320779	88	CONTEL OF INDIANA	1,501,217	314,848	273,282	2,089,347	0.1150	0.2675	0.1308	0.2273
320797	88	NEW PARIS TEL INC	15,878	3,650	3,055	22,583	0.1223	0.2507	0.1353	0.2270
320800	88	NORTHWESTERN INDIANA	69,081	29,182	17,103	115,366	0.1483	0.3464	0.1483	0.3063
330841	88	CENCOM OF WISCONSIN	146,751	44,618	21,100	212,469	0.0979	0.2439	0.0993	0.2165
330844	88	BADGER TELECOM, INC.	33,620	7,978	3,327	44,925	0.0741	0.1839	0.0741	0.1477
330851	88	BONDUEL TEL CO	11,755	3,576	1,116	16,447	0.0691	0.1552	0.0679	0.1238
330856	88	BURLINGTON B&W	16,116	8,964	6,590	31,669	0.2081	0.2854	0.2081	0.3084
330859	88	CENTRAL STATE TEL CO	51,279	18,705	7,658	77,641	0.1253	0.2201	0.0986	0.1759
330860	88	CHEQUAMEGON TEL COOP	23,403	9,994	8,616	42,013	0.2051	0.3604	0.2051	0.3989
330870	88	CRANDON TEL CO	15,052	5,022	2,126	22,200	0.0959	0.2035	0.0958	0.1770
330876	88	DODGE COUNTY TEL CO	7,440	2,359	699	10,498	0.0663	0.1563	0.0666	0.1035
330882	88	FENNIMORE TEL CO	12,273	4,844	1,871	18,988	0.0983	0.2385	0.0985	0.1866
330888	88	GREENWOOD TEL CO	9,667	2,556	1,100	13,322	0.0858	0.1906	0.0825	0.1502
330891 *		HEADWATERS TEL CO	13,488	6,438	4,266	24,193	0.1273	0.2965	0.1294	0.3006
330895	88	CENTURY OF WISCONSIN	485,966	76,081	129,339	691,386	0.1608	0.2578	0.1871	0.2914
330898	88	LARSEN-READFIELD TEL	11,806	6,603	1,512	19,921	0.0759	0.1794	0.0759	0.1281
330908	88	MARQUETTE-ADAMS COOP	10,206	5,687	6,491	22,384	0.2920	0.4478	0.2900	0.4506
330909	88	MIDWAY TEL CO	56,645	17,003	11,144	84,792	0.1314	0.2200	0.1314	0.1990
330913	88	MONROE COUNTY TEL CO	71,945	18,995	18,280	109,220	0.1674	0.2888	0.1674	0.2791
330914	88	EASTCOAST TELECOM	29,273	7,622	3,896	40,791	0.0955	0.2157	0.0955	0.1763
330916 *		MOUNT HOREB TEL CO	28,099	5,041	3,798	36,938	0.1273	0.2411	0.1294	0.3006
330917	88	MT VERNON TEL CO	53,170	11,227	7,982	72,379	0.1103	0.2295	0.1103	0.1859
330922 *		NORTH-WEST TEL CO	475,397	142,007	91,865	709,269	0.1273	0.2484	0.1294	0.2747
330931	88	PEOPLES TEL CO	39,123	14,719	6,131	59,973	0.1022	0.2181	0.1022	0.1885
330934 *		PLATTEVILLE TEL CO	51,317	17,420	13,042	81,780	0.1273	0.3015	0.1294	0.3006
330936	88	INDIANHEAD TEL CO	7,666	4,127	2,139	13,932	0.1535	0.3163	0.1535	0.2838
330937	88	PRICE COUNTY TEL CO	22,587	6,613	4,403	33,604	0.1310	0.2755	0.1310	0.2764
330940 *		RHINELANDER TEL CO	89,089	25,916	18,185	133,190	0.1273	0.2376	0.1294	0.3006
330945	88	SCANDINAVIA TEL CO	13,234	6,231	2,638	22,103	0.1245	0.2550	0.1194	0.2348
330950	88	SOLO SPRINGS TEL CO	81,889	25,705	26,256	133,850	0.1962	0.3260	0.1962	0.3356
330952	88	SE TEL OF WISCONSIN	48,140	17,654	8,258	74,052	0.1115	0.2097	0.1115	0.1970
330954	88	STOCKBRIDGE & SHERWD	15,937	6,245	1,905	24,087	0.0792	0.2097	0.0791	0.1062
330956	88	UNIVERSAL OF N WISC	60,911	24,135	14,712	99,759	0.1475	0.2759	0.1475	0.2503

TABLE 4.9

1988 NONTIER 1 COMPANIES NETWORK USAGE DATA

FCODE	YEAR	CARRIER	DEM MINUTES IN THOUSANDS				FACTORS			
			LOC DEM	ST DEM	IS DEM	TOT DEM	IS SLU	IS SPF	IS DEM	TR DEM
330963	88	UTELCO, INC	93,119	24,563	20,358	138,041	0.0996	0.2664	0.1475	0.2613
330964	88	URBAN TEL CORP	135,709	48,324	16,803	200,836	0.0806	0.2203	0.0837	0.1692
330965	88	VALDERS TEL CO	15,515	5,069	1,627	22,212	0.0747	0.1820	0.0733	0.1186
330974	88	WOOD COUNTY TEL CO	191,305	37,235	29,987	258,527	0.0969	0.2208	0.1160	0.1679
341000 *		ALLTEL ILLINOIS INC.	304,765	110,121	80,247	495,133	0.1273	0.3110	0.1294	0.2877
341004	88	EL PASO TEL CO	10,279	6,254	2,142	18,675	0.1147	0.2476	0.1147	0.1646
341011	88	LAKESIDE TEL CO	5,401	2,509	970	8,881	0.1093	0.2227	0.1093	0.1692
341023	88	GRIDLEY TEL CO	5,139	5,184	1,450	11,773	0.1231	0.2539	0.1231	0.2437
341036	88	CONTEL OF ILLINOIS	1,199,164	559,877	262,442	2,021,484	0.1259	0.2622	0.1298	0.2211
341037	88	IL CONSOLIDATED TEL	693,940	247,195	118,603	1,059,737	0.1088	0.2331	0.1119	0.1886
341038	88	INLAND TEL CO	20,269	19,659	4,359	44,287	0.0984	0.2115	0.0984	0.1570
341045	88	LEAF RIVER VLY TEL	2,460	2,323	571	5,354	0.1067	0.2248	0.1067	0.1742
341055	88	MIDLAND TEL CO	23,350	17,562	3,810	44,721	0.0852	0.2124	0.0852	0.1345
341060	88	MOULTRIE INDEPENDENT	4,332	2,408	562	7,302	0.0770	0.1914	0.0770	0.1375
341073	88	PRAIRIE TEL CO	6,466	3,127	1,005	10,598	0.0949	0.2091	0.0949	0.1629
351105	88	AYRSHIRE FARMERS MUT	1,454	1,387	389	3,230	0.1204	0.2372	0.1204	0.1907
351110 *		BERNARD TEL CO INC	3,728	1,654	602	5,984	0.1273	0.2551	0.1294	0.3006
351127	88	CENDEL OF IOWA	391,329	118,678	99,291	609,299	0.1552	0.3661	0.1670	0.2440
351207	88	CONTEL OF IOWA, INC.	544,748	197,373	87,463	829,584	0.1026	0.2397	0.1054	0.1954
351229 *		LOST NATION-ELWOOD	3,837	1,750	738	6,324	0.1273	0.1959	0.1294	0.3006
351316 *		UNITED FARMERS TEL	2,997	1	1,729	4,727	0.1273	0.2926	0.1294	0.3006
351327	88	WEBB-DICKENS TEL	1,421	2,079	695	4,196	0.1657	0.2631	0.1657	0.2438
351346	88	ACE TEL ASSN-IA	28,317	8,075	4,466	40,859	0.1092	0.2121	0.1093	0.1938
351888	88	GRAND RIVER MUT-IA	46,202	13,494	10,747	70,443	0.1526	0.3326	0.1526	0.3105
361140	88	CONTEL OF MINNESOTA	770,400	294,844	137,184	1,202,428	0.1098	0.2240	0.1141	0.1724
361346	88	ACE TEL ASSN-MN	77,957	17,231	21,716	116,904	0.1857	0.2559	0.1858	0.2637
361350 *		ARVIG TEL CO	38,327	14,156	7,908	60,391	0.1273	0.3211	0.1294	0.3006
361370	88	CLARA CITY TEL EXCH	8,350	4,354	1,248	13,952	0.0877	0.2755	0.0894	0.2593
361374	88	ARROWHEAD COMM CORP	2,038	1,784	623	4,445	0.1401	0.2668	0.1401	0.2295
361379	88	DEER RIVER TEL CO	13,957	2,740	1,819	18,515	0.0982	0.2304	0.0982	0.1630
361385 *		EAST OTTER TAIL TEL	93,241	35,152	21,422	149,816	0.1273	0.2639	0.1294	0.2941
361395	88	GARDEN VALLEY TEL CO	94,433	37,421	15,260	147,113	0.1037	0.2402	0.1037	0.2081
361410	88	JOHNSON TEL CO	5,883	2,550	1,363	9,796	0.1373	0.2902	0.1392	0.2846
361414	88	LAKEDALE TEL CO	57,878	35,199	7,811	100,888	0.0734	0.2013	0.0774	0.1591
361433	88	MID STATE TEL CO	39,894	12,836	5,055	57,786	0.0875	0.2124	0.0875	0.1694
361442	88	NEW ULM TELECOM, INC	69,676	21,646	13,704	105,026	0.1133	0.2566	0.1305	0.2555
361443	88	NORMAN COUNTY TEL CO	32,466	6,477	5,661	44,604	0.1245	0.2461	0.1269	0.2463
361451	88	PAUL BUNYAN RURAL	43,995	11,694	5,861	61,549	0.0952	0.2400	0.0952	0.2112
361483	88	SLEEPY EYE TEL CO	35,330	15,595	5,726	56,651	0.0919	0.1994	0.1011	0.1678
361491 *		TWIN VALLEY-ULEN TEL	19,615	6,235	3,388	29,238	0.1273	0.2235	0.1294	0.3006
371516	88	ARAPAHOE TEL CO	6,720	2,467	1,283	10,471	0.1226	0.2994	0.1226	0.0699

TABLE 4.9

1988 NONTIER 1 COMPANIES NETWORK USAGE DATA

FCODE	YEAR	CARRIER	DEM MINUTES IN THOUSANDS				FACTORS			
			LOC DEM	ST DEM	IS DEM	TOT DEM	IS SLU	IS SPF	IS DEM	TR DEM
371517	88	ARLINGTON TEL CO	6,152	3,691	1,537	11,380	0.1400	0.2822	0.1351	0.2307
371524	88	BLAIR TEL CO	46,077	15,339	11,500	72,916	0.1577	0.2986	0.1577	0.3088
371525	88	THREE RIVER TELCO	7,327	3,108	1,873	12,308	0.1522	0.3441	0.1522	0.3275
371526 *		CAMBRIDGE TEL CO -NE	7,819	2,163	1,483	11,465	0.1273	0.3063	0.1294	0.3006
371531 *		CLARKS TEL CO	5,171	1,431	981	7,583	0.1273	0.2077	0.1294	0.3006
371534	88	COZAD TEL CO	16,047	6,411	3,922	26,380	0.1487	0.3006	0.1487	0.0847
371536	88	CURTIS TEL CO	5,006	2,108	1,028	8,143	0.1263	0.2037	0.1263	0.0720
371537	88	DALTON TEL CO, INC	7,747	4,073	2,588	14,408	0.1796	0.4049	0.1796	0.3770
371540	88	DILLER TEL CO	5,023	2,526	1,007	8,556	0.1177	0.2936	0.1177	0.2410
371542	88	EASTERN NEBRASKA TEL	16,633	6,876	4,264	27,773	0.1535	0.3221	0.1535	0.3042
371557	88	HARTMAN TEL EXCH INC	2,541	1,045	1,220	4,807	0.2539	0.4267	0.2539	0.1447
371558	88	HEMINGFORD COOP TEL	9,186	1,346	1,444	11,976	0.1206	0.2765	0.1206	0.2571
371567 *		KEYSTONE-ARTHUR TEL	996	946	658	2,599	0.1273	0.5113	0.1294	0.3006
371574	88	NEBRASKA CENTRAL TEL	22,986	9,022	7,412	39,420	0.1880	0.2559	0.1880	0.3023
371577	88	GREAT PLAINS COMMUN	167,954	67,821	41,012	276,786	0.1482	0.2692	0.1482	0.2424
371580	88	PETERSBURG TEL CO	2,520	1,573	348	4,441	0.0783	0.2320	0.0783	0.0447
371586	88	ROCK COUNTY TEL CO	7,996	3,181	1,764	12,942	0.1352	0.2770	0.1363	0.2440
371591 *		SE NEBRASKA TEL CO	33,558	5,099	8,191	46,848	0.1273	0.2950	0.1294	0.3006
371592	88	STANTON TEL CO, INC	7,335	2,876	2,129	12,341	0.1726	0.2054	0.1726	0.0984
371597	88	WAUNETA TEL CO	4,386	1,553	1,109	7,047	0.1573	0.3317	0.1573	0.0897
372455	88	BENKELMAN TEL CO	7,940	1,829	2,001	11,770	0.1677	0.3683	0.1700	0.4063
381447	88	CONTEL OF N. DAKOTA	95,064	22,167	14,669	131,900	0.1112	0.2758	0.1112	0.2679
381607 *		CONSOLIDATED COOP	37,900	7,550	5,894	51,344	0.1273	0.3077	0.1294	0.3006
381616	88	INTER-COMMUNITY TEL	9,447	4,117	1,799	15,363	0.1171	0.2275	0.1171	0.2026
381617	88	MIDSTATE TEL CO	8,727	3,796	2,771	15,295	0.1812	0.3676	0.1812	0.3932
381630 *		POLAR COMM MUT AID	82,973	18,428	14,541	115,942	0.1273	0.2475	0.1294	0.3006
381632 *		RESERVATION TEL COOP	36,766	11,043	7,192	55,001	0.1273	0.3118	0.1294	0.3006
381634 *		SOURIS RIVER TEL MUT	96,284	28,063	30,086	154,433	0.1273	0.3774	0.1294	0.2941
381637	88	W. RIVER MUTUAL AID	82,577	19,361	15,228	117,167	0.1300	0.3303	0.1300	0.3078
391643	88	CONTEL OF S. DAKOTA	58,129	19,582	17,643	95,354	0.1854	0.3396	0.1850	0.3407
391647	88	CHEYENNE RIVER SIOUX	20,548	4,052	3,376	27,976	0.1207	0.2808	0.1207	0.2290
391659	88	GOLDEN WEST TELECOMM	94,744	25,921	28,167	148,832	0.1887	0.3473	0.1893	0.3376
391666	88	JEFFERSON TEL CO -SD	2,189	596	1,798	4,583	0.3924	0.6544	0.3924	0.6998
391667	88	KADOKA TELEPHONE CO	2,532	1,012	1,021	4,565	0.2245	0.5737	0.2237	0.4716
391668	88	KENNEBEC TEL CO	1,264	902	351	2,518	0.1396	0.2834	0.1396	0.2460
391689	88	WEST RIVER COOP	14,973	3,225	3,402	21,600	0.1576	0.3012	0.1575	0.2714
401691	88	ALLTEL ARKANSAS INC	617,210	172,140	127,751	917,101	0.1352	0.2951	0.1393	0.2535
401692	88	ARKANSAS TEL CO	54,072	8,787	11,040	73,899	0.1389	0.4216	0.1494	0.4308
401697	88	CENTRAL ARKANSAS TEL	20,043	5,523	2,470	28,035	0.0881	0.2482	0.0881	0.1866
401698	88	CLEVELAND COUNTY TEL	16,391	7,440	2,365	26,197	0.0937	0.2843	0.0903	0.2188
401699	88	DECATUR TEL CO INC	3,727	2,413	1,623	7,763	0.2091	0.5809	0.2091	0.5626

TABLE 4.9

1988 NONTIER 1 COMPANIES NETWORK USAGE DATA

FCODE	YEAR	CARRIER	DEM MINUTES IN THOUSANDS				FACTORS			
			LOC DEM	ST DEM	IS DEM	TOT DEM	IS SLU	IS SPF	IS DEM	TR DEM
401702	88	SOUTH ARKANSAS TEL	29,002	8,076	4,152	41,229	0.1007	0.2712	0.1007	0.2313
401705	88	CENTURY OF ARKANSAS	106,490	20,927	24,129	151,546	0.1592	0.3252	0.1592	0.3217
401709	88	MADISON COUNTY TEL	21,072	5,757	4,564	31,394	0.1454	0.2831	0.1454	0.2679
401711	88	MOUNTAIN HOME TEL	87,606	18,931	37,001	143,539	0.2587	0.4002	0.2578	0.4258
401713	88	NORTH ARKANSAS TEL	24,949	10,826	11,455	47,230	0.2425	0.4361	0.2425	0.4371
401720	88	REDFIELD TEL CO	9,979	4,941	1,963	16,883	0.1163	0.3345	0.1163	0.3166
401726	88	TRI-COUNTY TEL CO-AR	35,438	6,843	5,924	48,206	0.1231	0.2550	0.1229	0.2405
401727	88	UNION TEL CO INC	6,795	2,204	2,267	11,266	0.2019	0.3436	0.2012	0.3685
401729	88	WALNUT HILL TEL CO	32,491	10,932	9,847	53,270	0.1849	0.3863	0.1849	0.4041
401730	88	CONTEL OF ARKANSAS	783,674	198,239	143,493	1,125,406	0.1275	0.2879	0.1275	0.2495
401733	88	YELCOT TEL CO INC	25,049	5,735	5,459	36,243	0.1506	0.3318	0.1506	0.3207
401734	88	YELL COUNTY TEL CO	36,029	10,582	5,145	51,756	0.0988	0.2404	0.0994	0.1956
411741	88	ASSARIA TEL EXCHANGE	2,092	2,401	925	5,418	0.1708	0.2864	0.1708	0.2583
411746	88	BLUE VALLEY TEL CO	12,859	9,377	3,295	25,531	0.1291	0.2704	0.1291	0.2274
411761	88	CUNNINGHAM TEL CO	6,915	4,418	1,700	13,032	0.1351	0.2806	0.1304	0.2244
411764	88	ELKHART TEL CO INC	8,081	2,552	3,971	14,605	0.2719	0.4405	0.2719	0.5335
411781	88	H & B COMMUNICATIONS	3,876	3,116	1,267	8,260	0.1563	0.3029	0.1534	0.2480
411782	88	HOME TEL CO	6,261	4,922	1,480	12,663	0.1169	0.2805	0.1169	0.2264
411785	88	J. B. N. TEL CO INC	12,443	12,724	3,526	28,693	0.1229	0.2689	0.1229	0.2240
411788	88	KANOKLA TEL ASSN-KS	12,532	5,843	3,528	21,902	0.1638	0.3296	0.1638	0.3256
411789	88	KANSAS STATE TEL CO	41,385	7,579	14,889	63,854	0.2242	0.3925	0.2332	0.4603
411790	88	CONTEL OF KANSAS	256,343	177,256	70,033	503,631	0.1369	0.2937	0.1391	0.2576
411801	88	MADISON TEL CO INC	4,359	1,791	971	7,122	0.1364	0.2831	0.1364	0.2655
411807	88	MOKAN DIAL INC-KS	11,836	7,263	4,121	23,221	0.1775	0.3028	0.1775	0.2978
411808	88	MOUNDRIDGE TEL CO	13,883	6,550	4,824	25,258	0.1897	0.2843	0.1910	0.3032
411814	88	PEOPLES MUTUAL TEL	6,179	2,680	2,124	10,984	0.1934	0.3752	0.1934	0.3281
411817	88	PIONEER TEL ASSN INC	85,758	28,082	24,404	138,244	0.1765	0.3999	0.1765	0.4017
411818	88	CRAW-KAN TEL COOP	75,042	36,022	19,569	130,633	0.1498	0.2854	0.1498	0.2940
411826	88	RURAL TEL SERVICE CO	39,353	21,117	8,160	68,630	0.1189	0.2675	0.1189	0.2230
411827	88	S & T TEL COOP ASSN	7,131	6,069	2,610	15,810	0.1651	0.3481	0.1651	0.2994
411831 *		S. CENTRAL TEL - KS	3,538	3,904	1,406	8,847	0.1273	0.2894	0.1294	0.3006
411835	88	SUNFLOWER TEL CO	30,282	10,009	8,096	48,387	0.1673	0.3567	0.1673	0.3710
411840	88	TWIN VALLEY TEL INC	11,057	6,292	2,403	19,752	0.1251	0.2517	0.1216	0.2087
411841	88	UNITED TEL ASSN	25,344	16,684	8,184	50,211	0.1630	0.3840	0.1630	0.3511
411847	88	THE WHEAT STATE TEL	10,234	7,355	2,648	20,237	0.1309	0.2794	0.1309	0.2210
411849	88	WILSON TEL CO INC	12,033	6,251	2,340	20,624	0.1173	0.2499	0.1135	0.2040
411852	88	ZENDA TEL COMPANY	981	1,097	214	2,292	0.0936	0.2178	0.0936	0.1589
412030	88	TOTAH TELEPHONE CO	4,917	4,134	2,444	11,495	0.2166	0.3977	0.2126	0.3720
421807	88	MOKAN DIAL INC-MO	4,692	2,416	1,235	8,343	0.1480	0.2431	0.1480	0.2137
421846	88	CONTINENTAL SYS. -MO	346,951	102,447	60,482	509,880	0.1186	0.3074	0.1186	0.2617
421859	88	BOURBEUSE TEL	9,426	6,384	2,097	17,907	0.1171	0.2768	0.1171	0.2067

TABLE 4.9

1988 NONTIER 1 COMPANIES NETWORK USAGE DATA

FCODE	YEAR	CARRIER	DEM MINUTES IN THOUSANDS				FACTORS			
			LOC DEM	ST DEM	IS DEM	TOT DEM	IS SLU	IS SPF	IS DEM	TR DEM
421865	88	CITIZENS TEL CO - MO	14,683	11,211	4,697	30,591	0.1535	0.2410	0.1535	0.2319
421873	88	EASTERN MISSOURI TEL	14,022	9,619	2,800	26,440	0.1051	0.2093	0.1059	0.1646
421882	88	FIDELITY TEL CO	76,144	27,361	12,480	115,985	0.1076	0.2272	0.1076	0.2086
421885	88	ALLTEL MISSOURI	199,640	67,736	36,998	304,373	0.1216	0.2441	0.1216	0.2116
421886	88	GOODMAN TEL CO	6,540	4,626	2,964	14,130	0.2098	0.3756	0.2098	0.3393
421888	88	GRAND RIVER MUT-MO	105,720	29,558	14,922	150,200	0.0993	0.2467	0.0993	0.2048
421901	88	KINGDOM TELEPHONE CO	15,691	11,268	3,609	30,568	0.1321	0.3510	0.1321	0.2861
421904	88	MISSOURI TEL CO	132,062	33,386	21,870	187,319	0.1147	0.2348	0.1168	0.2074
421908	88	LE-RU TELEPHONE CO	5,299	2,458	2,506	10,263	0.2442	0.4168	0.2442	0.4284
421922	88	CONTEL OF MISSOURI	1,040,377	474,737	332,610	1,847,724	0.1800	0.2715	0.1800	0.2421
421929 *		HOLWAY TEL CO	5,206	1,709	539	7,454	0.1273	0.2733	0.1294	0.3006
421931	88	NE MISSOURI RURAL	26,457	8,549	5,641	40,646	0.1388	0.2759	0.1388	0.2575
421934 *		ORCHARD FARM TEL CO	1,946	4,521	656	7,124	0.1273	0.2485	0.1294	0.3006
421951	88	STOUTLAND TEL CO	7,013	2,876	988	10,877	0.0908	0.2728	0.0908	0.1998
421963 *		WEBSTER COUNTY TEL	30,432	8,419	5,772	44,623	0.1273	0.3283	0.1294	0.3006
431788	88	KANOKLA TEL ASSN-OK	6,325	3,782	2,560	12,666	0.2021	0.3219	0.2021	0.3360
431831 *		S. CENTRAL TEL - OK	2,048	1,093	822	3,962	0.1273	0.3693	0.1294	0.3006
431965	88	ALLTEL OKLAHOMA INC	76,187	47,651	18,980	142,818	0.1331	0.3094	0.1329	0.2439
431966	88	ATLAS TEL CO	7,935	5,362	3,703	17,001	0.2178	0.4870	0.2178	0.2418
431974	88	CANADIAN VALLEY TEL	2,108	2,021	765	4,894	0.1563	0.3325	0.1563	0.2694
431976	88	CARNEGIE TEL CO INC	11,170	4,921	2,052	18,144	0.1131	0.2629	0.1131	0.2413
431979	88	CHEROKEE TEL CO	30,048	10,712	11,713	52,474	0.2231	0.3608	0.2232	0.2478
431980	88	CHICKASAW TEL CO	47,130	29,719	9,576	86,426	0.1281	0.3008	0.1277	0.2730
431981	88	CHOUTEAU TEL CO	16,618	8,774	3,545	28,937	0.1180	0.2927	0.1225	0.2573
431984	88	OKLAMOMA COMM SYSTEM	110,137	47,211	20,838	178,185	0.1168	0.2417	0.1170	0.2004
431985	88	CROSS TEL CO	51,311	25,007	10,329	86,647	0.1192	0.2681	0.1192	0.2300
431988	88	DOBSON TEL CO	34,367	12,731	6,445	53,543	0.1204	0.3488	0.1204	0.2918
431994	88	GRAND TEL CO INC	13,830	7,582	4,065	25,477	0.1600	0.4016	0.1596	0.1771
431995	88	HINTON TEL CO	23,519	10,662	3,742	37,923	0.0987	0.2294	0.0987	0.1095
432006	88	MCLLOUD TEL CO	69,918	16,226	10,092	96,236	0.1049	0.2116	0.1049	0.1696
432010	88	MID-AMERICA TEL INC	7,656	6,111	1,648	15,415	0.1069	0.3037	0.1069	0.2227
432011	88	OKLAHOMA ALLTEL, INC	100,967	34,780	23,567	159,313	0.1481	0.2975	0.1479	0.2877
432013	88	OKLAHOMA TEL & TEL	10,644	6,460	2,140	19,244	0.1112	0.2720	0.1112	0.2597
432014	88	OKLAHOMA WESTERN TEL	13,618	8,517	3,963	26,098	0.1519	0.3455	0.1519	0.1686
432016	88	PANHANDLE TEL COOP	21,894	15,542	14,271	51,707	0.2815	0.4801	0.2760	0.3064
432018	88	PIONEER TEL COOP INC	289,122	124,042	43,309	456,472	0.0946	0.2669	0.0949	0.2259
432020	88	POTTAWATOMIE TEL CO	10,148	6,875	2,220	19,243	0.1154	0.2549	0.1154	0.2105
432030	88	TOTAH TELEPHONE CO	6,839	8,592	3,158	18,590	0.1699	0.3131	0.1699	0.2765
432032	88	VALLIANT TEL CO	18,527	5,216	3,140	26,884	0.1241	0.3182	0.1241	0.2972
432034	88	WYANDOTTE TEL CO	1,712	1,313	1,143	4,168	0.2752	0.5793	0.2752	0.5007
440425 *		CAMERON TEL CO TEXAS	4,013	3,413	1,012	8,437	0.1273	0.2377	0.1294	0.3006

TABLE 4.9

1988 NONTIER 1 COMPANIES NETWORK USAGE DATA

FCODE	YEAR	CARRIER	DEM MINUTES IN THOUSANDS				FACTORS			
			LOC DEM	ST DEM	IS DEM	TOT DEM	IS SLU	IS SPF	IS DEM	TR DEM
442039	88	BIG BEND TEL CO INC	12,887	9,256	3,906	26,049	0.1877	0.3509	0.1877	0.3597
442040	88	BRAZORIA TEL CO	53,558	17,151	4,648	75,357	0.0619	0.1835	0.0617	0.1318
442041	88	BRAZOS TEL COOP INC	1,423	5,172	852	7,447	0.1144	0.1962	0.1144	0.1640
442046	88	CAP ROCK TEL CO INC	13,156	9,881	1,537	24,574	0.0958	0.1987	0.0958	0.1567
442052	88	CENTRAL TEXAS CO-OP	16,757	7,994	1,535	26,286	0.0584	0.1836	0.0584	0.1094
442059	88	COLORADO VALLEY TEL	27,940	15,678	3,677	47,295	0.0778	0.1813	0.0777	0.1445
442066	88	DELL TEL. CO-OP - TX	3,240	1,353	1,208	5,801	0.2083	0.4302	0.2083	0.4286
442068 *		EASTEX TEL COOP INC	178,243	77,513	28,864	284,620	0.1273	0.2215	0.1294	0.2877
442070	88	ETEX TEL COOP INC	76,153	40,386	12,083	128,622	0.0940	0.1924	0.0939	0.1565
442071	88	FIVE AREA TEL CO-OP	9,111	4,149	1,808	15,069	0.1200	0.2596	0.1200	0.2197
442072	88	FORT BEND TEL CO	216,712	43,208	28,017	287,937	0.0981	0.2688	0.0973	0.2317
442076	88	GANADO TELEPHONE CO	7,375	5,175	934	13,485	0.0697	0.1631	0.0693	0.0997
442083	88	GUADALUPE VALLEY TEL	70,402	73,160	21,872	165,434	0.1323	0.2367	0.1322	0.2027
442086 *		HILL COUNTRY CO-OP	57,572	38,324	12,709	108,605	0.1273	0.2502	0.1294	0.3006
442093	88	INDUSTRY TEL CO	4,821	4,274	701	9,795	0.0720	0.1810	0.0716	0.1073
442097	88	KERRVILLE TEL CO	114,642	49,342	19,644	183,629	0.1046	0.3063	0.1070	0.2492
442101	88	LAKE DALLAS TEL CO	13,540	25,277	7,628	46,446	0.2240	0.3318	0.2240	0.3735
442103	88	LA WARD TEL EXCHANGE	2,532	3,886	688	7,106	0.0969	0.1977	0.0969	0.1232
442104	88	LAKE LIVINGSTON TEL	2,184	2,211	684	5,080	0.1347	0.3013	0.1347	0.2009
442109	88	LUFKIN-CONROE TEL EX	690,370	240,429	110,126	1,040,924	0.1003	0.2485	0.1058	0.2082
442112	88	MID-PLAINS RURAL TEL	13,193	9,698	2,052	24,943	0.1140	0.2163	0.1137	0.1734
442116	88	MUENSTER TEL CORP-TX	13,801	10,250	2,239	26,290	0.0853	0.2153	0.0852	0.1812
442117	88	MUSTANG TEL CO	5,909	8,180	3,616	17,705	0.2217	0.5855	0.2217	0.5857
442121	88	ALLTEL TEXAS INC	20,065	8,359	3,022	31,446	0.0963	0.2538	0.0961	0.1860
442129	88	PEEPLS TELEPHONE CO	3,910	3,967	828	8,705	0.0951	0.1859	0.0951	0.1358
442130	88	PEOPLES TEL COOP -TX	44,906	24,149	5,474	74,529	0.0977	0.1950	0.0977	0.1624
442131	88	POKA-LAMBRO TEL COOP	22,271	12,812	2,361	37,444	0.0631	0.1807	0.0631	0.1279
442134	88	RIVIERA TEL CO INC	3,677	3,512	1,000	8,188	0.1221	0.2371	0.1221	0.1814
442135 *		SOUTHWEST TEXAS TEL	16,024	14,150	3,676	33,850	0.1273	0.2107	0.1294	0.3006
442136	88	ROMAIN TELEPHONE CO	6,041	3,110	1,610	10,762	0.1496	0.2740	0.1496	0.2544
442147	88	SUGAR LAND TEL CO	438,067	27,092	58,170	523,329	0.1110	0.2858	0.1112	0.2449
442148	88	SWEENY-OLD OCEAN	17,862	13,666	2,807	34,335	0.0818	0.2345	0.0818	0.1813
442151 *		TAYLOR TEL CO-OP INC	38,636	19,490	6,919	65,045	0.1273	0.1930	0.1294	0.3006
442153	88	TEXAS-MIDLAND TEL	50,317	44,864	11,881	107,062	0.1110	0.2046	0.1110	0.1628
442155	88	TRI-COUNTY TEL - TX	5,280	3,044	669	8,993	0.0748	0.1932	0.0744	0.9202
442156	88	TRINITY VALLEY TEL	45,125	18,639	5,871	69,635	0.0843	0.2462	0.0843	0.1982
442159 *		VALLEY TEL CO-OP -TX	31,620	25,294	4,864	61,778	0.1273	0.2111	0.1294	0.3006
442163	88	WATERWOOD COMM INC	0	1,495	503	1,999	0.2519	0.5636	0.2519	0.5067
442166	88	WEST TEXAS RURAL TEL	15,001	7,399	3,152	25,551	0.1516	0.3098	0.1516	0.2801
442168	88	WES-TEX TEL CO-OP	23,912	11,885	2,735	38,531	0.0710	0.1861	0.0710	0.1459
442170	88	XIT RURAL TEL CO-OP	3,843	3,966	3,635	11,443	0.3177	0.3924	0.3177	0.4077

TABLE 4.9

1988 NONTIER 1 COMPANIES NETWORK USAGE DATA

FCODE	YEAR	CARRIER	DEM MINUTES IN THOUSANDS				FACTORS			
			LOC DEM	ST DEM	IS DEM	TOT DEM	IS SLU	IS SPF	IS DEM	TR DEM
442262	88	ENMR TEL COOP-TX	6,177	1,386	829	8,392	0.0988	0.2826	0.0988	0.2419
452171	88	ARIZONA TELEPHONE CO	3,202	5,454	2,945	11,601	0.2539	0.6250	0.2539	0.4850
452172	88	CITIZENS UTILITIES	290,163	43,904	137,666	471,734	0.2918	0.5752	0.2918	0.6594
452173	88	PAPAGO TRIBAL UTIL.	3,360	1,446	654	5,461	0.1198	0.3790	0.1198	0.3775
452175	88	UNIVERSAL TEL OF SW	7,129	2,678	1,764	11,571	0.1524	0.4539	0.1524	0.3536
452176	88	VALLEY TEL COOP-AZ	9,562	5,856	6,035	21,452	0.2813	0.5499	0.2813	0.4942
452177	88	CONTEL OF WEST-AZ	150,135	53,914	50,286	254,334	0.1977	0.3559	0.1977	0.3502
452275	88	NAVAJO COMMUN-AZ	42,374	26,388	27,136	95,899	0.2830	0.6179	0.2830	0.6007
452302	88	CONTEL CALIF - AZ	29,765	9,267	14,312	53,343	0.2689	0.5030	0.2683	0.5476
461835	88	SUNFLOWER TEL - CO	1,422	1,150	866	3,438	0.2519	0.3972	0.2519	0.4185
462181	88	BIJOU TEL COOP ASSOC	4,731	3,799	1,670	10,201	0.1637	0.3463	0.1637	0.2875
462182	88	BLANCA TEL CO	2,062	1,214	1,152	4,428	0.2510	0.5656	0.2510	0.5684
462184	88	DELTA COUNTY TEL CO	56,340	10,474	11,673	78,487	0.1487	0.2897	0.1487	0.2997
462185	88	EAGLE TELECOMMUN INC	27,039	17,434	11,994	56,467	0.2122	0.4294	0.2124	0.6372
462186	88	EASTERN SLOPE RURAL	22,209	14,284	5,590	42,083	0.1328	0.3359	0.1328	0.3199
462187	88	EL PASO COUNTY TEL	12,242	9,104	3,742	25,088	0.1492	0.3257	0.1492	0.3368
462188	88	FARMERS TEL CO - CO	1,268	846	406	2,520	0.1611	0.4061	0.1611	0.3788
462190	88	HAXTUN TEL CO	7,484	4,499	2,093	14,076	0.1499	0.3096	0.1487	0.2620
462192	88	BIG SANDY TELCOMM	3,480	2,522	922	6,924	0.1332	0.3091	0.1332	0.3012
462193	88	NUCLA-NATURITA TEL	5,877	2,347	1,921	10,145	0.1894	0.3997	0.1894	0.4221
462194	88	NUNN TEL CO	1,281	853	552	2,687	0.2055	0.4764	0.2055	0.4662
462196	88	PEETZ COOP TEL CO	1,338	587	507	2,431	0.2085	0.3817	0.2085	0.4028
462199	88	PLAINS COOP TEL ASSN	8,185	4,976	2,043	15,204	0.1344	0.2583	0.1344	0.2346
462203	88	RYE TELEPHONE CO	7,977	3,684	2,634	14,295	0.1843	0.3885	0.1843	0.3940
462204	88	COLUMBINE TEL CO	2,431	1,516	1,622	5,569	0.2913	0.5385	0.2913	0.5411
462207	88	STRASBURG TEL CO	3,945	3,332	1,375	8,652	0.1589	0.3523	0.1589	0.2945
462208	88	UNIVERSAL TEL CO -CO	34,314	5,924	10,839	51,076	0.2122	0.6151	0.2122	0.5401
462209	88	WIGGINS TEL ASSOC	5,464	4,474	1,352	11,290	0.1197	0.2776	0.1197	0.2305
472177	88	CONTEL OF WEST-ID	71,542	33,338	25,616	130,496	0.1963	0.4008	0.1963	0.3911
472213	88	ALBION TEL CO INC	6,361	2,496	2,024	10,880	0.1860	0.3558	0.1860	0.3534
472215	88	CAMBRIDGE TEL CO	4,072	2,161	1,195	7,429	0.1609	0.3575	0.1609	0.3352
472218	88	CUSTER TEL COOP	10,287	2,998	3,233	16,518	0.1957	0.6250	0.1957	0.6828
472223	88	GEM STATE UTIL-ID	6,545	3,556	1,731	11,832	0.1463	0.4189	0.1463	0.3833
472225 *		CENTURY TEL OF IDAHO	23,905	4,204	8,458	36,567	0.1273	0.3694	0.1294	0.3006
472226	88	MIDVALE TEL EXCH INC	310	790	401	1,502	0.2672	0.2831	0.2672	0.3066
472231	88	PROJECT MUTUAL TEL	78,307	9,124	11,183	98,614	0.1120	0.2891	0.1134	0.2766
472232	88	ROCKLAND TEL CO INC	2,358	959	522	3,839	0.1359	0.3100	0.1359	0.2625
472233	88	RURAL TEL CO - ID	438	552	307	1,298	0.2366	0.6250	0.2366	0.5414
472234	88	TROY TELEPHONE CO	3,091	2,029	1,644	6,765	0.2431	0.4114	0.2431	0.4431
472295	88	SILVER STAR TEL- ID	1,480	1,007	786	3,273	0.2401	0.5073	0.2401	0.4823
472423	88	INLAND TEL-ID	887	833	402	2,122	0.1893	0.3406	0.1893	0.3544

TABLE 4.9

1988 NONTIER 1 COMPANIES NETWORK USAGE DATA

FCODE	YEAR	CARRIER	DEM MINUTES IN THOUSANDS				FACTORS			
			LOC DEM	ST DEM	IS DEM	TOT DEM	IS SLU	IS SPF	IS DEM	TR DEM
482235	88	BLACKFOOT TEL COOP	25,133	18,303	9,847	53,283	0.1848	0.4386	0.1848	0.4257
482241 *		HOT SPRINGS TEL CO	4,446	1,230	843	6,519	0.1273	0.3063	0.1294	0.3006
482242	88	INTERBEL TEL COOP	6,290	1,275	1,843	9,408	0.1959	0.4762	0.1959	0.4468
482244	88	LINCOLN TEL CO INC	2,815	1,966	978	5,758	0.1698	0.4381	0.1698	0.4170
482246	88	MID-RIVERS TEL COOP	48,282	18,896	9,349	76,527	0.1222	0.2917	0.1222	0.2692
482247	88	NEMONT TEL COOP-MT	9,572	8,385	4,903	22,859	0.1894	0.3526	0.2145	0.3987
482248	88	NORTHERN TEL COOP	6,761	5,681	3,342	15,783	0.2117	0.4443	0.2117	0.4830
482249	88	NW TEL SYSTEMS, INC.	137,413	76,406	57,508	271,327	0.2081	0.3882	0.2120	0.4021
482250	88	PROJECT TEL CO	11,004	10,295	5,151	26,450	0.2038	0.3469	0.1948	0.3650
482251	88	RANGE TEL COOP-MT	18,886	8,684	5,950	33,520	0.1775	0.4073	0.1775	0.3923
482254	88	SOUTHERN MONTANA TEL	2,647	2,292	1,534	6,473	0.2369	0.5893	0.2369	0.6093
482255	88	3-RIVERS TEL COOP	48,315	25,028	13,774	87,117	0.1581	0.3990	0.1581	0.3926
482257	88	TRIANGLE TEL COOP	57,901	27,808	11,787	97,496	0.1209	0.3128	0.1209	0.2824
482258	88	VALLEY RURAL TEL	3,585	2,329	915	6,829	0.1340	0.6022	0.1340	0.5042
492066	88	DELL TEL CO-OP - NM	1,370	451	550	2,372	0.2320	0.6250	0.2320	0.5980
492176	88	VALLEY TEL COOP - NM	7,153	2,347	3,797	13,297	0.2867	0.4928	0.2855	0.4886
492177	88	CONTEL OF WEST - NM	161,383	63,843	50,576	275,802	0.1834	0.3696	0.1834	0.3797
492259	88	BACA VALLEY TEL CO	3,342	1,425	1,270	6,038	0.2104	0.5173	0.2104	0.4559
492262	88	ENMR TEL COOP INC-NM	65,093	15,360	16,143	96,596	0.1671	0.3883	0.1671	0.3897
492263	88	LA JICARITA RURAL	16,586	3,281	1,797	21,664	0.0829	0.2555	0.0829	0.2269
492264 *		LEACO RURAL TEL COOP	4,740	2,760	2,227	9,728	0.1273	0.4714	0.1294	0.3006
492268	88	WESTERN NEW MEXICO	25,447	10,435	8,682	44,564	0.1948	0.4558	0.1948	0.4665
492270	88	PENASCO VALLEY TEL	9,679	5,462	4,031	19,172	0.2103	0.4778	0.2103	0.4295
492272	88	ROOSEVELT CNTY RURAL	13,744	3,732	3,226	20,701	0.1558	0.3205	0.1558	0.3316
492274	88	UNIVERSAL TEL OF SW	19,214	8,687	6,390	34,292	0.1864	0.4001	0.1864	0.3508
492275	88	NAVAJO COMMUN - NM	13,684	8,655	9,246	31,585	0.2927	0.5980	0.2927	0.6022
502177	88	CONTEL THE WEST - UT	130,762	30,672	33,175	194,608	0.1705	0.3396	0.1705	0.3619
502275	88	NAVAJO COMMUN - UT	821	571	1,431	2,823	0.5068	0.6250	0.5068	0.7565
502277	88	CENTRAL UTAH TEL INC	7,079	2,152	882	10,112	0.0872	0.2158	0.0872	0.1711
502278	88	EMERY COUNTY FARMERS	28,271	7,086	3,238	38,595	0.0839	0.2586	0.0839	0.2259
502280	88	KAMAS-WOODLAND TEL	7,595	4,802	1,801	14,198	0.1268	0.2478	0.1268	0.2383
502284	88	BEEHIVE TEL CO - UT	8,621	1,254	688	10,564	0.0652	0.2180	0.0652	0.0782
502286	88	SOUTH CENTRAL UTAH	19,181	4,711	4,334	28,226	0.1536	0.3768	0.1536	0.3784
502287	88	UINTAH BASIN TEL	17,580	6,463	3,759	27,801	0.1352	0.2839	0.1352	0.2667
502288	88	UT-WY TELECOM	3,581	934	871	5,386	0.1618	0.4705	0.1618	0.3874
512251	88	RANGE TEL COOP - WY	11,759	3,404	3,946	19,109	0.2065	0.4949	0.2065	0.4073
512290	88	UTAH-WYOMING TELECOM	1,442	307	844	2,593	0.3255	0.6800	0.3255	0.6306
512291	88	DUBOIS TEL EXCHANGE	6,600	2,728	4,024	13,351	0.3014	0.5186	0.3014	0.6910
512294 *		MEDICINE BOW TEL CO	3,214	889	610	4,713	0.1273	0.6206	0.1294	0.3006
512295	88	SILVER STAR TEL-WY	5,309	1,336	2,842	9,487	0.2996	0.6700	0.2996	0.6658
512297	88	UNION TELEPHONE CO	24,826	5,681	10,030	40,536	0.2474	0.6444	0.2474	0.6443

TABLE 4.9

1988 NONTIER 1 COMPANIES NETWORK USAGE DATA

FCODE	YEAR	CARRIER	DEM MINUTES IN THOUSANDS				FACTORS			
			LOC DEM	ST DEM	IS DEM	TOT DEM	IS SLU	IS SPF	IS DEM	TR DEM
512299	88	TEL. UTIL. OF WY.	14,791	5,972	7,630	28,394	0.2679	0.6380	0.2687	0.8062
522404 *		ASOTIN TEL - WA	8,629	1,252	1,500	11,380	0.1273	0.2652	0.1294	0.3006
522408	88	TEL UTIL OF WA INC	520,588	285,831	102,996	909,415	0.1118	0.3748	0.1133	0.1133
522410	88	COWICHE TELEPHONE CO	6,856	5,993	1,538	14,386	0.1044	0.2843	0.1069	0.2610
522412	88	ELLENSBURG TEL CO	115,983	35,842	27,215	179,040	0.1520	0.2795	0.1520	0.2792
522417 *		HAT ISLAND TEL CO	0	94	13	106	0.1273	0.4469	0.1294	0.3006
522419	88	HOOD CANAL TEL CO	1,498	2,434	953	4,885	0.1951	0.3863	0.1951	0.3853
522423	88	INLAND TEL CO -WA	8,245	3,154	1,905	13,304	0.1432	0.3189	0.1432	0.3150
522426	88	KALAMA TEL CO	7,907	6,040	3,132	17,080	0.1664	0.3957	0.1834	0.4252
522427	88	LEWIS RIVER TEL CO	11,053	10,018	6,505	27,576	0.2327	0.3691	0.2359	0.4140
522431	88	MASHELL TEL CO INC	7,687	8,857	2,574	19,117	0.1346	0.2713	0.1346	0.2615
522436	88	PENINSULA TELECOMM	54,002	24,424	10,528	88,954	0.1184	0.3118	0.1184	0.3062
522437	88	PIONEER TEL CO	4,042	2,298	874	7,215	0.1212	0.2849	0.1212	0.2622
522442	88	ST JOHN TEL CO	2,114	2,167	785	5,065	0.1550	0.2423	0.1550	0.2468
522446	88	TENINO TELEPHONE CO	10,987	9,299	3,108	23,394	0.1311	0.2408	0.1328	0.2255
522447	88	TOLEDO TELEPHONE CO	8,124	4,704	2,640	15,469	0.1707	0.2394	0.1707	0.2357
522449	88	CONTEL OF THE NW-WA	393,547	152,409	82,942	628,898	0.1319	0.3303	0.1319	0.2446
522451	88	WESTERN WAHKIAKUM	5,784	2,568	1,476	9,828	0.1502	0.2590	0.1502	0.2501
522452	88	WHIDBEY TEL CO.	31,169	20,121	10,270	61,560	0.1355	0.2844	0.1392	0.0528
522453	88	YELM TELEPHONE CO	38,357	20,724	9,687	68,768	0.1409	0.2724	0.1409	0.2723
532226	88	MIDVALE TEL EXCH -OR	781	450	334	1,566	0.2134	0.4064	0.2134	0.4404
532304	88	C P NATIONAL CORP-OR	51,982	33,980	17,854	103,817	0.1720	0.4124	0.1720	0.4063
532359	88	BEAVER CREEK COOP	38,509	10,214	5,148	53,871	0.0956	0.2541	0.0956	0.2279
532361	88	TEL UTIL OF OREGON	215,164	131,755	52,710	399,629	0.1292	0.3489	0.1319	0.3146
532362	88	CANBY TEL ASSN	61,000	29,485	10,180	100,665	0.1011	0.2810	0.1011	0.2595
532363	88	CLEAR CREEK MUTUAL	33,138	7,477	5,028	45,642	0.1102	0.2522	0.1102	0.2323
532364	88	COLTON TEL CO	7,043	4,034	1,659	12,736	0.1303	0.3027	0.1303	0.2656
532371	88	CASCADE UTIL INC	64,579	20,067	11,113	95,759	0.1161	0.2946	0.1161	0.2765
532375	88	RTI/HALSEY TEL CO	2,639	3,534	2,037	8,210	0.2481	0.3630	0.2481	0.4226
532376	88	HELIX TEL CO.	440	892	319	1,651	0.1933	0.3872	0.1933	0.3637
532377	88	HOME TELEPHONE CO	2,306	1,721	597	4,624	0.1292	0.3051	0.1292	0.2396
532378	88	TRANS-CASCADES TEL	420	420	163	1,003	0.1622	0.4133	0.1622	0.3532
532383	88	MOLALLA TEL CO.	37,248	16,935	5,422	59,605	0.0910	0.2563	0.0910	0.2285
532385	88	MONROE TELEPHONE CO.	2,951	3,037	900	6,887	0.1306	0.3604	0.1306	0.3338
532387	88	NEHALEM TEL & TEL	5,655	4,882	1,982	12,519	0.1583	0.3859	0.1583	0.3965
532388	88	NORTH STATE TEL CO.	1,542	1,489	714	3,744	0.1906	0.3402	0.1906	0.2970
532389	88	OREGON TEL CORP	6,485	5,921	2,598	15,004	0.1732	0.3739	0.1732	0.3263
532392	88	PINE TEL SYSTEM INC.	3,283	1,468	1,411	6,162	0.2290	0.4941	0.2290	0.5192
532393	88	PIONEER TEL COOP	59,302	26,924	15,124	101,350	0.1492	0.3533	0.1492	0.3229
532397	88	SCIO MUTUAL TEL ASSN	8,376	5,382	2,086	15,843	0.1317	0.2459	0.1317	0.2308
532404 *		ASOTIN TEL - OR	279	262	221	762	0.1273	0.6250	0.1294	0.3006

TABLE 4.9

1988 NONTIER 1 COMPANIES NETWORK USAGE DATA

FCODE	YEAR	CARRIER	DEM MINUTES IN THOUSANDS				FACTORS			
			LOC DEM	ST DEM	IS DEM	TOT DEM	IS SLU	IS SPF	IS DEM	TR DEM
532449	88	CONTEL OF THE NW- OR	168,648	77,373	36,882	282,902	0.1304	0.2874	0.1304	0.2512
532456	88	MALHEUR HOME TEL CO	108,628	13,777	34,830	157,235	0.2215	0.3848	0.2215	0.3586
542301	88	CALAVERAS TEL CO	5,819	7,580	1,455	14,854	0.0980	0.2490	0.0980	0.2001
542304	88	C P NATIONAL CORP-CA	64,835	44,971	14,726	124,533	0.1179	0.2727	0.1183	0.2033
542308	88	CITIZENS UTIL OF CA	576,962	183,661	72,481	833,104	0.0870	0.2349	0.0870	0.0870
542311	88	CALIF-OREGON TEL CO	10,280	6,320	6,159	22,759	0.2706	0.4824	0.2706	0.5334
542313	88	DUCOR TELEPHONE CO	2,258	2,995	411	5,664	0.0726	0.2213	0.0726	0.1130
542315	88	EVANS TEL CO.	50,880	40,596	6,274	97,750	0.0642	0.2058	0.0642	0.1384
542318 *		FORESTHILL TEL CO.	6,954	9,076	1,611	17,641	0.1273	0.2591	0.1294	0.3006
542321 *		HAPPY VALLEY TEL CO	23,043	6,699	2,062	31,804	0.1273	0.1963	0.1294	0.3006
542322 *		HORNITOS TEL CO	424	2,004	308	2,736	0.1273	0.2531	0.1294	0.3006
542324	88	KERMAN TELEPHONE CO	48,055	13,627	3,453	65,134	0.0522	0.1657	0.0530	0.1084
542332	88	THE PONDEROSA TEL CO	25,500	23,683	3,881	53,064	0.0732	0.2060	0.0732	0.1412
542334	88	ROSEVILLE TEL CO	754,711	177,582	67,600	999,893	0.0704	0.2075	0.0676	0.1278
542338 *		SIERRA TELEPHONE CO	80,356	43,244	9,910	133,509	0.1273	0.2157	0.1294	0.2941
542339	88	THE SISKIYOU TEL CO	15,279	14,860	4,530	34,669	0.1303	0.3004	0.1303	0.2779
542342	88	TUOLUMNE TEL CO	19,636	21,714	4,082	45,433	0.0899	0.2612	0.0899	0.2231
542343	88	THE VOLCANO TEL CO	30,399	30,618	6,137	67,154	0.0914	0.2113	0.0914	0.2742
542346	88	PINNACLES TEL CO	215	1,685	323	2,223	0.1335	0.3808	0.1335	0.2407
552223	88	GEM STATE UTIL-NV	1,637	606	937	3,180	0.2945	0.6250	0.2945	0.8835
552233	88	RURAL TEL CO - NV	231	386	358	975	0.3670	0.6250	0.3670	0.6389
552284	88	BEEHIVE TEL CO - NV	419	107	264	789	0.3341	0.6188	0.3341	0.4009
552302	88	CONTEL OF CALIF-NV	107,008	37,231	84,295	228,535	0.3449	0.6125	0.3689	0.7501
552304	88	CP NATIONAL-NV	82,610	26,872	48,514	157,996	0.3060	0.6063	0.3071	0.6870
552349	88	CHURCHILL COUNTY TEL	66,937	11,328	26,006	104,271	0.2494	0.4975	0.2494	0.5778
552351	88	LINCOLN CTY TEL SYS	7,591	4,268	3,659	15,518	0.2358	0.5131	0.2358	0.4972
552353	88	MOAPA VALLEY TEL CO.	15,314	5,313	5,634	26,261	0.2145	0.5553	0.2145	0.5703
552354	88	NEVADA TEL-TELEGRAPH	13,827	5,613	9,012	28,452	0.3144	0.6250	0.3167	0.7023
552356	88	RIO VIRGIN TEL CO	6,687	1,410	5,262	13,359	0.3939	0.6125	0.3939	0.7579
613000	88	ANCHORAGE TEL UTIL	1,822,367	160,491	332,942	2,315,800	0.1450	0.4339	0.1438	0.4191
613001	88	ARCTIC SLOPE TEL	8,259	11,048	8,795	28,102	0.3130	0.6250	0.3130	0.6035
613003	88	BRISTOL BAY TEL COOP	6,021	3,200	2,795	12,017	0.2326	0.6250	0.2326	0.6012
613004 *		BUSH-TELL INC.	3,194	2,330	509	6,032	0.1273	0.3987	0.1294	0.3006
613006 *		COPPER VALLEY TEL	24,481	8,287	8,368	41,135	0.1273	0.4964	0.1294	0.3006
613007	88	CORDOVA TEL COOP	10,297	2,876	4,501	17,675	0.2547	0.6188	0.2547	0.7114
613008	88	FAIRBANKS MUNICIPAL	336,580	36,681	68,451	441,712	0.1397	0.4084	0.1550	0.3099
613009	88	GTE ALASKA INC.	89,551	37,478	31,662	158,691	0.1995	0.4581	0.1995	0.4541
613010	88	GLACIER STATE TEL CO	298,286	54,594	81,970	434,850	0.1885	0.5236	0.1885	0.3770
613011	88	INTERIOR TEL CO INC	12,525	8,101	11,315	31,940	0.3542	0.6250	0.3542	0.6519
613012	88	JUNEAU & DOUGLAS TEL	151,378	25,648	42,514	219,539	0.1937	0.4991	0.1937	0.5690
613013	88	KETCHIKAN PUBLIC UT	25,183	855	1,546	27,583	0.2128	0.5053	0.2128	0.5806

TABLE 4.9

1988 NONTIER 1 COMPANIES NETWORK USAGE DATA

FCODE	YEAR	CARRIER	DEM MINUTES IN THOUSANDS				FACTORS			
			LOC DEM	ST DEM	IS DEM	TOT DEM	IS SLU	IS SPF	IS DEM	TR DEM
613015	88	MATANUSKA TEL ASSOC	253,473	62,355	59,614	375,442	0.1588	0.3724	0.1588	0.3692
613016	*	MUKLUK TEL CO INC	2,694	2,798	756	6,248	0.1273	0.3796	0.1294	0.3006
613018	88	NUSHAGAK TEL COOP	10,683	4,500	3,381	18,564	0.1821	0.5126	0.1821	0.5603
613019	*	OTZ TEL COOPERATIVE	11,617	8,403	2,995	23,015	0.1273	0.3258	0.1294	0.3006
613020	88	SITKA TELEPHONE CO	52,531	23,162	25,591	101,285	0.2527	0.5187	0.2527	0.7580
613022	88	TEL UTIL OF ALASKA	21,253	1,967	12,167	35,388	0.3438	0.7000	0.3438	0.7884
613023	88	UNITED UTILITIES INC	20,873	12,846	3,511	37,230	0.0943	0.2942	0.0943	0.1976
613025	88	YUKON TEL CO INC	1,610	1,598	664	3,871	0.1714	0.6250	0.1714	0.4590
633200	*	PUERTO RICO COMM	1,154,159	289,746	88,069	1,531,974	0.1273	0.2308	0.1294	0.2747
643300	88	VIRGIN ISLANDS TEL	902,981	0	173,158	1,076,139	0.1609	0.3833	0.1609	0.3539
598		TOTAL	49575802	14413436	9987368	73976606				

* - THOSE COMPANIES WHO NECCA COMPUTED DATA FOR

TABLE 4.10 A

NUMBER OF LOOPS
BY COMPANY

CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
NEW ENGLAND TEL-ME	379630	391870	399537	415306	455959	488537	518865	534989	559727
NEW ENGLAND TEL-MA	2736295	2812630	2871189	2944748	3372309	3476340	3656059	3687599	3797958
NEW ENGLAND TEL-NH	376113	392665	410330	433567	494338	518259	554803	575757	600622
SOUTHERN NEW ENGLAND	1497022	1514269	1531296	1566461	1790125	1852349	1911985	1953317	2032405
NEW ENGLAND TEL-VT	179076	186631	194918	204631	210103	258436	248734	255123	265512
NEW YORK TEL CO	7945771	8077393	8100967	8209546	9124371	9369213	10131270	10107249	10160208
NEW JERSEY BELL	3571728	3674826	3771470	3895832	4473395	4624902	4706307	4883585	5023843
BELL OF PENNSYLVANIA	4292018	4369110	4423071	4460629	4602211	4803641	4948305	5126891	5288973
C & P TEL CO OF MD	2011566	2071688	2117908	2205167	2428057	2518484	2629453	2722022	2788307
CENDEL OF VIRGINIA	136860	145368	153745	161861	175687	168219	186567	205438	214807
GTE SOUTH INC. - VA	25731	21623	27303	27115	27455	28083	28989	29745	30405
UNITED INTER-MT-VA	61164	64745	66945	69767	74760	68109	70037	72115	76295
C & P TEL CO OF VA	1738546	1800419	1848327	1955339	2179310	2279871	2391676	2498923	2575516
GTE SOUTH INC. - WV	53710	60109	55572	56393	58496	60090	61507	63523	65090
C & P TEL CO OF WV	559609	570655	577737	591889	643617	653036	661167	683609	692319
GTE FLORIDA INC.	1050192	1118828	1177303	1256788	1345302	1389295	1530027	1610463	1685086
CENDEL OF FLORIDA	134195	142532	149826	157870	167427	181073	216211	235322	255651
SOUTHERN BELL-FL	2829927	2979190	3079630	3219165	3581010	3732018	3961391	4181333	4377838
GTE SOUTH INC. - GA	144198	152120	154055	159455	166705	175645	187725	193261	202480
SOUTHERN BELL-GA	1850232	1910876	1954918	2039633	2301881	2402516	2540765	2641485	2730758
CAROLINA TEL & TEL	547839	569636	589101	608028	662837	689325	717664	745090	778225
CENDEL OF NC	143477	148871	151625	154784	168827	178208	187001	192879	199701
GTE SOUTH INC - NC	97695	103270	105970	111024	122073	129355	133313	138702	145562
SOUTHERN BELL-NC	1165779	1199027	1226825	1265886	1385660	1433411	1530810	1598870	1660922
GTE SOUTH INC. - SC	97382	101776	104085	108416	117034	124147	130021	131903	138423
UTC OF THE CAROLINAS	47954	49431	51027	53384	59057	62336	66304	66626	70409
SOUTHERN BELL-SC	789114	807922	817790	841291	920432	946185	986726	1024223	1062059
GTE SOUTH INC. - AL	88368	97635	95149	95705	102623	107903	113402	117092	120817
SO CENTRAL BELL-AL	1145370	1175863	1197217	1219067	1341501	1354083	1385483	1443449	1509804
GTE SOUTH INC. - KY	254424	250265	257279	262292	275492	288619	299711	309424	316621
CINCINNATI BELL-KY	113730	115171	115504	116842	122440	128014	131535	135562	141555
SO CENTRAL BELL-KY	780242	789461	793336	805028	869758	867929	880108	917382	941306
SO CENTRAL BELL-LA	1546986	1608735	1647443	1687119	1873928	1856048	1828455	1854022	1868211
SO CENTRAL BELL-MS	749380	773893	776472	790958	842325	866600	883431	929252	970958
GTE SOUTH INC. - TN	40402	41334	42401	43337	45171	46873	47512	49421	51415
UNITED INTER-MT-TN	120941	126434	130424	135911	144537	158086	165101	168163	171573
SO. CENTRAL BELL -TN	1508855	1540351	1557567	1584566	1762913	1783132	1827647	1954740	2018871
GTE NORTH INC. - OH	510692	533278	543087	550869	572394	593035	608079	642689	652061
UTC OF OHIO	312697	329239	343895	355228	389577	408100	422388	440681	459731
CINCINNATI BELL-OH	550456	556120	552991	560675	620291	649592	659009	662831	671227
OHIO BELL TEL CO	2844059	2865767	2865272	2883636	3145754	3179885	3186894	3276728	3377736

TABLE 4.10 A

NUMBER OF LOOPS
BY COMPANY

CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
MICHIGAN BELL TEL CO	3490749	3500074	3500565	3586286	3971567	4060421	4084135	4154087	4384071
GTE NORTH INC. - IN	473304	490959	508614	526269	536354	576595	582077	563200	593384
UTC OF INDIANA	129903	132523	138625	149467	162595	169111	167362	175386	182671
INDIANA BELL TEL CO	1329561	1353563	1362012	1365303	1497016	1549495	1539350	1572278	1622989
GTE NORTH INC. - WI	269107	280447	289861	299275	275521	276157	276709	338939	348924
WISCONSIN BELL	1436422	1524531	1445318	1445665	1593073	1634196	1675819	1683639	1725439
ILLINOIS BELL TEL CO	4604971	4670022	4617925	4645845	5193752	5292771	5398069	5433055	5529643
GTE NORTH INC. - IA	96707	100725	103002	105279	105339	106647	104289	106522	107078
UTC OF IOWA	54545	54797	56111	58643	63894	65392	62205	63586	64077
NORTHWESTERN BELL-IA	856051	858778	863833	874246	932188	927484	917917	915765	933575
GTE NORTH INC. - MN	3215	3400	3655	3910	3363	3384	3296	3315	3393
CENTEL OF MN	53772	57346	58982	59877	63107	65124	67778	72382	78371
UTC OF MINNESOTA	66037	67258	68280	74474	80800	82827	89897	96732	107129
NORTHWESTERN BELL-MN	1457039	1491412	1496756	1544983	1684636	1737958	1755392	1755463	1784752
GTE NORTH INC. - NE	39059	40661	41827	42993	44031	44134	43411	43859	44713
LINCOLN TEL & TEL CO	195542	200183	200975	204486	216610	219115	222128	230549	237413
UTC OF THE WEST-NE	20662	22286	22371	23024	24616	24555	24062	24036	24354
NORTHWESTERN BELL-NE	392872	403352	406195	417952	451583	457365	456274	462148	466641
NORTHWESTERN BELL-ND	220218	228512	230782	238350	256699	260133	259270	262164	264819
NORTHWESTERN BELL-SD	219339	224645	225465	230562	250524	254740	255363	259998	264832
UTC OF ARKANSAS	14015	13788	13650	14148	14632	15096	15383	15848	17382
GTE SOUTHWEST INC-AR	51401	52380	53251	54828	56843	58599	58719	61183	64382
SOUTHWESTERN BELL-AR	575072	583860	588179	601235	656875	687015	707404	717152	717270
UTC OF KANSAS	56294	57466	59410	60973	66098	67460	65228	66005	69746
SOUTHWESTERN BELL-KS	856086	888660	899570	918238	990221	1036035	1057827	1058247	1064973
GTE NORTH INC. - MO	82596	85137	85862	86587	92297	96112	96028	90144	90458
UTC OF MISSOURI	122423	128412	137259	138059	157108	161647	168409	176397	179860
SOUTHWESTERN BELL-MO	1680526	1710647	1719644	1748978	1923878	1976611	2005536	2037083	2029303
GTE SOUTHWEST INC-OK	75264	79383	84707	89626	94909	99080	96725	98400	103626
SOUTHWESTERN BELL-OK	1127803	1199970	1225495	1242702	1362983	1376810	1361742	1342287	1315662
GTE SOUTHWEST INC-TX	749461	810842	847762	884957	951044	1004797	1026476	1062531	1124391
UTC OF TEXAS INC	72769	74323	79630	82265	82246	93997	97728	99516	102965
CENTEL OF TEXAS	68896	82432	83445	91424	104205	110056	119267	121160	127345
SOUTHWESTERN BELL-TX	4866813	5233382	5590678	5709867	6488861	6825436	6868673	6784904	6761126
MOUNTAIN BELL - AZ	1158019	1231914	1269108	1303714	1476096	1598358	1657360	1733920	1784211
MOUNTAIN BELL-CO	1322167	1404285	1453440	1512784	1714494	1823085	1791889	1812433	1833930
GTE NORTHWEST INC-ID	43149	61449	564425	62296	64203	66767	65164	66829	70366
MOUNTAIN BELL-ID	263476	272325	277740	283757	312896	327643	325052	329149	337988
PACIFIC NW BELL-ID	19726	20361	20447	21098	22579	23155	22781	23354	24460
GTE NORTHWEST INC-MT	5300	5417	54043	5789	5911	5936	6089	6170	6355
MOUNTAIN BELL-MT	265668	270952	276773	285990	306882	319454	307462	306232	309362
GTE SOUTHWEST INC-NM	37586	40712	41632	40137	41500	41481	38867	38880	39349
MOUNTAIN BELL-NM	425445	443572	459208	465962	507695	535045	544140	560496	573938
MOUNTAIN BELL-UT	546183	569445	581509	602818	667899	691942	695852	703945	714299
UTC OF THE WEST-WY	4847	5227	5247	5401	5566	5713	5676	5806	6063

TABLE 4.10 A

NUMBER OF LOOPS
BY COMPANY

CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
UTC OF THE NW-WA	35686	36186	36628	38100	42961	44596	47125	48948	52575
GTE NORTHWEST INC-WA	357782	383065	3494066	366589	415938	445217	461492	486536	491014
PACIFIC NW BELL-WA	1451414	1489503	1503316	1535614	1687478	1767473	1780057	1829836	1866845
UTC OF THE NW - OR	31901	32248	32509	35798	40898	41254	43692	46119	48778
GTE NORTHWEST INC-OR	198484	210894	2008414	213791	229217	237814	247317	257404	271749
PACIFIC NW BELL-OR	860882	880457	876693	888054	951391	985621	966783	989606	1023778
CONTEL OF CALIFORNIA	173017	183092	191231	198791	204609	218642	233367	254578	260629
GTC OF CALIFORNIA	2486600	2558838	2587737	2677005	2832110	2828409	2869001	3188431	3342172
WEST COAST TEL OF CA	7760	7957	79742	7773	8060	8308	8890	9315	9419
PACIFIC BELL	9842807	10207253	10363083	10858359	11498374	12004989	12015099	13112667	13579634
CENTEL OF NV	250090	261929	267626	290893	297118	311964	350190	358464	398839
NEVADA BELL	142376	152390	156515	166281	165000	174911	196655	206626	215291
DIAMOND STATE TEL	280663	291801	298310	304143	335379	358699	382981	405673	416722
C & P TEL CO OF WASH	690591	710968	721445	768414	875900	885321	875672	880853	907845
NEW ENGLAND TEL - RI	425216	433160	440600	455161	503506	478921	522999	532382	551464
TOTAL TIER 1A	92355701	95317594	102411639	99491396	109105627	112779501	115744800	119427364	122650558
CONTEL OF NY, INC	145063	NA	164422	166277	99670	172244	173239	184489	195924
ROCHESTER TEL CORP	NA	NA	NA	NA	409105	410452	415934	437013	450532
UNITED TEL - NJ, INC	NA	NA	NA	NA	99528	108967	117856	132941	142441
GTE NORTH INC. - PA	15807	NA	17222	0	372777	389041	393945	418233	446384
UTC OF PENNSYLVANIA	NA	NA	NA	NA	251683	261211	270020	282043	295080
CONTEL OF VIRGINIA	NA	203910	217026	225745	258154	273297	284618	334829	368664
UTC OF FLORIDA	NA	525540	569975	622733	715939	781349	838819	902559	976675
CENTEL OF OHIO	NA	54539	55066	54508	57327	58990	60170	62954	60779
GTE NORTH INC. - MI	NA	NA	NA	NA	437804	469141	470830	483451	492102
CENTEL OF ILLINOIS	NA	137344	153002	155822	176041	179314	179114	190940	180463
GTE NORTH INC. - IL	NA	532613	540468	NA	542977	520752	521069	561543	571831
CONTEL OF TEXAS	NA	100838	112786	118312	131907	137894	150180	154729	153390
GTE HAWAIIAN TEL. CO	NA	NA	456754	472251	488917	498378	524822	541488	584799
PUERTO RICO TEL CO	NA	NA	NA	NA	530914	603892	649505	705633	765325
TOTAL TIER 1B	NA	NA	NA	NA	4572743	4864922	5050121	5392845	5684389
ALL OTHER COST CO.	NA	NA	NA	NA	4400000	4600000	4800000	5332725	5292686
TOTAL COST CO.	NA	NA	NA	NA	118078370	122244423	125594921	130152934	133627633
AVERAGE SCHEDULE CO.	NA	NA	NA	NA	2590000	2660000	2700000	2800000	2858899
TOTAL INDUSTRY	NA	NA	NA	NA	120668370	124904423	128294921	132952934	136486532

TABLE 4.10 B

NUMBER OF LOOPS
YEAR OVER YEAR GROWTH
BY COMPANY

CARRIER	1981	1982	1983	1984	1985	1986	1987	1988
NEW ENGLAND TEL-ME	3.22%	1.96%	3.95%	9.79%	7.14%	6.21%	3.11%	4.62%
NEW ENGLAND TEL-MA	2.79%	2.08%	2.56%	14.52%	3.08%	5.17%	0.86%	2.99%
NEW ENGLAND TEL-NH	4.40%	4.50%	5.66%	14.02%	4.84%	7.05%	3.78%	4.32%
SOUTHERN NEW ENGLAND	1.15%	1.12%	2.30%	14.28%	3.48%	3.22%	2.16%	4.05%
NEW ENGLAND TEL-VT	4.22%	4.44%	4.98%	2.67%	23.00%	-3.75%	2.57%	4.07%
NEW YORK TEL CO	1.66%	0.29%	1.34%	11.14%	2.68%	8.13%	-0.24%	0.52%
NEW JERSEY BELL	2.89%	2.63%	3.30%	14.83%	3.39%	1.76%	3.77%	2.87%
BELL OF PENNSYLVANIA	1.80%	1.24%	0.85%	3.17%	4.38%	3.01%	3.61%	3.16%
C & P TEL CO OF MD	2.99%	2.23%	4.12%	10.11%	3.72%	4.41%	3.52%	2.44%
CENDEL OF VIRGINIA	6.22%	5.76%	5.28%	8.54%	-4.25%	10.91%	10.11%	4.56%
GTE SOUTH INC. - VA	-15.97%	26.27%	-0.69%	1.25%	2.29%	3.23%	2.61%	2.22%
UNITED INTER-MT-VA	5.85%	3.40%	4.22%	7.16%	-8.90%	2.83%	2.97%	5.80%
C & P TEL CO OF VA	3.56%	2.66%	5.79%	11.45%	4.61%	4.90%	4.48%	3.07%
GTE SOUTH INC. - WV	11.91%	-7.55%	1.48%	3.73%	2.72%	2.36%	3.28%	2.47%
C & P TEL CO OF WV	1.97%	1.24%	2.45%	8.74%	1.46%	1.25%	3.39%	1.27%
GTE FLORIDA INC.	6.54%	5.23%	6.75%	7.04%	3.27%	10.13%	5.26%	4.63%
CENDEL OF FLORIDA	6.21%	5.12%	5.37%	6.05%	8.15%	19.41%	8.84%	8.64%
SOUTHERN BELL-FL	5.27%	3.37%	4.53%	11.24%	4.22%	6.15%	5.55%	4.70%
GTE SOUTH INC.- GA	5.49%	1.27%	3.51%	4.55%	5.36%	6.88%	2.95%	4.77%
SOUTHERN BELL-GA	3.28%	2.30%	4.33%	12.86%	4.37%	5.75%	3.96%	3.38%
CAROLINA TEL & TEL	3.98%	3.42%	3.21%	9.01%	4.00%	4.11%	3.82%	4.45%
CENDEL OF NC	3.76%	1.85%	2.08%	9.07%	5.56%	4.93%	3.14%	3.54%
GTE SOUTH INC - NC	5.71%	2.61%	4.77%	9.95%	5.97%	3.06%	4.04%	4.95%
SOUTHERN BELL-NC	2.85%	2.32%	3.18%	9.46%	3.45%	6.79%	4.45%	3.88%
GTE SOUTH INC. - SC	4.51%	2.27%	4.16%	7.95%	6.08%	4.73%	1.45%	4.94%
UTC OF THE CAROLINAS	3.08%	3.23%	4.62%	10.63%	5.55%	6.37%	0.49%	5.68%
SOUTHERN BELL-SC	2.38%	1.22%	2.87%	9.41%	2.80%	4.28%	3.80%	3.69%
GTE SOUTH INC. - AL	10.49%	-2.55%	0.58%	7.23%	5.15%	5.10%	3.25%	3.18%
SO CENTRAL BELL-AL	2.66%	1.82%	1.83%	10.04%	0.94%	2.32%	4.18%	4.60%
GTE SOUTH INC. - KY	-1.63%	2.80%	1.95%	5.03%	4.76%	3.84%	3.24%	2.33%
CINCINNATI BELL-KY	1.27%	0.29%	1.16%	4.79%	4.55%	2.75%	3.06%	4.42%
SO CENTRAL BELL-KY	1.18%	0.49%	1.47%	8.04%	-0.21%	1.40%	4.24%	2.61%
SO CENTRAL BELL-LA	3.99%	2.41%	2.41%	11.07%	-0.95%	-1.49%	1.40%	0.77%
SO CENTRAL BELL-MS	3.27%	0.33%	1.87%	6.49%	2.88%	1.94%	5.19%	4.49%
GTE SOUTH INC. - TN	2.31%	2.58%	2.21%	4.23%	3.77%	1.36%	4.02%	4.03%
UNITED INTER-MT-TN	4.54%	3.16%	4.21%	6.35%	9.37%	4.44%	1.85%	2.03%
SO. CENTRAL BELL -TN	2.09%	1.12%	1.73%	11.26%	1.15%	2.50%	6.95%	3.28%
GTE NORTH INC. - OH	4.42%	1.84%	1.43%	3.91%	3.61%	2.54%	5.69%	1.46%
UTC OF OHIO	5.29%	4.45%	3.30%	9.67%	4.75%	3.50%	4.33%	4.32%
CINCINNATI BELL-OH	1.03%	-0.56%	1.39%	10.63%	4.72%	1.45%	0.58%	1.27%
OHIO BELL TEL CO	0.76%	-0.02%	0.64%	9.09%	1.08%	0.22%	2.82%	3.08%

TABLE 4.10 B
NUMBER OF LOOPS
YEAR OVER YEAR GROWTH
BY COMPANY

CARRIER	1981	1982	1983	1984	1985	1986	1987	1988
MICHIGAN BELL TEL CO	0.27%	0.01%	2.45%	10.74%	2.24%	0.58%	1.71%	5.54%
GTE NORTH INC. - IN	3.73%	3.60%	3.47%	1.92%	7.50%	0.95%	-3.24%	5.36%
UTC OF INDIANA	2.02%	4.60%	7.82%	8.78%	4.01%	-1.03%	4.79%	4.15%
INDIANA BELL TEL CO	1.81%	0.62%	0.24%	9.65%	3.51%	-0.65%	2.14%	3.23%
GTE NORTH INC. - WI	4.21%	3.36%	3.25%	-7.94%	0.23%	0.20%	22.49%	2.95%
WISCONSIN BELL	6.13%	-5.20%	0.02%	10.20%	2.58%	2.55%	0.47%	2.48%
ILLINOIS BELL TEL CO	1.41%	-1.12%	0.60%	11.79%	1.91%	1.99%	0.65%	1.78%
GTE NORTH INC. - IA	4.15%	2.26%	2.21%	0.06%	1.24%	-2.21%	2.14%	0.52%
UTC OF IOWA	0.46%	2.40%	4.51%	8.95%	2.34%	-4.87%	2.22%	0.77%
NORTHWESTERN BELL-IA	0.32%	0.59%	1.21%	6.63%	-0.50%	-1.03%	-0.23%	1.94%
GTE NORTH INC. - MN	5.75%	7.50%	6.98%	-13.99%	0.62%	-2.60%	0.58%	2.35%
CENDEL OF MN	6.65%	2.85%	1.52%	5.39%	3.20%	4.08%	6.79%	8.27%
UTC OF MINNESOTA	1.85%	1.52%	9.07%	8.49%	2.51%	8.54%	7.60%	10.75%
NORTHWESTERN BELL-MN	2.36%	0.36%	3.22%	9.04%	3.17%	1.00%	0.00%	1.67%
GTE NORTH INC. - NE	4.10%	2.87%	2.79%	2.41%	0.23%	-1.64%	1.03%	1.95%
LINCOLN TEL & TEL CO	2.37%	0.40%	1.75%	5.93%	1.16%	1.38%	3.79%	2.98%
UTC OF THE WEST-NE	7.86%	0.38%	2.92%	6.91%	-0.25%	-2.01%	-0.11%	1.32%
NORTHWESTERN BELL-NE	2.67%	0.70%	2.89%	8.05%	1.28%	-0.24%	1.29%	0.97%
NORTHWESTERN BELL-ND	3.77%	0.99%	3.28%	7.70%	1.34%	-0.33%	1.12%	1.01%
NORTHWESTERN BELL-SD	2.42%	0.37%	2.26%	8.66%	1.68%	0.24%	1.82%	1.86%
UTC OF ARKANSAS	-1.62%	-1.00%	3.65%	3.42%	3.17%	1.90%	3.02%	9.68%
GTE SOUTHWEST INC-AR	1.90%	1.66%	2.96%	3.68%	3.09%	0.20%	4.20%	5.23%
SOUTHWESTERN BELL-AR	1.53%	0.74%	2.22%	9.25%	4.59%	2.97%	1.38%	0.02%
UTC OF KANSAS	2.08%	3.38%	2.63%	8.41%	2.06%	-3.31%	1.19%	5.67%
SOUTHWESTERN BELL-KS	3.80%	1.23%	2.08%	7.84%	4.63%	2.10%	0.04%	0.64%
GTE NORTH INC. - MO	3.08%	0.85%	0.84%	6.59%	4.13%	-0.09%	-6.13%	0.35%
UTC OF MISSOURI	4.89%	6.89%	0.58%	13.80%	2.89%	4.18%	4.74%	1.96%
SOUTHWESTERN BELL-MO	1.79%	0.53%	1.71%	10.00%	2.74%	1.46%	1.57%	-0.38%
GTE SOUTHWEST INC-OK	5.47%	6.71%	5.81%	5.89%	4.39%	-2.38%	1.73%	5.31%
SOUTHWESTERN BELL-OK	6.40%	2.13%	1.40%	9.68%	1.01%	-1.09%	-1.43%	-1.98%
GTE SOUTHWEST INC-TX	8.19%	4.55%	4.39%	7.47%	5.65%	2.16%	3.51%	5.82%
UTC OF TEXAS INC	2.14%	7.14%	3.31%	-0.02%	14.29%	3.97%	1.83%	3.47%
CENDEL OF TEXAS	19.65%	1.23%	9.56%	13.98%	5.61%	8.37%	1.59%	5.10%
SOUTHWESTERN BELL-TX	7.53%	6.83%	2.13%	13.64%	5.19%	0.63%	-1.22%	-0.35%
MOUNTAIN BELL - AZ	6.38%	3.02%	2.73%	13.22%	8.28%	3.69%	4.62%	2.90%
MOUNTAIN BELL-CO	6.21%	3.50%	4.08%	13.33%	6.33%	-1.71%	1.15%	1.19%
GTE NORTHWEST INC-ID	42.41%	818.53%	-88.96%	3.06%	3.99%	-2.40%	2.56%	5.29%
MOUNTAIN BELL-ID	3.36%	1.99%	2.17%	10.27%	4.71%	-0.79%	1.26%	2.69%
PACIFIC NW BELL-ID	3.22%	0.42%	3.18%	7.02%	2.55%	-1.62%	2.52%	4.74%
GTE NORTHWEST INC-MT	2.21%	897.66%	-89.29%	2.11%	0.42%	2.58%	1.33%	3.00%
MOUNTAIN BELL-MT	1.99%	2.15%	3.33%	7.31%	4.10%	-3.75%	-0.40%	1.02%
GTE SOUTHWEST INC-NM	8.32%	2.26%	-3.59%	3.40%	-0.05%	-6.30%	0.03%	1.21%
MOUNTAIN BELL-NM	4.26%	3.53%	1.47%	8.96%	5.39%	1.70%	3.01%	2.40%
MOUNTAIN BELL-UT	4.26%	2.12%	3.66%	10.80%	3.60%	0.57%	1.16%	1.47%

TABLE 4.10 B

NUMBER OF LOOPS
YEAR OVER YEAR GROWTH
BY COMPANY

CARRIER	1981	1982	1983	1984	1985	1986	1987	1988
UTC OF THE NW-WA	1.40%	1.22%	4.02%	12.76%	3.81%	5.67%	3.87%	7.41%
GTE NORTHWEST INC-WA	7.07%	812.13%	-89.51%	13.46%	7.04%	3.66%	5.43%	0.92%
PACIFIC NW BELL-WA	2.62%	0.93%	2.15%	9.89%	4.74%	0.71%	2.80%	2.02%
UTC OF THE NW - OR	1.09%	0.81%	10.12%	14.25%	0.87%	5.91%	5.55%	5.77%
GTE NORTHWEST INC-OR	6.25%	852.33%	-89.36%	7.22%	3.75%	4.00%	4.08%	5.57%
PACIFIC NW BELL-OR	2.27%	-0.43%	1.30%	7.13%	3.60%	-1.91%	2.36%	3.45%
CONTEL OF CALIFORNIA	5.82%	4.45%	3.95%	2.93%	6.86%	6.73%	9.09%	2.38%
GTC OF CALIFORNIA	2.91%	1.13%	3.45%	5.79%	-0.13%	1.44%	11.13%	4.82%
WEST COAST TEL OF CA	2.54%	902.16%	-90.25%	3.69%	3.08%	7.01%	4.78%	1.12%
PACIFIC BELL	3.70%	1.53%	4.78%	5.89%	4.41%	0.08%	9.13%	3.56%
CENDEL OF NV	4.73%	2.18%	8.69%	2.14%	5.00%	12.25%	2.36%	11.26%
NEVADA BELL	7.03%	2.71%	6.24%	-0.77%	6.01%	12.43%	5.07%	4.19%
DIAMOND STATE TEL	3.97%	2.23%	1.96%	10.27%	6.95%	6.77%	5.93%	2.72%
C & P TEL CO OF WASH	2.95%	1.47%	6.51%	13.99%	1.08%	-1.09%	0.59%	3.06%
NEW ENGLAND TEL - RI	1.87%	1.72%	3.30%	10.62%	-4.88%	9.20%	1.79%	3.58%
TOTAL TIER 1A	3.21%	7.44%	-2.85%	9.66%	3.37%	2.63%	3.18%	2.70%
CONTEL OF NY, INC	NA	NA	1.13%	-40.06%	72.81%	0.58%	6.49%	6.20%
ROCHESTER TEL CORP	NA	NA	NA	NA	0.33%	1.34%	5.07%	3.09%
UNITED TEL - NJ, INC	NA	NA	NA	NA	9.48%	8.16%	12.80%	7.15%
GTE NORTH INC. - PA	NA	NA	NA	NA	4.36%	1.26%	6.17%	6.73%
UTC OF PENNSYLVANIA	NA	NA	NA	NA	3.79%	3.37%	4.45%	4.62%
CONTEL OF VIRGINIA	NA	6.43%	4.02%	14.36%	5.87%	4.14%	17.64%	10.11%
UTC OF FLORIDA	NA	8.46%	9.26%	14.97%	9.14%	7.36%	7.60%	8.21%
CENDEL OF OHIO	NA	0.97%	-1.01%	5.17%	2.90%	2.00%	4.63%	-3.45%
GTE NORTH INC. - MI	NA	0.00%	0.00%	0.00%	7.16%	0.36%	2.68%	1.79%
CENDEL OF ILLINOIS	NA	11.40%	1.84%	12.98%	1.86%	-0.11%	6.60%	-5.49%
GTE NORTH INC. - IL	NA	1.47%	-100.00%	0.00%	-4.09%	0.06%	7.77%	1.83%
CONTEL OF TEXAS	NA	11.85%	4.90%	11.49%	4.54%	8.91%	3.03%	-0.87%
GTE HAWAIIAN TEL. CO	NA	NA	3.39%	3.53%	1.94%	5.31%	3.18%	8.00%
PUERTO RICO TEL CO	NA	NA	NA	NA	13.75%	7.55%	8.64%	8.46%
TOTAL TIER 1B	NA	NA	NA	NA	6.39%	3.81%	6.79%	5.41%
ALL OTHER COST CO.	NA	NA	NA	NA	4.55%	4.35%	11.10%	-0.75%
TOTAL COST CO.	NA	NA	NA	NA	3.53%	2.74%	3.63%	2.67%
AVERAGE SCHEDULE CO.	NA	NA	NA	NA	2.70%	1.50%	3.70%	2.10%
TOTAL INDUSTRY	NA	NA	NA	NA	3.51%	2.71%	3.63%	2.66%

TABLE 4.11 A
STATE TOLL MESSAGES
BY COMPANY (IN THOUSANDS)

CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
NEW ENGLAND TEL-ME	67748	69758	75426	80806	84762	94855	104858	122527	132653
NEW ENGLAND TEL-MA	432947	477280	518493	532446	575371	682901	761834	915167	996760
NEW ENGLAND TEL-NH	59304	60118	65734	71612	76421	92446	106295	125362	139099
SOUTHERN NEW ENGLAND	262309	279410	300034	323208	357784	388524	425499	470457	518659
NEW ENGLAND TEL-VT	28084	30570	32793	36669	38344	39234	42715	47973	50942
NEW YORK TEL CO	450729	484264	517200	562799	553193	537035	603610	678402	654003
NEW JERSEY BELL	1035320	1104672	1192899	1313819	1456241	1575418	1761152	1995265	2134756
GTE NORTH INC. - PA	45923	48311	52134	54324	59190	63460	67850	74709	74651
BELL OF PENNSYLVANIA	456028	488850	519156	555899	621928	675969	762225	840905	924522
C & P TEL CO OF MD	109733	118060	123822	130494	139133	160842	179851	202519	231980
CENDEL OF VIRGINIA	20905	23229	24978	26235	27285	28304	28891	34649	40656
GTE SOUTH INC. - VA	3432	3775	3930	4078	4023	4495	4696	5083	5478
UNITED INTER-MT-VA	6607	7166	7467	7625	8092	8821	9461	10433	11639
C & P TEL CO OF VA	148976	159475	168774	177761	188991	218922	234849	255716	268367
GTE SOUTH INC. - WV	7030	7379	7665	7906	8386	9121	9396	10200	10707
C & P TEL CO OF WV	71102	73072	76351	78175	82111	90370	89909	94987	91229
GTE FLORIDA INC.	93811	105933	116290	126411	140830	166051	189601	237950	302360
CENDEL OF FLORIDA	12916	15537	17866	19821	22058	24769	31239	30213	38635
UTC OF FLORIDA	60081	67986	77224	90133	97316	117682	132690	147943	168440
SOUTHERN BELL-FL	300709	337594	372629	411034	466770	519937	565898	577974	634429
GTE SOUTH INC. - GA	24236	26216	27996	30567	33120	37694	42365	46856	51669
SOUTHERN BELL-GA	163344	177461	192781	208652	238922	261524	278211	302938	339172
CAROLINA TEL & TEL	83257	88223	92368	102056	113363	128763	144501	157414	175569
CENDEL OF NC	20365	22016	23490	25500	30126	29857	40308	35980	41106
GTE SOUTH INC - NC	12812	13579	15475	17890	20435	22796	26461	30777	35328
SOUTHERN BELL-NC	154527	168499	184348	201302	222376	240110	269258	270220	319058
GTE SOUTH INC. - SC	13954	14671	15680	17301	19151	20868	22893	24581	27824
UTC OF THE CAROLINAS	5929	6372	6714	7268	8074	8725	9526	10664	12278
SOUTHERN BELL-SC	79287	86116	90064	94437	103413	106321	109817	114856	133879
GTE SOUTH INC. - AL	12422	13444	14663	16324	17492	19320	20716	23107	25230
SO CENTRAL BELL-AL	110801	118190	125545	133237	144664	152769	159520	168115	186694
GTE SOUTH INC. - KY	22733	26777	30599	33487	35473	38394	42447	49622	52011
CINCINNATI BELL-KY	3934	4017	4154	4274	4565	5005	5321	5751	5956
SO CENTRAL BELL-KY	78058	81081	84142	88712	93901	95318	97629	104209	121225
SO CENTRAL BELL-LA	190320	215891	234777	240749	255502	258979	255431	256343	282294
SO CENTRAL BELL-MS	104000	108876	114831	119592	124561	131151	136405	151321	164246
GTE SOUTH INC. - TN	4996	4946	5792	6466	7357	8053	6993	7916	10851
UNITED INTER-MT-TN	12245	13644	14520	15647	16724	18530	22084	28306	31845
SO. CENTRAL BELL -TN	141499	150893	161604	169690	184346	193423	209331	230334	270544
GTE NORTH INC. - OH	105804	110837	103361	104644	110252	118946	127505	147031	163177
UTC OF OHIO	65411	69998	72551	75896	82039	89415	93861	101217	112660
CINCINNATI BELL-OH	28205	29501	30586	31690	34234	37162	39717	39471	42178
OHIO BELL TEL CO	282439	304738	316895	324912	339031	360997	354891	360880	357743

TABLE 4.11 A
STATE TOLL MESSAGES
BY COMPANY (IN THOUSANDS)

CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
GTE NORTH INC. - MI	103151	97548	107614	110534	116589	126339	133561	145779	159919
MICHIGAN BELL TEL CO	518089	544017	551978	581784	684963	752645	752645	874648	894243
GTE NORTH INC. - IN	55329	60386	63684	67197	72885	78072	81200	93220	105146
UTC OF INDIANA	23872	26585	28141	29990	32900	35848	38153	41279	46721
INDIANA BELL TEL CO	123854	130536	138296	147354	159057	164239	164239	171324	181695
GTE NORTH INC. - WI	51107	54130	55983	59094	64360	70581	72121	79839	90760
WISCONSIN BELL	147553	154678	164387	173389	179616	194759	190694	195226	203303
GTE NORTH INC. - IL	98276	113017	117756	121187	129574	129421	136292	143161	169152
ILLINOIS BELL TEL CO	265250	282311	291290	302199	340501	349013	358861	341191	334576
GTE NORTH INC. - IA	21698	22566	24155	25957	25800	26316	27048	29026	31846
NORTHWESTERN BELL-IA	117369	123120	128463	132486	132572	133276	132318	131945	132397
GTE NORTH INC. - MN	754	808	874	956	819	818	848	896	980
CENTEL OF MN	7691	8258	8900	9713	9716	10403	10820	12481	12967
NORTHWESTERN BELL-MN	109224	116506	123691	130919	139689	149536	154159	156780	155704
GTE NORTH INC. - NE	7187	7631	8236	8854	9136	9029	9146	9701	10169
LINCOLN TEL & TEL CO	26433	27928	30737	32835	34623	35679	36857	39291	41220
NORTHWESTERN BELL-NE	38681	41019	43547	46044	54672	47089	46365	46640	45465
NORTHWESTERN BELL-ND	28085	30500	32091	33316	35313	37329	36492	35825	36872
NORTHWESTERN BELL-SD	27681	29192	30951	32458	34160	36778	35904	34247	36562
UTC OF ARKANSAS	3105	3131	3157	3241	3265	3592	3724	4025	4387
GTE SOUTHWEST INC-AR	10052	10521	10756	11609	11933	13188	13531	14675	16124
SOUTHWESTERN BELL-AR	89544	94913	98845	103809	107942	108505	114383	121690	128261
UTC OF KANSAS	13237	13561	13952	15710	15610	16054	15813	16497	17469
SOUTHWESTERN BELL-KS	109304	121610	125049	131358	128806	129671	128483	134233	136602
GTE NORTH INC. - MO	13819	14661	14912	15619	15650	17637	18931	20645	22109
UTC OF MISSOURI	27962	29559	30620	31284	33192	36322	37883	42227	46952
SOUTHWESTERN BELL-MO	154438	158667	148174	161127	173232	174166	184054	192219	199252
GTE SOUTHWEST INC-OK	16561	18811	20343	21630	21872	22979	22772	23882	25080
SOUTHWESTERN BELL-OK	165212	173356	207881	212444	208572	210380	204893	199746	207604
GTE SOUTHWEST INC-TX	133519	154415	165858	175938	184343	201244	214866	239089	254341
CENTEL OF TEXAS	13109	15235	18847	19425	20016	21879	22302	27294	27063
SOUTHWESTERN BELL-TX	636804	719876	796879	804606	827782	887735	870312	876095	866534
MOUNTAIN BELL - AZ	70433	79154	85909	89045	97134	101981	108919	119152	127470
MOUNTAIN BELL-CO	120443	135050	147152	155393	162581	165183	168147	174360	179550
GTE NORTHWEST INC-ID	7607	7935	8072	8879	9767	10156	10361	10598	10578
MOUNTAIN BELL-ID	38549	40403	41470	44016	47134	49352	48400	48300	51627
PACIFIC NW BELL-ID	2751	2777	2834	3016	3116	3140	3176	3158	3322
GTE NORTHWEST INC-MT	702	726	720	765	787	814	851	883	912
MOUNTAIN BELL-MT	40781	43594	45438	48753	51609	51390	52887	53754	56238
GTE SOUTHWEST INC-NM	3257	3905	4317	4289	4811	5036	4516	4673	4929
MOUNTAIN BELL-NM	39205	42621	46447	48170	51452	55279	58427	59624	62299
MOUNTAIN BELL-UT	60302	66749	66521	67319	68149	71762	75254	79696	82760
MOUNTAIN BELL-WY	25185	27669	28230	27333	28534	29167	28163	27130	28673

TABLE 4.11 A
STATE TOLL MESSAGES
BY COMPANY (IN THOUSANDS)

CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
UTC OF THE NW-WA	11484	11962	12551	13279	13301	14497	14704	16525	19136
GTE NORTHWEST INC-WA	53421	56744	60419	66460	74435	80415	86688	95969	112594
PACIFIC NW BELL-WA	174628	189567	201137	217756	230476	238752	253875	275099	287149
UTC OF THE NW - OR	10424	10778	10690	11155	11357	13101	12343	12739	14858
GTE NORTHWEST INC-OR	34288	36308	37321	38441	39594	40799	42612	46609	51451
PACIFIC NW BELL-OR	121724	128874	133911	141760	146615	144831	138651	158393	159620
CONTEL OF CALIFORNIA	47213	51901	55039	58896	64593	71038	76003	80639	89784
GTC OF CALIFORNIA	630696	684585	737105	797697	860772	928834	986921	1169103	1264587
WEST COAST TEL OF CA	1512	1552	1486	1521	1532	1604	1868	2064	2501
PACIFIC BELL	2242132	2438270	2576616	2868243	3282288	3559774	3885138	4275951	4588887
CENTEL OF NV	2962	3264	3517	4320	4421	4982	5818	6411	9636
NEVADA BELL	7550	8647	9010	9828	11960	12726	12716	14354	17783
DIAMOND STATE TEL	10459	11160	12217	14207	15147	16850	19305	21660	25149
C & P TEL CO OF WASH	0	0	0	0	0	0	0	0	0
NEW ENGLAND TEL - RI	29116	33566	38015	39464	41522	48099	50647	56152	66297
TOTAL TIER 1A	12339047	13335240	14205992	15215617	16579598	17833359	19043769	20854153	22351768
CONTEL OF NY, INC	NA	NA	38290	40947	44799	48851	55842	66197	72337
ROCHESTER TEL CORP	NA	NA	NA	NA	32371	32684	30608	51832	54668
UNITED TEL - NJ, INC	NA	35279	37902	41415	50000	56315	64204	73356	79980
UTC OF PENNSYLVANIA	NA	41039	42972	46050	55070	59196	66590	72888	78831
CONTEL OF VIRGINIA	NA	39140	42912	44906	50035	56146	67292	72522	73628
CENTEL OF OHIO	NA	8098	8528	8214	8447	9478	10611	12412	14525
CENTEL OF ILLINOIS	NA	18344	19089	18769	19721	21569	22659	25133	29495
UTC OF IOWA	NA	11825	12692	12782	13434	14347	14570	16146	17175
UTC OF MINNESOTA	NA	10899	11917	12773	13136	15124	15648	17430	19276
UTC OF THE WEST-NE	NA	1853	1973	2072	2098	2280	2326	2328	2466
UTC OF TEXAS INC	NA	NA	22833	25465	28751	30972	33775	35610	37430
CONTEL OF TEXAS	NA	32268	38414	40695	43979	49506	52365	56402	58773
UTC OF THE WEST-WY	NA	545	566	607	649	691	709	702	702
GTE HAWAIIAN TEL. CO	NA	NA	14758	18091	22686	24136	23966	24473	27982
PUERTO RICO TEL CO	NA	NA	NA	NA	70344	86851	104093	130545	178878
TOTAL TIER 1B	NA	NA	NA	NA	455519	508147	565259	657976	746148
ALL OTHER COST CO.	NA	NA	NA	NA	8714000	1026400	1168200	1233716	1396269
TOTAL COST CO.	NA	NA	NA	NA	25749118	19367906	20777227	22745845	24494185
AVERAGE SCHEDULE CO.	NA	NA	NA	NA	314000	369600	348400	519000	678908
TOTAL INDUSTRY	NA	NA	NA	NA	26063118	19737506	21125627	23264845	25173094

TABLE 4.11 B

STATE TOLL MESSAGES
YEAR OVER YEAR GROWTH
BY COMPANY

CARRIER	1981	1982	1983	1984	1985	1986	1987	1988
NEW ENGLAND TEL-ME	2.97%	8.12%	7.13%	4.90%	11.91%	10.55%	16.85%	8.26%
NEW ENGLAND TEL-MA	10.24%	8.64%	2.69%	8.06%	18.69%	11.56%	20.13%	8.92%
NEW ENGLAND TEL-NH	1.37%	9.34%	8.94%	6.72%	20.97%	14.98%	17.94%	10.96%
SOUTHERN NEW ENGLAND	6.52%	7.38%	7.72%	10.70%	8.59%	9.52%	10.57%	10.25%
NEW ENGLAND TEL-VT	8.85%	7.27%	11.82%	4.57%	2.32%	8.87%	12.31%	6.19%
NEW YORK TEL CO	7.44%	6.80%	8.82%	-1.71%	-2.92%	12.40%	12.39%	-3.60%
NEW JERSEY BELL	6.70%	7.99%	10.14%	10.84%	8.18%	11.79%	13.29%	6.99%
GTE NORTH INC. - PA	5.20%	7.91%	4.20%	8.96%	7.21%	6.92%	10.11%	-0.08%
BELL OF PENNSYLVANIA	7.20%	6.20%	7.08%	11.88%	8.69%	12.76%	10.32%	9.94%
C & P TEL CO OF MD	7.59%	4.88%	5.39%	6.62%	15.60%	11.82%	12.60%	14.55%
CENDEL OF VIRGINIA	11.12%	7.53%	5.03%	4.00%	3.74%	2.07%	19.93%	17.34%
GTE SOUTH INC. - VA	9.99%	4.11%	3.77%	-1.35%	11.73%	4.47%	8.24%	7.77%
UNITED INTER-MT-VA	8.46%	4.19%	2.12%	6.13%	9.01%	7.26%	10.27%	11.56%
C & P TEL CO OF VA	7.05%	5.83%	5.33%	6.32%	15.84%	7.28%	8.89%	4.95%
GTE SOUTH INC. - WV	4.96%	3.88%	3.14%	6.07%	8.76%	3.02%	8.56%	4.97%
C & P TEL CO OF WV	2.77%	4.49%	2.39%	5.03%	10.06%	-0.51%	5.65%	-3.96%
GTE FLORIDA INC.	12.92%	9.78%	8.70%	11.41%	17.91%	14.18%	25.50%	27.07%
CENDEL OF FLORIDA	20.29%	14.99%	10.94%	11.29%	12.29%	26.12%	-3.28%	27.88%
UTC OF FLORIDA	13.16%	13.59%	16.72%	7.97%	20.93%	12.75%	11.50%	13.85%
SOUTHERN BELL-FL	12.27%	10.38%	10.31%	13.56%	11.39%	8.84%	2.13%	9.77%
GTE SOUTH INC.- GA	8.17%	6.79%	9.18%	8.35%	13.81%	12.39%	10.60%	10.27%
SOUTHERN BELL-GA	8.64%	8.63%	8.23%	14.51%	9.46%	6.38%	8.89%	11.96%
CAROLINA TEL & TEL	5.97%	4.70%	10.49%	11.08%	13.58%	12.22%	8.94%	11.53%
CENDEL OF NC	8.11%	6.69%	8.56%	18.14%	-0.89%	35.00%	-10.74%	14.25%
GTE SOUTH INC - NC	5.99%	13.96%	15.61%	14.23%	11.55%	16.08%	16.31%	14.79%
SOUTHERN BELL-NC	9.04%	9.41%	9.20%	10.47%	7.98%	12.14%	0.36%	18.07%
GTE SOUTH INC. - SC	5.14%	6.88%	10.34%	10.69%	8.97%	9.70%	7.37%	13.19%
UTC OF THE CAROLINAS	7.47%	5.37%	8.25%	11.10%	8.06%	9.18%	11.94%	15.13%
SOUTHERN BELL-SC	8.61%	4.59%	4.85%	9.51%	2.81%	3.29%	4.59%	16.56%
GTE SOUTH INC. - AL	8.23%	9.07%	11.33%	7.16%	10.45%	7.23%	11.54%	9.19%
SO CENTRAL BELL-AL	6.67%	6.22%	6.13%	8.58%	5.60%	4.42%	5.39%	11.05%
GTE SOUTH INC. - KY	17.79%	14.27%	9.44%	5.93%	8.23%	10.56%	16.90%	4.81%
CINCINNATI BELL-KY	2.10%	3.41%	2.87%	6.82%	9.65%	6.30%	8.08%	3.57%
SO CENTRAL BELL-KY	3.87%	3.77%	5.43%	5.85%	1.51%	2.42%	6.74%	16.33%
SO CENTRAL BELL-LA	13.44%	8.75%	2.54%	6.13%	1.36%	-1.37%	0.36%	10.12%
SO CENTRAL BELL-MS	4.69%	5.47%	4.15%	4.15%	5.29%	4.01%	10.93%	8.54%
GTE SOUTH INC. - TN	-1.00%	17.10%	11.64%	13.78%	9.46%	-13.16%	13.20%	37.08%
UNITED INTER-MT-TN	11.43%	6.42%	7.76%	6.88%	10.80%	19.18%	28.17%	12.50%
SO. CENTRAL BELL -TN	6.64%	7.10%	5.00%	8.64%	4.92%	8.22%	10.03%	17.46%
GTE NORTH INC. - OH	4.76%	-6.75%	1.24%	5.36%	7.89%	7.20%	15.31%	10.98%
UTC OF OHIO	7.01%	3.65%	4.61%	8.09%	8.99%	4.97%	7.84%	11.31%
CINCINNATI BELL-OH	4.59%	3.68%	3.61%	8.03%	8.55%	6.88%	-0.62%	6.86%
OHIO BELL TEL CO	7.90%	3.99%	2.53%	4.35%	6.48%	-1.69%	1.69%	-0.87%

TABLE 4.11 B
STATE TOLL MESSAGES
YEAR OVER YEAR GROWTH
BY COMPANY

CARRIER	1981	1982	1983	1984	1985	1986	1987	1988
GTE NORTH INC. - MI	-5.43%	10.32%	2.71%	5.48%	8.36%	5.72%	9.15%	9.70%
MICHIGAN BELL TEL CO	5.00%	1.46%	5.40%	17.73%	9.88%	0.00%	16.21%	2.24%
GTE NORTH INC. - IN	9.14%	5.46%	5.52%	8.46%	7.12%	4.01%	14.80%	12.79%
UTC OF INDIANA	11.36%	5.85%	6.57%	9.70%	8.96%	6.43%	8.19%	13.18%
INDIANA BELL TEL CO	5.40%	5.94%	6.55%	7.94%	3.26%	0.00%	4.31%	6.05%
GTE NORTH INC. - WI	5.92%	3.42%	5.56%	8.91%	9.67%	2.18%	10.70%	13.68%
WISCONSIN BELL	4.83%	6.28%	5.48%	3.59%	8.43%	-2.09%	2.38%	4.14%
GTE NORTH INC. - IL	15.00%	4.19%	2.91%	6.92%	-0.12%	5.31%	5.04%	18.16%
ILLINOIS BELL TEL CO	6.43%	3.18%	3.75%	12.67%	2.50%	2.82%	-4.92%	-1.94%
GTE NORTH INC. - IA	4.00%	7.04%	7.46%	-0.60%	2.00%	2.78%	7.31%	9.72%
NORTHWESTERN BELL-IA	4.90%	4.34%	3.13%	0.06%	0.53%	-0.72%	-0.28%	0.34%
GTE NORTH INC. - MN	7.15%	8.21%	9.35%	-14.33%	-0.12%	3.67%	5.66%	9.38%
CENDEL OF MN	7.37%	7.77%	9.14%	0.03%	7.07%	4.01%	15.35%	3.89%
NORTHWESTERN BELL-MN	6.67%	6.17%	5.84%	6.70%	7.05%	3.09%	1.70%	-0.69%
GTE NORTH INC. - NE	6.18%	7.93%	7.50%	3.19%	-1.17%	1.30%	6.07%	4.82%
LINCOLN TEL & TEL CO	5.65%	10.06%	6.83%	5.45%	3.05%	3.30%	6.60%	4.91%
NORTHWESTERN BELL-NE	6.04%	6.16%	5.74%	18.74%	-13.87%	-1.54%	0.59%	-2.52%
NORTHWESTERN BELL-ND	8.60%	5.22%	3.82%	5.99%	5.71%	-2.24%	-1.83%	2.92%
NORTHWESTERN BELL-SD	5.46%	6.03%	4.87%	5.25%	7.66%	-2.38%	-4.62%	6.76%
UTC OF ARKANSAS	0.84%	0.84%	2.63%	0.76%	10.00%	3.69%	8.08%	8.99%
GTE SOUTHWEST INC-AR	4.67%	2.23%	7.93%	2.79%	10.52%	2.60%	8.45%	9.87%
SOUTHWESTERN BELL-AR	6.00%	4.14%	5.02%	3.98%	0.52%	5.42%	6.39%	5.40%
UTC OF KANSAS	2.45%	2.89%	12.59%	-0.63%	2.84%	-1.50%	4.32%	5.89%
SOUTHWESTERN BELL-KS	11.26%	2.83%	5.05%	-1.94%	0.67%	-0.92%	4.48%	1.76%
GTE NORTH INC. - MO	6.09%	1.71%	4.74%	0.20%	12.70%	7.34%	9.05%	7.09%
UTC OF MISSOURI	5.71%	3.59%	2.17%	6.10%	9.43%	4.30%	11.47%	11.19%
SOUTHWESTERN BELL-MO	2.74%	-6.61%	8.74%	7.51%	0.54%	5.68%	4.44%	3.66%
GTE SOUTHWEST INC-OK	13.59%	8.14%	6.33%	1.12%	5.06%	-0.90%	4.87%	5.02%
SOUTHWESTERN BELL-OK	4.93%	19.92%	2.20%	-1.82%	0.87%	-2.61%	-2.51%	3.93%
GTE SOUTHWEST INC-TX	15.65%	7.41%	6.08%	4.78%	9.17%	6.77%	11.27%	6.38%
CENDEL OF TEXAS	16.22%	23.71%	3.07%	3.04%	9.31%	1.93%	22.39%	-0.85%
SOUTHWESTERN BELL-TX	13.05%	10.70%	0.97%	2.88%	7.24%	-1.96%	0.66%	-1.09%
MOUNTAIN BELL - AZ	12.38%	8.53%	3.65%	9.08%	4.99%	6.80%	9.40%	6.98%
MOUNTAIN BELL-CO	12.13%	8.96%	5.60%	4.63%	1.60%	1.79%	3.69%	2.98%
GTE NORTHWEST INC-ID	4.31%	1.73%	10.00%	10.00%	3.98%	2.02%	2.29%	-0.19%
MOUNTAIN BELL-ID	4.81%	2.64%	6.14%	7.08%	4.71%	-1.93%	-0.21%	6.89%
PACIFIC NW BELL-ID	0.95%	2.07%	6.41%	3.30%	0.79%	1.13%	-0.57%	5.22%
GTE NORTHWEST INC-MT	3.39%	-0.84%	6.30%	2.88%	3.43%	4.55%	3.76%	3.28%
MOUNTAIN BELL-MT	6.90%	4.23%	7.30%	5.86%	-0.43%	2.91%	1.64%	4.62%
GTE SOUTHWEST INC-NM	19.90%	10.55%	-0.65%	12.17%	4.68%	-10.33%	3.48%	5.48%
MOUNTAIN BELL-NM	8.72%	8.98%	3.71%	6.81%	7.44%	5.69%	2.05%	4.49%
MOUNTAIN BELL-UT	10.69%	-0.34%	1.20%	1.23%	5.30%	4.87%	5.90%	3.84%
MOUNTAIN BELL-WY	9.86%	2.03%	-3.18%	4.39%	2.22%	-3.44%	-3.67%	5.69%

TABLE 4.11 B

STATE TOLL MESSAGES
YEAR OVER YEAR GROWTH
BY COMPANY

CARRIER	1981	1982	1983	1984	1985	1986	1987	1988
UTC OF THE NW-WA	4.16%	4.92%	5.80%	0.17%	8.99%	1.42%	12.39%	15.80%
GTE NORTHWEST INC-WA	6.22%	6.48%	10.00%	12.00%	8.03%	7.80%	10.71%	17.32%
PACIFIC NW BELL-WA	8.55%	6.10%	8.26%	5.84%	3.59%	6.33%	8.36%	4.38%
UTC OF THE NW - OR	3.40%	-0.82%	4.35%	1.81%	15.36%	-5.78%	3.21%	16.63%
GTE NORTHWEST INC-OR	5.89%	2.79%	3.00%	3.00%	3.04%	4.44%	9.38%	10.39%
PACIFIC NW BELL-OR	5.87%	3.91%	5.86%	3.42%	-1.22%	-4.27%	14.24%	0.77%
CONTEL OF CALIFORNIA	9.93%	6.05%	7.01%	9.67%	9.98%	6.99%	6.10%	11.34%
GTC OF CALIFORNIA	8.54%	7.67%	8.22%	7.91%	7.91%	6.25%	18.46%	8.17%
WEST COAST TEL OF CA	2.65%	-4.25%	2.36%	0.72%	4.70%	16.46%	10.49%	21.17%
PACIFIC BELL	8.75%	5.67%	11.32%	14.44%	8.45%	9.14%	10.06%	7.32%
CENDEL OF NV	10.21%	7.75%	22.81%	2.35%	12.68%	16.79%	10.18%	50.31%
NEVADA BELL	14.53%	4.20%	9.07%	21.69%	6.41%	-0.08%	12.88%	23.89%
DIAMOND STATE TEL	6.70%	9.47%	16.29%	6.62%	11.25%	14.57%	12.20%	16.11%
C & P TEL CO OF WASH	0	0	0	0	0	0	0	0
NEW ENGLAND TEL - RI	15.28%	13.26%	3.81%	5.21%	15.84%	5.30%	10.87%	18.07%
TOTAL TIER 1A	8.07%	6.53%	7.11%	8.96%	7.56%	6.79%	9.51%	7.18%
CONTEL OF NY, INC	NA	NA	6.94%	9.41%	9.05%	14.31%	18.54%	9.28%
ROCHESTER TEL CORP	NA	NA	NA	NA	0.97%	-6.35%	69.34%	5.47%
UNITED TEL - NJ, INC	NA	7.44%	9.27%	20.73%	12.63%	14.01%	14.25%	9.03%
UTC OF PENNSYLVANIA	NA	4.71%	7.16%	19.59%	7.49%	12.49%	9.46%	8.15%
CONTEL OF VIRGINIA	NA	9.64%	4.65%	11.42%	12.21%	19.85%	7.77%	1.53%
CENDEL OF OHIO	NA	5.31%	-3.68%	2.84%	12.20%	11.95%	16.97%	17.03%
CENDEL OF ILLINOIS	NA	4.06%	-1.67%	5.07%	9.37%	5.06%	10.92%	17.36%
UTC OF IOWA	NA	7.33%	0.71%	5.10%	6.80%	1.55%	10.82%	6.37%
UTC OF MINNESOTA	NA	9.34%	7.18%	2.84%	15.14%	3.46%	11.39%	10.59%
UTC OF THE WEST-NE	NA	6.47%	5.00%	1.26%	8.67%	2.03%	0.10%	5.91%
UTC OF TEXAS INC	NA	NA	11.53%	12.91%	7.72%	9.05%	5.43%	5.11%
CONTEL OF TEXAS	NA	19.05%	5.94%	8.07%	12.57%	5.78%	7.71%	4.20%
UTC OF THE WEST-WY	NA	3.86%	7.13%	6.94%	6.53%	2.58%	-0.99%	0.05%
GTE HAWAIIAN TEL. CO	NA	NA	22.58%	25.40%	6.39%	-0.70%	2.12%	14.34%
PUERTO RICO TEL CO	NA	NA	NA	NA	23.47%	19.85%	25.41%	37.02%
TOTAL TIER 1B	NA	NA	NA	NA	11.55%	11.24%	16.40%	13.40%
ALL OTHER COST CO.	NA	NA	NA	NA	-88.22%	13.82%	5.61%	13.18%
TOTAL COST CO.	NA	NA	NA	NA	-24.78%	7.28%	9.47%	7.69%
AVERAGE SCHEDULE CO.	NA	NA	NA	NA	17.71%	-5.74%	48.97%	30.81%
TOTAL INDUSTRY	NA	NA	NA	NA	-24.27%	7.03%	10.13%	8.20%

TABLE 4.12 A

 INTERSTATE MESSAGES
 BY COMPANY (IN THOUSANDS)

CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
NEW ENGLAND TEL-ME	33,969	36,757	40,372	45,786	50,195	57,642	65,049	70,623	78,324
NEW ENGLAND TEL-MA	303,462	332,719	361,550	432,931	462,028	518,522	554,263	581,353	600,382
NEW ENGLAND TEL-NH	68,352	73,456	80,515	88,559	93,338	113,672	126,905	139,871	154,084
SOUTHERN NEW ENGLAND	214,561	230,545	243,288	259,889	285,665	318,057	347,037	381,923	399,659
NEW ENGLAND TEL-VT	28,611	29,811	31,238	33,236	34,406	46,052	50,142	54,961	57,319
CONTEL OF NY, INC	7,955	8,880	9,785	10,998	12,619	14,722	17,704	19,968	22,583
NEW YORK TEL CO	913,627	982,866	1,061,731	1,134,991	1,251,746	1,313,004	1,409,296	1,477,683	1,549,160
NEW JERSEY BELL	589,868	636,155	674,941	734,455	787,480	915,219	1,067,297	1,213,933	1,406,165
GTE NORTH INC. - PA	24,461	25,941	31,209	32,161	33,650	35,014	40,576	49,251	49,626
BELL OF PENNSYLVANIA	420,181	452,959	473,250	502,219	542,250	611,080	701,207	820,906	956,285
C & P TEL CO OF MD	194,913	211,459	217,968	232,483	253,800	302,121	345,337	423,974	499,991
CENTEL OF VIRGINIA	10,586	11,741	12,657	14,178	15,459	18,701	19,526	21,496	26,828
GTE SOUTH INC. - VA	2,648	2,924	3,022	3,204	3,435	3,810	4,097	4,599	5,169
UNITED INTER-MT-VA	5,858	6,561	6,815	7,235	7,567	8,144	9,273	10,873	13,053
C & P TEL CO OF VA	188,398	206,622	219,890	242,526	273,575	322,520	357,964	422,325	479,125
GTE SOUTH INC. - WV	6,280	6,867	7,094	7,703	8,184	9,147	10,251	12,082	14,109
C & P TEL CO OF WV	56,568	60,425	62,405	66,816	71,689	80,820	90,838	104,404	112,756
GTE FLORIDA INC.	74,277	82,405	88,543	97,836	109,149	112,247	140,745	168,557	249,066
CENTEL OF FLORIDA	10,914	12,781	14,407	16,470	19,787	22,549	28,025	31,195	40,233
UTC OF FLORIDA	37,043	41,494	47,015	50,172	54,992	80,788	94,635	108,735	122,549
SOUTHERN BELL-FL	327,218	356,963	392,620	425,789	455,866	495,063	550,135	581,634	830,322
GTE SOUTH INC.- GA	9,077	9,882	11,079	12,470	14,013	16,321	18,963	23,111	26,151
SOUTHERN BELL-GA	243,770	271,139	296,733	328,186	363,160	401,170	427,938	437,330	602,340
CAROLINA TEL & TEL	38,463	41,860	45,165	51,300	58,354	67,964	80,717	98,975	110,535
CENTEL OF NC	7,122	7,874	8,475	9,471	11,710	11,894	17,443	15,070	18,559
GTE SOUTH INC - NC	7,189	7,838	10,073	12,497	14,524	16,422	20,061	22,127	26,519
SOUTHERN BELL-NC	112,767	127,283	140,311	158,110	175,436	198,598	214,722	220,045	277,212
GTE SOUTH INC. - SC	8,922	10,367	11,642	13,625	15,629	17,820	20,669	25,297	29,653
UTC OF THE CAROLINAS	3,917	4,429	4,846	5,312	5,937	6,560	7,140	8,735	10,377
SOUTHERN BELL-SC	80,820	91,237	99,179	110,583	120,951	128,077	135,005	142,568	204,346
GTE SOUTH INC. - AL	7,584	8,440	9,242	10,894	12,410	14,485	16,363	18,911	18,632
SO CENTRAL BELL-AL	106,673	118,519	126,529	139,216	153,759	169,443	179,861	192,708	245,886
GTE SOUTH INC. - KY	17,318	20,857	24,603	27,832	30,637	34,791	37,558	43,422	48,267
CINCINNATI BELL-KY	7,770	8,309	8,672	9,194	10,704	12,354	13,600	15,769	15,817
SO CENTRAL BELL-KY	75,355	80,638	84,472	90,054	96,547	102,464	108,867	117,018	153,461
SO CENTRAL BELL-LA	132,782	151,059	163,074	174,526	192,582	205,531	209,334	212,501	281,843
SO CENTRAL BELL-MS	78,703	87,319	93,476	101,502	109,750	124,079	134,507	145,067	168,478
GTE SOUTH INC. - TN	2,341	2,404	2,894	3,510	4,257	4,741	4,037	4,373	12,554
UNITED INTER-MT-TN	10,496	11,704	12,217	12,925	13,864	15,301	17,913	28,199	31,413
SO. CENTRAL BELL -TN	161,241	171,319	186,338	202,373	229,273	238,908	253,490	267,413	357,533
GTE NORTH INC. - OH	28,252	30,483	31,054	32,832	35,421	39,276	44,344	56,082	63,954
UTC OF OHIO	21,499	23,006	25,099	27,058	30,499	34,502	38,062	43,134	49,012
CINCINNATI BELL-OH	52,190	56,209	60,408	65,189	71,704	76,089	83,192	83,386	86,814
OHIO BELL TEL CO	231,500	250,599	265,174	280,604	298,689	314,472	328,420	344,007	341,021

TABLE 4.12 A

 INTERSTATE MESSAGES
 BY COMPANY (IN THOUSANDS)

CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
GTE NORTH INC. - MI	19,835	19,357	22,160	23,551	25,506	28,226	31,255	36,596	42,807
MICHIGAN BELL TEL CO	231,259	250,504	259,752	278,799	300,091	335,444	335,444	396,131	414,645
GTE NORTH INC. - IN	35,468	41,709	42,863	45,870	50,496	54,885	60,100	71,851	86,460
UTC OF INDIANA	9,261	11,893	12,485	13,608	15,167	16,462	18,135	20,857	24,075
INDIANA BELL TEL CO	131,571	139,831	144,787	157,364	170,807	181,708	181,708	204,399	215,266
GTE NORTH INC. - WI	16,220	17,487	17,849	19,494	21,220	23,909	25,528	30,315	36,811
WISCONSIN BELL	119,207	126,919	133,549	145,180	156,374	166,398	169,525	169,985	174,092
GTE NORTH INC. - IL	26,171	30,940	32,660	34,790	39,203	40,687	44,145	49,375	60,890
ILLINOIS BELL TEL CO	480,047	515,345	530,757	565,218	611,668	657,197	688,646	726,879	756,764
GTE NORTH INC. - IA	5,324	5,928	6,386	6,922	7,233	7,504	8,206	9,243	10,485
NORTHWESTERN BELL-IA	87,139	95,558	101,513	116,197	133,242	156,048	148,487	128,627	129,504
GTE NORTH INC. - MN	250	267	281	315	321	290	299	332	363
CENTEL OF MN	3,232	3,675	3,860	4,249	4,650	4,990	5,736	6,456	9,188
NORTHWESTERN BELL-MN	145,754	157,715	165,751	180,257	193,129	211,927	228,090	233,639	232,036
GTE NORTH INC. - NE	2,141	2,349	2,483	2,743	2,845	3,199	3,393	4,215	4,608
LINCOLN TEL & TEL CO	13,285	14,496	15,900	17,441	20,881	24,289	24,336	27,543	33,390
NORTHWESTERN BELL-NE	50,069	54,697	58,495	62,723	74,164	74,645	78,327	82,434	86,946
NORTHWESTERN BELL-ND	23,278	26,603	28,277	30,817	33,327	38,255	38,307	41,212	41,793
NORTHWESTERN BELL-SD	22,568	25,328	27,734	31,403	34,942	39,488	42,028	40,824	41,453
UTC OF ARKANSAS	1,340	1,398	1,456	1,490	1,531	1,697	1,879	2,082	2,363
GTE SOUTHWEST INC-AR	3,977	4,375	4,570	4,923	5,115	5,794	6,273	7,120	7,912
SOUTHWESTERN BELL-AR	64,049	73,270	80,261	91,182	98,810	109,354	117,328	123,745	121,899
UTC OF KANSAS	4,974	5,112	5,205	5,997	6,172	6,661	6,930	7,800	8,860
SOUTHWESTERN BELL-KS	94,060	101,798	103,531	118,806	125,117	134,438	141,285	151,719	157,327
GTE NORTH INC. - MO	4,867	5,262	5,498	6,184	6,455	7,034	8,364	9,706	10,579
UTC OF MISSOURI	9,303	9,899	10,696	11,565	11,288	15,290	16,600	19,249	22,863
SOUTHWESTERN BELL-MO	196,786	205,715	215,476	223,231	237,649	249,774	260,665	261,599	270,386
GTE SOUTHWEST INC-OK	5,762	6,833	7,479	7,976	8,372	9,670	10,957	13,079	14,344
SOUTHWESTERN BELL-OK	115,979	132,045	145,462	146,728	146,966	151,267	154,654	158,788	156,893
GTE SOUTHWEST INC-TX	39,657	46,948	50,929	55,171	60,777	70,646	83,331	108,202	131,909
CENTEL OF TEXAS	5,960	6,854	7,356	8,018	9,046	10,242	11,172	14,900	16,784
SOUTHWESTERN BELL-TX	398,531	455,024	521,212	549,271	569,265	619,266	625,844	639,165	676,135
MOUNTAIN BELL - AZ	137,252	148,604	152,586	170,805	188,583	205,800	218,279	237,741	250,456
MOUNTAIN BELL-CO	161,947	186,340	202,325	220,589	234,728	247,311	253,742	263,065	273,736
GTE NORTHWEST INC-ID	9,327	10,103	10,262	11,288	12,417	14,781	14,669	15,195	16,003
MOUNTAIN BELL-ID	32,723	35,790	37,674	42,004	44,257	49,451	53,222	54,017	54,384
PACIFIC NW BELL-ID	3,026	3,215	3,303	3,655	3,953	4,132	4,261	4,548	4,507
GTE NORTHWEST INC-MT	565	618	618	682	702	790	861	916	924
MOUNTAIN BELL-MT	27,090	31,460	33,954	37,100	40,185	42,266	44,936	46,519	49,080
GTE SOUTHWEST INC-NM	4,430	5,393	5,852	5,870	6,219	6,659	6,147	6,654	7,151
MOUNTAIN BELL-NM	49,501	54,681	58,771	63,577	70,393	76,836	83,968	90,209	92,419
MOUNTAIN BELL-UT	55,143	63,524	69,945	77,108	76,335	80,037	89,083	90,585	96,677
MOUNTAIN BELL-WY	32,873	37,684	39,058	38,880	39,893	42,721	43,126	43,672	45,877

TABLE 4.12 A

INTERSTATE MESSAGES
BY COMPANY (IN THOUSANDS)

CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
UTC OF THE NW-WA	2,931	3,192	3,319	3,621	4,214	4,898	4,921	5,386	5,969
GTE NORTHWEST INC-WA	21,373	24,109	27,006	29,706	33,271	38,742	40,512	48,065	62,867
PACIFIC NW BELL-WA	133,689	150,007	162,676	177,512	187,861	202,896	204,083	219,660	219,889
UTC OF THE NW - OR	2,492	2,672	2,706	2,927	3,445	4,415	4,644	5,118	6,150
GTE NORTHWEST INC-OR	18,010	21,076	22,798	23,481	24,185	28,182	28,510	34,112	43,204
PACIFIC NW BELL-OR	95,688	104,564	107,835	117,529	124,058	133,780	138,651	139,523	141,513
CONTEL OF CALIFORNIA	7,331	8,244	9,061	10,874	13,441	16,632	22,359	28,097	33,462
GTC OF CALIFORNIA	113,131	121,355	135,721	158,565	179,008	202,087	219,894	291,866	343,293
WEST COAST TEL OF CA	690	736	716	794	835	845	991	1,097	1,402
PACIFIC BELL	624,464	686,438	731,737	815,696	871,526	973,620	1,067,457	1,160,075	1,235,332
CENDEL OF NV	44,956	48,509	50,535	56,371	61,271	66,400	84,667	92,912	105,601
NEVADA BELL	27,179	30,258	30,107	34,432	40,612	38,461	39,931	42,408	54,793
DIAMOND STATE TEL	47,377	49,811	53,309	57,364	61,290	71,878	84,841	121,393	117,732
C & P TEL CO OF WASH	119,771	119,819	116,986	121,031	130,311	143,670	155,745	182,063	202,795
NEW ENGLAND TEL - RI	59,198	64,537	69,894	72,036	79,955	92,405	98,300	106,747	114,806
TOTAL TIER 1A	9,164,981	10,010,978	10,706,500	11,639,879	12,611,467	13,896,537	15,027,284	16,395,300	18,427,017
ROCHESTER TEL CORP	NA	NA	NA	NA	34,398	42,026	41,005	36,372	40,142
UNITED TEL - NJ, INC	NA	10,435	11,429	12,982	16,951	19,277	22,815	27,276	29,082
UTC OF PENNSYLVANIA	NA	14,411	15,173	16,377	23,346	26,547	29,088	31,171	32,311
CONTEL OF VIRGINIA	NA	18,002	20,017	21,968	24,855	29,878	31,894	47,851	63,045
CENDEL OF OHIO	NA	2,501	2,605	2,836	2,968	3,480	3,894	4,536	5,596
CENDEL OF ILLINOIS	NA	20,760	20,233	19,638	20,513	23,387	25,773	30,548	38,367
UTC OF IOWA	NA	3,539	3,785	3,972	4,253	5,143	5,466	6,954	7,283
UTC OF MINNESOTA	NA	3,158	3,354	3,690	3,616	4,732	5,437	6,961	8,873
UTC OF THE WEST-NE	NA	2,427	2,575	2,608	2,668	2,996	3,162	3,622	3,862
UTC OF TEXAS INC	NA	NA	2,608	2,873	3,447	4,037	4,320	4,872	6,028
CONTEL OF TEXAS	NA	3,726	5,441	5,831	6,482	8,120	8,742	9,569	10,780
UTC OF THE WEST-WY	NA	791	812	827	936	1,070	1,116	1,146	1,236
GTE HAWAIIAN TEL. CO	NA	NA	26,013	27,869	28,551	35,919	38,493	54,426	68,208
PUERTO RICO TEL CO	NA	NA	NA	NA	22,200	26,522	33,152	38,847	48,946
TOTAL TIER 1B	NA	NA	NA	NA	195,185	233,134	254,357	304,150	363,760
ALL OTHER COST CO.	NA	NA	NA	NA	398,600	462,000	503,800	508,524	604,544
TOTAL COST CO.	NA	NA	NA	NA	13,205,252	14,591,671	15,785,441	17,207,975	19,395,321
AVERAGE SCHEDULE CO.	NA	NA	NA	NA	143,600	166,300	150,200	227,200	277,354
TOTAL INDUSTRY	NA	NA	NA	NA	13,348,852	14,757,971	15,935,641	17,435,175	19,672,675

TABLE 4.12 B

INTERSTATE MESSAGES
YEAR OVER YEAR GROWTH
BY COMPANY

CARRIER	1981	1982	1983	1984	1985	1986	1987	1988
NEW ENGLAND TEL-ME	8.21%	9.84%	13.41%	9.63%	14.84%	12.85%	8.57%	10.90%
NEW ENGLAND TEL-MA	9.64%	8.67%	19.74%	6.72%	12.23%	6.89%	4.89%	3.27%
NEW ENGLAND TEL-NH	7.47%	9.61%	9.99%	5.40%	21.78%	11.64%	10.22%	10.16%
SOUTHERN NEW ENGLAND	7.45%	5.53%	6.82%	9.92%	11.34%	9.11%	10.05%	4.64%
NEW ENGLAND TEL-VT	4.20%	4.79%	6.40%	3.52%	33.85%	8.88%	9.61%	4.29%
CONTEL OF NY, INC	11.63%	10.19%	12.40%	14.74%	16.67%	20.26%	12.79%	13.10%
NEW YORK TEL CO	7.58%	8.02%	6.90%	10.29%	4.89%	7.33%	4.85%	4.84%
NEW JERSEY BELL	7.85%	6.10%	8.82%	7.22%	16.22%	16.62%	13.74%	15.84%
GTE NORTH INC. - PA	6.05%	20.31%	3.05%	4.63%	4.05%	15.89%	21.38%	0.76%
BELL OF PENNSYLVANIA	7.80%	4.48%	6.12%	7.97%	12.69%	14.75%	17.07%	16.49%
C & P TEL CO OF MD	8.49%	3.08%	6.66%	9.17%	19.04%	14.30%	22.77%	17.93%
CENTEL OF VIRGINIA	10.91%	7.80%	12.01%	9.04%	20.97%	4.41%	10.09%	24.80%
GTE SOUTH INC. - VA	10.42%	3.36%	6.01%	7.21%	10.92%	7.53%	12.25%	12.39%
UNITED INTER-MT-VA	12.01%	3.87%	6.16%	4.59%	7.63%	13.86%	17.26%	20.05%
C & P TEL CO OF VA	9.67%	6.42%	10.29%	12.80%	17.89%	10.99%	17.98%	13.45%
GTE SOUTH INC. - WV	9.35%	3.31%	8.58%	6.24%	11.77%	12.07%	17.86%	16.78%
C & P TEL CO OF WV	6.82%	3.28%	7.07%	7.29%	12.74%	12.40%	14.93%	8.00%
GTE FLORIDA INC.	10.94%	7.45%	10.50%	11.56%	2.84%	25.39%	19.76%	47.76%
CENTEL OF FLORIDA	17.11%	12.72%	14.33%	20.13%	13.96%	24.28%	11.31%	28.97%
UTC OF FLORIDA	12.02%	13.31%	6.72%	9.61%	46.91%	17.14%	14.90%	12.70%
SOUTHERN BELL-FL	9.09%	9.99%	8.45%	7.06%	8.60%	11.12%	5.73%	42.76%
GTE SOUTH INC.- GA	8.87%	12.11%	12.56%	12.37%	16.47%	16.19%	21.87%	13.15%
SOUTHERN BELL-GA	11.23%	9.44%	10.60%	10.66%	10.47%	6.67%	2.19%	37.73%
CAROLINA TEL & TEL	8.83%	7.89%	13.58%	13.75%	16.47%	18.76%	22.62%	11.68%
CENTEL OF NC	10.56%	7.64%	11.75%	23.64%	1.57%	46.65%	-13.60%	23.15%
GTE SOUTH INC - NC	9.03%	28.51%	24.06%	16.22%	13.07%	22.16%	10.30%	19.85%
SOUTHERN BELL-NC	12.87%	10.24%	12.69%	10.96%	13.20%	8.12%	2.48%	25.98%
GTE SOUTH INC. - SC	16.20%	12.30%	17.03%	14.71%	14.02%	15.99%	22.39%	17.22%
UTC OF THE CAROLINAS	13.06%	9.42%	9.61%	11.77%	10.50%	8.84%	22.33%	18.80%
SOUTHERN BELL-SC	12.89%	8.70%	11.50%	9.38%	5.89%	5.41%	5.60%	43.33%
GTE SOUTH INC. - AL	11.29%	9.50%	17.87%	13.92%	16.72%	12.97%	15.57%	-1.48%
SO CENTRAL BELL-AL	11.11%	6.76%	10.03%	10.45%	10.20%	6.15%	7.14%	27.60%
GTE SOUTH INC. - KY	20.44%	17.96%	13.12%	10.08%	13.56%	7.95%	15.61%	11.16%
CINCINNATI BELL-KY	6.94%	4.37%	6.02%	16.43%	15.41%	10.09%	15.95%	0.30%
SO CENTRAL BELL-KY	7.01%	4.75%	6.61%	7.21%	6.13%	6.25%	7.49%	31.14%
SO CENTRAL BELL-LA	13.76%	7.95%	7.02%	10.35%	6.72%	1.85%	1.51%	32.63%
SO CENTRAL BELL-MS	10.95%	7.05%	8.59%	8.13%	13.06%	8.41%	7.85%	16.14%
GTE SOUTH INC. - TN	2.69%	20.38%	21.29%	21.28%	11.37%	-14.85%	8.32%	187.08%
UNITED INTER-MT-TN	11.51%	4.39%	5.80%	7.26%	10.37%	17.07%	57.42%	11.40%
SO. CENTRAL BELL -TN	6.25%	8.77%	8.61%	13.29%	4.20%	6.10%	5.49%	33.70%
GTE NORTH INC. - OH	7.90%	1.87%	5.73%	7.89%	10.88%	12.90%	26.47%	14.04%
UTC OF OHIO	7.01%	9.10%	7.80%	12.72%	13.12%	10.32%	13.33%	13.63%
CINCINNATI BELL-OH	7.70%	7.47%	7.91%	10.00%	6.12%	9.33%	0.23%	4.11%
OHIO BELL TEL CO	8.25%	5.82%	5.82%	6.45%	5.28%	4.44%	4.75%	-0.87%

TABLE 4.12 B

INTERSTATE MESSAGES
YEAR OVER YEAR GROWTH
BY COMPANY

CARRIER	1981	1982	1983	1984	1985	1986	1987	1988
GTE NORTH INC. - MI	-2.41%	14.48%	6.28%	8.30%	10.66%	10.73%	17.09%	16.97%
MICHIGAN BELL TEL CO	8.32%	3.69%	7.33%	7.64%	11.78%	0.00%	18.09%	4.67%
GTE NORTH INC. - IN	17.60%	2.77%	7.02%	10.09%	8.69%	9.50%	19.55%	20.33%
UTC OF INDIANA	28.42%	4.98%	8.99%	11.46%	8.54%	10.16%	15.01%	15.43%
INDIANA BELL TEL CO	6.28%	3.54%	8.69%	8.54%	6.38%	0.00%	12.49%	5.32%
GTE NORTH INC. - WI	7.81%	2.07%	9.22%	8.85%	12.67%	6.77%	18.75%	21.43%
WISCONSIN BELL	6.47%	5.22%	8.71%	7.71%	6.41%	1.88%	0.27%	2.42%
GTE NORTH INC. - IL	18.22%	5.56%	6.52%	12.68%	3.79%	8.50%	11.85%	23.32%
ILLINOIS BELL TEL CO	7.35%	2.99%	6.49%	8.22%	7.44%	4.79%	5.55%	4.11%
GTE NORTH INC. - IA	11.34%	7.73%	8.39%	4.49%	3.75%	9.36%	12.64%	13.44%
NORTHWESTERN BELL-IA	9.66%	6.23%	14.46%	14.67%	17.12%	-4.85%	-13.38%	0.68%
GTE NORTH INC. - MN	6.78%	5.15%	12.31%	1.82%	-9.66%	3.10%	11.04%	9.20%
CENTEL OF MN	13.69%	5.05%	10.07%	9.45%	7.29%	14.96%	12.56%	42.31%
NORTHWESTERN BELL-MN	8.21%	5.09%	8.75%	7.14%	9.73%	7.63%	2.43%	-0.69%
GTE NORTH INC. - NE	9.72%	5.70%	10.47%	3.72%	12.44%	6.06%	24.23%	9.32%
LINCOLN TEL & TEL CO	9.12%	9.69%	9.69%	19.72%	16.32%	0.20%	13.18%	21.23%
NORTHWESTERN BELL-NE	9.24%	6.94%	7.23%	18.24%	0.65%	4.93%	5.24%	5.47%
NORTHWESTERN BELL-ND	14.28%	6.29%	8.98%	8.14%	14.79%	0.13%	7.58%	1.41%
NORTHWESTERN BELL-SD	12.23%	9.50%	13.23%	11.27%	13.01%	6.43%	-2.86%	1.54%
UTC OF ARKANSAS	4.31%	4.13%	2.37%	2.71%	10.88%	10.71%	10.81%	13.50%
GTE SOUTHWEST INC-AR	10.01%	4.46%	7.72%	3.90%	13.27%	8.27%	13.50%	11.12%
SOUTHWESTERN BELL-AR	14.40%	9.54%	13.61%	8.36%	10.67%	7.29%	5.47%	-1.49%
UTC OF KANSAS	2.77%	1.82%	15.21%	2.93%	7.93%	4.04%	12.55%	13.59%
SOUTHWESTERN BELL-KS	8.23%	1.70%	14.75%	5.31%	7.45%	5.09%	7.38%	3.70%
GTE NORTH INC. - MO	8.12%	4.48%	12.48%	4.38%	8.97%	18.91%	16.04%	8.99%
UTC OF MISSOURI	6.41%	8.04%	8.13%	-2.40%	35.46%	8.57%	15.95%	18.78%
SOUTHWESTERN BELL-MO	4.54%	4.75%	3.60%	6.46%	5.10%	4.36%	0.36%	3.36%
GTE SOUTHWEST INC-OK	18.59%	9.45%	6.65%	4.96%	15.50%	13.31%	19.37%	9.68%
SOUTHWESTERN BELL-OK	13.85%	10.16%	0.87%	0.16%	2.93%	2.24%	2.67%	-1.19%
GTE SOUTHWEST INC-TX	18.39%	8.48%	8.33%	10.16%	16.24%	17.96%	29.85%	21.91%
CENTEL OF TEXAS	15.00%	7.32%	9.00%	12.82%	13.23%	9.08%	33.37%	12.65%
SOUTHWESTERN BELL-TX	14.18%	14.55%	5.38%	3.64%	8.78%	1.06%	2.13%	5.78%
MOUNTAIN BELL - AZ	8.27%	2.68%	11.94%	10.41%	9.13%	6.06%	8.92%	5.35%
MOUNTAIN BELL-CO	15.06%	8.58%	9.03%	6.41%	5.36%	2.60%	3.67%	4.06%
GTE NORTHWEST INC-ID	8.32%	1.57%	10.00%	10.00%	19.04%	-0.76%	3.59%	5.32%
MOUNTAIN BELL-ID	9.38%	5.26%	11.49%	5.36%	11.74%	7.62%	1.49%	0.68%
PACIFIC NW BELL-ID	6.22%	2.77%	10.65%	8.14%	4.54%	3.12%	6.74%	-0.91%
GTE NORTHWEST INC-MT	9.31%	0.08%	10.30%	2.97%	12.54%	8.99%	6.39%	0.87%
MOUNTAIN BELL-MT	16.13%	7.93%	9.27%	8.32%	5.18%	6.32%	3.52%	5.51%
GTE SOUTHWEST INC-NM	21.74%	8.51%	0.31%	5.95%	7.08%	-7.69%	8.25%	7.47%
MOUNTAIN BELL-NM	10.47%	7.48%	8.18%	10.72%	9.15%	9.28%	7.43%	2.45%
MOUNTAIN BELL-UT	15.20%	10.11%	10.24%	-1.00%	4.85%	11.30%	1.69%	6.73%
MOUNTAIN BELL-WY	14.64%	3.65%	-0.46%	2.61%	7.09%	0.95%	1.26%	5.05%

TABLE 4.12 B

INTERSTATE MESSAGES
YEAR OVER YEAR GROWTH
BY COMPANY

CARRIER	1981	1982	1983	1984	1985	1986	1987	1988
UTC OF THE NW-WA	8.91%	3.98%	9.07%	16.40%	16.22%	0.48%	9.45%	10.82%
GTE NORTHWEST INC-WA	12.80%	12.02%	10.00%	12.00%	16.44%	4.57%	18.64%	30.80%
PACIFIC NW BELL-WA	12.21%	8.45%	9.12%	5.83%	8.00%	0.59%	7.63%	0.10%
UTC OF THE NW - OR	7.22%	1.28%	8.15%	17.68%	28.18%	5.18%	10.20%	20.17%
GTE NORTHWEST INC-OR	17.02%	8.17%	3.00%	3.00%	16.53%	1.16%	19.65%	26.65%
PACIFIC NW BELL-OR	9.28%	3.13%	8.99%	5.56%	7.84%	3.64%	0.63%	1.43%
CONTEL OF CALIFORNIA	12.45%	9.91%	20.01%	23.61%	23.74%	34.43%	25.66%	19.09%
GTC OF CALIFORNIA	7.27%	11.84%	16.83%	12.89%	12.89%	8.81%	32.73%	17.62%
WEST COAST TEL OF CA	6.67%	-2.72%	10.89%	5.16%	1.20%	17.28%	10.70%	27.80%
PACIFIC BELL	9.92%	6.60%	11.47%	6.84%	11.71%	9.64%	8.68%	6.49%
CENDEL OF NV	7.90%	4.18%	11.55%	8.69%	8.37%	27.51%	9.74%	13.66%
NEVADA BELL	11.33%	-0.50%	14.37%	17.95%	-5.30%	3.82%	6.20%	29.21%
DIAMOND STATE TEL	5.14%	7.02%	7.61%	6.84%	17.28%	18.04%	43.08%	-3.02%
C & P TEL CO OF WASH	0.04%	-2.36%	3.46%	7.67%	10.25%	8.40%	16.90%	11.39%
NEW ENGLAND TEL - RI	9.02%	8.30%	3.06%	10.99%	15.57%	6.38%	8.59%	7.55%
TOTAL TIER 1A	9.23%	6.95%	8.72%	8.35%	10.19%	8.14%	9.10%	12.39%
ROCHESTER TEL CORP	NA	NA	NA	NA	22.17%	-2.43%	-11.30%	10.37%
UNITED TEL - NJ, INC	NA	9.52%	13.59%	30.57%	13.72%	18.35%	19.55%	6.62%
UTC OF PENNSYLVANIA	NA	5.29%	7.93%	42.56%	13.71%	9.57%	7.16%	3.66%
CONTEL OF VIRGINIA	NA	11.19%	9.75%	13.14%	20.21%	6.75%	50.03%	31.75%
CENDEL OF OHIO	NA	4.14%	8.91%	4.65%	17.23%	11.90%	16.51%	23.36%
CENDEL OF ILLINOIS	NA	-2.54%	-2.94%	4.45%	14.01%	10.20%	18.53%	25.60%
UTC OF IOWA	NA	6.96%	4.93%	7.08%	20.93%	6.27%	27.22%	4.74%
UTC OF MINNESOTA	NA	6.21%	10.02%	-1.99%	30.86%	14.90%	28.02%	27.46%
UTC OF THE WEST-NE	NA	6.09%	1.29%	2.31%	12.30%	5.54%	14.53%	6.64%
UTC OF TEXAS INC	NA	NA	10.20%	19.97%	17.11%	7.00%	12.78%	23.72%
CONTEL OF TEXAS	NA	46.02%	7.17%	11.16%	25.27%	7.66%	9.46%	12.66%
UTC OF THE WEST-WY	NA	2.64%	1.86%	13.17%	14.24%	4.38%	2.63%	7.89%
GTE HAWAIIAN TEL. CO	NA	NA	7.13%	2.45%	25.81%	7.17%	41.39%	25.32%
PUERTO RICO TEL CO	NA	NA	NA	NA	19.47%	25.00%	17.18%	26.00%
TOTAL TIER 1B	NA	NA	NA	NA	19.44%	9.10%	19.58%	19.60%
ALL OTHER COST CO.	NA	NA	NA	NA	15.91%	9.05%	0.94%	18.88%
TOTAL COST CO.	NA	NA	NA	NA	10.50%	8.18%	9.01%	12.71%
AVERAGE SCHEDULE CO.	NA	NA	NA	NA	15.81%	-9.68%	51.26%	22.07%
TOTAL INDUSTRY	NA	NA	NA	NA	10.56%	7.98%	9.41%	12.83%

TABLE 4.13 A

LOCAL DIAL EQUIPMENT MINUTES
BY COMPANY (IN MILLIONS)

CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
NEW ENGLAND TEL-ME	4,514	4,642	4,771	4,882	5,002	4,793	4,952	5,180	5,200
NEW ENGLAND TEL-MA	38,575	39,717	40,722	41,506	43,380	43,612	43,013	43,737	45,991
NEW ENGLAND TEL-NH	4,118	4,250	4,382	4,490	4,911	4,977	5,020	5,175	5,743
SOUTHERN NEW ENGLAND	20,071	20,110	20,319	20,618	20,984	21,595	23,300	23,299	23,578
NEW ENGLAND TEL-VT	1,981	2,116	2,251	2,355	2,356	2,319	2,296	2,242	2,339
CONTEL OF NY, INC	1,494	1,586	1,625	1,672	1,721	1,764	1,816	1,882	1,955
NEW YORK TEL CO	110,824	115,846	119,478	125,487	134,850	143,167	144,619	145,765	151,438
NEW JERSEY BELL	44,712	46,132	45,646	46,077	47,181	46,151	45,782	45,718	48,240
GTE NORTH INC. - PA	4,846	4,898	4,949	5,101	5,142	5,181	5,420	5,622	5,788
UTC OF PENNSYLVANIA	2,243	2,331	2,345	2,391	2,554	2,588	2,618	2,604	2,658
BELL OF PENNSYLVANIA	66,682	68,624	70,477	70,438	69,277	66,363	70,332	71,046	73,442
C & P TEL CO OF MD	36,680	38,385	40,442	41,646	41,732	40,547	41,880	42,775	45,468
CENDEL OF VIRGINIA	1,946	2,020	2,161	2,209	2,146	2,326	2,364	2,376	2,446
GTE SOUTH INC. - VA	450	414	457	437	440	435	449	438	449
UNITED INTER-MT-VA	1,131	1,131	1,138	1,175	1,034	964	971	988	1,057
C & P TEL CO OF VA	29,780	30,013	30,994	32,451	33,327	34,263	35,566	36,940	39,452
GTE SOUTH INC. - WV	763	695	796	784	790	767	784	766	788
C & P TEL CO OF WV	10,095	10,245	10,164	10,216	10,279	10,301	10,259	10,590	10,672
GTE FLORIDA INC.	11,113	12,131	12,653	13,518	14,292	15,545	16,480	17,173	17,573
CENDEL OF FLORIDA	1,649	1,673	1,739	1,931	2,101	2,180	2,443	2,641	2,894
SOUTHERN BELL-FL	43,262	44,464	46,549	49,206	50,947	52,286	52,769	55,212	59,872
GTE SOUTH INC.- GA	2,001	2,015	2,092	2,167	2,169	2,199	2,350	2,374	2,491
SOUTHERN BELL-GA	36,244	36,939	36,956	39,128	41,879	43,161	43,957	45,030	48,657
CAROLINA TEL & TEL	7,388	7,446	7,764	8,023	8,498	8,814	8,988	9,238	9,407
CENDEL OF NC	1,898	1,957	2,036	2,116	2,185	2,281	2,342	2,446	2,443
GTE SOUTH INC - NC	1,390	1,398	1,497	1,576	1,699	1,742	1,658	1,655	1,858
SOUTHERN BELL-NC	19,080	19,108	19,288	19,696	21,481	22,590	23,546	22,619	23,704
GTE SOUTH INC. - SC	1,300	1,336	1,315	1,371	1,488	1,547	1,574	1,571	1,611
UTC OF THE CAROLINAS	691	716	711	754	741	793	828	862	931
SOUTHERN BELL-SC	14,856	14,770	15,085	15,397	16,448	17,246	17,718	17,206	18,058
GTE SOUTH INC. - AL	1,177	1,245	1,345	1,347	1,392	1,406	1,413	1,440	1,447
SO CENTRAL BELL-AL	22,106	22,683	23,138	24,093	24,610	25,132	25,932	26,753	28,186
GTE SOUTH INC. - KY	3,300	3,775	3,803	3,916	4,089	4,353	4,270	4,182	4,528
CINCINNATI BELL-KY	2,180	2,205	2,246	2,258	2,277	2,337	2,326	2,392	2,485
SO CENTRAL BELL-KY	14,543	14,554	14,749	14,850	15,655	15,946	15,160	15,496	15,989
SO CENTRAL BELL-LA	29,161	30,897	32,374	32,950	32,797	32,421	31,906	31,389	32,079
SO CENTRAL BELL-MS	12,732	12,759	13,298	13,562	13,919	14,862	14,787	15,262	16,053
GTE SOUTH INC. - TN	599	543	560	549	568	581	610	607	625
UNITED INTER-MT-TN	2,276	2,336	2,306	2,328	2,280	2,353	2,460	2,576	2,717
SO. CENTRAL BELL -TN	29,695	29,114	29,794	30,038	31,138	32,353	33,665	34,702	35,772
GTE NORTH INC. - OH	6,221	6,456	6,574	6,664	7,091	7,164	7,506	7,503	7,505
UTC OF OHIO	4,068	4,168	4,212	4,150	4,307	4,451	4,683	4,694	4,433
CINCINNATI BELL-OH	11,371	11,025	11,296	11,471	12,173	11,804	11,792	11,776	12,736
OHIO BELL TEL CO	50,352	48,698	50,025	51,757	54,219	53,488	50,410	50,687	53,050

TABLE 4.13 A

LOCAL DIAL EQUIPMENT MINUTES
BY COMPANY (IN MILLIONS)

CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
GTE NORTH INC. - MI	4,549	4,540	4,523	4,522	4,656	4,729	4,758	4,776	4,882
MICHIGAN BELL TEL CO	56,871	56,667	56,340	57,464	58,012	57,220	58,187	59,068	64,043
GTE NORTH INC. - IN	6,032	5,906	6,012	6,217	6,789	6,607	6,681	7,110	6,748
UTC OF INDIANA	1,267	1,323	1,393	1,366	1,441	1,433	1,481	1,510	1,530
INDIANA BELL TEL CO	22,911	22,662	23,406	23,298	23,749	23,543	23,483	23,476	24,521
GTE NORTH INC. - WI	2,677	2,725	2,780	2,783	2,836	2,893	2,943	2,926	2,919
WISCONSIN BELL	21,541	20,669	21,084	20,826	20,961	21,487	21,678	21,117	22,931
GTE NORTH INC. - IL	4,604	5,074	5,144	5,268	5,605	5,554	5,319	5,154	5,081
ILLINOIS BELL TEL CO	70,186	70,593	72,401	73,282	78,018	80,018	79,498	78,157	79,702
GTE NORTH INC. - IA	781	766	815	825	884	836	816	779	810
NORTHWESTERN BELL-IA	10,879	10,602	10,829	10,872	11,244	11,001	11,088	10,604	11,107
GTE NORTH INC. - MN	22	24	25	24	24	23	22	21	21
CENDEL OF MN	598	642	669	720	725	767	787	808	875
NORTHWESTERN BELL-MN	21,404	21,283	22,497	23,489	24,490	24,293	24,738	24,019	25,903
GTE NORTH INC. - NE	358	331	376	391	397	380	370	359	357
LINCOLN TEL & TEL CO	1,923	1,951	2,036	2,148	2,254	2,279	2,277	2,309	2,307
NORTHWESTERN BELL-NE	5,512	5,595	5,848	6,043	6,640	6,222	6,167	6,062	6,332
NORTHWESTERN BELL-ND	2,714	2,767	2,916	2,913	3,006	2,928	2,823	2,731	2,912
NORTHWESTERN BELL-SD	2,401	2,378	2,457	2,468	2,580	2,611	2,606	2,481	2,597
UTC OF ARKANSAS	128	128	130	127	132	135	127	124	133
GTE SOUTHWEST INC-AR	648	687	699	648	765	756	744	702	690
SOUTHWESTERN BELL-AR	8,514	8,383	8,658	9,045	9,559	9,648	9,755	9,811	9,856
UTC OF KANSAS	473	472	483	496	489	480	451	454	465
SOUTHWESTERN BELL-KS	12,061	11,737	11,939	12,304	12,493	13,083	13,102	12,744	13,248
GTE NORTH INC. - MO	801	798	839	857	895	908	911	923	919
UTC OF MISSOURI	1,186	1,215	1,293	1,311	1,321	1,316	1,302	1,363	1,378
SOUTHWESTERN BELL-MO	28,916	28,857	30,047	29,706	30,889	31,893	32,596	33,000	33,544
GTE SOUTHWEST INC-OK	827	887	953	880	955	1,080	1,068	962	953
SOUTHWESTERN BELL-OK	15,947	16,143	17,100	17,697	17,460	17,166	16,929	16,483	16,609
GTE SOUTHWEST INC-TX	9,339	10,094	10,407	9,875	11,528	12,113	12,282	12,107	12,190
CENDEL OF TEXAS	942	988	1,120	1,178	1,250	1,324	1,355	1,317	1,594
CONTEL OF TEXAS	844	877	953	1,000	1,082	1,118	1,173	1,228	1,198
SOUTHWESTERN BELL-TX	80,721	85,090	92,339	95,696	97,579	102,657	104,580	101,625	104,584
MOUNTAIN BELL - AZ	15,584	16,566	16,698	17,829	19,185	20,610	22,183	22,823	25,503
MOUNTAIN BELL-CO	19,545	20,674	22,270	22,016	22,262	22,789	22,840	23,120	25,497
GTE NORTHWEST INC-ID	559	545	543	566	593	621	615	639	675
MOUNTAIN BELL-ID	3,388	3,487	3,565	3,518	3,516	3,498	3,468	3,407	3,696
PACIFIC NW BELL-ID	285	282	279	292	296	297	285	276	302
GTE NORTHWEST INC-MT	50	52	50	59	60	61	60	58	54
MOUNTAIN BELL-MT	2,816	2,779	2,864	2,871	2,972	2,978	3,042	2,902	3,207
GTE SOUTHWEST INC-NM	414	460	480	400	393	413	419	411	381
MOUNTAIN BELL-NM	6,354	6,292	6,361	6,582	6,833	7,058	7,412	7,569	8,156
MOUNTAIN BELL-UT	8,758	8,814	9,231	9,622	10,028	10,051	10,232	10,123	10,953
MOUNTAIN BELL-WY	2,621	2,120	2,226	2,128	2,084	2,122	2,064	1,894	2,084

TABLE 4.13 A

LOCAL DIAL EQUIPMENT MINUTES
BY COMPANY (IN MILLIONS)

CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
UTC OF THE NW-WA	303	309	320	324	320	335	323	330	333
GTE NORTHWEST INC-WA	3,999	3,916	4,015	4,172	4,470	4,768	5,170	5,550	6,136
PACIFIC NW BELL-WA	19,021	19,400	19,394	20,372	20,446	19,843	21,169	21,453	22,772
UTC OF THE NW - OR	252	257	249	258	268	336	299	331	342
GTE NORTHWEST INC-OR	2,246	2,377	2,402	2,509	2,661	2,814	2,844	2,953	2,925
PACIFIC NW BELL-OR	11,468	11,397	10,980	11,398	10,111	10,651	10,895	10,695	11,690
CONTEL OF CALIFORNIA	1,423	1,468	1,544	1,573	1,645	1,763	1,834	1,884	2,066
GTC OF CALIFORNIA	27,822	27,888	29,201	30,865	31,129	31,876	32,505	33,864	32,125
WEST COAST TEL OF CA	48	59	61	66	69	67	67	72	73
PACIFIC BELL	131,287	134,696	139,028	142,333	142,507	144,802	145,424	148,611	151,072
CENTEL OF NV	3,159	3,317	3,360	3,455	3,381	3,706	4,159	4,307	5,312
NEVADA BELL	1,601	1,670	1,760	1,824	1,903	1,907	1,956	2,103	2,124
DIAMOND STATE TEL	4,169	4,224	4,214	4,356	4,466	4,379	4,675	5,089	5,405
C & P TEL CO OF WASH	12,045	12,275	12,439	12,670	13,162	12,616	12,803	13,581	13,319
NEW ENGLAND TEL - RI	6,295	6,411	6,527	6,639	6,795	6,765	6,652	6,605	6,652
TOTAL TIER 1A	1,395,650	1,422,152	1,465,093	1,503,189	1,549,809	1,576,775	1,598,506	1,611,588	1,679,598
ROCHESTER TEL CORP	NA	NA	NA	NA	5,720	5,939	5,981	6,133	6,508
UNITED TEL - NJ, INC	NA	571	583	603	663	737	678	742	797
CONTEL OF VIRGINIA	NA	2,252	2,375	2,468	2,843	3,057	3,257	3,464	3,843
UTC OF FLORIDA	NA	5,340	5,784	5,961	6,528	6,981	7,582	8,121	8,307
CENTEL OF OHIO	NA	730	695	705	740	765	768	683	720
CENTEL OF ILLINOIS	NA	2,046	2,100	2,126	2,175	2,067	2,033	1,992	2,044
UTC OF IOWA	NA	473	492	498	486	495	488	483	491
UTC OF MINNESOTA	NA	786	822	864	877	961	989	1,008	1,085
UTC OF THE WEST-NE	NA	226	225	232	212	211	227	235	243
UTC OF TEXAS INC	NA	NA	722	745	741	740	800	820	859
UTC OF THE WEST-WY	NA	45	44	45	46	45	43	44	48
GTE HAWAIIAN TEL. CO	NA	NA	6,747	6,615	6,929	7,285	7,749	7,764	8,175
PUERTO RICO TEL CO	NA	NA	NA	NA	6,599	6,471	7,187	7,574	8,476
TOTAL TIER 1B	NA	NA	NA	NA	34,559	35,755	37,782	39,066	41,594
ALL OTHER COST CO.	NA	NA	NA	NA	39,951	44,185	46,770	45,906	49,576
TOTAL COST CO.	NA	NA	NA	NA	1,624,320	1,656,715	1,683,057	1,696,560	1,770,768
AVERAGE SCHEDULE CO.	NA	NA	NA	NA	14,397	15,909	13,948	19,596	25,168
TOTAL INDUSTRY	NA	NA	NA	NA	1,638,717	1,672,624	1,697,006	1,716,156	1,795,936

TABLE 4.13 B

LOCAL DIAL EQUIPMENT MINUTES
YEAR OVER YEAR GROWTH
BY COMPANY

CARRIER	1981	1982	1983	1984	1985	1986	1987	1988
NEW ENGLAND TEL-ME	2.85%	2.78%	2.33%	2.45%	-4.19%	3.33%	4.60%	0.38%
NEW ENGLAND TEL-MA	2.96%	2.53%	1.93%	4.52%	0.53%	-1.37%	1.68%	5.15%
NEW ENGLAND TEL-NH	3.20%	3.10%	2.46%	9.38%	1.34%	0.87%	3.09%	10.96%
SOUTHERN NEW ENGLAND	0.20%	1.04%	1.47%	1.77%	2.91%	7.90%	-0.01%	1.20%
NEW ENGLAND TEL-VT	6.81%	6.37%	4.62%	0.01%	-1.54%	-0.98%	-2.38%	4.31%
CONTEL OF NY, INC	6.14%	2.42%	2.94%	2.88%	2.49%	2.99%	3.62%	3.88%
NEW YORK TEL CO	4.53%	3.14%	5.03%	7.46%	6.17%	1.01%	0.79%	3.89%
NEW JERSEY BELL	3.17%	-1.05%	0.94%	2.40%	-2.18%	-0.80%	-0.14%	5.52%
GTE NORTH INC. - PA	1.07%	1.04%	3.07%	0.80%	0.76%	4.61%	3.73%	2.95%
UTC OF PENNSYLVANIA	3.93%	0.60%	1.97%	6.80%	1.31%	1.19%	-0.54%	2.06%
BELL OF PENNSYLVANIA	2.91%	2.70%	-0.05%	-1.65%	-4.21%	5.98%	1.02%	3.37%
C & P TEL CO OF MD	4.65%	5.36%	2.98%	0.21%	-2.84%	3.29%	2.14%	6.30%
CENDEL OF VIRGINIA	3.83%	6.98%	2.22%	-2.87%	8.40%	1.63%	0.52%	2.94%
GTE SOUTH INC. - VA	-8.08%	10.40%	-4.37%	0.75%	-1.14%	3.33%	-2.51%	2.50%
UNITED INTER-MT-VA	0.00%	0.68%	3.21%	-11.97%	-6.85%	0.76%	1.79%	6.96%
C & P TEL CO OF VA	0.78%	3.27%	4.70%	2.70%	2.81%	3.80%	3.86%	6.80%
GTE SOUTH INC. - WV	-8.90%	14.46%	-1.50%	0.79%	-2.90%	2.24%	-2.27%	2.83%
C & P TEL CO OF WV	1.49%	-0.79%	0.51%	0.61%	0.22%	-0.41%	3.23%	0.77%
GTE FLORIDA INC.	9.16%	4.30%	6.84%	5.73%	8.76%	6.01%	4.21%	2.33%
CENDEL OF FLORIDA	1.46%	3.99%	11.03%	8.80%	3.77%	12.05%	8.09%	9.59%
SOUTHERN BELL-FL	2.78%	4.69%	5.71%	3.54%	2.63%	0.92%	4.63%	8.44%
GTE SOUTH INC.- GA	0.68%	3.86%	3.58%	0.08%	1.39%	6.86%	1.00%	4.95%
SOUTHERN BELL-GA	1.92%	0.05%	5.88%	7.03%	3.06%	1.84%	2.44%	8.06%
CAROLINA TEL & TEL	0.78%	4.28%	3.33%	5.92%	3.71%	1.98%	2.78%	1.83%
CENDEL OF NC	3.07%	4.04%	3.93%	3.26%	4.40%	2.69%	4.42%	-0.10%
GTE SOUTH INC - NC	0.57%	7.08%	5.30%	7.78%	2.53%	-4.83%	-0.15%	12.21%
SOUTHERN BELL-NC	0.15%	0.94%	2.12%	9.06%	5.17%	4.23%	-3.94%	4.80%
GTE SOUTH INC. - SC	2.77%	-1.55%	4.26%	8.52%	3.97%	1.75%	-0.20%	2.53%
UTC OF THE CAROLINAS	3.69%	-0.74%	6.05%	-1.72%	6.98%	4.48%	4.08%	8.06%
SOUTHERN BELL-SC	-0.58%	2.14%	2.06%	6.83%	4.85%	2.74%	-2.89%	4.95%
GTE SOUTH INC. - AL	5.76%	8.06%	0.15%	3.30%	1.04%	0.53%	1.87%	0.47%
SO CENTRAL BELL-AL	2.61%	2.01%	4.13%	2.15%	2.12%	3.19%	3.16%	5.36%
GTE SOUTH INC. - KY	14.39%	0.74%	2.97%	4.41%	6.47%	-1.91%	-2.05%	8.25%
CINCINNATI BELL-KY	1.15%	1.86%	0.57%	0.84%	2.60%	-0.45%	2.82%	3.92%
SO CENTRAL BELL-KY	0.08%	1.33%	0.69%	5.42%	1.85%	-4.93%	2.22%	3.18%
SO CENTRAL BELL-LA	5.95%	4.78%	1.78%	-0.47%	-1.15%	-1.59%	-1.62%	2.20%
SO CENTRAL BELL-MS	0.21%	4.23%	1.98%	2.64%	6.77%	-0.50%	3.21%	5.18%
GTE SOUTH INC. - TN	-9.33%	3.06%	-1.87%	3.39%	2.31%	4.94%	-0.39%	2.96%
UNITED INTER-MT-TN	2.63%	-1.27%	0.95%	-2.07%	3.20%	4.53%	4.71%	5.48%
SO. CENTRAL BELL -TN	-1.96%	2.34%	0.82%	3.66%	3.90%	4.06%	3.08%	3.08%
GTE NORTH INC. - OH	3.78%	1.82%	1.36%	6.41%	1.03%	4.78%	-0.05%	0.03%
UTC OF OHIO	2.45%	1.07%	-1.48%	3.80%	3.33%	5.21%	0.25%	-5.56%
CINCINNATI BELL-OH	-3.04%	2.46%	1.55%	6.13%	-3.04%	-0.10%	-0.14%	8.15%
OHIO BELL TEL CO	-3.28%	2.72%	3.46%	4.76%	-1.35%	-5.75%	0.55%	4.66%

TABLE 4.13 B

LOCAL DIAL EQUIPMENT MINUTES
YEAR OVER YEAR GROWTH
BY COMPANY

CARRIER	1981	1982	1983	1984	1985	1986	1987	1988
GTE NORTH INC. - MI	-0.20%	-0.37%	-0.02%	2.96%	1.57%	0.61%	0.39%	2.20%
MICHIGAN BELL TEL CO	-0.36%	-0.58%	2.00%	0.95%	-1.37%	1.69%	1.52%	8.42%
GTE NORTH INC. - IN	-2.09%	1.81%	3.40%	9.20%	-2.67%	1.12%	6.42%	-5.08%
UTC OF INDIANA	4.45%	5.29%	-1.94%	5.47%	-0.51%	3.34%	1.97%	1.31%
INDIANA BELL TEL CO	-1.09%	3.28%	-0.46%	1.94%	-0.87%	-0.26%	-0.03%	4.45%
GTE NORTH INC. - WI	1.78%	2.03%	0.11%	1.88%	2.03%	1.73%	-0.57%	-0.24%
WISCONSIN BELL	-4.05%	2.01%	-1.23%	0.65%	2.51%	0.89%	-2.59%	8.59%
GTE NORTH INC. - IL	10.21%	1.38%	2.41%	6.40%	-0.91%	-4.23%	-3.11%	-1.41%
ILLINOIS BELL TEL CO	0.58%	2.56%	1.22%	6.46%	2.56%	-0.65%	-1.69%	1.98%
GTE NORTH INC. - IA	-1.89%	6.34%	1.19%	7.23%	-5.44%	-2.44%	-4.53%	4.00%
NORTHWESTERN BELL-IA	-2.55%	2.14%	0.40%	3.42%	-2.16%	0.79%	-4.37%	4.75%
GTE NORTH INC. - MN	7.20%	2.74%	-2.03%	-3.10%	-2.21%	-5.06%	-6.11%	0.12%
CENDEL OF MN	7.34%	4.17%	7.74%	0.61%	5.79%	2.70%	2.64%	8.26%
NORTHWESTERN BELL-MN	-0.56%	5.70%	4.41%	4.26%	-0.80%	1.83%	-2.91%	7.84%
GTE NORTH INC. - NE	-7.42%	13.39%	3.98%	1.70%	-4.38%	-2.60%	-2.97%	-0.70%
LINCOLN TEL & TEL CO	1.44%	4.35%	5.53%	4.93%	1.08%	-0.06%	1.41%	-0.11%
NORTHWESTERN BELL-NE	1.50%	4.52%	3.34%	9.87%	-6.28%	-0.89%	-1.70%	4.45%
NORTHWESTERN BELL-ND	1.96%	5.37%	-0.11%	3.21%	-2.58%	-3.60%	-3.26%	6.66%
NORTHWESTERN BELL-SD	-0.95%	3.35%	0.43%	4.56%	1.20%	-0.20%	-4.82%	4.68%
UTC OF ARKANSAS	-0.13%	2.09%	-2.09%	3.21%	2.67%	-6.13%	-2.07%	6.85%
GTE SOUTHWEST INC-AR	5.97%	1.83%	-7.38%	18.12%	-1.18%	-1.61%	-5.63%	-1.63%
SOUTHWESTERN BELL-AR	-1.53%	3.27%	4.47%	5.68%	0.94%	1.11%	0.57%	0.46%
UTC OF KANSAS	-0.41%	2.40%	2.71%	-1.30%	-1.98%	-6.09%	0.85%	2.38%
SOUTHWESTERN BELL-KS	-2.69%	1.73%	3.05%	1.54%	4.72%	0.15%	-2.73%	3.95%
GTE NORTH INC. - MO	-0.43%	5.20%	2.20%	4.43%	1.40%	0.34%	1.31%	-0.47%
UTC OF MISSOURI	2.48%	6.41%	1.40%	0.78%	-0.38%	-1.06%	4.66%	1.12%
SOUTHWESTERN BELL-MO	-0.21%	4.12%	-1.13%	3.98%	3.25%	2.21%	1.24%	1.65%
GTE SOUTHWEST INC-OK	7.24%	7.42%	-7.62%	8.52%	13.09%	-1.08%	-9.93%	-0.96%
SOUTHWESTERN BELL-OK	1.23%	5.93%	3.49%	-1.34%	-1.68%	-1.38%	-2.63%	0.76%
GTE SOUTHWEST INC-TX	8.08%	3.11%	-5.11%	16.74%	5.07%	1.39%	-1.42%	0.69%
CENDEL OF TEXAS	4.85%	13.42%	5.14%	6.11%	5.97%	2.27%	-2.77%	21.01%
CONTEL OF TEXAS	3.89%	8.61%	4.95%	8.17%	3.37%	4.91%	4.70%	-2.44%
SOUTHWESTERN BELL-TX	5.41%	8.52%	3.64%	1.97%	5.20%	1.87%	-2.83%	2.91%
MOUNTAIN BELL - AZ	6.30%	0.80%	6.77%	7.61%	7.43%	7.63%	2.89%	11.74%
MOUNTAIN BELL-CO	5.77%	7.72%	-1.14%	1.12%	2.37%	0.23%	1.23%	10.28%
GTE NORTHWEST INC-ID	-2.43%	-0.53%	4.28%	4.86%	4.63%	-0.84%	3.74%	5.79%
MOUNTAIN BELL-ID	2.93%	2.24%	-1.33%	-0.06%	-0.50%	-0.86%	-1.78%	8.49%
PACIFIC NW BELL-ID	-1.21%	-0.90%	4.56%	1.36%	0.47%	-4.30%	-2.91%	9.48%
GTE NORTHWEST INC-MT	4.07%	-3.64%	18.61%	1.51%	1.48%	-2.66%	-2.05%	-7.56%
MOUNTAIN BELL-MT	-1.31%	3.07%	0.22%	3.52%	0.22%	2.14%	-4.60%	10.49%
GTE SOUTHWEST INC-NM	11.06%	4.44%	-16.75%	-1.69%	5.09%	1.54%	-2.11%	-7.10%
MOUNTAIN BELL-NM	-0.97%	1.09%	3.48%	3.81%	3.29%	5.02%	2.12%	7.75%
MOUNTAIN BELL-UT	0.64%	4.73%	4.23%	4.22%	0.24%	1.80%	-1.07%	8.20%
MOUNTAIN BELL-WY	-19.11%	4.97%	-4.38%	-2.08%	1.84%	-2.73%	-8.23%	10.01%

TABLE 4.13 B

LOCAL DIAL EQUIPMENT MINUTES
YEAR OVER YEAR GROWTH
BY COMPANY

CARRIER	1981	1982	1983	1984	1985	1986	1987	1988
UTC OF THE NW-WA	2.21%	3.33%	1.34%	-1.36%	4.73%	-3.37%	2.04%	0.98%
GTE NORTHWEST INC-WA	-2.07%	2.51%	3.92%	7.14%	6.67%	8.43%	7.35%	10.56%
PACIFIC NW BELL-WA	1.99%	-0.03%	5.04%	0.36%	-2.95%	6.68%	1.34%	6.15%
UTC OF THE NW - OR	1.97%	-3.23%	3.39%	4.20%	25.35%	-11.20%	10.76%	3.33%
GTE NORTHWEST INC-OR	5.83%	1.04%	4.46%	6.08%	5.74%	1.05%	3.84%	-0.95%
PACIFIC NW BELL-OR	-0.62%	-3.66%	3.80%	-11.30%	5.35%	2.29%	-1.84%	9.31%
CONTEL OF CALIFORNIA	3.15%	5.18%	1.89%	4.59%	7.15%	4.06%	2.71%	9.66%
GTC OF CALIFORNIA	0.24%	4.71%	5.70%	0.86%	2.40%	1.97%	4.18%	-5.14%
WEST COAST TEL OF CA	22.42%	3.08%	8.31%	3.55%	-2.51%	-0.54%	8.96%	0.79%
PACIFIC BELL	2.60%	3.22%	2.38%	0.12%	1.61%	0.43%	2.19%	1.66%
CENTEL OF NV	5.02%	1.29%	2.84%	-2.14%	9.59%	12.23%	3.57%	23.32%
NEVADA BELL	4.30%	5.38%	3.66%	4.32%	0.22%	2.57%	7.55%	0.99%
DIAMOND STATE TEL	1.32%	-0.23%	3.37%	2.52%	-1.95%	6.75%	8.86%	6.21%
C & P TEL CO OF WASH	1.91%	1.34%	1.86%	3.88%	-4.14%	1.48%	6.08%	-1.93%
NEW ENGLAND TEL - RI	1.84%	1.81%	1.72%	2.35%	-0.44%	-1.68%	-0.71%	0.72%
TOTAL TIER 1A	1.90%	3.02%	2.60%	3.10%	1.74%	1.38%	0.82%	4.22%
ROCHESTER TEL CORP	NA	NA	NA	NA	3.84%	0.70%	2.55%	6.11%
UNITED TEL - NJ, INC	NA	2.04%	3.36%	10.09%	11.14%	-8.00%	9.43%	7.40%
CONTEL OF VIRGINIA	NA	5.48%	3.93%	15.20%	7.52%	6.52%	6.36%	10.95%
UTC OF FLORIDA	NA	8.33%	3.06%	9.51%	6.94%	8.61%	7.12%	2.28%
CENTEL OF OHIO	NA	-4.78%	1.36%	5.07%	3.35%	0.38%	-11.09%	5.42%
CENTEL OF ILLINOIS	NA	2.63%	1.23%	2.28%	-4.94%	-1.67%	-1.99%	2.59%
UTC OF IOWA	NA	3.92%	1.20%	-2.44%	1.97%	-1.56%	-0.83%	1.47%
UTC OF MINNESOTA	NA	4.56%	5.12%	1.47%	9.54%	3.01%	1.91%	7.62%
UTC OF THE WEST-NE	NA	-0.51%	3.28%	-8.43%	-0.70%	7.70%	3.42%	3.41%
UTC OF TEXAS INC	NA	NA	3.25%	-0.57%	-0.15%	8.10%	2.56%	4.64%
UTC OF THE WEST-WY	NA	-0.76%	2.66%	1.48%	-2.32%	-4.01%	2.35%	7.86%
GTE HAWAIIAN TEL. CO	NA	NA	-1.96%	4.75%	5.14%	6.37%	0.19%	5.29%
PUERTO RICO TEL CO	NA	NA	NA	NA	-1.94%	11.07%	5.39%	11.90%
TOTAL TIER 1B	NA	NA	NA	NA	3.46%	5.67%	3.40%	6.47%
ALL OTHER COST CO.	NA	NA	NA	NA	10.60%	5.85%	-1.85%	7.99%
TOTAL COST CO.	NA	NA	NA	NA	1.99%	1.59%	0.80%	4.37%
AVERAGE SCHEDULE CO.	NA	NA	NA	NA	10.50%	-12.33%	40.49%	28.44%
TOTAL INDUSTRY	NA	NA	NA	NA	2.07%	1.46%	1.13%	4.65%

TABLE 4.14 A

STATE DIAL EQUIPMENT MINUTES
BY COMPANY (IN MILLIONS)

CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
NEW ENGLAND TEL-ME	607	641	675	731	797	916	949	1062	1171
NEW ENGLAND TEL-MA	3831	4007	4183	4513	5138	5974	6843	7992	8806
NEW ENGLAND TEL-NH	469	509	548	611	687	788	942	1078	1094
SOUTHERN NEW ENGLAND	2463	2596	2757	2867	3014	3308	3641	4069	4432
NEW ENGLAND TEL-VT	273	285	296	315	341	357	405	434	476
CONTEL OF NY, INC	377	421	452	489	557	633	695	774	838
NEW YORK TEL CO	4887	5195	5553	6134	6499	6653	7638	8493	8434
NEW JERSEY BELL	10195	10642	11336	12357	14209	15231	16891	18813	20073
GTE NORTH INC. - PA	935	965	1037	1070	1138	1229	1237	1362	937
UTC OF PENNSYLVANIA	424	449	464	494	586	623	693	765	837
BELL OF PENNSYLVANIA	4569	4909	5225	5526	8062	9635	7752	8217	8817
C & P TEL CO OF WASH	0	0	0	0	0	0	0	0	0
C & P TEL CO OF MD	1127	1197	1254	1305	1394	1590	1779	2368	2465
CENDEL OF VIRGINIA	248	275	294	310	359	344	350	420	513
GTE SOUTH INC. - VA	77	77	84	80	91	103	104	112	60
C & P TEL CO OF VA	1589	1675	1753	1827	2183	2699	2766	2884	3091
GTE SOUTH INC. - WV	144	139	153	154	181	203	209	222	115
C & P TEL CO OF WV	749	787	807	791	930	1127	1079	971	934
GTE FLORIDA INC.	1456	1576	1788	1859	2575	2869	3335	4064	2837
CENDEL OF FLORIDA	177	187	212	235	264	317	388	399	535
SOUTHERN BELL-FL	2845	3154	3456	3726	5020	6239	7644	7776	8308
GTE SOUTH INC.- GA	516	536	550	589	641	731	824	922	532
SOUTHERN BELL-GA	1785	1890	1988	2024	2496	3109	3110	3438	3735
CAROLINA TEL & TEL	877	913	950	1033	1155	1348	1480	1504	1683
CENDEL OF NC	233	251	257	279	398	338	367	414	472
GTE SOUTH INC - NC	226	223	240	269	317	378	403	432	341
SOUTHERN BELL-NC	1632	1766	1871	1973	2346	2737	3083	3111	3375
GTE SOUTH INC. - SC	293	295	299	315	367	415	437	481	280
SOUTHERN BELL-SC	782	838	846	868	1073	1285	1370	1465	1642
GTE SOUTH INC. - AL	251	262	281	296	345	356	377	416	238
SO CENTRAL BELL-AL	1095	1162	1213	1252	1460	1684	1827	1936	2046
GTE SOUTH INC. - KY	475	538	553	564	576	728	776	945	581
CINCINNATI BELL-KY	43	42	48	55	59	76	76	83	96
SO CENTRAL BELL-KY	775	801	805	825	974	1064	1157	1245	1312
SO CENTRAL BELL-LA	1849	2066	2207	2210	2900	3195	2845	2752	2958
SO CENTRAL BELL-MS	949	982	1026	1081	1294	1465	1514	1690	1750
GTE SOUTH INC. - TN	99	97	123	130	147	149	179	199	108
SO. CENTRAL BELL -TN	1325	1429	1510	1567	1961	2327	2490	2740	3153
GTE NORTH INC. - OH	1931	2045	2128	2141	2215	2389	2512	2793	1724
UTC OF OHIO	700	750	791	821	876	950	987	1081	1546
CINCINNATI BELL-OH	278	294	330	349	356	537	530	583	525
OHIO BELL TEL CO	2943	2959	3023	3077	3740	4392	4846	4912	4941
GTE NORTH INC. - MI	2212	2212	2215	2254	2328	2582	2713	2721	1685

TABLE 4.14 A

STATE DIAL EQUIPMENT MINUTES
BY COMPANY (IN MILLIONS)

CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
MICHIGAN BELL TEL CO	5270	5536	5615	5864	7820	9908	10032	9756	9998
GTE NORTH INC. - IN	1033	1083	1140	1188	1288	1381	1447	1600	1224
UTC OF INDIANA	248	264	276	290	336	352	374	399	456
INDIANA BELL TEL CO	1250	1317	1385	1430	1746	1975	2056	2176	2335
GTE NORTH INC. - WI	1111	1144	1198	1228	1264	1312	1385	1468	969
WISCONSIN BELL	1498	1588	1689	1732	1880	2044	2158	2301	2584
GTE NORTH INC. - IL	2242	2580	2753	2772	2854	2921	3002	3182	1939
ILLINOIS BELL TEL CO	2791	2788	2838	2997	3461	3593	3807	3725	3921
GTE NORTH INC. - IA	441	462	491	525	525	543	547	578	321
NORTHWESTERN BELL-IA	1147	1202	1255	1288	1339	1437	1517	1599	1616
GTE NORTH INC. - MN	14	16	18	20	19	18	19	20	10
CENTEL OF MN	76	84	90	99	104	114	120	140	134
NORTHWESTERN BELL-MN	1133	1200	1279	1358	1517	1754	1843	1993	2050
GTE NORTH INC. - NE	148	147	173	184	191	208	214	231	116
LINCOLN TEL & TEL CO	281	300	329	339	358	357	356	420	441
NORTHWESTERN BELL-NE	379	404	430	452	557	503	518	555	550
NORTHWESTERN BELL-ND	281	308	321	325	360	410	402	395	409
NORTHWESTERN BELL-SD	273	289	306	318	344	388	396	433	453
UTC OF ARKANSAS	26	26	26	27	28	31	32	34	36
GTE SOUTHWEST INC-AR	237	242	233	220	248	281	285	303	168
SOUTHWESTERN BELL-AR	881	941	948	971	1082	1156	1199	1341	1630
SOUTHWESTERN BELL-KS	1176	1292	1301	1320	1465	1532	1527	1633	1691
GTE NORTH INC. - MO	323	347	348	361	359	411	436	473	289
UTC OF MISSOURI	318	337	345	350	362	399	404	433	571
SOUTHWESTERN BELL-MO	1558	1617	1631	1593	1755	1955	2040	2239	2367
GTE SOUTHWEST INC-OK	392	441	465	449	461	525	506	517	274
SOUTHWESTERN BELL-OK	1723	1929	2100	2116	2257	2426	2321	2289	2322
GTE SOUTHWEST INC-TX	3084	3395	3542	3367	3897	4282	4424	4879	2898
CENTEL OF TEXAS	144	156	199	299	249	265	279	313	271
CONTEL OF TEXAS	310	364	410	418	486	542	558	564	602
SOUTHWESTERN BELL-TX	6984	7866	8534	8300	12889	14184	13925	13247	12731
MOUNTAIN BELL - AZ	773	854	900	895	1185	1455	1726	1965	1600
MOUNTAIN BELL-CO	1199	1341	1465	1519	1893	2179	2367	2602	2011
GTE NORTHWEST INC-ID	150	153	156	165	184	204	208	216	116
MOUNTAIN BELL-ID	368	384	391	407	489	551	554	567	526
PACIFIC NW BELL-ID	29	29	30	32	35	36	37	39	41
GTE NORTHWEST INC-MT	16	17	16	17	19	20	21	21	10
MOUNTAIN BELL-MT	440	463	479	511	556	583	638	643	666
GTE SOUTHWEST INC-NM	70	80	92	83	88	96	83	82	53
MOUNTAIN BELL-NM	414	444	486	495	602	622	680	724	686
MOUNTAIN BELL-UT	608	663	650	654	759	860	932	985	897
MOUNTAIN BELL-WY	296	289	293	277	318	367	354	348	323
UTC OF THE NW-WA	118	119	127	135	130	146	149	153	164
GTE NORTHWEST INC-WA	950	925	995	1084	1174	1264	1358	1518	1227
PACIFIC NW BELL-WA	1707	1863	1961	2108	2487	3300	2805	3153	3249

TABLE 4.14 A

STATE DIAL EQUIPMENT MINUTES
BY COMPANY (IN MILLIONS)

CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
GTC OF CALIFORNIA	10907	11503	11788	11976	12102	12227	13647	14999	12856
WEST COAST TEL OF CA	31	35	32	31	32	34	35	41	27
PACIFIC BELL	23823	25457	26028	27838	32715	36590	39944	42656	46005
CENDEL OF NV	45	50	51	58	49	55	67	76	125
NEVADA BELL	81	91	91	96	115	147	177	164	264
DIAMOND STATE TEL	113	120	126	144	284	381	203	226	261
NEW ENGLAND TEL - RI	309	322	335	349	372	404	454	484	535
TOTAL "TIER 1"	140283	149302	156308	163118	191957	214874	227062	242581	240019
ROCHESTER TEL CORP	NA	NA	NA	NA	533	569	617	683	713
UNITED TEL - NJ, INC	NA	353	378	410	459	572	669	734	788
CONTEL OF VIRGINIA	NA	427	466	487	570	771	789	1003	769
UNITED INTER-MT-VA	NA	84	87	87	100	113	123	133	139
UTC OF FLORIDA	NA	751	849	993	1104	1390	1451	1445	1470
UTC OF THE CAROLINAS	NA	68	70	74	95	111	116	115	138
UNITED INTER-MT-TN	NA	146	152	161	229	275	310	296	368
CENDEL OF OHIO	NA	87	89	87	90	102	117	192	200
CENDEL OF ILLINOIS	NA	181	185	192	217	229	252	284	332
UTC OF IOWA	NA	112	120	122	132	147	147	160	167
UTC OF MINNESOTA	NA	113	123	132	141	166	174	184	202
UTC OF THE WEST-NE	NA	21	22	23	23	29	27	25	28
UTC OF KANSAS	NA	NA	145	148	145	157	151	153	164
UTC OF TEXAS INC	NA	NA	545	545	632	345	346	351	379
UTC OF THE WEST-WY	NA	6	6	6	6	8	8	7	8
GTE HAWAIIAN TEL. CO	NA	NA	380	414	448	444	526	537	368
PUERTO RICO TEL CO	NA	NA	NA	NA	704	891	1017	1306	1776
TOTAL "NON-TIER 1"	NA	NA	NA	NA	5628	6319	6841	7609	8011
ALL OTHER COST CO.	NA	NA	NA	NA	10424	12003	13037	13498	14413
TOTAL COST CO.	NA	NA	NA	NA	208009	233196	246940	263688	262443
AVERAGE SCHEDULE CO.	NA	NA	NA	NA	3757	4322	3888	5808	6963
TOTAL INDUSTRY	140283	149302	156308	163118	211766	237517	250828	269496	269406

TABLE 4.14 B

STATE DIAL EQUIPMENT MINUTES
YEAR OVER YEAR GROWTH
BY COMPANY

CARRIER	1981	1982	1983	1984	1985	1986	1987	1988
NEW ENGLAND TEL-ME	5.54%	5.25%	8.32%	9.08%	14.98%	3.60%	11.86%	10.23%
NEW ENGLAND TEL-MA	4.59%	4.39%	7.89%	13.85%	16.26%	14.55%	16.80%	10.19%
NEW ENGLAND TEL-NH	8.52%	7.85%	11.42%	12.34%	14.73%	19.65%	14.36%	1.47%
SOUTHERN NEW ENGLAND	5.41%	6.18%	4.01%	5.11%	9.75%	10.08%	11.76%	8.91%
NEW ENGLAND TEL-VT	4.22%	4.05%	6.24%	8.47%	4.52%	13.59%	6.96%	9.76%
CONTEL OF NY, INC	11.69%	7.31%	8.09%	13.84%	13.78%	9.78%	11.34%	8.27%
NEW YORK TEL CO	6.30%	6.89%	10.48%	5.94%	2.37%	14.80%	11.20%	-0.69%
NEW JERSEY BELL	4.39%	6.53%	9.01%	14.98%	7.19%	10.90%	11.38%	6.69%
GTE NORTH INC. - PA	3.21%	7.46%	3.18%	6.36%	8.00%	0.68%	10.05%	-31.20%
UTC OF PENNSYLVANIA	5.97%	3.37%	6.32%	18.70%	6.38%	11.23%	10.29%	9.41%
BELL OF PENNSYLVANIA	7.45%	6.43%	5.76%	45.89%	19.51%	-19.54%	6.00%	7.30%
C & P TEL CO OF MD	6.18%	4.81%	4.05%	6.85%	14.05%	11.86%	33.08%	4.13%
CENTEL OF VIRGINIA	10.85%	6.74%	5.63%	15.75%	-4.31%	1.86%	19.96%	22.27%
GTE SOUTH INC. - VA	0.58%	7.94%	-4.14%	13.39%	13.34%	1.06%	7.98%	-46.83%
C & P TEL CO OF VA	5.42%	4.63%	4.22%	19.51%	23.63%	2.50%	4.24%	7.20%
GTE SOUTH INC. - WV	-3.64%	10.26%	0.91%	16.96%	12.42%	2.78%	6.20%	-48.13%
C & P TEL CO OF WV	5.06%	2.54%	-1.99%	17.57%	21.18%	-4.28%	-10.02%	-3.82%
GTE FLORIDA INC.	8.20%	13.50%	3.96%	38.50%	11.42%	16.24%	21.86%	-30.19%
CENTEL OF FLORIDA	5.96%	13.28%	10.79%	12.33%	19.95%	22.34%	2.90%	34.09%
SOUTHERN BELL-FL	10.83%	9.59%	7.83%	34.72%	24.28%	22.51%	1.74%	6.84%
GTE SOUTH INC.- GA	3.84%	2.63%	7.08%	8.87%	14.03%	12.71%	11.94%	-42.30%
SOUTHERN BELL-GA	5.87%	5.17%	1.81%	23.34%	24.56%	0.04%	10.53%	8.66%
CAROLINA TEL & TEL	4.04%	4.12%	8.69%	11.84%	16.69%	9.80%	1.66%	11.87%
CENTEL OF NC	8.07%	2.37%	8.42%	42.78%	-15.23%	8.60%	12.84%	14.19%
GTE SOUTH INC - NC	-1.44%	7.73%	12.05%	17.90%	19.24%	6.60%	7.20%	-20.98%
SOUTHERN BELL-NC	8.23%	5.91%	5.50%	18.89%	16.65%	12.66%	0.89%	8.49%
GTE SOUTH INC. - SC	0.73%	1.31%	5.39%	16.46%	13.08%	5.39%	10.07%	-41.85%
SOUTHERN BELL-SC	7.16%	1.00%	2.54%	23.67%	19.75%	6.58%	6.98%	12.07%
GTE SOUTH INC. - AL	4.50%	7.03%	5.59%	16.39%	3.19%	5.82%	10.43%	-42.83%
SO CENTRAL BELL-AL	6.11%	4.45%	3.22%	16.62%	15.32%	8.47%	5.98%	5.70%
GTE SOUTH INC. - KY	13.29%	2.85%	1.96%	2.02%	26.46%	6.60%	21.75%	-38.50%
CINCINNATI BELL-KY	-2.89%	13.53%	14.92%	7.96%	27.97%	-0.14%	9.23%	15.59%
SO CENTRAL BELL-KY	3.31%	0.55%	2.49%	18.07%	9.23%	8.72%	7.64%	5.38%
SO CENTRAL BELL-LA	11.74%	6.85%	0.13%	31.22%	10.15%	-10.95%	-3.26%	7.50%
SO CENTRAL BELL-MS	3.45%	4.44%	5.39%	19.67%	13.28%	3.34%	11.61%	3.55%
GTE SOUTH INC. - TN	-2.33%	27.65%	5.57%	12.81%	1.36%	20.42%	10.72%	-45.85%
SO. CENTRAL BELL -TN	7.87%	5.67%	3.75%	25.14%	18.67%	7.01%	10.01%	15.08%
GTE NORTH INC. - OH	5.91%	4.06%	0.60%	3.47%	7.85%	5.13%	11.21%	-38.25%
UTC OF OHIO	7.21%	5.48%	3.76%	6.62%	8.51%	3.83%	9.60%	43.01%
CINCINNATI BELL-OH	5.75%	12.32%	5.81%	1.88%	51.14%	-1.46%	10.16%	-10.03%
OHIO BELL TEL CO	0.54%	2.16%	1.80%	21.54%	17.44%	10.34%	1.37%	0.59%

TABLE 4.14 B

STATE DIAL EQUIPMENT MINUTES
YEAR OVER YEAR GROWTH
BY COMPANY

CARRIER	1981	1982	1983	1984	1985	1986	1987	1988
GTE NORTH INC. - MI	0.00%	0.14%	1.75%	3.29%	10.91%	5.09%	0.28%	-38.07%
MICHIGAN BELL TEL CO	5.05%	1.44%	4.43%	33.36%	26.71%	1.24%	-2.75%	2.48%
GTE NORTH INC. - IN	4.81%	5.25%	4.26%	8.41%	7.21%	4.78%	10.55%	-23.50%
UTC OF INDIANA	6.68%	4.64%	4.75%	15.95%	4.93%	6.10%	6.79%	14.28%
INDIANA BELL TEL CO	5.33%	5.18%	3.30%	22.04%	13.13%	4.11%	5.85%	7.27%
GTE NORTH INC. - WI	2.95%	4.70%	2.55%	2.88%	3.84%	5.55%	6.00%	-33.95%
WISCONSIN BELL	5.96%	6.38%	2.52%	8.57%	8.72%	5.60%	6.61%	12.30%
GTE NORTH INC. - IL	15.06%	6.71%	0.71%	2.96%	2.34%	2.78%	5.98%	-39.07%
ILLINOIS BELL TEL CO	-0.11%	1.80%	5.60%	15.49%	3.82%	5.96%	-2.17%	5.26%
GTE NORTH INC. - IA	4.74%	6.37%	6.93%	-0.11%	3.46%	0.79%	5.69%	-44.57%
NORTHWESTERN BELL-IA	4.79%	4.35%	2.65%	3.99%	7.35%	5.54%	5.39%	1.06%
GTE NORTH INC. - MN	16.99%	11.86%	9.36%	-3.72%	-6.75%	5.02%	5.09%	-49.66%
CENDEL OF MN	9.77%	8.13%	9.29%	5.13%	10.02%	5.05%	16.75%	-4.19%
NORTHWESTERN BELL-MN	5.94%	6.56%	6.15%	11.70%	15.68%	5.05%	8.15%	2.83%
GTE NORTH INC. - NE	-0.47%	17.68%	6.31%	3.72%	8.81%	2.80%	8.11%	-49.91%
LINCOLN TEL & TEL CO	6.65%	9.72%	3.11%	5.66%	-0.28%	-0.31%	17.87%	5.06%
NORTHWESTERN BELL-NE	6.84%	6.34%	5.15%	23.10%	-9.64%	2.95%	7.09%	-0.86%
NORTHWESTERN BELL-ND	9.35%	4.24%	1.33%	10.87%	13.90%	-1.97%	-1.77%	3.49%
NORTHWESTERN BELL-SD	5.74%	6.01%	3.75%	8.13%	12.81%	2.08%	9.47%	4.55%
UTC OF ARKANSAS	-0.15%	1.07%	2.03%	2.88%	12.96%	2.60%	4.84%	7.52%
GTE SOUTHWEST INC-AR	2.17%	-3.98%	-5.24%	12.56%	13.31%	1.51%	6.26%	-44.49%
SOUTHWESTERN BELL-AR	6.76%	0.82%	2.42%	11.39%	6.82%	3.72%	11.82%	21.59%
SOUTHWESTERN BELL-KS	9.83%	0.76%	1.41%	11.00%	4.57%	-0.32%	6.92%	3.58%
GTE NORTH INC. - MO	7.56%	0.23%	3.71%	-0.71%	14.62%	6.16%	8.33%	-38.77%
UTC OF MISSOURI	6.07%	2.34%	1.40%	3.26%	10.42%	1.17%	7.14%	31.91%
SOUTHWESTERN BELL-MO	3.80%	0.90%	-2.36%	10.21%	11.37%	4.36%	9.75%	5.70%
GTE SOUTHWEST INC-OK	12.49%	5.43%	-3.49%	2.75%	13.88%	-3.71%	2.17%	-46.95%
SOUTHWESTERN BELL-OK	11.92%	8.86%	0.78%	6.63%	7.51%	-4.32%	-1.38%	1.44%
GTE SOUTHWEST INC-TX	10.09%	4.34%	-4.95%	15.74%	9.88%	3.32%	10.27%	-40.59%
CENDEL OF TEXAS	8.66%	27.08%	50.18%	-16.45%	6.10%	5.43%	12.29%	-13.44%
CONTEL OF TEXAS	17.56%	12.56%	1.89%	16.26%	11.64%	2.97%	1.00%	6.74%
SOUTHWESTERN BELL-TX	12.63%	8.49%	-2.75%	55.30%	10.05%	-1.83%	-4.87%	-3.90%
MOUNTAIN BELL - AZ	10.47%	5.37%	-0.56%	32.39%	22.83%	18.62%	13.85%	-18.60%
MOUNTAIN BELL-CO	11.83%	9.26%	3.71%	24.58%	15.09%	8.64%	9.93%	-22.72%
GTE NORTHWEST INC-ID	2.31%	1.54%	5.87%	11.69%	10.46%	2.07%	3.97%	-46.11%
MOUNTAIN BELL-ID	4.42%	1.79%	4.22%	19.92%	12.70%	0.71%	2.19%	-7.18%
PACIFIC NW BELL-ID	0.44%	2.60%	6.86%	9.49%	2.85%	3.26%	4.14%	6.90%
GTE NORTHWEST INC-MT	4.06%	-2.88%	7.30%	7.77%	7.21%	3.25%	2.76%	-54.11%
MOUNTAIN BELL-MT	5.28%	3.43%	6.68%	8.83%	4.87%	9.32%	0.87%	3.59%
GTE SOUTHWEST INC-NM	14.82%	15.06%	-10.62%	6.46%	9.09%	-13.10%	-1.69%	-34.86%
MOUNTAIN BELL-NM	7.17%	9.51%	1.86%	21.60%	3.43%	9.28%	6.47%	-5.28%
MOUNTAIN BELL-UT	9.02%	-1.97%	0.59%	16.20%	13.21%	8.40%	5.73%	-9.00%
MOUNTAIN BELL-WY	-2.26%	1.23%	-5.39%	15.03%	15.23%	-3.53%	-1.76%	-7.10%

TABLE 4.14 B

STATE DIAL EQUIPMENT MINUTES
YEAR OVER YEAR GROWTH
BY COMPANY

CARRIER	1981	1982	1983	1984	1985	1986	1987	1988
UTC OF THE NW-WA	1.38%	6.11%	6.29%	-3.20%	11.99%	2.28%	2.66%	7.25%
GTE NORTHWEST INC-WA	-2.63%	7.59%	8.89%	8.34%	7.70%	7.41%	11.73%	-19.17%
PACIFIC NW BELL-WA	9.11%	5.26%	7.50%	18.00%	32.68%	-15.00%	12.41%	3.03%
UTC OF THE NW - OR	1.92%	-1.72%	4.49%	0.97%	20.18%	-9.40%	-0.65%	11.81%
GTE NORTHWEST INC-OR	10.62%	-0.10%	2.98%	1.22%	1.20%	5.66%	12.09%	-30.11%
PACIFIC NW BELL-OR	-5.58%	11.76%	4.72%	7.12%	9.90%	5.83%	8.14%	2.73%
CONTEL OF CALIFORNIA	10.32%	5.73%	5.23%	6.30%	11.55%	8.72%	10.47%	12.39%
GTC OF CALIFORNIA	5.46%	2.48%	1.59%	1.06%	1.04%	11.61%	9.91%	-14.29%
WEST COAST TEL OF CA	12.66%	-5.99%	-4.02%	2.90%	4.77%	5.26%	14.54%	-32.89%
PACIFIC BELL	6.86%	2.25%	6.95%	17.52%	11.84%	9.17%	6.79%	7.85%
CENDEL OF NV	10.95%	2.43%	13.49%	-14.80%	12.32%	20.70%	14.22%	64.44%
NEVADA BELL	12.13%	0.70%	5.13%	19.67%	27.65%	20.66%	-7.05%	60.39%
DIAMOND STATE TEL	6.56%	5.10%	13.62%	97.45%	34.17%	-46.69%	11.24%	15.41%
C & P TEL CO OF WASH	0	0	0	0	0	0	0	0
NEW ENGLAND TEL - RI	4.26%	4.09%	4.29%	6.41%	8.77%	12.22%	6.67%	10.50%
TOTAL TIER 1A	6.43%	4.69%	4.36%	17.68%	11.94%	5.67%	6.83%	-1.06%
ROCHESTER TEL CORP	NA	NA	NA	NA	6.74%	8.40%	10.62%	4.50%
UNITED TEL - NJ, INC	NA	7.19%	8.24%	11.93%	24.78%	16.93%	9.75%	7.36%
CONTEL OF VIRGINIA	NA	9.06%	4.48%	17.16%	35.32%	2.35%	27.04%	-23.30%
UNITED INTER-MT-VA	NA	3.71%	0.24%	14.73%	13.05%	9.00%	8.13%	4.25%
UTC OF FLORIDA	NA	12.98%	17.01%	11.16%	25.86%	4.38%	-0.42%	1.74%
UTC OF THE CAROLINAS	NA	1.86%	5.78%	28.85%	17.68%	4.48%	-1.14%	19.82%
UNITED INTER-MT-TN	NA	4.09%	6.19%	42.32%	20.08%	12.60%	-4.60%	24.48%
CENDEL OF OHIO	NA	2.59%	-2.02%	3.12%	13.21%	14.60%	64.66%	4.20%
CENDEL OF ILLINOIS	NA	2.37%	3.80%	12.98%	5.32%	10.30%	12.62%	16.90%
UTC OF IOWA	NA	7.85%	1.65%	7.58%	11.41%	0.62%	8.59%	4.07%
UTC OF MINNESOTA	NA	8.97%	7.38%	6.90%	17.75%	4.38%	5.79%	10.12%
UTC OF THE WEST-NE	NA	5.64%	5.69%	-1.10%	25.36%	-5.94%	-5.11%	9.70%
UTC OF KANSAS	NA	NA	2.03%	-1.78%	8.42%	-3.87%	1.57%	7.06%
UTC OF TEXAS INC	NA	NA	-0.04%	15.96%	-45.35%	0.26%	1.42%	7.99%
UTC OF THE WEST-WY	NA	-6.57%	5.15%	-4.04%	25.03%	0.27%	-3.56%	7.26%
GTE HAWAIIAN TEL. CO	NA	NA	8.91%	8.18%	-0.88%	18.39%	2.15%	-31.45%
PUERTO RICO TEL CO	NA	NA	NA	NA	26.52%	14.20%	28.33%	36.04%
TOTAL TIER 1B	NA	NA	NA	NA	12.29%	8.25%	11.22%	5.28%
ALL OTHER COST CO.	NA	NA	NA	NA	15.14%	8.62%	3.53%	6.78%
TOTAL COST CO.	NA	NA	NA	NA	12.11%	5.89%	6.78%	-0.47%
AVERAGE SCHEDULE CO.	NA	NA	NA	NA	15.04%	-10.03%	49.37%	19.89%

TABLE 4.15 A

 INTERSTATE DIAL EQUIPMENT MINUTES
 BY COMPANY (IN MILLIONS)

CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
NEW ENGLAND TEL-ME	481	529	577	644	742	897	1,037	1,065	1,149
NEW ENGLAND TEL-MA	4,000	4,340	4,679	4,971	6,555	7,551	8,415	8,886	9,894
NEW ENGLAND TEL-NH	807	877	957	1,074	1,279	1,566	1,877	1,984	1,963
SOUTHERN NEW ENGLAND	2,846	2,997	3,135	3,425	4,214	5,062	5,518	6,000	6,394
NEW ENGLAND TEL-VT	393	421	449	491	567	632	715	804	884
CONTEL OF NY, INC	132	147	159	174	205	254	291	338	404
NEW YORK TEL CO	10,951	11,793	12,969	14,543	18,537	22,080	24,005	23,914	27,428
NEW JERSEY BELL	7,180	7,573	8,022	8,784	10,634	13,144	13,356	14,824	16,441
GTE NORTH INC. - PA	614	628	678	682	780	907	985	1,170	827
UTC OF PENNSYLVANIA	193	210	214	228	296	330	363	412	475
BELL OF PENNSYLVANIA	5,524	5,869	6,296	6,972	8,829	10,510	10,175	10,902	12,043
C & P TEL CO OF MD	2,833	2,981	3,097	3,346	3,872	4,749	5,439	6,263	6,877
CENTEL OF VIRGINIA	214	232	248	278	299	356	386	453	536
GTE SOUTH INC. - VA	76	76	80	75	89	97	102	116	70
C & P TEL CO OF VA	2,633	2,785	2,911	3,216	4,059	4,694	5,059	5,987	6,478
GTE SOUTH INC. - WV	181	175	188	187	222	242	274	316	190
C & P TEL CO OF WV	812	862	869	911	1,055	1,179	1,261	1,394	1,402
GTE FLORIDA INC.	1,912	2,172	2,539	2,627	3,064	3,493	4,221	5,264	4,073
CENTEL OF FLORIDA	197	220	246	275	300	358	448	527	663
SOUTHERN BELL-FL	4,630	5,039	5,531	6,195	7,383	8,396	9,714	11,602	13,643
GTE SOUTH INC.- GA	290	299	299	321	363	427	493	582	344
SOUTHERN BELL-GA	3,363	3,632	3,886	4,078	4,806	5,635	6,351	7,463	8,219
CAROLINA TEL & TEL	621	654	698	788	929	1,161	1,339	1,669	1,881
CENTEL OF NC	127	139	142	161	251	215	244	288	338
GTE SOUTH INC - NC	201	220	241	285	351	461	482	556	398
SOUTHERN BELL-NC	1,551	1,743	1,856	2,058	2,384	2,756	3,190	4,000	4,293
GTE SOUTH INC. - SC	288	308	315	352	401	468	539	723	402
SOUTHERN BELL-SC	1,060	1,169	1,248	1,394	1,587	1,734	2,292	2,684	2,923
GTE SOUTH INC. - AL	241	261	274	290	357	373	424	488	275
SO CENTRAL BELL-AL	1,498	1,603	1,675	1,781	2,149	2,829	3,104	3,220	3,477
GTE SOUTH INC. - KY	495	578	590	580	641	921	1,000	1,232	712
CINCINNATI BELL-KY	97	101	119	148	160	234	235	254	281
SO CENTRAL BELL-KY	1,048	1,096	1,126	1,165	1,417	1,715	1,913	2,016	2,195
SO CENTRAL BELL-LA	1,911	2,109	2,248	2,411	2,886	3,605	3,602	3,535	3,916
SO CENTRAL BELL-MS	1,073	1,152	1,204	1,278	1,477	1,940	2,190	2,296	2,460
GTE SOUTH INC. - TN	76	82	106	110	118	170	159	176	101
SO. CENTRAL BELL -TN	2,069	2,245	2,532	2,787	3,578	4,358	4,717	5,011	5,231
GTE NORTH INC. - OH	938	999	999	1,011	1,135	1,258	1,433	1,693	1,077
UTC OF OHIO	324	347	376	404	465	561	581	676	1,078
CINCINNATI BELL-OH	654	697	800	852	924	1,588	1,611	1,646	1,599
OHIO BELL TEL CO	3,392	3,535	3,873	4,176	5,209	5,486	6,889	7,121	7,218
GTE NORTH INC. - MI	632	652	676	697	758	892	965	1,099	735
MICHIGAN BELL TEL CO	3,322	3,427	3,684	3,897	5,066	6,273	7,012	7,367	7,780
GTE NORTH INC. - IN	1,036	1,112	1,123	1,160	1,351	1,522	1,677	1,870	1,472
UTC OF INDIANA	146	167	174	183	196	206	223	259	304

TABLE 4.15 A

 INTERSTATE DIAL EQUIPMENT MINUTES
 BY COMPANY (IN MILLIONS)

CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
INDIANA BELL TEL CO	1,780	1,908	2,036	2,220	2,547	3,310	3,311	3,641	3,922
GTE NORTH INC. - WI	555	577	588	614	677	722	783	845	608
WISCONSIN BELL	1,522	1,645	1,814	1,979	2,448	2,954	3,204	3,404	3,682
GTE NORTH INC. - IL	873	1,053	1,117	1,141	1,165	1,233	1,280	1,508	1,006
ILLINOIS BELL TEL CO	6,489	6,667	6,873	7,600	9,526	10,828	11,018	12,390	13,902
GTE NORTH INC. - IA	172	194	206	220	236	255	266	289	166
NORTHWESTERN BELL-IA	1,100	1,158	1,228	1,384	1,808	2,460	2,659	2,581	2,675
GTE NORTH INC. - MN	6	7	8	9	9	9	9	10	5
CENTEL OF MN	48	53	55	60	71	81	93	104	146
NORTHWESTERN BELL-MN	1,799	1,920	1,848	2,242	2,525	3,746	4,044	4,077	4,360
GTE NORTH INC. - NE	65	64	73	79	88	108	117	156	87
LINCOLN TEL & TEL CO	214	226	235	234	290	317	355	430	498
NORTHWESTERN BELL-NE	725	790	819	875	1,093	1,290	1,401	1,547	1,701
NORTHWESTERN BELL-ND	299	335	321	365	418	554	580	623	650
NORTHWESTERN BELL-SD	301	328	351	384	451	533	679	692	749
UTC OF ARKANSAS	17	19	20	20	21	26	29	32	36
GTE SOUTHWEST INC-AR	150	160	157	146	167	204	226	266	154
SOUTHWESTERN BELL-AR	824	909	957	1,032	1,273	1,614	1,711	1,832	1,876
SOUTHWESTERN BELL-KS	1,161	1,272	1,322	1,458	1,774	2,162	2,301	2,592	2,848
GTE NORTH INC. - MO	171	180	185	208	229	265	310	361	254
UTC OF MISSOURI	157	174	196	214	197	284	298	320	362
SOUTHWESTERN BELL-MO	2,662	2,738	2,897	3,082	3,722	4,899	4,960	5,172	5,532
GTE SOUTHWEST INC-OK	208	229	240	219	231	294	319	376	231
SOUTHWESTERN BELL-OK	1,593	1,759	1,997	2,034	2,443	2,819	2,723	2,921	3,072
GTE SOUTHWEST INC-TX	1,293	1,404	1,399	1,307	1,609	1,856	2,196	3,023	2,008
CENTEL OF TEXAS	116	124	154	138	199	220	272	295	318
CONTEL OF TEXAS	70	81	93	94	118	165	161	164	207
SOUTHWESTERN BELL-TX	5,462	6,304	7,266	7,703	9,654	12,695	12,463	13,112	13,867
MOUNTAIN BELL - AZ	2,119	2,264	2,394	2,640	3,351	4,106	4,544	5,055	5,462
MOUNTAIN BELL-CO	2,569	2,947	3,253	3,496	4,151	4,761	5,274	5,309	5,670
GTE NORTHWEST INC-ID	248	261	258	270	318	366	374	402	244
MOUNTAIN BELL-ID	418	449	468	515	636	832	834	867	898
PACIFIC NW BELL-ID	38	39	38	42	48	53	57	64	72
GTE NORTHWEST INC-MT	18	21	21	22	25	29	30	32	15
MOUNTAIN BELL-MT	406	457	473	474	553	681	678	717	812
GTE SOUTHWEST INC-NM	126	147	159	138	141	151	136	149	100
MOUNTAIN BELL-NM	701	766	834	889	1,059	1,344	1,488	1,641	1,580
MOUNTAIN BELL-UT	828	936	983	1,240	1,385	1,825	1,806	1,739	1,954
MOUNTAIN BELL-WY	466	497	535	528	598	673	675	673	711
UTC OF THE NW-WA	53	55	57	62	69	76	77	79	80
GTE NORTHWEST INC-WA	603	628	645	691	769	847	931	1,189	1,108
PACIFIC NW BELL-WA	1,751	1,929	2,054	2,211	2,648	3,699	3,706	4,024	4,322
UTC OF THE NW - OR	48	49	50	54	61	76	76	76	95
GTE NORTHWEST INC-OR	401	467	457	477	510	541	659	790	684
PACIFIC NW BELL-OR	1,206	1,288	1,304	1,312	1,870	2,840	2,341	2,469	2,615

TABLE 4.15 A

 INTERSTATE DIAL EQUIPMENT MINUTES
 BY COMPANY (IN MILLIONS)

CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
CONTEL OF CALIFORNIA	131	140	153	170	185	222	251	327	388
GTC OF CALIFORNIA	3,074	3,200	3,217	3,335	3,691	4,047	4,789	5,959	5,506
WEST COAST TEL OF CA	17	20	19	20	22	22	22	24	16
PACIFIC BELL	10,031	10,573	11,370	13,237	16,923	19,495	19,785	20,695	21,448
CENDEL OF NV	730	803	777	791	975	922	1,066	1,246	1,678
NEVADA BELL	377	411	430	490	570	628	648	587	795
DIAMOND STATE TEL	630	649	660	716	898	1,101	1,211	1,302	1,445
C & P TEL CO OF WASH	1,324	1,397	1,500	1,770	2,448	3,336	3,495	2,871	2,419
NEW ENGLAND TEL - RI	718	763	808	880	1,049	1,253	1,408	1,530	1,590
TOTAL TIER 1A	131,922	141,688	151,476	165,003	201,887	243,113	260,437	282,727	297,167
ROCHESTER TEL CORP	NA	NA	NA	NA	459	535	618	661	748
UNITED TEL - NJ, INC	NA	143	153	171	194	255	286	346	389
CONTEL OF VIRGINIA	NA	304	331	358	483	604	729	933	1,069
UNITED INTER-MT-VA	NA	93	98	102	113	124	142	147	176
UTC OF FLORIDA	NA	895	1,005	1,077	1,115	1,388	1,612	1,881	2,096
UTC OF THE CAROLINAS	NA	75	81	87	103	113	115	137	161
UNITED INTER-MT-TN	NA	186	197	208	227	274	291	367	403
CENDEL OF OHIO	NA	44	47	48	63	77	86	112	117
CENDEL OF ILLINOIS	NA	223	218	244	275	299	375	510	769
UTC OF IOWA	NA	49	54	57	66	87	92	104	108
UTC OF MINNESOTA	NA	48	50	54	60	80	92	109	135
UTC OF THE WEST-NE	NA	33	34	35	35	44	43	46	61
UTC OF KANSAS	NA	NA	98	106	108	118	126	142	163
UTC OF TEXAS INC	NA	NA	104	96	124	70	73	93	109
UTC OF THE WEST-WY	NA	10	10	10	11	14	15	16	18
GTE HAWAIIAN TEL. CO	NA	NA	801	824	943	1,128	1,426	2,047	1,498
PUERTO RICO TEL CO	NA	NA	NA	NA	502	626	731	866	1,169
TOTAL TIER 1B	NA	NA	NA	NA	4,881	5,834	6,853	8,515	9,190
ALL OTHER COST CO.	NA	NA	NA	NA	6,722	7,931	8,826	8,988	9,987
TOTAL COST CO.	NA	NA	NA	NA	213,490	256,878	276,117	300,230	316,345
AVERAGE SCHEDULE CO.	NA	NA	NA	NA	2,422	2,855	2,632	4,025	4,774
TOTAL INDUSTRY	NA	NA	NA	NA	215,912	259,733	278,749	304,255	321,118

TABLE 4.15 B

INTERSTATE DIAL EQUIPMENT MINUTES
YEAR OVER YEAR GROWTH
BY COMPANY

CARRIER	1981	1982	1983	1984	1985	1986	1987	1988
NEW ENGLAND TEL-ME	9.94%	9.04%	11.57%	15.35%	20.82%	15.59%	2.75%	7.80%
NEW ENGLAND TEL-MA	8.49%	7.82%	6.24%	31.87%	15.20%	11.44%	5.59%	11.34%
NEW ENGLAND TEL-NH	8.73%	9.11%	12.22%	19.14%	22.43%	19.82%	5.70%	-1.03%
SOUTHERN NEW ENGLAND	5.31%	4.63%	9.24%	23.04%	20.12%	9.01%	8.74%	6.55%
NEW ENGLAND TEL-VT	7.18%	6.70%	9.32%	15.45%	11.54%	13.14%	12.49%	9.91%
CONTEL OF NY, INC	11.18%	8.06%	9.46%	18.19%	23.77%	14.46%	16.24%	19.53%
NEW YORK TEL CO	7.69%	9.97%	12.14%	27.46%	19.11%	8.72%	-0.38%	14.69%
NEW JERSEY BELL	5.47%	5.92%	9.50%	21.07%	23.60%	1.62%	10.99%	10.91%
GTE NORTH INC. - PA	2.28%	7.96%	0.59%	14.37%	16.28%	8.58%	18.76%	-29.29%
UTC OF PENNSYLVANIA	9.01%	1.89%	6.75%	29.49%	11.64%	10.13%	13.41%	15.12%
BELL OF PENNSYLVANIA	6.25%	7.27%	10.74%	26.64%	19.04%	-3.18%	7.14%	10.46%
C & P TEL CO OF MD	5.24%	3.87%	8.07%	15.71%	22.64%	14.54%	15.14%	9.80%
CENDEL OF VIRGINIA	8.14%	6.89%	12.09%	7.43%	19.29%	8.36%	17.34%	18.38%
GTE SOUTH INC. - VA	0.16%	5.68%	-6.86%	18.90%	8.88%	4.77%	13.97%	-39.56%
C & P TEL CO OF VA	5.78%	4.51%	10.49%	26.22%	15.64%	7.76%	18.35%	8.21%
GTE SOUTH INC. - WV	-3.44%	7.74%	-0.69%	18.90%	8.84%	13.18%	15.43%	-39.91%
C & P TEL CO OF WV	6.14%	0.80%	4.80%	15.79%	11.78%	7.00%	10.51%	0.57%
GTE FLORIDA INC.	13.61%	16.86%	3.49%	16.63%	14.00%	20.84%	24.71%	-22.63%
CENDEL OF FLORIDA	11.67%	12.03%	11.74%	8.76%	19.42%	25.18%	17.70%	25.78%
SOUTHERN BELL-FL	8.82%	9.76%	12.01%	19.18%	13.72%	15.70%	19.44%	17.60%
GTE SOUTH INC.- GA	3.00%	0.25%	7.14%	13.26%	17.51%	15.36%	18.12%	-40.88%
SOUTHERN BELL-GA	7.99%	6.98%	4.95%	17.83%	17.26%	12.70%	17.52%	10.13%
CAROLINA TEL & TEL	5.31%	6.72%	12.94%	17.87%	25.07%	15.26%	24.66%	12.73%
CENDEL OF NC	9.97%	1.74%	13.38%	56.25%	-14.59%	13.83%	18.07%	17.32%
GTE SOUTH INC - NC	9.42%	9.81%	17.91%	23.26%	31.34%	4.60%	15.30%	-28.41%
SOUTHERN BELL-NC	12.38%	6.46%	10.89%	15.85%	15.63%	15.72%	25.40%	7.33%
GTE SOUTH INC. - SC	6.89%	2.37%	11.81%	13.80%	16.71%	15.25%	33.98%	-44.37%
SOUTHERN BELL-SC	10.30%	6.78%	11.71%	13.87%	9.23%	32.16%	17.14%	8.87%
GTE SOUTH INC. - AL	8.43%	4.95%	5.82%	23.02%	4.48%	13.57%	15.27%	-43.69%
SO CENTRAL BELL-AL	7.05%	4.44%	6.33%	20.68%	31.65%	9.73%	3.74%	7.96%
GTE SOUTH INC. - KY	16.72%	2.08%	-1.58%	10.43%	43.70%	8.62%	23.13%	-42.20%
CINCINNATI BELL-KY	4.00%	17.73%	24.66%	7.97%	46.39%	0.52%	8.03%	10.42%
SO CENTRAL BELL-KY	4.52%	2.74%	3.54%	21.57%	21.06%	11.50%	5.43%	8.86%
SO CENTRAL BELL-LA	10.32%	6.60%	7.29%	19.68%	24.90%	-0.07%	-1.87%	10.79%
SO CENTRAL BELL-MS	7.41%	4.48%	6.20%	15.53%	31.33%	12.93%	4.83%	7.12%
GTE SOUTH INC. - TN	7.78%	28.91%	4.64%	6.79%	44.07%	-6.43%	10.38%	-42.47%
SO. CENTRAL BELL -TN	8.51%	12.76%	10.09%	28.38%	21.78%	8.23%	6.23%	4.40%
GTE NORTH INC. - OH	6.47%	0.05%	1.21%	12.23%	10.84%	13.91%	18.14%	-36.38%
UTC OF OHIO	7.22%	8.27%	7.67%	14.85%	20.69%	3.66%	16.30%	59.43%
CINCINNATI BELL-OH	6.67%	14.66%	6.52%	8.50%	71.84%	1.41%	2.23%	-2.87%
OHIO BELL TEL CO	4.23%	9.54%	7.84%	24.74%	5.31%	25.57%	3.37%	1.36%

TABLE 4.15 B

INTERSTATE DIAL EQUIPMENT MINUTES
YEAR OVER YEAR GROWTH
BY COMPANY

CARRIER	1981	1982	1983	1984	1985	1986	1987	1988
GTE NORTH INC. - MI	3.22%	3.55%	3.24%	8.68%	17.68%	8.18%	13.89%	-33.12%
MICHIGAN BELL TEL CO	3.16%	7.49%	5.78%	30.01%	23.82%	11.79%	5.07%	5.60%
GTE NORTH INC. - IN	7.35%	1.01%	3.26%	16.47%	12.66%	10.18%	11.53%	-21.30%
UTC OF INDIANA	14.53%	4.10%	5.69%	6.80%	5.23%	8.17%	16.05%	17.52%
INDIANA BELL TEL CO	7.19%	6.73%	9.04%	14.72%	29.96%	0.02%	9.98%	7.70%
GTE NORTH INC. - WI	3.99%	1.83%	4.45%	10.32%	6.62%	8.48%	7.93%	-28.08%
WISCONSIN BELL	8.07%	10.30%	9.10%	23.67%	20.67%	8.48%	6.24%	8.16%
GTE NORTH INC. - IL	20.67%	6.05%	2.15%	2.10%	5.82%	3.81%	17.81%	-33.29%
ILLINOIS BELL TEL CO	2.75%	3.08%	10.59%	25.34%	13.66%	1.75%	12.45%	12.20%
GTE NORTH INC. - IA	12.89%	6.29%	6.81%	7.01%	8.09%	4.30%	8.52%	-42.48%
NORTHWESTERN BELL-IA	5.30%	6.03%	12.67%	30.66%	36.03%	8.08%	-2.90%	3.61%
GTE NORTH INC. - MN	20.25%	8.47%	11.92%	1.21%	1.42%	0.28%	8.15%	-48.77%
CENTEL OF MN	11.68%	4.44%	7.45%	19.62%	12.99%	15.27%	12.37%	39.48%
NORTHWESTERN BELL-MN	6.78%	-3.78%	21.36%	12.61%	48.36%	7.95%	0.82%	6.93%
GTE NORTH INC. - NE	-0.92%	13.83%	8.43%	11.06%	22.34%	8.07%	34.06%	-44.40%
LINCOLN TEL & TEL CO	5.84%	4.08%	-0.40%	23.71%	9.53%	11.80%	21.24%	15.70%
NORTHWESTERN BELL-NE	8.94%	3.70%	6.86%	24.85%	17.99%	8.65%	10.42%	9.98%
NORTHWESTERN BELL-ND	12.07%	-4.16%	13.88%	14.51%	32.53%	4.74%	7.36%	4.33%
NORTHWESTERN BELL-SD	8.92%	6.98%	9.37%	17.60%	18.25%	27.25%	1.98%	8.25%
UTC OF ARKANSAS	10.44%	4.11%	2.07%	5.25%	20.08%	13.28%	11.68%	10.39%
GTE SOUTHWEST INC-AR	6.89%	-1.90%	-7.25%	14.48%	22.16%	10.92%	17.44%	-42.05%
SOUTHWESTERN BELL-AR	10.37%	5.29%	7.85%	23.33%	26.80%	5.97%	7.09%	2.40%
SOUTHWESTERN BELL-KS	9.60%	3.96%	10.29%	21.66%	21.83%	6.43%	12.66%	9.88%
GTE NORTH INC. - MO	5.26%	2.95%	12.11%	10.10%	15.85%	16.90%	16.47%	-29.60%
UTC OF MISSOURI	11.21%	12.71%	8.98%	-7.88%	44.22%	4.81%	7.38%	13.20%
SOUTHWESTERN BELL-MO	2.83%	5.80%	6.41%	20.76%	31.62%	1.24%	4.28%	6.95%
GTE SOUTHWEST INC-OK	10.18%	4.52%	-8.40%	5.28%	27.27%	8.46%	18.02%	-38.62%
SOUTHWESTERN BELL-OK	10.38%	13.54%	1.85%	20.15%	15.39%	-3.43%	7.30%	5.15%
GTE SOUTHWEST INC-TX	8.58%	-0.39%	-6.54%	23.10%	15.35%	18.34%	37.62%	-33.56%
CENTEL OF TEXAS	7.44%	23.44%	-10.24%	44.42%	10.68%	23.66%	8.15%	7.78%
CONTEL OF TEXAS	15.26%	15.69%	0.38%	25.82%	39.94%	-2.18%	1.80%	26.22%
SOUTHWESTERN BELL-TX	15.40%	15.27%	6.01%	25.32%	31.50%	-1.83%	5.21%	5.75%
MOUNTAIN BELL - AZ	6.84%	5.72%	10.27%	26.97%	22.50%	10.69%	11.23%	8.05%
MOUNTAIN BELL-CO	14.74%	10.38%	7.46%	18.73%	14.70%	10.78%	0.65%	6.81%
GTE NORTHWEST INC-ID	5.34%	-1.32%	4.75%	17.75%	15.08%	2.22%	7.52%	-39.33%
MOUNTAIN BELL-ID	7.29%	4.43%	9.86%	23.63%	30.78%	0.28%	3.95%	3.51%
PACIFIC NW BELL-ID	1.41%	-1.21%	10.31%	13.78%	10.57%	7.60%	11.77%	12.48%
GTE NORTHWEST INC-MT	15.90%	-0.93%	5.97%	16.27%	14.00%	1.78%	6.68%	-52.41%
MOUNTAIN BELL-MT	12.54%	3.52%	0.29%	16.65%	23.11%	-0.41%	5.68%	13.23%
GTE SOUTHWEST INC-NM	16.39%	8.16%	-12.73%	1.86%	7.09%	-9.94%	9.34%	-32.75%
MOUNTAIN BELL-NM	9.16%	8.95%	6.57%	19.12%	26.89%	10.73%	10.29%	-3.71%
MOUNTAIN BELL-UT	13.12%	5.01%	26.15%	11.65%	31.81%	-1.09%	-3.68%	12.35%
MOUNTAIN BELL-WY	6.57%	7.64%	-1.28%	13.34%	12.58%	0.26%	-0.29%	5.61%

TABLE 4.15 B

INTERSTATE DIAL EQUIPMENT MINUTES
YEAR OVER YEAR GROWTH
BY COMPANY

CARRIER	1981	1982	1983	1984	1985	1986	1987	1988
UTC OF THE NW-WA	3.50%	4.50%	8.53%	10.68%	11.11%	1.14%	2.70%	1.32%
GTE NORTHWEST INC-WA	4.22%	2.57%	7.26%	11.22%	10.09%	10.01%	27.68%	-6.82%
PACIFIC NW BELL-WA	10.20%	6.48%	7.63%	19.74%	39.70%	0.20%	8.56%	7.41%
UTC OF THE NW - OR	3.56%	1.45%	8.45%	11.82%	25.13%	0.05%	0.32%	24.34%
GTE NORTHWEST INC-OR	16.34%	-2.02%	4.25%	6.99%	6.12%	21.85%	19.88%	-13.45%
PACIFIC NW BELL-OR	6.83%	1.28%	0.59%	42.54%	51.82%	-17.56%	5.45%	5.91%
CONTEL OF CALIFORNIA	6.73%	9.38%	10.88%	8.83%	20.01%	13.38%	30.17%	18.60%
GTC OF CALIFORNIA	4.10%	0.54%	3.66%	10.66%	9.64%	18.34%	24.43%	-7.60%
WEST COAST TEL OF CA	18.14%	-3.97%	4.19%	9.23%	1.06%	-2.20%	9.13%	-32.71%
PACIFIC BELL	5.40%	7.54%	16.42%	27.84%	15.20%	1.49%	4.60%	3.64%
CENTEL OF NV	10.02%	-3.27%	1.85%	23.20%	-5.43%	15.65%	16.87%	34.69%
NEVADA BELL	9.03%	4.53%	14.12%	16.33%	10.05%	3.28%	-9.47%	35.55%
DIAMOND STATE TEL	3.00%	1.81%	8.34%	25.44%	22.62%	10.02%	7.56%	10.94%
C & P TEL CO OF WASH	5.46%	7.38%	18.00%	38.32%	36.29%	4.77%	-17.87%	-15.74%
NEW ENGLAND TEL - RI	6.26%	5.89%	9.00%	19.19%	19.37%	12.43%	8.60%	3.93%
TOTAL TIER 1A	7.40%	6.91%	8.93%	22.35%	20.42%	7.13%	8.56%	5.11%
ROCHESTER TEL CORP	NA	NA	NA	NA	16.50%	15.53%	7.10%	13.17%
UNITED TEL - NJ, INC	NA	7.19%	11.97%	13.03%	31.78%	12.14%	20.93%	12.52%
CONTEL OF VIRGINIA	NA	9.12%	7.92%	35.17%	24.96%	20.75%	27.86%	14.66%
UNITED INTER-MT-VA	NA	4.88%	4.28%	10.54%	10.07%	14.25%	3.52%	19.40%
UTC OF FLORIDA	NA	12.22%	7.20%	3.53%	24.48%	16.11%	16.68%	11.42%
UTC OF THE CAROLINAS	NA	8.12%	7.41%	18.99%	8.96%	2.37%	18.55%	17.91%
UNITED INTER-MT-TN	NA	6.03%	5.51%	9.02%	20.87%	6.39%	25.82%	9.94%
CENTEL OF OHIO	NA	5.88%	1.89%	33.21%	21.23%	11.78%	29.91%	4.52%
CENTEL OF ILLINOIS	NA	-2.27%	11.82%	12.73%	8.57%	25.56%	35.89%	50.94%
UTC OF IOWA	NA	10.97%	6.11%	14.63%	31.91%	6.68%	12.89%	3.34%
UTC OF MINNESOTA	NA	4.17%	9.43%	11.00%	33.18%	15.03%	18.02%	24.26%
UTC OF THE WEST-NE	NA	3.10%	2.84%	-1.01%	27.97%	-2.68%	6.76%	32.53%
UTC OF KANSAS	NA	NA	8.06%	2.18%	8.90%	7.01%	12.59%	15.30%
UTC OF TEXAS INC	NA	NA	-7.47%	29.00%	-43.36%	4.08%	26.93%	17.77%
UTC OF THE WEST-WY	NA	-5.32%	-1.02%	14.08%	23.92%	9.89%	3.94%	14.54%
GTE HAWAIIAN TEL. CO	NA	NA	2.87%	14.44%	19.62%	26.42%	43.55%	-26.82%
PUERTO RICO TEL CO	NA	NA	NA	NA	24.54%	16.89%	18.49%	34.94%
TOTAL TIER 1B	NA	NA	NA	NA	19.53%	17.47%	24.24%	7.93%
ALL OTHER COST CO.	NA	NA	NA	NA	17.98%	11.29%	1.84%	11.12%
TOTAL COST CO.	NA	NA	NA	NA	20.32%	7.49%	8.73%	5.37%
AVERAGE SCHEDULE CO.	NA	NA	NA	NA	17.87%	-7.81%	52.91%	18.60%

TABLE 4.16 A

TOTAL DIAL EQUIPMENT MINUTES
BY COMPANY (IN MILLIONS)

CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
NEW ENGLAND TEL-ME	5,602	5,812	6,023	6,257	6,542	6,606	6,939	7,308	7,519
NEW ENGLAND TEL-MA	46,406	48,063	49,584	50,990	55,074	57,137	58,271	60,615	64,691
NEW ENGLAND TEL-NH	5,394	5,636	5,887	6,175	6,877	7,331	7,839	8,237	8,800
SOUTHERN NEW ENGLAND	25,380	25,703	26,211	26,911	28,212	29,965	32,460	33,369	34,403
NEW ENGLAND TEL-VT	2,647	2,822	2,996	3,161	3,263	3,308	3,417	3,480	3,698
CONTEL OF NY, INC	2,004	2,155	2,236	2,335	2,482	2,651	2,802	2,994	3,197
NEW YORK TEL CO	126,662	132,834	138,000	146,165	159,886	171,900	176,262	178,172	187,300
NEW JERSEY BELL	62,087	64,347	65,004	67,218	72,024	74,525	76,029	79,355	84,754
GTE NORTH INC. - PA	6,395	6,491	6,664	6,853	7,060	7,317	7,642	8,153	7,551
UTC OF PENNSYLVANIA	2,859	2,990	3,023	3,113	3,436	3,541	3,675	3,781	3,969
BELL OF PENNSYLVANIA	76,775	79,403	81,997	82,936	86,168	86,508	88,259	90,165	94,302
C & P TEL CO OF MD	40,640	42,563	44,793	46,297	46,999	46,886	49,098	51,405	54,810
CENTEL OF VIRGINIA	2,408	2,527	2,703	2,797	2,803	3,026	3,100	3,249	3,495
GTE SOUTH INC. - VA	603	567	621	592	620	635	655	666	579
UNITED INTER-MT-VA	1,131	1,308	1,323	1,364	1,247	1,201	1,236	1,268	1,371
C & P TEL CO OF VA	34,002	34,473	35,657	37,493	39,570	41,656	43,391	45,811	49,021
GTE SOUTH INC. - WV	1,088	1,009	1,137	1,125	1,193	1,212	1,267	1,304	1,093
C & P TEL CO OF WV	11,657	11,895	11,841	11,918	12,264	12,608	12,599	12,955	13,007
GTE FLORIDA INC.	14,482	15,879	16,980	18,005	19,931	21,907	24,036	26,501	24,483
CENTEL OF FLORIDA	2,023	2,080	2,198	2,442	2,665	2,855	3,279	3,567	4,092
SOUTHERN BELL-FL	50,738	52,656	55,536	59,127	63,350	66,921	70,126	74,590	81,823
GTE SOUTH INC.- GA	2,807	2,849	2,942	3,077	3,173	3,357	3,666	3,878	3,367
SOUTHERN BELL-GA	41,393	42,461	42,830	45,230	49,181	51,905	53,418	55,931	60,612
CAROLINA TEL & TEL	8,886	9,012	9,412	9,844	10,582	11,323	11,807	12,411	12,971
CENTEL OF NC	2,258	2,347	2,435	2,556	2,834	2,833	2,953	3,148	3,254
GTE SOUTH INC - NC	1,817	1,841	1,978	2,130	2,367	2,581	2,543	2,643	2,597
SOUTHERN BELL-NC	22,263	22,618	23,015	23,728	26,211	28,084	29,819	29,729	31,371
GTE SOUTH INC. - SC	1,881	1,939	1,929	2,039	2,256	2,430	2,551	2,775	2,293
UTC OF THE CAROLINAS	691	859	861	914	939	1,017	1,060	1,114	1,230
SOUTHERN BELL-SC	16,698	16,776	17,180	17,659	19,109	20,265	21,380	21,356	22,623
GTE SOUTH INC. - AL	1,669	1,768	1,900	1,934	2,094	2,135	2,214	2,344	1,959
SO CENTRAL BELL-AL	24,698	25,448	26,026	27,126	28,220	29,645	30,864	31,909	33,709
GTE SOUTH INC. - KY	4,270	4,891	4,946	5,061	5,305	6,002	6,046	6,359	5,821
CINCINNATI BELL-KY	2,320	2,348	2,412	2,462	2,497	2,647	2,638	2,729	2,862
SO CENTRAL BELL-KY	16,366	16,451	16,679	16,840	18,046	18,725	18,229	18,758	19,497
SO CENTRAL BELL-LA	32,921	35,071	36,828	37,572	38,583	39,220	38,352	37,676	38,954
SO CENTRAL BELL-MS	14,753	14,893	15,528	15,921	16,690	18,267	18,492	19,248	20,262
GTE SOUTH INC. - TN	774	722	789	790	833	900	948	982	834
UNITED INTER-MT-TN	2,276	2,668	2,655	2,697	2,736	2,902	3,061	3,238	3,488
SO. CENTRAL BELL -TN	33,089	32,788	33,836	34,393	36,677	39,038	40,872	42,452	44,155
GTE NORTH INC. - OH	9,090	9,500	9,701	9,816	10,441	10,811	11,451	11,988	10,306
UTC OF OHIO	5,092	5,265	5,379	5,376	5,648	5,962	6,250	6,452	7,057
CINCINNATI BELL-OH	12,302	12,016	12,425	12,671	13,453	13,929	13,932	14,006	14,860
OHIO BELL TEL CO	56,686	55,192	56,920	59,010	63,168	63,366	62,145	62,720	65,209

TABLE 4.16 A

TOTAL DIAL EQUIPMENT MINUTES
BY COMPANY (IN MILLIONS)

CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
GTE NORTH INC. - MI	7,393	7,404	7,414	7,473	7,742	8,203	8,436	8,596	7,302
MICHIGAN BELL TEL CO	65,463	65,630	65,639	67,225	70,898	73,401	75,230	76,191	81,821
GTE NORTH INC. - IN	8,101	8,101	8,275	8,565	9,428	9,510	9,805	10,580	9,444
UTC OF INDIANA	1,660	1,754	1,843	1,839	1,972	1,992	2,078	2,168	2,290
INDIANA BELL TEL CO	25,941	25,887	26,827	26,949	28,042	28,828	28,850	29,294	30,777
GTE NORTH INC. - WI	4,343	4,446	4,565	4,625	4,776	4,927	5,111	5,240	4,497
WISCONSIN BELL	24,562	23,901	24,587	24,536	25,289	26,484	27,041	26,822	29,197
GTE NORTH INC. - IL	7,719	8,707	9,014	9,181	9,624	9,708	9,601	9,843	8,026
ILLINOIS BELL TEL CO	79,466	80,049	82,111	83,879	91,006	94,440	94,323	94,272	97,524
GTE NORTH INC. - IA	1,394	1,422	1,513	1,570	1,645	1,634	1,629	1,646	1,296
NORTHWESTERN BELL-IA	13,127	12,962	13,312	13,544	14,391	14,898	15,264	14,784	15,398
GTE NORTH INC. - MN	43	48	51	53	52	50	50	50	36
CENDEL OF MN	722	779	815	879	900	962	1,000	1,053	1,155
NORTHWESTERN BELL-MN	24,336	24,404	25,624	27,089	28,532	29,794	30,625	30,090	32,313
GTE NORTH INC. - NE	571	543	622	655	677	696	701	747	559
LINCOLN TEL & TEL CO	2,418	2,477	2,600	2,722	2,903	2,953	2,988	3,160	3,246
NORTHWESTERN BELL-NE	6,616	6,789	7,097	7,371	8,289	8,015	8,086	8,164	8,583
NORTHWESTERN BELL-ND	3,294	3,409	3,557	3,602	3,784	3,893	3,805	3,749	3,971
NORTHWESTERN BELL-SD	2,975	2,995	3,115	3,169	3,375	3,533	3,681	3,606	3,800
UTC OF ARKANSAS	171	173	176	174	180	192	188	190	204
GTE SOUTHWEST INC-AR	1,035	1,089	1,089	1,014	1,180	1,241	1,255	1,271	1,013
SOUTHWESTERN BELL-AR	10,219	10,233	10,564	11,049	11,914	12,418	12,665	12,983	13,362
UTC OF KANSAS	705	472	725	749	742	754	727	749	793
SOUTHWESTERN BELL-KS	14,398	14,300	14,563	15,082	15,732	16,776	16,929	16,968	17,787
GTE NORTH INC. - MO	1,295	1,325	1,373	1,426	1,483	1,584	1,657	1,756	1,462
UTC OF MISSOURI	1,660	1,726	1,834	1,875	1,880	1,999	2,004	2,115	2,311
SOUTHWESTERN BELL-MO	33,136	33,211	34,575	34,382	36,367	38,747	39,596	40,411	41,443
GTE SOUTHWEST INC-OK	1,427	1,557	1,657	1,548	1,647	1,899	1,893	1,855	1,458
SOUTHWESTERN BELL-OK	19,263	19,830	21,196	21,847	22,160	22,411	21,973	21,694	22,003
GTE SOUTHWEST INC-TX	13,716	14,893	15,348	14,549	17,034	18,251	18,902	20,008	17,097
CENDEL OF TEXAS	1,202	1,269	1,473	1,614	1,698	1,810	1,906	1,925	2,183
CONTEL OF TEXAS	1,224	1,322	1,456	1,511	1,685	1,825	1,892	1,956	2,007
SOUTHWESTERN BELL-TX	93,168	99,260	108,140	111,699	120,122	129,536	130,968	127,985	131,182
MOUNTAIN BELL - AZ	18,477	19,684	19,992	21,363	23,721	26,171	28,453	29,843	32,565
MOUNTAIN BELL-CO	23,313	24,962	26,989	27,032	28,306	29,729	30,481	31,031	33,178
GTE NORTHWEST INC-ID	957	960	956	1,001	1,095	1,190	1,197	1,257	1,036
MOUNTAIN BELL-ID	4,174	4,320	4,425	4,440	4,640	4,881	4,857	4,840	5,119
PACIFIC NW BELL-ID	352	350	347	366	379	386	379	379	416
GTE NORTHWEST INC-MT	84	90	87	99	105	110	110	111	79
MOUNTAIN BELL-MT	3,662	3,700	3,817	3,856	4,082	4,243	4,358	4,263	4,685
GTE SOUTHWEST INC-NM	610	687	731	621	622	660	639	641	535
MOUNTAIN BELL-NM	7,469	7,501	7,681	7,966	8,493	9,024	9,580	9,934	10,421
MOUNTAIN BELL-UT	10,193	10,413	10,864	11,515	12,172	12,736	12,970	12,848	13,804
MOUNTAIN BELL-WY	3,383	2,906	3,053	2,933	3,000	3,163	3,093	2,915	3,118

TABLE 4.16 A

TOTAL DIAL EQUIPMENT MINUTES
BY COMPANY (IN MILLIONS)

CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
UTC OF THE NW-WA	473	483	504	521	519	557	550	563	578
GTE NORTHWEST INC-WA	5,552	5,470	5,655	5,947	6,413	6,879	7,459	8,257	8,471
PACIFIC NW BELL-WA	22,479	23,192	23,409	24,691	25,581	26,842	27,680	28,630	30,343
UTC OF THE NW - OR	408	417	408	425	444	550	499	531	575
GTE NORTHWEST INC-OR	3,176	3,429	3,443	3,587	3,780	3,972	4,154	4,473	4,119
PACIFIC NW BELL-OR	13,862	13,807	13,538	14,023	13,387	15,037	14,872	14,932	16,122
CONTEL OF CALIFORNIA	2,083	2,191	2,314	2,392	2,520	2,754	2,923	3,136	3,493
GTC OF CALIFORNIA	41,803	42,591	44,206	46,176	46,922	48,151	50,941	54,822	50,487
WEST COAST TEL OF CA	96	114	113	118	123	123	124	137	116
PACIFIC BELL	165,141	170,725	176,427	183,408	192,145	200,887	205,154	211,962	218,525
CENTEL OF NV	3,934	4,170	4,188	4,304	4,406	4,683	5,292	5,629	7,115
NEVADA BELL	2,059	2,171	2,280	2,410	2,588	2,681	2,781	2,855	3,183
DIAMOND STATE TEL	4,912	4,993	5,001	5,216	5,647	5,861	6,089	6,617	7,110
C & P TEL CO OF WASH	13,370	13,672	13,939	14,440	15,609	15,952	16,298	16,452	15,738
NEW ENGLAND TEL - RI	7,322	7,496	7,670	7,869	8,216	8,423	8,514	8,618	8,777
TOTAL TIER 1A	1,668,086	1,713,794	1,773,804	1,832,282	1,944,773	2,036,047	2,087,380	2,138,385	2,218,496
ROCHESTER TEL CORP	NA	NA	NA	NA	6,712	7,043	7,216	7,477	7,970
UNITED TEL - NJ, INC	NA	1,067	1,114	1,184	1,316	1,565	1,633	1,822	1,975
CONTEL OF VIRGINIA	NA	2,982	3,172	3,313	3,897	4,433	4,775	5,399	5,681
UTC OF FLORIDA	NA	6,987	7,638	8,032	8,747	9,759	10,645	11,447	11,872
CENTEL OF OHIO	NA	861	831	839	894	944	971	987	1,037
CENTEL OF ILLINOIS	NA	2,451	2,504	2,563	2,667	2,595	2,660	2,786	3,146
UTC OF IOWA	NA	634	666	677	683	728	727	748	765
UTC OF MINNESOTA	NA	947	995	1,051	1,078	1,207	1,255	1,301	1,423
UTC OF THE WEST-NE	NA	280	281	290	270	284	297	307	332
UTC OF TEXAS INC	NA	NA	1,371	1,387	1,497	1,156	1,219	1,265	1,347
UTC OF THE WEST-WY	NA	61	60	61	63	66	66	67	73
GTE HAWAIIAN TEL. CO	NA	NA	7,928	7,853	8,320	8,857	9,701	10,348	10,041
PUERTO RICO TEL CO	NA	NA	NA	NA	7,805	7,987	8,936	9,746	11,421
TOTAL TIER 1B	NA	NA	NA	NA	43,949	46,623	50,101	53,700	57,083
ALL OTHER COST CO.	NA	NA	NA	NA	57,097	64,118	68,633	68,392	73,977
TOTAL COST CO.	NA	NA	NA	NA	2,045,819	2,146,788	2,206,114	2,260,478	2,349,556
AVERAGE SCHEDULE CO.	NA	NA	NA	NA	20,576	23,086	20,469	29,429	36,905
TOTAL INDUSTRY	NA	NA	NA	NA	2,066,395	2,169,875	2,226,583	2,289,907	2,386,461

TABLE 4.16 B

TOTAL DIAL EQUIPMENT MINUTES
YEAR OVER YEAR GROWTH
BY COMPANY

CARRIER	1981	1982	1983	1984	1985	1986	1987	1988
NEW ENGLAND TEL-ME	3.75%	3.62%	3.88%	4.55%	0.99%	5.03%	5.32%	2.89%
NEW ENGLAND TEL-MA	3.57%	3.16%	2.84%	8.01%	3.75%	1.98%	4.02%	6.72%
NEW ENGLAND TEL-NH	4.49%	4.46%	4.88%	11.37%	6.60%	6.93%	5.07%	6.83%
SOUTHERN NEW ENGLAND	1.28%	1.98%	2.67%	4.84%	6.21%	8.33%	2.80%	3.10%
NEW ENGLAND TEL-VT	6.59%	6.19%	5.49%	3.25%	1.37%	3.29%	1.84%	6.28%
CONTEL OF NY, INC	7.52%	3.76%	4.44%	6.32%	6.78%	5.71%	6.84%	6.78%
NEW YORK TEL CO	4.87%	3.89%	5.92%	9.39%	7.51%	2.54%	1.08%	5.12%
NEW JERSEY BELL	3.64%	1.02%	3.41%	7.15%	3.47%	2.02%	4.37%	6.80%
GTE NORTH INC. - PA	1.50%	2.67%	2.84%	3.02%	3.64%	4.44%	6.69%	-7.38%
UTC OF PENNSYLVANIA	4.57%	1.11%	2.98%	10.35%	3.07%	3.79%	2.89%	4.97%
BELL OF PENNSYLVANIA	3.42%	3.27%	1.14%	3.90%	0.40%	2.02%	2.16%	4.59%
C & P TEL CO OF MD	4.73%	5.24%	3.36%	1.52%	-0.24%	4.72%	4.70%	6.62%
CENDEL OF VIRGINIA	4.93%	6.94%	3.50%	0.22%	7.93%	2.45%	4.81%	7.59%
GTE SOUTH INC. - VA	-5.94%	9.43%	-4.66%	4.76%	2.43%	3.18%	1.71%	-13.13%
UNITED INTER-MT-VA	15.66%	1.18%	3.10%	-8.58%	-3.73%	2.93%	2.62%	8.12%
C & P TEL CO OF VA	1.38%	3.44%	5.15%	5.54%	5.27%	4.16%	5.58%	7.01%
GTE SOUTH INC. - WV	-7.29%	12.72%	-1.04%	6.02%	1.61%	4.52%	2.95%	-16.19%
C & P TEL CO OF WV	2.04%	-0.46%	0.66%	2.90%	2.80%	-0.06%	2.82%	0.40%
GTE FLORIDA INC.	9.65%	6.93%	6.03%	10.70%	9.91%	9.72%	10.26%	-7.62%
CENDEL OF FLORIDA	2.85%	5.68%	11.08%	9.13%	7.13%	14.84%	8.79%	14.72%
SOUTHERN BELL-FL	3.78%	5.47%	6.47%	7.14%	5.64%	4.79%	6.37%	9.70%
GTE SOUTH INC. - GA	1.50%	3.25%	4.60%	3.14%	5.79%	9.22%	5.76%	-13.17%
SOUTHERN BELL-GA	2.58%	0.87%	5.60%	8.73%	5.54%	2.91%	4.70%	8.37%
CAROLINA TEL & TEL	1.42%	4.44%	4.59%	7.50%	7.00%	4.27%	5.12%	4.52%
CENDEL OF NC	3.97%	3.72%	4.96%	10.91%	-0.04%	4.24%	6.59%	3.37%
GTE SOUTH INC - NC	1.30%	7.49%	7.66%	11.13%	9.04%	-1.47%	3.95%	-1.76%
SOUTHERN BELL-NC	1.59%	1.76%	3.10%	10.47%	7.14%	6.18%	-0.30%	5.52%
GTE SOUTH INC. - SC	3.08%	-0.49%	5.67%	10.66%	7.71%	4.97%	8.79%	-17.38%
UTC OF THE CAROLINAS	24.40%	0.24%	6.16%	2.70%	8.28%	4.24%	5.08%	10.48%
SOUTHERN BELL-SC	0.47%	2.41%	2.79%	8.21%	6.05%	5.50%	-0.11%	5.94%
GTE SOUTH INC. - AL	5.96%	7.45%	1.77%	8.26%	1.98%	3.69%	5.89%	-16.41%
SO CENTRAL BELL-AL	3.04%	2.27%	4.23%	4.03%	5.05%	4.11%	3.39%	5.64%
GTE SOUTH INC. - KY	14.54%	1.13%	2.31%	4.83%	13.14%	0.74%	5.17%	-8.47%
CINCINNATI BELL-KY	1.20%	2.75%	2.04%	1.43%	6.01%	-0.35%	3.47%	4.88%
SO CENTRAL BELL-KY	0.52%	1.39%	0.97%	7.16%	3.76%	-2.65%	2.90%	3.94%
SO CENTRAL BELL-LA	6.53%	5.01%	2.02%	2.69%	1.65%	-2.21%	-1.76%	3.39%
SO CENTRAL BELL-MS	0.95%	4.26%	2.53%	4.83%	9.45%	1.23%	4.09%	5.27%
GTE SOUTH INC. - TN	-6.76%	9.29%	0.17%	5.42%	8.06%	5.36%	3.52%	-15.05%
UNITED INTER-MT-TN	17.19%	-0.47%	1.59%	1.44%	6.08%	5.47%	5.78%	7.72%
SO. CENTRAL BELL -TN	-0.91%	3.20%	1.65%	6.64%	6.44%	4.70%	3.87%	4.01%
GTE NORTH INC. - OH	4.51%	2.12%	1.18%	6.37%	3.54%	5.92%	4.69%	-14.03%
UTC OF OHIO	3.41%	2.17%	-0.07%	5.06%	5.56%	4.84%	3.22%	9.39%
CINCINNATI BELL-OH	-2.33%	3.41%	1.98%	6.17%	3.54%	0.02%	0.53%	6.10%
OHIO BELL TEL CO	-2.64%	3.13%	3.67%	7.04%	0.31%	-1.93%	0.93%	3.97%

TABLE 4.16 B

TOTAL DIAL EQUIPMENT MINUTES
YEAR OVER YEAR GROWTH
BY COMPANY

CARRIER	1981	1982	1983	1984	1985	1986	1987	1988
GTE NORTH INC. - MI	0.15%	0.12%	0.81%	3.60%	5.95%	2.84%	1.90%	-15.06%
MICHIGAN BELL TEL CO	0.26%	0.01%	2.42%	5.46%	3.53%	2.49%	1.28%	7.39%
GTE NORTH INC. - IN	-0.01%	2.16%	3.50%	10.07%	0.87%	3.10%	7.90%	-10.74%
UTC OF INDIANA	5.66%	5.08%	-0.22%	7.25%	0.98%	4.33%	4.35%	5.63%
INDIANA BELL TEL CO	-0.21%	3.63%	0.45%	4.06%	2.81%	0.08%	1.54%	5.06%
GTE NORTH INC. - WI	2.36%	2.69%	1.31%	3.27%	3.16%	3.74%	2.51%	-14.18%
WISCONSIN BELL	-2.69%	2.87%	-0.21%	3.07%	4.73%	2.10%	-0.81%	8.85%
GTE NORTH INC. - IL	12.80%	3.52%	1.86%	4.83%	0.87%	-1.10%	2.52%	-18.46%
ILLINOIS BELL TEL CO	0.73%	2.58%	2.15%	8.50%	3.77%	-0.12%	-0.05%	3.45%
GTE NORTH INC. - IA	2.03%	6.34%	3.82%	4.74%	-0.66%	-0.31%	1.04%	-21.23%
NORTHWESTERN BELL-IA	-1.25%	2.70%	1.74%	6.26%	3.52%	2.45%	-3.14%	4.15%
GTE NORTH INC. - MN	12.27%	6.73%	4.21%	-2.62%	-3.28%	-0.47%	0.73%	-29.13%
CENDEL OF MN	7.89%	4.61%	7.89%	2.41%	6.85%	4.04%	5.24%	9.70%
NORTHWESTERN BELL-MN	0.28%	5.00%	5.72%	5.33%	4.42%	2.79%	-1.75%	7.39%
GTE NORTH INC. - NE	-4.88%	14.60%	5.15%	3.41%	2.83%	0.67%	6.58%	-25.09%
LINCOLN TEL & TEL CO	2.43%	4.98%	4.69%	6.64%	1.75%	1.18%	5.73%	2.73%
NORTHWESTERN BELL-NE	2.62%	4.53%	3.86%	12.46%	-3.31%	0.89%	0.96%	5.13%
NORTHWESTERN BELL-ND	3.51%	4.33%	1.28%	5.04%	2.87%	-2.24%	-1.49%	5.94%
NORTHWESTERN BELL-SD	0.66%	4.00%	1.76%	6.50%	4.66%	4.19%	-2.03%	5.35%
UTC OF ARKANSAS	0.93%	2.15%	-1.01%	3.40%	6.29%	-2.13%	1.23%	7.57%
GTE SOUTHWEST INC-AR	5.24%	-0.01%	-6.91%	16.39%	5.17%	1.16%	1.23%	-20.31%
SOUTHWESTERN BELL-AR	0.14%	3.23%	4.59%	7.83%	4.23%	1.98%	2.52%	2.92%
UTC OF KANSAS	-33.13%	53.81%	3.30%	-0.90%	1.63%	-3.59%	3.03%	5.78%
SOUTHWESTERN BELL-KS	-0.68%	1.84%	3.56%	4.31%	6.64%	0.91%	0.23%	4.82%
GTE NORTH INC. - MO	2.32%	3.59%	3.92%	3.96%	6.83%	4.62%	5.99%	-16.76%
UTC OF MISSOURI	3.99%	6.25%	2.21%	0.25%	6.37%	0.22%	5.56%	9.24%
SOUTHWESTERN BELL-MO	0.23%	4.11%	-0.56%	5.77%	6.54%	2.19%	2.06%	2.55%
GTE SOUTHWEST INC-OK	9.11%	6.43%	-6.58%	6.39%	15.30%	-0.33%	-1.99%	-21.40%
SOUTHWESTERN BELL-OK	2.94%	6.89%	3.07%	1.43%	1.13%	-1.96%	-1.27%	1.42%
GTE SOUTHWEST INC-TX	8.58%	3.06%	-5.21%	17.08%	7.14%	3.57%	5.85%	-14.55%
CENDEL OF TEXAS	5.56%	16.09%	9.62%	5.21%	6.54%	5.34%	1.00%	13.38%
CONTEL OF TEXAS	8.00%	10.13%	3.79%	11.50%	8.31%	3.69%	3.36%	2.61%
SOUTHWESTERN BELL-TX	6.54%	8.95%	3.29%	7.54%	7.84%	1.11%	-2.28%	2.50%
MOUNTAIN BELL - AZ	6.53%	1.57%	6.86%	11.04%	10.33%	8.72%	4.88%	9.12%
MOUNTAIN BELL-CO	7.07%	8.12%	0.16%	4.71%	5.03%	2.53%	1.80%	6.92%
GTE NORTHWEST INC-ID	0.33%	-0.41%	4.67%	9.46%	8.64%	0.60%	4.96%	-17.57%
MOUNTAIN BELL-ID	3.50%	2.43%	0.35%	4.52%	5.18%	-0.49%	-0.34%	5.76%
PACIFIC NW BELL-ID	-0.79%	-0.64%	5.39%	3.50%	1.97%	-1.96%	-0.01%	9.73%
GTE NORTHWEST INC-MT	6.60%	-2.87%	13.50%	5.88%	5.56%	-0.42%	1.20%	-29.18%
MOUNTAIN BELL-MT	1.02%	3.17%	1.04%	5.84%	3.96%	2.72%	-2.20%	9.91%
GTE SOUTHWEST INC-NM	12.59%	6.48%	-15.10%	0.18%	6.11%	-3.21%	0.38%	-16.60%
MOUNTAIN BELL-NM	0.43%	2.39%	3.71%	6.62%	6.25%	6.16%	3.70%	4.91%
MOUNTAIN BELL-UT	2.16%	4.33%	6.00%	5.70%	4.64%	1.83%	-0.94%	7.44%
MOUNTAIN BELL-WY	-14.10%	5.06%	-3.93%	2.31%	5.40%	-2.18%	-5.76%	6.95%

TABLE 4.16 B

TOTAL DIAL EQUIPMENT MINUTES
YEAR OVER YEAR GROWTH
BY COMPANY

CARRIER	1981	1982	1983	1984	1985	1986	1987	1988
UTC OF THE NW-WA	2.15%	4.15%	3.40%	-0.40%	7.40%	-1.27%	2.30%	2.73%
GTE NORTHWEST INC-WA	-1.48%	3.38%	5.18%	7.83%	7.26%	8.44%	10.69%	2.59%
PACIFIC NW BELL-WA	3.17%	0.94%	5.48%	3.60%	4.93%	3.12%	3.43%	5.98%
UTC OF THE NW - OR	2.15%	-2.28%	4.30%	4.31%	23.98%	-9.19%	6.32%	8.33%
GTE NORTHWEST INC-OR	7.96%	0.43%	4.18%	5.39%	5.06%	4.60%	7.68%	-7.92%
PACIFIC NW BELL-OR	-0.40%	-1.94%	3.58%	-4.53%	12.32%	-1.09%	0.40%	7.97%
CONTEL OF CALIFORNIA	5.20%	5.59%	3.38%	5.36%	9.30%	6.12%	7.30%	11.40%
GTC OF CALIFORNIA	1.89%	3.79%	4.46%	1.62%	2.62%	5.79%	7.62%	-7.91%
WEST COAST TEL OF CA	18.55%	-0.92%	4.06%	4.35%	0.04%	0.75%	10.58%	-15.01%
PACIFIC BELL	3.38%	3.34%	3.96%	4.76%	4.55%	2.12%	3.32%	3.10%
CENDEL OF NV	6.02%	0.42%	2.78%	2.35%	6.30%	13.00%	6.38%	26.39%
NEVADA BELL	5.47%	5.03%	5.69%	7.37%	3.61%	3.72%	2.65%	11.52%
DIAMOND STATE TEL	1.66%	0.16%	4.29%	8.28%	3.77%	3.89%	8.68%	7.45%
C & P TEL CO OF WASH	2.26%	1.95%	3.60%	8.10%	2.20%	2.17%	0.94%	-4.34%
NEW ENGLAND TEL - RI	2.38%	2.32%	2.60%	4.42%	2.51%	1.08%	1.23%	1.84%
TOTAL TIER 1A	2.74%	3.50%	3.30%	6.14%	4.69%	2.52%	2.44%	3.75%
ROCHESTER TEL CORP	NA	NA	NA	NA	4.94%	2.45%	3.63%	6.59%
UNITED TEL - NJ, INC	NA	4.43%	6.20%	11.15%	18.93%	4.40%	11.57%	8.35%
CONTEL OF VIRGINIA	NA	6.36%	4.43%	17.64%	13.75%	7.73%	13.06%	5.23%
UTC OF FLORIDA	NA	9.32%	5.15%	8.91%	11.56%	9.08%	7.54%	3.72%
CENDEL OF OHIO	NA	-3.49%	1.03%	6.46%	5.61%	2.85%	1.64%	5.08%
CENDEL OF ILLINOIS	NA	2.17%	2.35%	4.08%	-2.71%	2.52%	4.74%	12.90%
UTC OF IOWA	NA	5.15%	1.68%	0.81%	6.67%	-0.14%	2.82%	2.29%
UTC OF MINNESOTA	NA	5.07%	5.61%	2.64%	11.94%	4.00%	3.63%	9.37%
UTC OF THE WEST-NE	NA	0.37%	3.42%	-6.95%	5.18%	4.71%	3.13%	8.32%
UTC OF TEXAS INC	NA	NA	1.13%	7.98%	-22.81%	5.51%	3.70%	6.53%
UTC OF THE WEST-WY	NA	-2.14%	2.32%	2.88%	4.88%	-0.66%	2.02%	9.33%
GTE HAWAIIAN TEL. CO	NA	NA	-0.95%	5.95%	6.45%	9.53%	6.67%	-2.97%
PUERTO RICO TEL CO	NA	NA	NA	NA	2.33%	11.88%	9.07%	17.18%
TOTAL TIER 1B	NA	NA	NA	NA	6.08%	7.46%	7.18%	6.30%
ALL OTHER COST CO.	NA	NA	NA	NA	12.30%	7.04%	-0.35%	8.17%
TOTAL COST CO.	NA	NA	NA	NA	4.94%	2.76%	2.46%	3.94%
AVERAGE SCHEDULE CO.	NA	NA	NA	NA	12.20%	-11.34%	43.77%	25.40%
TOTAL INDUSTRY	NA	NA	NA	NA	5.01%	2.61%	2.84%	4.22%

TABLE 4.17 A

LOCAL SUBSCRIBER LINE USAGE MINUTES
BY COMPANY (IN MILLIONS)

CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
NEW ENGLAND TEL-ME	4,514	4,642	4,771	4,882	5,002	4,793	4,793	5,180	5,200
NEW ENGLAND TEL-MA	38,575	39,717	40,858	41,506	43,380	43,612	43,013	43,737	45,991
NEW ENGLAND TEL-NH	4,118	4,250	4,382	4,490	4,911	4,977	5,020	5,175	5,743
SOUTHERN NEW ENGLAND	20,071	20,110	20,319	20,618	20,984	21,595	23,300	23,299	23,578
NEW ENGLAND TEL-VT	1,981	2,116	2,251	2,355	2,356	2,319	2,296	2,242	2,338
CONTEL OF NY, INC	1,494	1,586	1,625	1,672	1,721	1,764	1,816	1,882	1,955
NEW YORK TEL CO	110,824	115,845	119,478	125,487	135,171	143,167	144,619	145,765	151,438
NEW JERSEY BELL	44,712	46,132	45,646	46,077	47,181	46,151	45,782	45,718	48,240
GTE NORTH INC. - PA	4,846	4,898	4,949	5,101	5,142	5,180	5,420	5,622	5,789
UTC OF PENNSYLVANIA	2,243	2,331	2,345	2,391	2,554	2,588	2,618	2,604	2,658
BELL OF PENNSYLVANIA	66,682	68,624	70,477	70,438	69,277	66,363	70,332	71,046	73,442
C & P TEL CO OF MD	36,680	38,385	40,442	41,646	41,732	40,547	41,880	42,774	45,467
CENTEL OF VIRGINIA	1,946	2,020	2,161	2,209	2,146	2,326	2,364	2,376	2,446
GTE SOUTH INC. - VA	450	449	457	437	440	436	449	438	449
UNITED INTER-MT-VA	1,131	1,131	1,138	1,175	1,034	964	971	988	1,057
C & P TEL CO OF VA	29,944	30,185	31,181	32,661	33,560	34,510	35,824	37,210	39,495
GTE SOUTH INC. - WV	763	760	796	784	793	767	784	766	788
C & P TEL CO OF WV	10,095	10,245	10,164	10,216	10,279	10,301	10,259	10,590	10,672
GTE FLORIDA INC.	11,113	12,131	12,653	13,518	14,292	15,545	16,480	17,173	17,502
CENTEL OF FLORIDA	1,649	1,794	1,824	1,960	2,133	2,212	2,475	2,671	2,894
SOUTHERN BELL-FL	43,352	44,565	46,657	49,278	50,981	52,305	52,769	55,212	59,872
GTE SOUTH INC.- GA	2,001	2,015	2,092	2,167	2,169	2,199	2,350	2,374	2,491
SOUTHERN BELL-GA	36,244	36,939	36,956	39,128	41,879	43,161	43,957	45,030	48,657
CAROLINA TEL & TEL	7,388	7,446	7,764	8,023	8,572	8,814	8,988	9,238	9,407
CENTEL OF NC	1,898	1,957	2,036	2,116	2,185	2,281	2,342	2,446	2,443
GTE SOUTH INC - NC	1,390	1,398	1,497	1,576	1,681	1,743	1,658	1,655	1,858
SOUTHERN BELL-NC	19,080	19,108	19,288	19,696	21,481	22,590	23,546	22,619	23,656
GTE SOUTH INC. - SC	1,300	1,336	1,315	1,371	1,494	1,547	1,558	1,571	1,610
UTC OF THE CAROLINAS	691	716	711	754	741	793	828	862	931
SOUTHERN BELL-SC	14,856	14,770	15,085	15,397	16,448	17,246	17,718	17,206	18,058
GTE SOUTH INC. - AL	1,177	1,245	1,345	1,347	1,392	1,406	1,415	1,440	1,447
SO CENTRAL BELL-AL	22,106	22,582	23,138	24,107	24,632	25,156	25,967	26,771	28,186
GTE SOUTH INC. - KY	3,300	3,775	3,803	3,916	4,089	4,353	4,270	4,182	4,528
CINCINNATI BELL-KY	2,180	2,205	2,246	2,258	2,277	2,337	2,326	2,392	2,489
SO CENTRAL BELL-KY	14,543	14,554	14,749	14,850	15,655	15,946	15,160	15,496	15,989
SO CENTRAL BELL-LA	29,161	30,897	32,374	32,950	32,797	32,421	31,906	31,389	32,079
SO CENTRAL BELL-MS	12,732	12,759	13,298	13,562	13,919	14,862	14,787	15,262	16,053
GTE SOUTH INC. - TN	599	596	560	549	568	581	610	607	625
UNITED INTER-MT-TN	2,276	2,336	2,306	2,328	2,280	2,353	2,460	2,576	2,717
SO. CENTRAL BELL -TN	29,695	29,114	29,794	30,038	31,138	32,353	33,665	34,702	35,772
GTE NORTH INC. - OH	6,221	6,456	6,574	6,660	7,091	7,164	7,506	7,503	7,505
UTC OF OHIO	4,068	4,168	4,212	4,150	4,325	4,455	4,684	4,694	4,353
CINCINNATI BELL-OH	11,371	11,025	11,296	11,471	12,173	11,804	11,792	11,776	12,807
OHIO BELL TEL CO	50,466	48,698	50,283	52,137	54,217	53,488	50,410	50,687	53,050

TABLE 4.17 A

LOCAL SUBSCRIBER LINE USAGE MINUTES
BY COMPANY (IN MILLIONS)

CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
GTE NORTH INC. - MI	4,549	4,540	4,523	4,522	4,656	4,729	4,758	4,776	4,882
MICHIGAN BELL TEL CO	56,922	56,735	56,583	57,754	58,012	57,220	58,187	59,068	64,043
GTE NORTH INC. - IN	6,032	5,906	6,012	6,217	6,789	6,607	6,681	7,110	6,748
UTC OF INDIANA	1,267	1,323	1,393	1,366	1,450	1,433	1,481	1,510	1,530
INDIANA BELL TEL CO	22,927	22,320	23,463	23,434	23,751	23,543	23,483	23,476	24,521
GTE NORTH INC. - WI	2,677	2,725	2,780	2,783	2,836	2,893	2,943	2,926	2,919
WISCONSIN BELL	21,561	20,694	21,152	20,937	20,961	21,487	21,678	21,117	22,931
GTE NORTH INC. - IL	4,603	5,074	5,144	5,268	5,605	5,554	5,319	5,154	5,081
ILLINOIS BELL TEL CO	70,307	72,743	72,925	73,909	78,019	80,018	79,498	78,157	79,702
GTE NORTH INC. - IA	781	766	815	825	884	836	816	779	810
NORTHWESTERN BELL-IA	10,879	10,602	10,829	10,872	11,020	11,001	11,088	10,604	11,107
GTE NORTH INC. - MN	22	24	25	24	24	23	22	21	21
CENDEL OF MN	598	642	669	720	725	767	787	808	875
NORTHWESTERN BELL-MN	21,404	21,183	22,331	23,489	24,277	24,293	24,738	24,019	25,903
GTE NORTH INC. - NE	358	331	376	391	397	380	370	359	357
LINCOLN TEL & TEL CO	1,923	1,951	2,036	2,148	2,254	2,279	2,277	2,309	2,307
NORTHWESTERN BELL-NE	5,265	5,610	5,548	6,043	5,864	6,222	6,167	6,062	6,332
NORTHWESTERN BELL-ND	2,715	2,767	2,858	2,820	2,991	2,928	2,823	2,731	2,912
NORTHWESTERN BELL-SD	2,401	2,378	2,457	2,408	2,543	2,611	2,606	2,481	2,597
UTC OF ARKANSAS	128	128	130	127	132	135	127	124	133
GTE SOUTHWEST INC-AR	652	687	699	707	765	756	744	690	690
SOUTHWESTERN BELL-AR	8,514	8,383	8,658	9,045	9,559	9,648	9,755	9,811	9,856
UTC OF KANSAS	473	472	483	496	489	480	451	454	465
SOUTHWESTERN BELL-KS	12,061	11,737	11,939	12,304	12,493	13,083	13,102	12,744	13,248
GTE NORTH INC. - MO	801	798	839	857	895	908	911	923	919
UTC OF MISSOURI	1,186	1,215	1,293	1,311	1,321	1,316	1,302	1,363	1,378
SOUTHWESTERN BELL-MO	28,916	28,857	30,047	29,706	30,889	31,893	32,596	33,000	33,544
GTE SOUTHWEST INC-OK	832	888	953	962	1,037	1,080	1,068	648	952
SOUTHWESTERN BELL-OK	15,947	16,143	17,100	17,697	17,460	17,166	16,929	16,483	16,609
GTE SOUTHWEST INC-TX	9,413	10,094	10,397	10,779	11,528	12,113	12,282	11,850	12,190
CENDEL OF TEXAS	942	1,019	1,114	1,178	1,250	1,343	1,364	1,317	1,595
CONTEL OF TEXAS	844	877	953	1,000	1,082	1,118	1,173	1,228	1,217
SOUTHWESTERN BELL-TX	80,721	85,090	92,339	95,696	97,579	102,657	104,580	101,625	104,584
MOUNTAIN BELL - AZ	15,584	16,545	16,677	18,079	16,803	20,610	22,183	22,823	25,503
MOUNTAIN BELL-CO	19,549	20,670	22,270	22,065	21,631	22,789	22,840	23,120	25,497
GTE NORTHWEST INC-ID	559	545	543	566	594	621	615	639	675
MOUNTAIN BELL-ID	3,388	3,488	3,565	3,518	3,456	3,498	3,468	3,407	3,690
PACIFIC NW BELL-ID	285	282	276	292	295	297	285	276	302
GTE NORTHWEST INC-MT	50	52	50	59	60	61	60	58	54
MOUNTAIN BELL-MT	2,816	2,779	2,865	2,925	2,962	2,972	3,042	2,902	3,199
GTE SOUTHWEST INC-NM	409	421	440	437	430	413	419	407	381
MOUNTAIN BELL-NM	6,354	6,292	6,361	6,582	6,801	7,058	7,407	7,569	8,156
MOUNTAIN BELL-UT	8,758	8,814	9,272	9,658	10,204	10,051	10,221	10,123	10,953
MOUNTAIN BELL-WY	2,073	2,120	2,207	2,128	1,806	2,122	2,063	1,894	2,084

TABLE 4.17 A

LOCAL SUBSCRIBER LINE USAGE MINUTES
BY COMPANY (IN MILLIONS)

CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
UTC OF THE NW-WA	295	309	320	324	320	335	323	330	333
GTE NORTHWEST INC-WA	4,013	3,916	4,015	4,172	4,410	4,768	5,170	5,550	6,136
PACIFIC NW BELL-WA	18,951	19,400	19,394	20,371	19,978	19,843	21,169	21,453	22,772
UTC OF THE NW - OR	247	257	249	258	268	336	299	331	342
GTE NORTHWEST INC-OR	2,246	2,377	2,402	2,509	2,661	2,814	2,844	2,953	2,925
PACIFIC NW BELL-OR	11,552	11,390	10,980	11,298	10,843	10,651	10,895	10,695	11,690
CONTEL OF CALIFORNIA	1,423	1,468	1,544	1,573	1,645	1,763	1,834	1,884	2,066
GTC OF CALIFORNIA	27,822	27,888	29,201	30,865	31,129	31,876	32,505	33,864	32,125
WEST COAST TEL OF CA	48	59	61	65	69	67	66	72	73
PACIFIC BELL	131,320	134,696	139,028	143,333	142,507	144,802	145,424	148,611	151,072
CENTEL OF NV	3,154	3,302	3,353	3,455	3,381	3,730	3,878	4,199	5,312
NEVADA BELL	1,601	1,670	1,759	1,824	1,903	1,907	1,956	2,103	2,124
DIAMOND STATE TEL	4,169	4,224	4,214	4,356	4,466	4,379	4,675	5,089	5,405
C & P TEL CO OF WASH	12,099	12,335	12,499	12,731	13,228	12,682	12,868	13,647	13,550
NEW ENGLAND TEL - RI	6,295	6,411	6,527	6,639	6,795	6,765	6,652	6,605	6,631
TOTAL TIER 1A	1,395,608	1,424,421	1,466,232	1,507,334	1,546,452	1,577,205	1,598,435	1,611,276	1,679,735
ROCHESTER TEL CORP	NA	NA	NA	NA	5,720	5,939	5,981	6,133	6,508
UNITED TEL - NJ, INC	NA	571	583	603	663	737	678	742	797
CONTEL OF VIRGINIA	NA	2,252	2,375	2,468	2,843	3,057	3,257	3,464	3,843
UTC OF FLORIDA	NA	5,340	5,784	5,961	6,528	6,981	7,582	8,121	8,307
CENTEL OF OHIO	NA	730	695	705	740	737	719	722	748
CENTEL OF ILLINOIS	NA	2,046	2,100	2,126	2,175	2,065	2,047	2,009	2,169
UTC OF IOWA	NA	473	492	498	486	495	488	483	491
UTC OF MINNESOTA	NA	786	822	864	877	961	989	1,008	1,085
UTC OF THE WEST-NE	NA	226	225	232	212	211	227	235	243
UTC OF TEXAS INC	NA	NA	722	745	741	740	800	820	859
UTC OF THE WEST-WY	NA	45	44	45	46	45	43	44	48
GTE HAWAIIAN TEL. CO	NA	NA	6,747	6,615	6,929	7,285	7,749	7,764	8,175
PUERTO RICO TEL CO	NA	NA	NA	NA	6,599	6,471	7,187	7,574	8,476
TOTAL TIER 1B	NA	NA	NA	NA	34,559	35,724	37,747	39,121	41,747
ALL OTHER COST CO.	NA	NA	NA	NA	39,982	44,209	46,760	45,659	49,644
TOTAL COST CO.	NA	NA	NA	NA	1,620,993	1,657,138	1,682,942	1,696,056	1,771,127
AVERAGE SCHEDULE CO.	NA	NA	NA	NA	14,408	15,918	13,946	19,595	25,203
TOTAL INDUSTRY	NA	NA	NA	NA	1,635,401	1,673,056	1,696,888	1,715,651	1,796,329

TABLE 4.17 B

LOCAL SUBSCRIBER LINE USAGE MINUTES
YEAR OVER YEAR GROWTH
BY COMPANY

CARRIER	1981	1982	1983	1984	1985	1986	1987	1988
NEW ENGLAND TEL-ME	2.85%	2.78%	2.33%	2.45%	-4.19%	0.00%	8.09%	0.38%
NEW ENGLAND TEL-MA	2.96%	2.87%	1.59%	4.52%	0.54%	-1.37%	1.68%	5.15%
NEW ENGLAND TEL-NH	3.20%	3.10%	2.46%	9.38%	1.34%	0.87%	3.09%	10.96%
SOUTHERN NEW ENGLAND	0.19%	1.04%	1.47%	1.78%	2.91%	7.90%	-0.01%	1.20%
NEW ENGLAND TEL-VT	6.81%	6.37%	4.62%	0.01%	-1.54%	-0.98%	-2.38%	4.31%
CONTEL OF NY, INC	6.14%	2.42%	2.94%	2.88%	2.49%	2.99%	3.62%	3.88%
NEW YORK TEL CO	4.53%	3.14%	5.03%	7.72%	5.92%	1.01%	0.79%	3.89%
NEW JERSEY BELL	3.17%	-1.05%	0.94%	2.40%	-2.18%	-0.80%	-0.14%	5.52%
GTE NORTH INC. - PA	1.07%	1.04%	3.07%	0.80%	0.74%	4.63%	3.73%	2.98%
UTC OF PENNSYLVANIA	3.93%	0.60%	1.97%	6.80%	1.31%	1.19%	-0.54%	2.06%
BELL OF PENNSYLVANIA	2.91%	2.70%	-0.05%	-1.65%	-4.21%	5.98%	1.02%	3.37%
C & P TEL CO OF MD	4.65%	5.36%	2.98%	0.21%	-2.84%	3.29%	2.13%	6.30%
CENDEL OF VIRGINIA	3.83%	6.98%	2.22%	-2.87%	8.40%	1.63%	0.52%	2.94%
GTE SOUTH INC. - VA	-0.22%	1.71%	-4.37%	0.75%	-0.91%	3.09%	-2.51%	2.50%
UNITED INTER-MT-VA	0.00%	0.68%	3.21%	-11.97%	-6.85%	0.76%	1.77%	6.99%
C & P TEL CO OF VA	0.80%	3.30%	4.75%	2.75%	2.83%	3.81%	3.87%	6.14%
GTE SOUTH INC. - WV	-0.39%	4.69%	-1.50%	1.19%	-3.28%	2.24%	-2.27%	2.83%
C & P TEL CO OF WV	1.49%	-0.79%	0.51%	0.61%	0.22%	-0.41%	3.22%	0.77%
GTE FLORIDA INC.	9.16%	4.30%	6.84%	5.73%	8.76%	6.01%	4.21%	1.92%
CENDEL OF FLORIDA	8.84%	1.66%	7.44%	8.84%	3.71%	11.89%	7.91%	8.34%
SOUTHERN BELL-FL	2.80%	4.69%	5.62%	3.46%	2.60%	0.89%	4.63%	8.44%
GTE SOUTH INC.- GA	0.68%	3.86%	3.58%	0.08%	1.39%	6.86%	1.00%	4.95%
SOUTHERN BELL-GA	1.92%	0.05%	5.88%	7.03%	3.06%	1.84%	2.44%	8.06%
CAROLINA TEL & TEL	0.78%	4.28%	3.33%	6.84%	2.83%	1.98%	2.78%	1.83%
CENDEL OF NC	3.07%	4.04%	3.93%	3.26%	4.40%	2.69%	4.42%	-0.10%
GTE SOUTH INC - NC	0.57%	7.10%	5.26%	6.64%	3.71%	-4.89%	-0.15%	12.21%
SOUTHERN BELL-NC	0.15%	0.94%	2.12%	9.06%	5.17%	4.23%	-3.94%	4.59%
GTE SOUTH INC. - SC	2.77%	-1.55%	4.25%	8.96%	3.55%	0.74%	0.80%	2.51%
UTC OF THE CAROLINAS	3.69%	-0.74%	6.05%	-1.72%	6.98%	4.48%	4.08%	8.06%
SOUTHERN BELL-SC	-0.58%	2.14%	2.06%	6.83%	4.85%	2.74%	-2.89%	4.95%
GTE SOUTH INC. - AL	5.76%	8.06%	0.15%	3.30%	1.04%	0.62%	1.77%	0.47%
SO CENTRAL BELL-AL	2.15%	2.46%	4.19%	2.18%	2.13%	3.22%	3.10%	5.29%
GTE SOUTH INC. - KY	14.40%	0.75%	2.96%	4.41%	6.47%	-1.91%	-2.05%	8.25%
CINCINNATI BELL-KY	1.15%	1.86%	0.57%	0.84%	2.60%	-0.45%	2.82%	4.08%
SO CENTRAL BELL-KY	0.08%	1.33%	0.69%	5.42%	1.85%	-4.93%	2.22%	3.18%
SO CENTRAL BELL-LA	5.95%	4.78%	1.78%	-0.47%	-1.15%	-1.59%	-1.62%	2.20%
SO CENTRAL BELL-MS	0.21%	4.23%	1.98%	2.64%	6.77%	-0.50%	3.21%	5.18%
GTE SOUTH INC. - TN	-0.50%	-6.09%	-1.87%	3.39%	2.31%	4.94%	-0.39%	2.96%
UNITED INTER-MT-TN	2.63%	-1.27%	0.95%	-2.07%	3.20%	4.53%	4.71%	5.48%
SO. CENTRAL BELL -TN	-1.96%	2.34%	0.82%	3.66%	3.90%	4.06%	3.08%	3.08%
GTE NORTH INC. - OH	3.78%	1.82%	1.31%	6.46%	1.03%	4.78%	-0.05%	0.03%
UTC OF OHIO	2.45%	1.07%	-1.48%	4.22%	3.01%	5.14%	0.22%	-7.27%
CINCINNATI BELL-OH	-3.04%	2.46%	1.55%	6.13%	-3.04%	-0.10%	-0.14%	8.76%
OHIO BELL TEL CO	-3.50%	3.25%	3.69%	3.99%	-1.34%	-5.75%	0.55%	4.66%

TABLE 4.17 B

LOCAL SUBSCRIBER LINE USAGE MINUTES
YEAR OVER YEAR GROWTH
BY COMPANY

CARRIER	1981	1982	1983	1984	1985	1986	1987	1988
GTE NORTH INC. - MI	-0.20%	-0.37%	-0.03%	2.96%	1.58%	0.61%	0.39%	2.20%
MICHIGAN BELL TEL CO	-0.33%	-0.27%	2.07%	0.45%	-1.37%	1.69%	1.52%	8.42%
GTE NORTH INC. - IN	-2.09%	1.79%	3.41%	9.19%	-2.67%	1.12%	6.42%	-5.08%
UTC OF INDIANA	4.45%	5.29%	-1.94%	6.17%	-1.17%	3.34%	1.97%	1.31%
INDIANA BELL TEL CO	-2.65%	5.12%	-0.12%	1.35%	-0.87%	-0.26%	-0.03%	4.45%
GTE NORTH INC. - WI	1.78%	2.03%	0.11%	1.88%	2.03%	1.73%	-0.57%	-0.24%
WISCONSIN BELL	-4.02%	2.21%	-1.02%	0.11%	2.51%	0.89%	-2.59%	8.59%
GTE NORTH INC. - IL	10.23%	1.38%	2.41%	6.40%	-0.91%	-4.23%	-3.11%	-1.41%
ILLINOIS BELL TEL CO	3.47%	0.25%	1.35%	5.56%	2.56%	-0.65%	-1.69%	1.98%
GTE NORTH INC. - IA	-1.89%	6.34%	1.19%	7.23%	-5.44%	-2.44%	-4.53%	4.00%
NORTHWESTERN BELL-IA	-2.55%	2.14%	0.40%	1.36%	-0.17%	0.79%	-4.37%	4.75%
GTE NORTH INC. - MN	7.20%	2.74%	-2.03%	-3.10%	-2.21%	-5.06%	-6.11%	0.12%
CENTEL OF MN	7.41%	4.17%	7.74%	0.61%	5.79%	2.70%	2.64%	8.26%
NORTHWESTERN BELL-MN	-1.03%	5.42%	5.18%	3.35%	0.07%	1.83%	-2.91%	7.84%
GTE NORTH INC. - NE	-7.42%	13.39%	3.98%	1.70%	-4.38%	-2.60%	-2.97%	-0.70%
LINCOLN TEL & TEL CO	1.44%	4.35%	5.53%	4.93%	1.08%	-0.06%	1.41%	-0.11%
NORTHWESTERN BELL-NE	6.56%	-1.11%	8.93%	-2.96%	6.11%	-0.89%	-1.70%	4.45%
NORTHWESTERN BELL-ND	1.92%	3.30%	-1.33%	6.04%	-2.09%	-3.60%	-3.26%	6.66%
NORTHWESTERN BELL-SD	-0.95%	3.35%	-2.00%	5.59%	2.70%	-0.20%	-4.82%	4.68%
UTC OF ARKANSAS	-0.13%	2.09%	-2.09%	3.21%	2.67%	-6.13%	-2.07%	6.85%
GTE SOUTHWEST INC-AR	5.32%	1.83%	1.11%	8.27%	-1.17%	-1.67%	-7.24%	0.07%
SOUTHWESTERN BELL-AR	-1.53%	3.27%	4.47%	5.68%	0.94%	1.11%	0.57%	0.46%
UTC OF KANSAS	-0.41%	2.40%	2.71%	-1.30%	-1.98%	-6.09%	0.85%	2.38%
SOUTHWESTERN BELL-KS	-2.69%	1.73%	3.05%	1.54%	4.72%	0.15%	-2.73%	3.96%
GTE NORTH INC. - MO	-0.43%	5.20%	2.20%	4.43%	1.40%	0.34%	1.31%	-0.43%
UTC OF MISSOURI	2.48%	6.41%	1.40%	0.78%	-0.38%	-1.06%	4.66%	1.12%
SOUTHWESTERN BELL-MO	-0.21%	4.12%	-1.13%	3.98%	3.25%	2.21%	1.24%	1.65%
GTE SOUTHWEST INC-OK	6.73%	7.28%	0.98%	7.80%	4.15%	-1.07%	-39.35%	46.88%
SOUTHWESTERN BELL-OK	1.23%	5.93%	3.49%	-1.34%	-1.68%	-1.38%	-2.63%	0.76%
GTE SOUTHWEST INC-TX	7.23%	3.01%	3.67%	6.95%	5.07%	1.39%	-3.52%	2.87%
CENTEL OF TEXAS	8.18%	9.30%	5.75%	6.11%	7.44%	1.60%	-3.46%	21.11%
SOUTHWESTERN BELL-TX	5.41%	8.52%	3.64%	1.97%	5.20%	1.87%	-2.83%	2.91%
MOUNTAIN BELL - AZ	6.17%	0.79%	8.41%	-7.06%	22.66%	7.63%	2.89%	11.74%
MOUNTAIN BELL-CO	5.73%	7.74%	-0.92%	-1.97%	5.35%	0.23%	1.23%	10.28%
GTE NORTHWEST INC-ID	-2.43%	-0.53%	4.28%	5.03%	4.45%	-0.84%	3.74%	5.79%
MOUNTAIN BELL-ID	2.96%	2.21%	-1.33%	-1.76%	1.23%	-0.86%	-1.78%	8.32%
PACIFIC NW BELL-ID	-1.22%	-1.96%	5.70%	1.11%	0.72%	-4.30%	-2.91%	9.48%
GTE NORTHWEST INC-MT	4.07%	-3.64%	18.61%	1.02%	1.97%	-2.66%	-2.05%	-7.54%
MOUNTAIN BELL-MT	-1.31%	3.09%	2.10%	1.24%	0.36%	2.35%	-4.60%	10.23%
GTE SOUTHWEST INC-NM	2.93%	4.51%	-0.68%	-1.60%	-3.95%	1.54%	-2.95%	-6.30%
MOUNTAIN BELL-NM	-0.98%	1.09%	3.48%	3.33%	3.77%	4.95%	2.19%	7.75%
MOUNTAIN BELL-UT	0.64%	5.19%	4.17%	5.66%	-1.50%	1.69%	-0.96%	8.20%
MOUNTAIN BELL-WY	2.27%	4.10%	-3.58%	-15.13%	17.50%	-2.80%	-8.17%	10.01%

TABLE 4.17 B

LOCAL SUBSCRIBER LINE USAGE MINUTES
YEAR OVER YEAR GROWTH
BY COMPANY

CARRIER	1981	1982	1983	1984	1985	1986	1987	1988
UTC OF THE NW-WA	4.92%	3.33%	1.34%	-1.36%	4.73%	-3.37%	2.04%	0.98%
GTE NORTHWEST INC-WA	-2.41%	2.51%	3.92%	5.70%	8.12%	8.43%	7.35%	10.56%
PACIFIC NW BELL-WA	2.37%	-0.03%	5.04%	-1.93%	-0.68%	6.68%	1.34%	6.15%
UTC OF THE NW - OR	4.06%	-3.23%	3.39%	4.20%	25.35%	-11.20%	10.76%	3.33%
GTE NORTHWEST INC-OR	5.81%	1.05%	4.46%	6.07%	5.75%	1.05%	3.84%	-0.95%
PACIFIC NW BELL-OR	-1.40%	-3.60%	2.89%	-4.03%	-1.77%	2.29%	-1.84%	9.31%
CONTEL OF CALIFORNIA	3.15%	5.18%	1.89%	4.59%	7.15%	4.06%	2.71%	9.66%
GTC OF CALIFORNIA	0.24%	4.71%	5.70%	0.86%	2.40%	1.97%	4.18%	-5.14%
WEST COAST TEL OF CA	22.20%	3.00%	7.81%	5.59%	-2.90%	-2.04%	9.01%	2.11%
PACIFIC BELL	2.57%	3.22%	3.10%	-0.58%	1.61%	0.43%	2.19%	1.66%
CENDEL OF NV	4.71%	1.54%	3.05%	-2.14%	10.30%	3.98%	8.27%	26.50%
NEVADA BELL	4.30%	5.37%	3.67%	4.32%	0.22%	2.57%	7.55%	0.99%
DIAMOND STATE TEL	1.32%	-0.23%	3.37%	2.52%	-1.95%	6.76%	8.86%	6.21%
C & P TEL CO OF WASH	1.95%	1.33%	1.86%	3.90%	-4.13%	1.47%	6.05%	-0.71%
NEW ENGLAND TEL - RI	1.84%	1.81%	1.72%	2.35%	-0.44%	-1.68%	-0.71%	0.40%
TOTAL TIER 1A	2.06%	2.94%	2.80%	2.60%	1.99%	1.35%	0.80%	4.25%
ROCHESTER TEL CORP	NA	NA	NA	NA	3.84%	0.70%	2.55%	6.11%
UNITED TEL - NJ, INC	NA	2.04%	3.36%	10.09%	11.14%	-8.00%	9.43%	7.40%
CONTEL OF VIRGINIA	NA	5.48%	3.93%	15.20%	7.52%	6.52%	6.36%	10.95%
UTC OF FLORIDA	NA	8.33%	3.06%	9.51%	6.94%	8.61%	7.12%	2.28%
CENDEL OF OHIO	NA	-4.78%	1.36%	4.97%	-0.36%	-2.43%	0.34%	3.65%
CENDEL OF ILLINOIS	NA	2.63%	1.23%	2.28%	-5.06%	-0.86%	-1.86%	7.99%
UTC OF IOWA	NA	3.92%	1.20%	-2.44%	1.97%	-1.56%	-0.83%	1.47%
UTC OF MINNESOTA	NA	4.56%	5.12%	1.47%	9.54%	3.01%	1.91%	7.62%
UTC OF THE WEST-NE	NA	-0.51%	3.28%	-8.43%	-0.70%	7.70%	3.42%	3.41%
UTC OF TEXAS INC	NA	NA	3.25%	-0.57%	-0.15%	8.10%	2.56%	4.64%
UTC OF THE WEST-WY	NA	-0.76%	2.66%	1.48%	-2.32%	-4.01%	2.35%	7.86%
GTE HAWAIIAN TEL. CO	NA	NA	-1.96%	4.75%	5.14%	6.37%	0.19%	5.29%
PUERTO RICO TEL CO	NA	NA	NA	NA	-1.94%	11.07%	5.39%	11.90%
TOTAL TIER 1B	NA	NA	NA	NA	3.37%	5.66%	3.64%	6.71%

TABLE 4.18 A

STATE SUBSCRIBER LINE USAGE MINUTES
BY COMPANY (IN MILLIONS)

CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
NEW ENGLAND TEL-ME	607	641	675	731	797	916	949	1,062	1,171
NEW ENGLAND TEL-MA	3,831	4,007	4,183	4,513	5,138	5,932	6,792	7,960	8,751
NEW ENGLAND TEL-NH	469	509	548	611	687	788	942	1,078	1,115
SOUTHERN NEW ENGLAND	2,467	2,597	2,757	2,868	3,014	3,308	3,641	4,069	4,432
NEW ENGLAND TEL-VT	273	285	296	315	341	357	405	433	459
CONTEL OF NY, INC	377	421	452	489	557	633	695	764	827
NEW YORK TEL CO	4,898	5,204	5,555	6,134	6,057	6,411	7,344	8,493	8,347
NEW JERSEY BELL	10,198	10,645	11,340	12,361	14,212	15,234	16,856	18,752	20,062
GTE NORTH INC. - PA	502	524	550	574	612	666	664	719	853
UTC OF PENNSYLVANIA	424	449	464	494	586	620	664	729	827
BELL OF PENNSYLVANIA	4,591	4,932	5,232	5,526	7,119	8,161	7,617	8,140	8,758
C & P TEL CO OF MD	1,127	1,197	1,254	1,305	1,383	1,499	1,741	2,276	2,371
CENDEL OF VIRGINIA	247	274	292	308	324	345	352	397	514
GTE SOUTH INC. - VA	38	41	41	39	43	50	51	55	60
UNITED INTER-MT-VA	79	84	87	87	96	108	116	120	135
C & P TEL CO OF VA	1,614	1,700	1,776	1,846	2,086	2,514	2,638	2,853	3,063
GTE SOUTH INC. - WV	74	79	79	80	88	101	103	109	113
C & P TEL CO OF WV	749	787	807	791	877	1,018	985	959	931
GTE FLORIDA INC.	1,130	1,249	1,334	1,413	1,840	2,060	2,280	2,710	2,760
CENDEL OF FLORIDA	185	215	237	251	298	347	438	448	503
SOUTHERN BELL-FL	2,857	3,168	3,473	3,736	4,650	5,602	6,162	6,175	6,913
GTE SOUTH INC.- GA	259	277	289	308	339	383	418	452	497
SOUTHERN BELL-GA	1,791	1,896	1,993	2,029	2,385	2,820	2,739	2,931	3,301
CAROLINA TEL & TEL	877	913	950	1,033	1,152	1,310	1,343	1,377	1,540
CENDEL OF NC	242	260	265	288	307	341	374	380	473
GTE SOUTH INC - NC	147	151	159	171	194	232	248	269	310
SOUTHERN BELL-NC	1,632	1,766	1,871	1,973	2,261	2,559	2,704	2,625	2,943
GTE SOUTH INC. - SC	144	148	152	161	176	212	227	244	273
UTC OF THE CAROLINAS	65	69	70	74	89	100	105	113	129
SOUTHERN BELL-SC	782	838	846	868	1,020	1,197	1,209	1,267	1,433
GTE SOUTH INC. - AL	132	142	150	159	181	182	190	207	226
SO CENTRAL BELL-AL	1,095	1,155	1,213	1,253	1,407	1,585	1,628	1,674	1,797
GTE SOUTH INC. - KY	282	326	336	346	378	431	450	520	554
CINCINNATI BELL-KY	43	42	48	55	59	75	75	83	94
SO CENTRAL BELL-KY	775	801	805	825	934	1,003	1,037	1,097	1,172
SO CENTRAL BELL-LA	1,851	2,080	2,233	2,236	2,640	2,829	2,534	2,438	2,607
SO CENTRAL BELL-MS	949	982	1,026	1,081	1,233	1,362	1,358	1,485	1,540
GTE SOUTH INC. - TN	55	59	63	66	74	85	85	91	102
UNITED INTER-MT-TN	144	148	155	165	204	231	260	285	324
SO. CENTRAL BELL -TN	1,325	1,429	1,510	1,567	1,852	2,119	2,178	2,337	2,681
GTE NORTH INC. - OH	1,030	1,079	1,132	1,139	1,186	1,279	1,344	1,506	1,690
UTC OF OHIO	700	750	791	821	850	914	893	990	910
CINCINNATI BELL-OH	278	294	330	349	356	467	483	542	498
OHIO BELL TEL CO	2,943	2,959	3,023	3,077	3,625	4,176	4,394	4,678	4,844

TABLE 4.18 A

STATE SUBSCRIBER LINE USAGE MINUTES
BY COMPANY (IN MILLIONS)

CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
GTE NORTH INC. - MI	1,090	1,102	1,118	1,148	1,209	1,317	1,409	1,467	1,644
MICHIGAN BELL TEL CO	5,278	5,543	5,618	5,867	7,168	8,791	9,318	8,888	9,897
GTE NORTH INC. - IN	617	652	682	717	772	836	866	944	1,172
UTC OF INDIANA	250	267	279	293	333	356	358	390	444
INDIANA BELL TEL CO	1,254	1,321	1,389	1,435	1,653	1,811	1,887	2,019	2,126
GTE NORTH INC. - WI	524	555	574	594	622	684	720	769	924
WISCONSIN BELL	1,506	1,591	1,689	1,732	1,859	2,001	2,088	2,241	2,513
GTE NORTH INC. - IL	1,140	1,311	1,386	1,406	1,464	1,534	1,582	1,671	1,889
ILLINOIS BELL TEL CO	2,795	2,793	2,843	2,999	3,461	3,585	3,754	3,659	3,874
GTE NORTH INC. - IA	217	227	241	259	259	269	272	288	313
NORTHWESTERN BELL-IA	1,152	1,202	1,255	1,288	1,505	1,412	1,474	1,542	1,570
GTE NORTH INC. - MN	6	7	8	9	9	8	8	9	10
CENTEL OF MN	77	85	92	100	106	117	120	144	133
NORTHWESTERN BELL-MN	1,145	1,210	1,286	1,364	1,671	1,686	1,783	1,911	1,997
GTE NORTH INC. - NE	78	78	92	97	101	103	101	105	109
LINCOLN TEL & TEL CO	281	300	329	339	358	357	356	420	441
NORTHWESTERN BELL-NE	379	374	430	452	541	496	507	541	544
NORTHWESTERN BELL-ND	281	308	321	327	366	401	395	390	403
NORTHWESTERN BELL-SD	273	289	306	318	346	382	385	403	424
UTC OF ARKANSAS	26	26	26	27	28	31	32	34	35
GTE SOUTHWEST INC-AR	107	111	108	111	117	133	132	145	159
SOUTHWESTERN BELL-AR	881	941	948	971	1,060	1,120	1,107	1,166	1,325
UTC OF KANSAS	138	141	145	149	146	158	151	153	163
SOUTHWESTERN BELL-KS	1,200	1,311	1,316	1,327	1,385	1,449	1,418	1,497	1,582
GTE NORTH INC. - MO	168	181	182	189	194	221	236	253	276
UTC OF MISSOURI	322	341	350	355	368	402	408	422	507
SOUTHWESTERN BELL-MO	1,579	1,632	1,639	1,593	1,706	1,858	1,932	2,073	2,231
GTE SOUTHWEST INC-OK	183	208	220	233	242	258	249	261	268
SOUTHWESTERN BELL-OK	1,740	1,946	2,108	2,116	2,204	2,345	2,222	2,164	2,206
GTE SOUTHWEST INC-TX	1,656	1,837	1,935	2,030	2,217	2,456	2,516	2,905	2,784
CENTEL OF TEXAS	147	168	204	210	242	264	269	301	261
CENTEL OF TEXAS	311	365	411	419	482	537	552	606	585
SOUTHWESTERN BELL-TX	7,164	7,984	8,624	8,367	10,712	11,856	11,572	11,351	11,563
MOUNTAIN BELL - AZ	780	860	907	907	1,362	1,280	1,468	1,677	1,576
MOUNTAIN BELL-CO	1,199	1,340	1,465	1,519	2,248	1,910	2,049	2,238	1,989
GTE NORTHWEST INC-ID	76	79	81	87	100	107	109	113	114
MOUNTAIN BELL-ID	368	383	391	407	512	519	516	526	526
PACIFIC NW BELL-ID	28	29	29	32	35	36	37	38	41
GTE NORTHWEST INC-MT	7	8	7	8	9	9	9	10	10
MOUNTAIN BELL-MT	440	463	479	511	559	583	616	630	661
GTE SOUTHWEST INC-NM	39	45	50	48	55	61	51	51	52
MOUNTAIN BELL-NM	414	444	486	495	611	600	670	691	685
MOUNTAIN BELL-UT	608	663	650	654	704	792	851	894	879
MOUNTAIN BELL-WY	266	289	290	278	324	342	336	325	320

TABLE 4.18 A

STATE SUBSCRIBER LINE USAGE MINUTES
BY COMPANY (IN MILLIONS)

CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
UTC OF THE NW-WA	113	119	127	135	130	146	146	152	164
GTE NORTHWEST INC-WA	585	615	649	717	788	853	925	1,036	1,202
PACIFIC NW BELL-WA	1,707	1,863	1,961	2,108	2,600	2,822	2,706	3,054	3,206
UTC OF THE NW - OR	106	110	108	113	114	137	122	123	135
GTE NORTHWEST INC-OR	356	371	375	391	403	403	421	462	499
PACIFIC NW BELL-OR	1,188	1,129	1,254	1,313	1,612	1,469	1,561	1,699	1,757
CONTEL OF CALIFORNIA	529	584	617	649	690	769	834	902	1,021
GTC OF CALIFORNIA	7,333	7,881	8,223	8,524	8,913	8,865	9,846	10,702	12,298
WEST COAST TEL OF CA	16	18	17	16	17	18	18	21	27
PACIFIC BELL	23,838	25,475	26,048	27,860	31,903	35,163	36,973	39,175	42,541
CENTEL OF NV	33	36	40	48	50	57	71	80	126
NEVADA BELL	81	91	91	96	115	141	159	163	251
DIAMOND STATE TEL	113	120	126	144	219	278	203	226	261
C & P TEL CO OF WASH	0	0	0	0	0	0	0	0	0
NEW ENGLAND TEL - RI	309	322	335	349	372	404	454	484	537
TOTAL TIER 1A	128,776	137,311	143,806	150,766	173,058	189,560	199,043	212,492	228,160
ROCHESTER TEL CORP	NA	NA	NA	NA	533	569	617	654	713
UNITED TEL - NJ, INC	NA	353	378	410	459	572	658	719	788
CONTEL OF VIRGINIA	NA	427	466	487	570	771	784	991	761
UTC OF FLORIDA	NA	751	849	993	1,104	1,249	1,260	1,365	1,426
CENTEL OF OHIO	NA	87	89	87	88	108	130	162	172
CENTEL OF ILLINOIS	NA	181	186	193	215	226	244	269	295
UTC OF IOWA	NA	113	122	124	133	148	146	157	165
UTC OF MINNESOTA	NA	115	125	134	144	169	171	180	196
UTC OF THE WEST-NE	NA	21	22	23	23	29	28	27	27
UTC OF TEXAS INC	NA	NA	258	262	307	342	345	350	374
UTC OF THE WEST-WY	NA	6	6	6	6	8	8	7	8
GTE HAWAIIAN TEL. CO	NA	NA	215	251	273	279	328	337	368
PUERTO RICO TEL CO	NA	NA	NA	NA	705	891	1,018	1,306	1,776
TOTAL TIER 1B	NA	NA	NA	NA	4,561	5,363	5,736	6,524	7,070
ALL OTHER COST CO.	NA	NA	NA	NA	97,378	11,147	12,040	12,663	14,237
TOTAL COST CO.	NA	NA	NA	NA	274,997	206,070	216,819	231,679	249,467
AVERAGE SCHEDULE CO.	NA	NA	NA	NA	35,092	4,013	3,591	5,329	6,883
TOTAL INDUSTRY	NA	NA	NA	NA	310,089	210,083	220,409	237,008	256,350

TABLE 4.18 B

STATE SUBSCRIBER LINE USAGE MINUTES
YEAR OVER YEAR GROWTH
BY COMPANY

CARRIER	1981	1982	1983	1984	1985	1986	1987	1988
NEW ENGLAND TEL-ME	5.54%	5.25%	8.32%	9.08%	14.98%	3.60%	11.86%	10.23%
NEW ENGLAND TEL-MA	4.59%	4.39%	7.89%	13.85%	15.45%	14.50%	17.19%	9.94%
NEW ENGLAND TEL-NH	8.52%	7.85%	11.42%	12.34%	14.73%	19.65%	14.36%	3.46%
SOUTHERN NEW ENGLAND	5.27%	6.16%	4.03%	5.09%	9.76%	10.07%	11.76%	8.91%
NEW ENGLAND TEL-VT	4.22%	4.05%	6.24%	8.47%	4.52%	13.59%	6.85%	6.04%
CONTEL OF NY, INC	11.69%	7.31%	8.09%	13.84%	13.78%	9.78%	9.90%	8.25%
NEW YORK TEL CO	6.24%	6.76%	10.42%	-1.25%	5.83%	14.55%	15.66%	-1.72%
NEW JERSEY BELL	4.38%	6.52%	9.01%	14.98%	7.19%	10.65%	11.25%	6.99%
GTE NORTH INC. - PA	4.38%	4.96%	4.36%	6.62%	8.82%	-0.35%	8.29%	18.68%
UTC OF PENNSYLVANIA	5.97%	3.37%	6.32%	18.70%	5.81%	7.16%	9.72%	13.49%
BELL OF PENNSYLVANIA	7.44%	6.07%	5.63%	28.83%	14.63%	-6.66%	6.87%	7.59%
C & P TEL CO OF MD	6.18%	4.81%	4.05%	5.94%	8.45%	16.11%	30.73%	4.17%
CENDEL OF VIRGINIA	11.33%	6.54%	5.22%	5.35%	6.43%	1.99%	12.93%	29.35%
GTE SOUTH INC. - VA	7.89%	-0.27%	-3.95%	9.89%	15.85%	1.68%	7.41%	9.03%
UNITED INTER-MT-VA	6.64%	3.69%	0.26%	10.66%	11.84%	7.61%	3.45%	12.24%
C & P TEL CO OF VA	5.36%	4.49%	3.90%	13.04%	20.49%	4.95%	8.15%	7.36%
GTE SOUTH INC. - WV	6.76%	0.26%	1.23%	10.05%	14.47%	1.86%	5.98%	3.72%
C & P TEL CO OF WV	5.06%	2.54%	-1.99%	10.89%	16.04%	-3.24%	-2.64%	-2.92%
GTE FLORIDA INC.	10.53%	6.83%	5.88%	30.24%	11.98%	10.65%	18.87%	1.85%
CENDEL OF FLORIDA	16.00%	10.19%	5.91%	18.86%	16.26%	26.27%	2.27%	12.33%
SOUTHERN BELL-FL	10.88%	9.63%	7.58%	24.45%	20.49%	9.99%	0.21%	11.95%
GTE SOUTH INC.- GA	7.02%	4.09%	6.73%	10.06%	13.01%	9.25%	8.10%	9.88%
SOUTHERN BELL-GA	5.86%	5.15%	1.78%	17.55%	18.25%	-2.88%	7.02%	12.63%
CAROLINA TEL & TEL	4.04%	4.12%	8.69%	11.59%	13.66%	2.49%	2.55%	11.88%
CENDEL OF NC	7.62%	1.88%	8.51%	6.65%	11.03%	9.96%	1.37%	24.56%
GTE SOUTH INC - NC	2.84%	4.88%	7.65%	13.67%	19.58%	6.88%	8.48%	15.25%
SOUTHERN BELL-NC	8.23%	5.91%	5.50%	14.59%	13.15%	5.69%	-2.95%	12.15%
GTE SOUTH INC. - SC	2.78%	2.67%	5.82%	9.46%	20.45%	7.22%	7.37%	11.85%
UTC OF THE CAROLINAS	5.26%	1.60%	5.88%	19.85%	13.00%	5.00%	7.55%	14.35%
SOUTHERN BELL-SC	7.16%	1.00%	2.54%	17.60%	17.28%	1.03%	4.81%	13.10%
GTE SOUTH INC. - AL	7.36%	5.94%	6.15%	13.43%	0.68%	4.53%	8.77%	9.37%
SO CENTRAL BELL-AL	5.47%	5.08%	3.24%	12.34%	12.65%	2.68%	2.86%	7.34%
GTE SOUTH INC. - KY	15.52%	3.08%	3.11%	9.15%	14.05%	4.49%	15.49%	6.46%
CINCINNATI BELL-KY	-2.89%	13.53%	14.92%	7.96%	26.02%	0.34%	9.79%	14.18%
SO CENTRAL BELL-KY	3.31%	0.55%	2.49%	13.17%	7.40%	3.36%	5.85%	6.77%
SO CENTRAL BELL-LA	12.36%	7.36%	0.16%	18.02%	7.18%	-10.44%	-3.78%	6.95%
SO CENTRAL BELL-MS	3.45%	4.44%	5.39%	14.04%	10.51%	-0.33%	9.33%	3.72%
GTE SOUTH INC. - TN	7.27%	6.53%	5.33%	11.02%	15.64%	-0.36%	7.31%	12.08%
UNITED INTER-MT-TN	3.12%	4.61%	6.18%	24.27%	13.12%	12.36%	9.74%	13.72%
SO. CENTRAL BELL -TN	7.87%	5.67%	3.75%	18.20%	14.41%	2.77%	7.31%	14.71%
GTE NORTH INC. - OH	4.80%	4.87%	0.66%	4.08%	7.85%	5.12%	11.99%	12.25%
UTC OF OHIO	7.21%	5.48%	3.76%	3.45%	7.53%	-2.24%	10.82%	-8.07%
CINCINNATI BELL-OH	5.75%	12.32%	5.81%	1.88%	31.24%	3.53%	12.27%	-8.10%
OHIO BELL TEL CO	0.54%	2.16%	1.80%	17.83%	15.19%	5.22%	6.45%	3.55%

TABLE 4.18 B

STATE SUBSCRIBER LINE USAGE MINUTES
YEAR OVER YEAR GROWTH
BY COMPANY

CARRIER	1981	1982	1983	1984	1985	1986	1987	1988
GTE NORTH INC. - MI	1.10%	1.45%	2.69%	5.32%	8.91%	6.99%	4.08%	12.11%
MICHIGAN BELL TEL CO	5.01%	1.36%	4.42%	22.18%	22.64%	5.99%	-4.62%	11.36%
GTE NORTH INC. - IN	5.74%	4.47%	5.17%	7.70%	8.29%	3.59%	9.04%	24.14%
UTC OF INDIANA	6.74%	4.84%	4.97%	13.42%	6.99%	0.50%	8.93%	13.87%
INDIANA BELL TEL CO	5.31%	5.19%	3.31%	15.18%	9.55%	4.21%	7.01%	5.27%
GTE NORTH INC. - WI	5.82%	3.49%	3.51%	4.73%	9.95%	5.29%	6.81%	20.18%
WISCONSIN BELL	5.62%	6.17%	2.52%	7.37%	7.60%	4.37%	7.30%	12.17%
GTE NORTH INC. - IL	14.99%	5.72%	1.47%	4.11%	4.78%	3.15%	5.63%	13.04%
ILLINOIS BELL TEL CO	-0.09%	1.80%	5.51%	15.39%	3.58%	4.70%	-2.52%	5.87%
GTE NORTH INC. - IA	4.44%	6.53%	7.18%	-0.06%	4.01%	1.20%	5.69%	8.74%
NORTHWESTERN BELL-IA	4.37%	4.35%	2.65%	16.90%	-6.19%	4.37%	4.60%	1.82%
GTE NORTH INC. - MN	17.12%	11.52%	9.45%	-3.67%	-6.36%	4.32%	4.96%	14.15%
CENTEL OF MN	9.79%	8.22%	9.27%	5.09%	10.59%	3.16%	19.42%	-7.55%
NORTHWESTERN BELL-MN	5.65%	6.31%	6.07%	22.48%	0.94%	5.70%	7.21%	4.51%
GTE NORTH INC. - NE	0.15%	17.82%	5.93%	3.85%	1.73%	-2.31%	4.49%	3.99%
LINCOLN TEL & TEL CO	6.65%	9.72%	3.11%	5.66%	-0.28%	-0.31%	17.87%	5.06%
NORTHWESTERN BELL-NE	-1.24%	15.03%	5.15%	19.73%	-8.39%	2.23%	6.62%	0.64%
NORTHWESTERN BELL-ND	9.35%	4.44%	1.76%	11.86%	9.62%	-1.55%	-1.12%	3.27%
NORTHWESTERN BELL-SD	5.74%	6.01%	3.75%	8.72%	10.58%	0.64%	4.75%	5.24%
UTC OF ARKANSAS	0.27%	0.65%	2.09%	2.98%	13.20%	2.21%	4.84%	4.49%
GTE SOUTHWEST INC-AR	3.47%	-2.14%	2.45%	5.41%	13.68%	-1.01%	10.14%	9.46%
SOUTHWESTERN BELL-AR	6.76%	0.82%	2.42%	9.10%	5.71%	-1.18%	5.35%	13.60%
UTC OF KANSAS	2.40%	2.75%	2.24%	-1.81%	8.31%	-4.77%	1.49%	7.00%
SOUTHWESTERN BELL-KS	9.21%	0.42%	0.84%	4.32%	4.65%	-2.13%	5.55%	5.70%
GTE NORTH INC. - MO	7.67%	0.71%	3.95%	2.50%	13.86%	6.62%	7.54%	9.00%
UTC OF MISSOURI	6.15%	2.61%	1.40%	3.49%	9.31%	1.51%	3.36%	20.13%
SOUTHWESTERN BELL-MO	3.35%	0.45%	-2.83%	7.11%	8.92%	3.98%	7.27%	7.62%
GTE SOUTHWEST INC-OK	13.49%	5.77%	6.07%	3.86%	6.61%	-3.41%	4.74%	2.86%
SOUTHWESTERN BELL-OK	11.82%	8.35%	0.38%	4.12%	6.41%	-5.25%	-2.62%	1.96%
GTE SOUTHWEST INC-TX	10.91%	5.36%	4.91%	9.21%	10.78%	2.45%	15.45%	-4.15%
CENTEL OF TEXAS	14.09%	21.53%	2.90%	15.28%	9.26%	1.68%	11.87%	-13.06%
CONTEL OF TEXAS	17.56%	12.55%	1.99%	15.14%	11.34%	2.68%	9.93%	-3.51%
SOUTHWESTERN BELL-TX	11.45%	8.01%	-2.99%	28.03%	10.69%	-2.39%	-1.91%	1.87%
MOUNTAIN BELL - AZ	10.20%	5.50%	0.05%	50.06%	-6.02%	14.71%	14.23%	-5.98%
MOUNTAIN BELL-CO	11.81%	9.29%	3.71%	47.96%	-15.02%	7.27%	9.19%	-11.11%
GTE NORTHWEST INC-ID	4.34%	2.04%	7.02%	15.66%	7.01%	1.99%	3.26%	1.42%
MOUNTAIN BELL-ID	4.15%	2.06%	4.22%	25.69%	1.36%	-0.58%	1.91%	0.04%
PACIFIC NW BELL-ID	3.45%	1.22%	8.31%	9.49%	2.85%	2.08%	4.19%	7.46%
GTE NORTHWEST INC-MT	10.06%	-2.63%	7.52%	11.02%	3.60%	3.35%	2.40%	1.86%
MOUNTAIN BELL-MT	5.28%	3.30%	6.81%	9.41%	4.26%	5.71%	2.14%	4.99%
GTE SOUTHWEST INC-NM	14.15%	11.59%	-3.38%	14.58%	10.91%	-15.59%	-0.95%	2.82%
MOUNTAIN BELL-NM	7.23%	9.52%	1.86%	23.38%	-1.80%	11.69%	3.05%	-0.77%
MOUNTAIN BELL-UT	9.02%	-1.97%	0.59%	7.70%	12.53%	7.42%	5.12%	-1.69%
MOUNTAIN BELL-WY	8.49%	0.40%	-4.13%	16.55%	5.59%	-1.78%	-3.39%	-1.48%

TABLE 4.18 B

STATE SUBSCRIBER LINE USAGE MINUTES
YEAR OVER YEAR GROWTH
BY COMPANY

CARRIER	1981	1982	1983	1984	1985	1986	1987	1988
UTC OF THE NW-WA	5.53%	6.11%	6.29%	-3.20%	11.70%	0.37%	4.17%	7.77%
GTE NORTHWEST INC-WA	5.13%	5.50%	10.44%	10.03%	8.17%	8.44%	12.05%	16.01%
PACIFIC NW BELL-WA	9.11%	5.26%	7.50%	23.36%	8.52%	-4.11%	12.88%	4.97%
UTC OF THE NW - OR	3.77%	-1.72%	4.49%	0.97%	20.18%	-10.88%	0.61%	9.58%
GTE NORTHWEST INC-OR	4.14%	1.18%	4.13%	3.31%	-0.14%	4.47%	9.78%	8.07%
PACIFIC NW BELL-OR	-4.99%	11.07%	4.72%	22.78%	-8.89%	6.29%	8.84%	3.42%
CONTEL OF CALIFORNIA	10.32%	5.73%	5.23%	6.30%	11.37%	8.51%	8.16%	13.20%
GTC OF CALIFORNIA	7.47%	4.34%	3.66%	4.56%	-0.53%	11.06%	8.70%	14.92%
WEST COAST TEL OF CA	12.52%	-5.75%	-3.11%	3.28%	4.95%	3.82%	14.16%	27.73%
PACIFIC BELL	6.87%	2.25%	6.96%	14.51%	10.22%	5.15%	5.96%	8.59%
CENDEL OF NV	10.03%	10.13%	18.36%	6.16%	12.89%	25.44%	12.09%	57.64%
NEVADA BELL	11.81%	0.70%	5.13%	19.67%	22.78%	12.43%	2.90%	53.57%
DIAMOND STATE TEL	6.56%	5.10%	13.62%	52.57%	26.98%	-27.09%	11.33%	15.49%
C & P TEL CO OF WASH	0	0	0	0	0	0	0	0
NEW ENGLAND TEL - RI	4.26%	4.09%	4.29%	6.41%	8.77%	12.17%	6.71%	10.91%
TOTAL TIER 1A	6.63%	4.73%	4.84%	14.79%	9.54%	5.00%	6.76%	7.37%
ROCHESTER TEL CORP	NA	NA	NA	NA	6.74%	8.40%	5.93%	9.13%
UNITED TEL - NJ, INC	NA	7.19%	8.24%	11.93%	24.78%	15.01%	9.31%	9.58%
CONTEL OF VIRGINIA	NA	9.06%	4.48%	17.16%	35.32%	1.61%	26.41%	-23.16%
UTC OF FLORIDA	NA	12.98%	17.01%	11.16%	13.12%	0.84%	8.38%	4.46%
CENDEL OF OHIO	NA	2.60%	-2.13%	1.36%	22.45%	20.31%	24.80%	5.84%
CENDEL OF ILLINOIS	NA	2.67%	3.65%	11.62%	5.35%	7.95%	10.08%	9.69%
UTC OF IOWA	NA	7.84%	1.58%	7.76%	11.11%	-1.86%	7.76%	4.92%
UTC OF MINNESOTA	NA	8.93%	7.39%	7.04%	17.84%	1.07%	5.37%	9.05%
UTC OF THE WEST-NE	NA	5.58%	5.61%	-0.25%	23.26%	-2.51%	-4.89%	1.43%
UTC OF TEXAS INC	NA	NA	1.30%	17.37%	11.51%	0.66%	1.69%	6.77%
UTC OF THE WEST-WY	NA	-6.57%	5.26%	-3.49%	24.20%	-0.01%	-3.57%	6.91%
GTE HAWAIIAN TEL. CO	NA	NA	16.49%	8.89%	2.14%	17.57%	2.69%	9.28%
PUERTO RICO TEL CO	NA	NA	NA	NA	26.47%	14.21%	28.24%	36.04%
TOTAL TIER 1B	NA	NA	NA	NA	17.59%	6.95%	13.74%	8.37%
ALL OTHER COST CO.	NA	NA	NA	NA	-88.55%	8.01%	5.18%	12.43%
TOTAL COST CO.	NA	NA	NA	NA	-25.06%	5.22%	6.85%	7.68%
AVERAGE SCHEDULE CO.	NA	NA	NA	NA	-88.56%	-10.53%	48.40%	29.17%
TOTAL INDUSTRY	NA	NA	NA	NA	-32.25%	4.92%	7.53%	8.16%

TABLE 4.19 A

INTERSTATE SUBSCRIBER LINE USAGE MINUTES
BY COMPANY (IN MILLIONS)

CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
NEW ENGLAND TEL-ME	481	529	577	641	725	864	966	1,039	1,141
NEW ENGLAND TEL-MA	3,909	4,159	4,408	4,706	5,293	6,934	7,854	8,528	9,642
NEW ENGLAND TEL-NH	807	877	948	1,037	1,182	1,497	1,747	1,915	1,933
SOUTHERN NEW ENGLAND	2,820	2,961	3,056	3,231	3,759	4,441	4,904	5,552	5,973
NEW ENGLAND TEL-VT	393	421	449	491	561	616	674	747	814
CONTEL OF NY, INC	132	147	159	174	205	254	291	333	399
NEW YORK TEL CO	10,926	11,709	12,637	13,757	16,833	19,755	21,857	23,914	26,594
NEW JERSEY BELL	7,173	7,542	7,877	8,425	9,773	11,738	12,351	14,153	16,169
GTE NORTH INC. - PA	362	370	391	400	424	490	546	662	767
UTC OF PENNSYLVANIA	193	210	214	228	296	323	328	375	469
BELL OF PENNSYLVANIA	5,436	5,747	6,065	6,481	7,749	9,283	9,368	10,283	11,619
C & P TEL CO OF MD	2,793	2,937	3,005	3,192	3,628	4,014	5,087	5,975	6,746
CENDEL OF VIRGINIA	214	230	244	271	294	358	290	380	537
GTE SOUTH INC. - VA	37	39	39	37	43	47	49	55	70
UNITED INTER-MT-VA	86	95	99	103	112	123	137	146	173
C & P TEL CO OF VA	2,703	2,850	2,970	3,256	3,921	4,492	4,825	5,869	6,353
GTE SOUTH INC. - WV	95	101	99	99	117	126	139	160	185
C & P TEL CO OF WV	812	862	869	901	1,019	1,130	1,194	1,309	1,363
GTE FLORIDA INC.	1,443	1,688	1,856	1,964	2,309	2,638	2,980	3,611	3,980
CENDEL OF FLORIDA	200	234	257	286	324	395	489	576	640
SOUTHERN BELL-FL	4,639	5,025	5,423	5,872	6,622	7,616	8,381	9,540	12,059
GTE SOUTH INC.- GA	158	166	170	183	216	242	244	272	295
SOUTHERN BELL-GA	3,375	3,654	3,856	3,963	4,533	5,252	5,331	5,912	6,964
CAROLINA TEL & TEL	621	654	698	788	932	1,143	1,235	1,489	1,760
CENDEL OF NC	135	149	150	170	196	224	256	239	338
GTE SOUTH INC - NC	137	157	172	193	221	259	251	329	343
SOUTHERN BELL-NC	1,538	1,723	1,818	1,980	2,277	2,618	2,694	3,120	3,694
GTE SOUTH INC. - SC	148	165	172	193	219	249	275	363	387
UTC OF THE CAROLINAS	68	75	81	88	104	112	115	129	157
SOUTHERN BELL-SC	1,056	1,163	1,230	1,348	1,598	1,716	1,924	2,169	2,648
GTE SOUTH INC. - AL	131	146	153	161	196	200	209	250	258
SO CENTRAL BELL-AL	1,497	1,593	1,657	1,735	2,002	2,496	2,562	2,584	3,077
GTE SOUTH INC. - KY	305	355	363	367	416	484	499	679	680
CINCINNATI BELL-KY	97	101	119	148	160	231	234	254	280
SO CENTRAL BELL-KY	1,041	1,085	1,101	1,124	1,317	1,537	1,559	1,577	1,893
SO CENTRAL BELL-LA	1,885	2,071	2,167	2,265	2,614	3,120	2,918	2,814	3,597
SO CENTRAL BELL-MS	1,073	1,152	1,200	1,264	1,436	1,784	1,828	1,841	2,222
GTE SOUTH INC. - TN	42	49	53	56	61	73	72	78	93
UNITED INTER-MT-TN	178	194	209	220	244	266	271	315	389
SO. CENTRAL BELL -TN	2,101	2,249	2,449	2,633	3,207	3,797	3,829	3,986	4,496
GTE NORTH INC. - OH	519	560	547	557	609	686	774	924	1,049
UTC OF OHIO	324	347	376	404	446	531	496	574	616
CINCINNATI BELL-OH	654	697	800	852	924	1,301	1,403	1,510	1,532
OHIO BELL TEL CO	3,161	3,263	3,357	3,441	2,890	4,978	4,075	6,615	7,001

TABLE 4.19 A

 INTERSTATE SUBSCRIBER LINE USAGE MINUTES
 BY COMPANY (IN MILLIONS)

CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
GTE NORTH INC. - MI	330	342	353	373	419	470	534	588	697
MICHIGAN BELL TEL CO	3,237	3,316	2,998	3,344	4,496	5,507	6,272	5,271	7,466
GTE NORTH INC. - IN	670	717	724	759	829	945	1,015	1,118	1,359
UTC OF INDIANA	154	176	183	195	210	226	210	246	291
INDIANA BELL TEL CO	1,755	1,855	1,920	1,956	2,289	2,837	2,944	3,335	3,703
GTE NORTH INC. - WI	269	290	296	314	353	405	413	427	539
WISCONSIN BELL	1,521	1,607	1,677	1,756	2,166	2,490	2,807	3,086	3,487
GTE NORTH INC. - IL	458	556	587	609	629	678	690	769	894
ILLINOIS BELL TEL CO	6,267	6,389	6,263	6,438	8,523	9,669	10,395	11,842	13,565
GTE NORTH INC. - IA	87	96	104	112	119	129	132	139	158
NORTHWESTERN BELL-IA	1,090	1,145	1,193	1,319	1,654	2,054	2,179	2,204	2,444
GTE NORTH INC. - MN	3	3	4	4	4	4	4	4	5
CENDEL OF MN	50	56	59	64	77	86	94	118	144
NORTHWESTERN BELL-MN	1,784	1,895	1,957	2,131	2,410	3,201	3,540	3,791	4,190
GTE NORTH INC. - NE	36	35	41	44	49	54	55	67	70
LINCOLN TEL & TEL CO	214	226	235	234	290	317	355	430	498
NORTHWESTERN BELL-NE	658	786	790	836	943	1,149	1,281	1,450	1,650
NORTHWESTERN BELL-ND	299	335	377	365	417	507	529	576	621
NORTHWESTERN BELL-SD	301	328	351	381	479	514	596	624	697
UTC OF ARKANSAS	18	19	21	21	22	27	29	32	36
GTE SOUTHWEST INC-AR	72	77	77	78	84	102	104	128	136
SOUTHWESTERN BELL-AR	823	907	947	1,009	1,188	1,439	1,391	1,431	1,479
UTC OF KANSAS	95	97	99	108	110	119	124	140	161
SOUTHWESTERN BELL-KS	1,206	1,302	1,321	1,432	1,647	1,947	1,954	2,126	2,423
GTE NORTH INC. - MO	97	100	104	117	134	151	176	202	240
UTC OF MISSOURI	161	181	204	224	208	296	302	311	346
SOUTHWESTERN BELL-MO	2,740	2,762	2,785	2,851	3,271	4,095	3,906	3,902	4,440
GTE SOUTHWEST INC-OK	105	123	131	132	143	170	184	242	223
SOUTHWESTERN BELL-OK	1,729	1,892	2,053	2,020	2,195	2,470	2,363	2,479	2,733
GTE SOUTHWEST INC-TX	793	875	886	917	1,054	1,253	1,427	2,131	1,954
CENDEL OF TEXAS	119	132	137	152	200	224	275	291	314
CONTEL OF TEXAS	71	82	94	95	120	157	154	187	196
SOUTHWESTERN BELL-TX	5,590	6,268	7,040	7,240	8,451	10,689	10,133	10,495	11,849
MOUNTAIN BELL - AZ	2,110	2,234	2,298	2,292	2,744	3,609	4,048	4,744	5,351
MOUNTAIN BELL-CO	2,523	2,902	3,142	3,263	3,796	4,188	4,724	5,107	5,589
GTE NORTHWEST INC-ID	127	136	136	145	179	195	195	204	232
MOUNTAIN BELL-ID	418	449	466	503	613	743	782	824	879
PACIFIC NW BELL-ID	38	39	41	42	48	53	57	63	71
GTE NORTHWEST INC-MT	8	9	9	10	12	13	13	14	15
MOUNTAIN BELL-MT	406	457	473	474	550	624	646	695	791
GTE SOUTHWEST INC-NM	72	84	88	83	88	95	84	99	99
MOUNTAIN BELL-NM	703	768	823	864	1,004	1,191	1,320	1,490	1,529
MOUNTAIN BELL-UT	817	922	992	1,098	1,049	1,513	1,640	1,650	1,889
MOUNTAIN BELL-WY	433	496	519	505	565	622	630	639	695

TABLE 4.19 A

INTERSTATE SUBSCRIBER LINE USAGE MINUTES
BY COMPANY (IN MILLIONS)

CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
UTC OF THE NW-WA	51	55	57	62	69	76	74	79	80
GTE NORTHWEST INC-WA	388	424	445	482	534	599	644	803	1,032
PACIFIC NW BELL-WA	1,750	1,925	2,036	2,154	2,601	3,158	3,391	3,794	4,184
UTC OF THE NW - OR	47	49	50	54	61	76	74	76	91
GTE NORTHWEST INC-OR	297	324	321	336	360	384	447	496	632
PACIFIC NW BELL-OR	1,122	1,285	1,290	1,366	1,665	2,226	2,093	2,288	2,502
CONTEL OF CALIFORNIA	131	140	153	170	185	219	249	316	382
GTC OF CALIFORNIA	2,075	2,194	2,237	2,374	2,468	2,962	3,544	4,368	5,267
WEST COAST TEL OF CA	9	11	10	11	12	12	11	12	15
PACIFIC BELL	9,684	10,145	10,561	11,677	13,580	16,381	16,392	17,474	18,735
CENDEL OF NV	563	614	625	648	860	873	1,239	1,319	1,665
NEVADA BELL	375	409	419	470	535	571	540	577	710
DIAMOND STATE TEL	620	640	646	688	831	1,025	1,151	1,271	1,435
C & P TEL CO OF WASH	1,844	1,911	1,912	2,007	2,391	3,007	3,130	2,922	2,239
NEW ENGLAND TEL - RI	704	740	776	829	940	1,159	1,306	1,438	1,549
TOTAL TIER 1A	126,011	134,832	141,076	149,923	174,927	210,393	222,504	246,092	278,060
ROCHESTER TEL CORP	NA	NA	NA	NA	459	535	618	611	748
UNITED TEL - NJ, INC	NA	143	153	171	194	255	274	332	387
CONTEL OF VIRGINIA	NA	304	331	358	483	604	719	909	1,045
UTC OF FLORIDA	NA	895	1,005	1,077	1,115	1,385	1,495	1,796	2,013
CENDEL OF OHIO	NA	44	47	48	60	76	80	101	110
CENDEL OF ILLINOIS	NA	223	218	244	275	296	369	467	584
UTC OF IOWA	NA	50	56	59	69	89	85	92	103
UTC OF MINNESOTA	NA	53	55	60	65	85	90	105	127
UTC OF THE WEST-NE	NA	33	35	35	36	45	46	49	58
UTC OF TEXAS INC	NA	NA	49	46	60	71	74	92	108
UTC OF THE WEST-WY	NA	10	10	10	11	14	15	15	18
GTE HAWAIIAN TEL. CO	NA	NA	499	529	558	737	919	1,366	1,452
PUERTO RICO TEL CO	NA	NA	NA	NA	503	626	732	866	1,169
TOTAL TIER 1B	NA	NA	NA	NA	3,887	4,818	5,514	6,803	7,923
ALL OTHER COST CO.	NA	NA	NA	NA	6,599	7,613	8,337	8,365	9,762
TOTAL COST CO.	NA	NA	NA	NA	185,413	222,824	236,355	261,260	295,745
AVERAGE SCHEDULE CO.	NA	NA	NA	NA	2,378	2,741	2,486	3,698	4,681
TOTAL INDUSTRY	NA	NA	NA	NA	187,792	225,565	238,841	264,958	300,426

TABLE 4.19 B

INTERSTATE SUBSCRIBER LINE USAGE MINUTES
YEAR OVER YEAR GROWTH
BY COMPANY

CARRIER	1981	1982	1983	1984	1985	1986	1987	1988
NEW ENGLAND TEL-ME	9.94%	9.04%	11.10%	13.08%	19.20%	11.82%	7.53%	9.84%
NEW ENGLAND TEL-MA	6.38%	6.00%	6.76%	12.47%	30.99%	13.27%	8.57%	13.07%
NEW ENGLAND TEL-NH	8.73%	8.03%	9.48%	13.94%	26.68%	16.70%	9.59%	0.96%
SOUTHERN NEW ENGLAND	5.00%	3.21%	5.73%	16.34%	18.14%	10.43%	13.21%	7.59%
NEW ENGLAND TEL-VT	7.18%	6.70%	9.32%	14.27%	9.82%	9.36%	10.88%	8.97%
CONTEL OF NY, INC	11.18%	8.06%	9.46%	18.19%	23.77%	14.46%	14.52%	19.82%
NEW YORK TEL CO	7.17%	7.93%	8.86%	22.36%	17.36%	10.64%	9.41%	11.20%
NEW JERSEY BELL	5.15%	4.43%	6.96%	15.99%	20.11%	5.22%	14.59%	14.24%
GTE NORTH INC. - PA	2.21%	5.68%	2.30%	6.00%	15.58%	11.39%	21.26%	15.93%
UTC OF PENNSYLVANIA	9.01%	1.89%	6.75%	29.49%	9.18%	1.75%	14.25%	25.03%
BELL OF PENNSYLVANIA	5.73%	5.52%	6.87%	19.55%	19.81%	0.91%	9.77%	12.99%
C & P TEL CO OF MD	5.16%	2.31%	6.23%	13.64%	10.65%	26.73%	17.46%	12.90%
CENDEL OF VIRGINIA	7.30%	6.18%	10.92%	8.55%	22.01%	-19.21%	31.33%	41.24%
GTE SOUTH INC. - VA	5.41%	-0.52%	-5.83%	18.61%	8.46%	3.84%	12.88%	26.25%
UNITED INTER-MT-VA	10.52%	4.87%	4.10%	8.94%	8.96%	11.77%	6.57%	18.47%
C & P TEL CO OF VA	5.44%	4.21%	9.65%	20.41%	14.56%	7.42%	21.64%	8.25%
GTE SOUTH INC. - WV	6.32%	-1.57%	-0.38%	18.00%	7.82%	10.49%	15.00%	15.44%
C & P TEL CO OF WV	6.14%	0.80%	3.68%	13.10%	10.89%	5.65%	9.63%	4.13%
GTE FLORIDA INC.	16.98%	9.95%	5.82%	17.58%	14.23%	12.95%	21.18%	10.22%
CENDEL OF FLORIDA	17.08%	10.18%	11.03%	13.40%	21.98%	23.68%	17.82%	11.14%
SOUTHERN BELL-FL	8.31%	7.92%	8.29%	12.77%	15.02%	10.04%	13.82%	26.41%
GTE SOUTH INC.- GA	5.17%	2.05%	7.77%	18.24%	12.00%	0.66%	11.84%	8.28%
SOUTHERN BELL-GA	8.26%	5.53%	2.78%	14.36%	15.88%	1.50%	10.89%	17.80%
CAROLINA TEL & TEL	5.31%	6.72%	12.94%	18.35%	22.57%	8.09%	20.57%	18.21%
CENDEL OF NC	10.43%	0.79%	13.12%	15.36%	14.23%	14.22%	-6.66%	41.83%
GTE SOUTH INC - NC	14.64%	9.63%	11.98%	14.46%	17.37%	-2.96%	31.00%	4.17%
SOUTHERN BELL-NC	12.06%	5.50%	8.89%	15.02%	14.97%	2.91%	15.81%	18.39%
GTE SOUTH INC. - SC	11.81%	3.75%	12.61%	13.37%	13.60%	10.50%	31.99%	6.56%
UTC OF THE CAROLINAS	11.44%	7.66%	8.16%	18.04%	8.28%	2.48%	12.25%	22.05%
SOUTHERN BELL-SC	10.14%	5.73%	9.57%	18.55%	7.38%	12.14%	12.71%	22.10%
GTE SOUTH INC. - AL	11.75%	4.74%	5.16%	21.70%	1.92%	4.74%	19.50%	3.18%
SO CENTRAL BELL-AL	6.42%	4.02%	4.71%	15.37%	24.72%	2.61%	0.88%	19.08%
GTE SOUTH INC. - KY	16.23%	2.53%	0.98%	13.41%	16.27%	3.18%	35.87%	0.22%
CINCINNATI BELL-KY	4.00%	17.73%	24.66%	7.97%	44.23%	1.41%	8.36%	10.49%
SO CENTRAL BELL-KY	4.22%	1.42%	2.14%	17.19%	16.68%	1.45%	1.15%	19.99%
SO CENTRAL BELL-LA	9.89%	4.62%	4.53%	15.41%	19.36%	-6.48%	-3.55%	27.82%
SO CENTRAL BELL-MS	7.41%	4.18%	5.33%	13.60%	24.23%	2.46%	0.70%	20.70%
GTE SOUTH INC. - TN	16.67%	8.72%	5.33%	8.15%	20.28%	-1.17%	7.73%	19.73%
UNITED INTER-MT-TN	9.08%	7.84%	5.31%	10.97%	8.92%	1.77%	16.29%	23.58%
SO. CENTRAL BELL -TN	7.04%	8.93%	7.50%	21.79%	18.41%	0.84%	4.11%	12.79%
GTE NORTH INC. - OH	7.93%	-2.26%	1.68%	9.34%	12.69%	12.87%	19.35%	13.48%
UTC OF OHIO	7.22%	8.27%	7.67%	10.21%	19.20%	-6.59%	15.62%	7.32%
CINCINNATI BELL-OH	6.67%	14.66%	6.52%	8.50%	40.78%	7.81%	7.67%	1.43%
OHIO BELL TEL CO	3.21%	2.89%	2.51%	-16.02%	72.25%	-18.14%	62.32%	5.84%

TABLE 4.19 B

INTERSTATE SUBSCRIBER LINE USAGE MINUTES
YEAR OVER YEAR GROWTH
BY COMPANY

CARRIER	1981	1982	1983	1984	1985	1986	1987	1988
GTE NORTH INC. - MI	3.64%	3.22%	5.67%	12.46%	12.04%	13.52%	10.20%	18.49%
MICHIGAN BELL TEL CO	2.43%	-9.59%	11.54%	34.45%	22.49%	13.89%	-15.95%	41.63%
GTE NORTH INC. - IN	7.03%	0.96%	4.78%	9.29%	13.99%	7.41%	10.12%	21.59%
UTC OF INDIANA	13.71%	4.28%	6.32%	7.60%	7.98%	-6.97%	16.91%	18.36%
INDIANA BELL TEL CO	5.73%	3.50%	1.88%	17.00%	23.96%	3.76%	13.27%	11.03%
GTE NORTH INC. - WI	7.93%	1.91%	6.05%	12.57%	14.66%	2.01%	3.39%	26.20%
WISCONSIN BELL	5.66%	4.38%	4.71%	23.36%	14.91%	12.73%	9.97%	13.00%
GTE NORTH INC. - IL	21.34%	5.66%	3.66%	3.31%	7.82%	1.75%	11.52%	16.16%
ILLINOIS BELL TEL CO	1.95%	-1.97%	2.79%	32.39%	13.45%	7.51%	13.92%	14.54%
GTE NORTH INC. - IA	10.70%	7.68%	8.16%	6.54%	7.96%	2.63%	5.33%	13.25%
NORTHWESTERN BELL-IA	5.02%	4.19%	10.57%	25.41%	24.14%	6.08%	1.17%	10.87%
GTE NORTH INC. - MN	9.43%	7.97%	11.77%	1.53%	-0.55%	2.11%	7.70%	13.67%
CENDEL OF MN	12.27%	5.91%	7.59%	20.47%	12.72%	8.94%	25.56%	21.70%
NORTHWESTERN BELL-MN	6.22%	3.25%	8.88%	13.10%	32.84%	10.59%	7.07%	10.53%
GTE NORTH INC. - NE	-1.60%	14.46%	8.19%	12.02%	9.90%	2.39%	20.76%	4.52%
LINCOLN TEL & TEL CO	5.84%	4.08%	-0.40%	23.71%	9.53%	11.80%	21.24%	15.70%
NORTHWESTERN BELL-NE	19.51%	0.42%	5.85%	12.85%	21.80%	11.49%	13.22%	13.78%
NORTHWESTERN BELL-ND	12.07%	12.75%	-3.30%	14.24%	21.72%	4.30%	8.80%	7.82%
NORTHWESTERN BELL-SD	8.92%	6.98%	8.68%	25.71%	7.36%	15.77%	4.74%	11.69%
UTC OF ARKANSAS	7.87%	7.20%	4.18%	2.91%	24.52%	5.15%	11.68%	10.35%
GTE SOUTHWEST INC-AR	7.63%	-0.81%	1.48%	7.69%	21.43%	2.05%	22.96%	6.30%
SOUTHWESTERN BELL-AR	10.12%	4.44%	6.57%	17.70%	21.15%	-3.32%	2.84%	3.39%
UTC OF KANSAS	2.57%	2.03%	8.82%	2.27%	8.29%	4.21%	12.32%	15.01%
SOUTHWESTERN BELL-KS	7.93%	1.45%	8.43%	15.00%	18.20%	0.38%	8.76%	14.00%
GTE NORTH INC. - MO	3.43%	4.12%	12.09%	14.59%	12.54%	16.25%	15.12%	18.54%
UTC OF MISSOURI	12.35%	12.96%	10.06%	-7.34%	42.14%	2.16%	3.04%	11.10%
SOUTHWESTERN BELL-MO	0.83%	0.81%	2.39%	14.71%	25.19%	-4.60%	-0.12%	13.80%
GTE SOUTHWEST INC-OK	16.76%	6.51%	1.09%	8.33%	18.88%	8.00%	31.81%	-7.90%
SOUTHWESTERN BELL-OK	9.47%	8.48%	-1.58%	8.63%	12.53%	-4.32%	4.91%	10.25%
GTE SOUTHWEST INC-TX	10.36%	1.24%	3.50%	14.94%	18.88%	13.89%	49.33%	-8.29%
CENDEL OF TEXAS	10.69%	3.71%	10.80%	31.82%	11.96%	23.16%	5.74%	7.68%
CONTEL OF TEXAS	15.04%	15.26%	0.94%	26.28%	30.27%	-1.81%	21.59%	4.81%
SOUTHWESTERN BELL-TX	12.13%	12.31%	2.85%	16.73%	26.47%	-5.19%	3.57%	12.90%
MOUNTAIN BELL - AZ	5.84%	2.88%	-0.27%	19.71%	31.53%	12.16%	17.21%	12.79%
MOUNTAIN BELL-CO	15.01%	8.27%	3.85%	16.32%	10.34%	12.81%	8.10%	9.43%
GTE NORTHWEST INC-ID	6.76%	0.04%	6.66%	23.79%	9.02%	0.06%	4.19%	14.01%
MOUNTAIN BELL-ID	7.29%	3.97%	7.93%	21.73%	21.26%	5.20%	5.37%	6.70%
PACIFIC NW BELL-ID	1.40%	6.53%	2.30%	13.78%	10.57%	6.50%	11.77%	11.63%
GTE NORTHWEST INC-MT	21.01%	-0.50%	6.10%	21.51%	8.38%	1.92%	5.78%	6.17%
MOUNTAIN BELL-MT	12.54%	3.51%	0.25%	16.08%	13.37%	3.49%	7.65%	13.76%
GTE SOUTHWEST INC-NM	16.05%	4.92%	-5.32%	6.02%	7.95%	-11.37%	17.58%	0.00%
MOUNTAIN BELL-NM	9.20%	7.19%	4.98%	16.17%	18.61%	10.83%	12.90%	2.58%
MOUNTAIN BELL-UT	12.86%	7.67%	10.62%	-4.46%	44.31%	8.38%	0.57%	14.50%
MOUNTAIN BELL-WY	14.49%	4.78%	-2.79%	11.82%	10.27%	1.23%	1.47%	8.68%

TABLE 4.19 B

INTERSTATE SUBSCRIBER LINE USAGE MINUTES
YEAR OVER YEAR GROWTH
BY COMPANY

CARRIER	1981	1982	1983	1984	1985	1986	1987	1988
UTC OF THE NW-WA	6.65%	4.50%	8.53%	10.68%	10.52%	-2.99%	7.28%	1.62%
GTE NORTHWEST INC-WA	9.21%	5.02%	8.32%	10.73%	12.25%	7.44%	24.81%	28.48%
PACIFIC NW BELL-WA	9.97%	5.80%	5.76%	20.76%	21.42%	7.38%	11.87%	10.29%
UTC OF THE NW - OR	5.61%	1.45%	8.45%	11.82%	25.07%	-3.04%	3.26%	20.00%
GTE NORTHWEST INC-OR	9.22%	-1.06%	4.69%	7.07%	6.86%	16.32%	11.02%	27.37%
PACIFIC NW BELL-OR	14.58%	0.35%	5.90%	21.91%	33.70%	-5.98%	9.32%	9.37%
CONTEL OF CALIFORNIA	6.73%	9.38%	10.88%	8.81%	18.55%	13.52%	27.09%	20.92%
GTC OF CALIFORNIA	5.72%	2.00%	6.11%	3.94%	20.02%	19.65%	23.26%	20.57%
WEST COAST TEL OF CA	18.33%	-3.30%	5.83%	7.94%	1.10%	-5.94%	8.40%	25.02%
PACIFIC BELL	4.77%	4.10%	10.57%	16.30%	20.63%	0.07%	6.60%	7.22%
CENTEL OF NV	8.98%	1.73%	3.71%	32.71%	1.60%	41.82%	6.48%	26.26%
NEVADA BELL	9.13%	2.47%	12.15%	13.97%	6.54%	-5.26%	6.76%	23.07%
DIAMOND STATE TEL	3.30%	0.95%	6.51%	20.77%	23.36%	12.27%	10.43%	12.90%
C & P TEL CO OF WASH	3.64%	0.06%	4.97%	19.15%	25.73%	4.10%	-6.63%	-23.38%
NEW ENGLAND TEL - RI	5.11%	4.86%	6.87%	13.32%	23.39%	12.62%	10.13%	7.72%
TOTAL TIER 1A	7.00%	4.63%	6.27%	16.68%	20.27%	5.76%	10.60%	12.99%
ROCHESTER TEL CORP	NA	NA	NA	NA	16.50%	15.53%	-1.00%	22.42%
UNITED TEL - NJ, INC	NA	7.19%	11.97%	13.03%	31.78%	7.33%	21.30%	16.67%
CONTEL OF VIRGINIA	NA	9.12%	7.92%	35.17%	24.96%	18.96%	26.45%	15.01%
UTC OF FLORIDA	NA	12.22%	7.20%	3.53%	24.23%	7.91%	20.13%	12.10%
CENTEL OF OHIO	NA	5.78%	1.66%	25.40%	27.44%	5.58%	25.93%	8.62%
CENTEL OF ILLINOIS	NA	-2.18%	11.66%	12.71%	7.76%	24.46%	26.72%	25.07%
UTC OF IOWA	NA	10.95%	5.93%	17.08%	28.39%	-4.03%	8.67%	11.91%
UTC OF MINNESOTA	NA	5.10%	8.37%	8.09%	31.71%	5.31%	17.20%	20.62%
UTC OF THE WEST-NE	NA	5.13%	1.17%	0.73%	25.96%	1.71%	6.66%	19.39%
UTC OF TEXAS INC	NA	NA	-6.23%	30.57%	18.17%	3.60%	25.11%	16.63%
UTC OF THE WEST-WY	NA	-5.21%	-0.62%	14.58%	22.60%	9.02%	4.18%	13.57%
GTE HAWAIIAN TEL. CO	NA	NA	6.01%	5.48%	32.08%	24.69%	48.64%	6.29%
PUERTO RICO TEL CO	NA	NA	NA	NA	24.42%	16.95%	18.35%	34.94%
TOTAL TIER 1B	NA	NA	NA	NA	23.93%	14.45%	23.38%	16.47%
ALL OTHER COST CO.	NA	NA	NA	NA	15.36%	9.51%	0.33%	16.70%
TOTAL COST CO.	NA	NA	NA	NA	20.18%	6.07%	10.54%	13.20%
AVERAGE SCHEDULE CO.	NA	NA	NA	NA	15.26%	-9.30%	48.73%	26.60%
TOTAL INDUSTRY	NA	NA	NA	NA	20.11%	5.89%	10.93%	13.39%

TABLE 4.20 A

TOTAL SUBSCRIBER LINE USAGE MINUTES
BY COMPANY (IN MILLIONS)

CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
NEW ENGLAND TEL-ME	5,602	5,812	6,023	6,254	6,524	6,573	6,708	7,281	7,511
NEW ENGLAND TEL-MA	46,315	47,882	49,450	50,725	53,812	56,478	57,659	60,224	64,384
NEW ENGLAND TEL-NH	5,394	5,636	5,878	6,138	6,779	7,262	7,710	8,168	8,791
SOUTHERN NEW ENGLAND	25,358	25,668	26,132	26,717	27,757	29,344	31,846	32,920	33,983
NEW ENGLAND TEL-VT	2,647	2,822	2,996	3,161	3,258	3,292	3,375	3,422	3,612
CONTEL OF NY, INC	2,004	2,155	2,236	2,335	2,482	2,651	2,802	2,979	3,181
NEW YORK TEL CO	126,649	132,757	137,671	145,379	158,061	169,333	173,819	178,172	186,379
NEW JERSEY BELL	62,084	64,319	64,863	66,863	71,166	73,123	74,989	78,623	84,471
GTE NORTH INC. - PA	5,710	5,792	5,890	6,075	6,178	6,336	6,629	7,002	7,409
UTC OF PENNSYLVANIA	2,859	2,990	3,023	3,113	3,436	3,530	3,611	3,708	3,954
BELL OF PENNSYLVANIA	76,709	79,304	81,773	82,446	84,144	83,807	87,317	89,469	93,819
C & P TEL CO OF MD	40,600	42,520	44,701	46,143	46,743	46,060	48,708	51,025	54,584
CENTEL OF VIRGINIA	2,406	2,524	2,697	2,787	2,763	3,029	3,005	3,153	3,497
GTE SOUTH INC. - VA	525	529	536	513	526	533	549	548	578
UNITED INTER-MT-VA	1,295	1,309	1,325	1,365	1,243	1,194	1,224	1,254	1,365
C & P TEL CO OF VA	34,260	34,734	35,927	37,762	39,567	41,516	43,287	45,932	48,911
GTE SOUTH INC. - WV	932	940	974	963	998	994	1,026	1,036	1,086
C & P TEL CO OF WV	11,657	11,895	11,841	11,909	12,176	12,450	12,438	12,858	12,966
GTE FLORIDA INC.	13,686	15,068	15,843	16,895	18,441	20,243	21,739	23,494	24,242
CENTEL OF FLORIDA	2,034	2,243	2,319	2,497	2,756	2,954	3,402	3,695	4,037
SOUTHERN BELL-FL	50,849	52,758	55,553	58,886	62,253	65,524	67,313	70,927	78,844
GTE SOUTH INC. - GA	2,418	2,458	2,550	2,658	2,724	2,824	3,012	3,098	3,283
SOUTHERN BELL-GA	41,410	42,489	42,806	45,120	48,796	51,234	52,027	53,873	58,923
CAROLINA TEL & TEL	8,886	9,012	9,412	9,844	10,657	11,267	11,566	12,104	12,708
CENTEL OF NC	2,275	2,366	2,451	2,573	2,687	2,845	2,972	3,064	3,255
GTE SOUTH INC - NC	1,674	1,706	1,828	1,939	2,095	2,234	2,157	2,254	2,511
SOUTHERN BELL-NC	22,250	22,598	22,977	23,650	26,019	27,767	28,945	28,364	30,293
GTE SOUTH INC. - SC	1,592	1,649	1,639	1,725	1,889	2,008	2,061	2,178	2,270
UTC OF THE CAROLINAS	824	860	862	916	933	1,005	1,048	1,104	1,218
SOUTHERN BELL-SC	16,694	16,771	17,162	17,613	19,067	20,158	20,852	20,642	22,140
GTE SOUTH INC. - AL	1,440	1,533	1,649	1,668	1,769	1,788	1,814	1,897	1,931
SO CENTRAL BELL-AL	24,697	25,329	26,009	27,095	28,041	29,238	30,156	31,029	33,060
GTE SOUTH INC. - KY	3,887	4,455	4,503	4,629	4,883	5,268	5,220	5,381	5,761
CINCINNATI BELL-KY	2,320	2,348	2,412	2,462	2,497	2,642	2,635	2,728	2,864
SO CENTRAL BELL-KY	16,359	16,440	16,654	16,799	17,907	18,486	17,756	18,171	19,054
SO CENTRAL BELL-LA	32,897	35,048	36,773	37,451	38,050	38,370	37,357	36,642	38,284
SO CENTRAL BELL-MS	14,753	14,893	15,524	15,907	16,588	18,008	17,973	18,587	19,814
GTE SOUTH INC. - TN	696	704	676	672	702	739	767	776	820
UNITED INTER-MT-TN	2,597	2,678	2,670	2,713	2,729	2,850	2,990	3,176	3,430
SO. CENTRAL BELL -TN	33,121	32,792	33,754	34,239	36,197	38,269	39,671	41,025	42,949
GTE NORTH INC. - OH	7,770	8,096	8,253	8,356	8,885	9,129	9,625	9,932	10,243
UTC OF OHIO	5,092	5,265	5,379	5,376	5,620	5,900	6,074	6,258	5,879
CINCINNATI BELL-OH	12,302	12,016	12,425	12,671	13,453	13,571	13,678	13,828	14,837
OHIO BELL TEL CO	56,570	54,919	56,662	58,655	60,732	62,642	58,879	61,979	64,895
GTE NORTH INC. - MI	5,969	5,984	5,994	6,043	6,284	6,516	6,700	6,831	7,223

TABLE 4.20 A

TOTAL SUBSCRIBER LINE USAGE MINUTES
BY COMPANY (IN MILLIONS)

CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
MICHIGAN BELL TEL CO	65,437	65,593	65,200	66,965	69,676	71,518	73,776	73,227	81,406
GTE NORTH INC. - IN	7,319	7,276	7,418	7,692	8,390	8,388	8,562	9,172	9,279
UTC OF INDIANA	1,671	1,765	1,856	1,854	1,993	2,016	2,049	2,146	2,265
INDIANA BELL TEL CO	25,935	25,496	26,772	26,825	27,693	28,192	28,314	28,831	30,350
GTE NORTH INC. - WI	3,470	3,569	3,650	3,691	3,811	3,982	4,076	4,123	4,383
WISCONSIN BELL	24,588	23,892	24,519	24,425	24,987	25,977	26,573	26,444	28,931
GTE NORTH INC. - IL	6,201	6,941	7,117	7,283	7,698	7,766	7,591	7,594	7,864
ILLINOIS BELL TEL CO	79,369	81,925	82,031	83,347	90,003	93,273	93,646	93,658	97,140
GTE NORTH INC. - IA	1,085	1,089	1,160	1,195	1,262	1,234	1,220	1,206	1,281
NORTHWESTERN BELL-IA	13,121	12,949	13,277	13,479	14,180	14,467	14,741	14,350	15,121
GTE NORTH INC. - MN	32	35	36	37	36	35	34	34	36
CENTEL OF MN	725	783	820	884	907	970	1,002	1,070	1,152
NORTHWESTERN BELL-MN	24,333	24,288	25,574	26,983	28,357	29,181	30,061	29,721	32,090
GTE NORTH INC. - NE	472	445	508	532	548	537	526	531	536
LINCOLN TEL & TEL CO	2,418	2,477	2,600	2,722	2,903	2,953	2,988	3,160	3,246
NORTHWESTERN BELL-NE	6,301	6,770	6,767	7,331	7,349	7,867	7,955	8,053	8,526
NORTHWESTERN BELL-ND	3,295	3,409	3,557	3,512	3,773	3,836	3,746	3,696	3,936
NORTHWESTERN BELL-SD	2,975	2,995	3,115	3,107	3,368	3,508	3,587	3,508	3,718
UTC OF ARKANSAS	172	173	177	176	181	194	188	190	203
GTE SOUTHWEST INC-AR	831	875	884	896	966	991	980	963	985
SOUTHWESTERN BELL-AR	10,218	10,231	10,553	11,026	11,806	12,207	12,253	12,407	12,660
UTC OF KANSAS	706	710	727	752	746	757	725	747	789
SOUTHWESTERN BELL-KS	14,468	14,349	14,577	15,063	15,524	16,478	16,474	16,366	17,253
GTE NORTH INC. - MO	1,066	1,079	1,126	1,164	1,224	1,280	1,322	1,378	1,435
UTC OF MISSOURI	1,668	1,737	1,847	1,891	1,897	2,014	2,012	2,096	2,230
SOUTHWESTERN BELL-MO	33,235	33,251	34,471	34,150	35,866	37,846	38,435	38,974	40,215
GTE SOUTHWEST INC-OK	1,120	1,218	1,303	1,327	1,422	1,508	1,501	1,151	1,443
SOUTHWESTERN BELL-OK	19,415	19,981	21,261	21,834	21,859	21,981	21,514	21,126	21,548
GTE SOUTHWEST INC-TX	11,862	12,805	13,218	13,726	14,799	15,822	16,225	16,886	16,929
CENTEL OF TEXAS	1,208	1,319	1,455	1,539	1,692	1,831	1,909	1,909	2,170
CONTEL OF TEXAS	1,226	1,324	1,458	1,514	1,684	1,812	1,878	2,021	1,998
SOUTHWESTERN BELL-TX	93,475	99,342	108,003	111,303	116,742	125,202	126,286	123,472	127,996
MOUNTAIN BELL - AZ	18,475	19,638	19,882	21,278	20,909	25,499	27,698	29,244	32,431
MOUNTAIN BELL-CO	23,272	24,913	26,878	26,848	27,675	28,887	29,614	30,465	33,075
GTE NORTHWEST INC-ID	762	760	759	797	873	923	920	955	1,022
MOUNTAIN BELL-ID	4,174	4,320	4,423	4,429	4,581	4,760	4,766	4,756	5,095
PACIFIC NW BELL-ID	352	350	347	366	378	386	378	378	414
GTE NORTHWEST INC-MT	65	69	67	77	81	83	82	82	79
MOUNTAIN BELL-MT	3,662	3,700	3,817	3,911	4,071	4,179	4,304	4,227	4,651
GTE SOUTHWEST INC-NM	520	549	577	568	573	569	555	557	533
MOUNTAIN BELL-NM	7,471	7,504	7,670	7,942	8,416	8,849	9,397	9,750	10,370
MOUNTAIN BELL-UT	10,182	10,398	10,914	11,409	11,957	12,357	12,713	12,667	13,722
MOUNTAIN BELL-WY	2,773	2,905	3,017	2,911	2,695	3,087	3,029	2,859	3,099
UTC OF THE NW-WA	459	483	504	521	519	556	543	561	578
GTE NORTHWEST INC-WA	4,986	4,955	5,109	5,371	5,732	6,220	6,739	7,390	8,370

TABLE 4.20 A

TOTAL SUBSCRIBER LINE USAGE MINUTES
BY COMPANY (IN MILLIONS)

CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
PACIFIC NW BELL-WA	22,409	23,188	23,391	24,633	25,179	25,822	27,266	28,301	30,162
UTC OF THE NW - OR	400	417	408	425	444	550	495	530	568
GTE NORTHWEST INC-OR	2,899	3,072	3,098	3,235	3,424	3,601	3,712	3,911	4,056
PACIFIC NW BELL-OR	13,862	13,804	13,524	13,976	14,120	14,346	14,549	14,681	15,949
CONTEL OF CALIFORNIA	2,083	2,191	2,314	2,392	2,520	2,750	2,917	3,102	3,469
GTC OF CALIFORNIA	37,230	37,963	39,661	41,763	42,510	43,703	45,895	48,934	49,690
WEST COAST TEL OF CA	73	88	88	93	98	97	95	105	115
PACIFIC BELL	164,841	170,316	175,637	182,869	187,989	196,346	198,789	205,260	212,349
CENDEL OF NV	3,750	3,953	4,018	4,151	4,291	4,660	5,188	5,598	7,103
NEVADA BELL	2,057	2,169	2,270	2,390	2,553	2,618	2,655	2,844	3,085
DIAMOND STATE TEL	4,901	4,984	4,987	5,188	5,516	5,683	6,029	6,586	7,101
C & P TEL CO OF WASH	13,943	14,246	14,411	14,738	15,619	15,688	15,998	16,569	15,789
NEW ENGLAND TEL - RI	7,308	7,473	7,638	7,817	8,107	8,329	8,411	8,527	8,717
TOTAL TIER 1A	1,650,394	1,696,565	1,751,114	1,808,023	1,894,437	1,977,159	2,019,982	2,069,860	2,185,955
ROCHESTER TEL CORP	NA	NA	NA	NA	6,712	7,043	7,216	7,398	7,970
UNITED TEL - NJ, INC	NA	1,067	1,114	1,184	1,316	1,565	1,610	1,794	1,973
CONTEL OF VIRGINIA	NA	2,982	3,172	3,313	3,897	4,433	4,759	5,363	5,649
UTC OF FLORIDA	NA	6,987	7,638	8,032	8,747	9,615	10,337	11,283	11,746
CENDEL OF OHIO	NA	861	831	839	888	921	929	985	1,029
CENDEL OF ILLINOIS	NA	2,451	2,505	2,563	2,665	2,587	2,660	2,745	3,049
UTC OF IOWA	NA	637	669	681	688	732	718	733	758
UTC OF MINNESOTA	NA	953	1,002	1,058	1,085	1,215	1,250	1,294	1,409
UTC OF THE WEST-NE	NA	280	282	291	271	284	301	310	328
UTC OF TEXAS INC	NA	NA	1,029	1,053	1,109	1,154	1,218	1,263	1,340
UTC OF THE WEST-WY	NA	61	60	61	63	66	66	67	73
GTE HAWAIIAN TEL. CO	NA	NA	7,461	7,395	7,760	8,301	8,996	9,467	9,995
PUERTO RICO TEL CO	NA	NA	NA	NA	7,807	7,988	8,937	9,746	11,421
TOTAL TIER 1B	NA	NA	NA	NA	43,007	45,904	48,997	52,448	56,741
ALL OTHER COST CO.	NA	NA	NA	NA	143,960	62,969	67,136	66,687	73,643
TOTAL COST CO.	NA	NA	NA	NA	2,081,403	2,086,032	2,136,116	2,188,995	2,316,338
AVERAGE SCHEDULE CO.	NA	NA	NA	NA	51,879	22,672	20,023	28,622	36,767
TOTAL INDUSTRY	NA	NA	NA	NA	2,133,282	2,108,704	2,156,138	2,217,617	2,353,106

TABLE 4.20 B

TOTAL SUBSCRIBER LINE USAGE MINUTES
YEAR OVER YEAR GROWTH
BY COMPANY

CARRIER	1981	1982	1983	1984	1985	1986	1987	1988
NEW ENGLAND TEL-ME	3.75%	3.62%	3.84%	4.32%	0.75%	2.05%	8.54%	3.16%
NEW ENGLAND TEL-MA	3.38%	3.27%	2.58%	6.08%	4.96%	2.09%	4.45%	6.91%
NEW ENGLAND TEL-NH	4.49%	4.29%	4.43%	10.45%	7.12%	6.17%	5.94%	7.63%
SOUTHERN NEW ENGLAND	1.22%	1.81%	2.24%	3.89%	5.72%	8.53%	3.38%	3.23%
NEW ENGLAND TEL-VT	6.59%	6.19%	5.49%	3.07%	1.05%	2.53%	1.38%	5.55%
CONTEL OF NY, INC	7.52%	3.76%	4.44%	6.32%	6.78%	5.71%	6.31%	6.78%
NEW YORK TEL CO	4.82%	3.70%	5.60%	8.72%	7.13%	2.65%	2.50%	4.61%
NEW JERSEY BELL	3.60%	0.85%	3.08%	6.44%	2.75%	2.55%	4.85%	7.44%
GTE NORTH INC. - PA	1.44%	1.69%	3.14%	1.70%	2.56%	4.63%	5.63%	5.81%
UTC OF PENNSYLVANIA	4.57%	1.11%	2.98%	10.35%	2.76%	2.29%	2.69%	6.63%
BELL OF PENNSYLVANIA	3.38%	3.11%	0.82%	2.06%	-0.40%	4.19%	2.46%	4.86%
C & P TEL CO OF MD	4.73%	5.13%	3.23%	1.30%	-1.46%	5.75%	4.76%	6.98%
CENDEL OF VIRGINIA	4.90%	6.86%	3.34%	-0.85%	9.61%	-0.80%	4.94%	10.89%
GTE SOUTH INC. - VA	0.76%	1.39%	-4.44%	2.72%	1.24%	3.02%	-0.23%	5.54%
UNITED INTER-MT-VA	1.10%	1.18%	3.09%	-8.95%	-3.97%	2.51%	2.46%	8.83%
C & P TEL CO OF VA	1.38%	3.43%	5.11%	4.78%	4.92%	4.27%	6.11%	6.49%
GTE SOUTH INC. - WV	0.86%	3.64%	-1.17%	3.66%	-0.41%	3.25%	0.90%	4.87%
C & P TEL CO OF WV	2.04%	-0.46%	0.58%	2.24%	2.25%	-0.09%	3.37%	0.84%
GTE FLORIDA INC.	10.10%	5.15%	6.64%	9.15%	9.77%	7.39%	8.07%	3.18%
CENDEL OF FLORIDA	10.30%	3.36%	7.68%	10.37%	7.21%	15.16%	8.61%	9.26%
SOUTHERN BELL-FL	3.75%	5.30%	6.00%	5.72%	5.25%	2.73%	5.37%	11.16%
GTE SOUTH INC.- GA	1.65%	3.76%	4.22%	2.49%	3.67%	6.66%	2.87%	5.96%
SOUTHERN BELL-GA	2.60%	0.75%	5.41%	8.15%	4.99%	1.55%	3.55%	9.37%
CAROLINA TEL & TEL	1.42%	4.44%	4.59%	8.26%	5.73%	2.66%	4.65%	4.99%
CENDEL OF NC	3.99%	3.60%	4.99%	4.44%	5.88%	4.47%	3.08%	6.22%
GTE SOUTH INC - NC	1.92%	7.14%	6.10%	8.03%	6.62%	-3.44%	4.48%	11.40%
SOUTHERN BELL-NC	1.56%	1.68%	2.93%	10.02%	6.72%	4.24%	-2.01%	6.80%
GTE SOUTH INC. - SC	3.61%	-0.64%	5.27%	9.50%	6.29%	2.63%	5.69%	4.23%
UTC OF THE CAROLINAS	4.45%	0.18%	6.24%	1.91%	7.69%	4.31%	5.32%	10.34%
SOUTHERN BELL-SC	0.46%	2.33%	2.63%	8.26%	5.73%	3.44%	-1.00%	7.26%
GTE SOUTH INC. - AL	6.45%	7.55%	1.16%	6.05%	1.10%	1.48%	4.55%	1.80%
SO CENTRAL BELL-AL	2.56%	2.68%	4.18%	3.49%	4.27%	3.14%	2.90%	6.55%
GTE SOUTH INC. - KY	14.62%	1.06%	2.81%	5.47%	7.89%	-0.91%	3.09%	7.07%
CINCINNATI BELL-KY	1.20%	2.75%	2.04%	1.43%	5.82%	-0.26%	3.51%	4.99%
SO CENTRAL BELL-KY	0.50%	1.30%	0.87%	6.59%	3.23%	-3.95%	2.34%	4.86%
SO CENTRAL BELL-LA	6.54%	4.92%	1.84%	1.60%	0.84%	-2.64%	-1.92%	4.48%
SO CENTRAL BELL-MS	0.95%	4.24%	2.47%	4.28%	8.56%	-0.20%	3.42%	6.60%
GTE SOUTH INC. - TN	1.15%	-4.00%	-0.63%	4.54%	5.26%	3.73%	1.22%	5.71%
UNITED INTER-MT-TN	3.10%	-0.28%	1.60%	0.59%	4.45%	4.91%	6.20%	8.02%
SO. CENTRAL BELL -TN	-0.99%	2.93%	1.44%	5.72%	5.73%	3.66%	3.41%	4.69%
GTE NORTH INC. - OH	4.20%	1.95%	1.25%	6.33%	2.74%	5.43%	3.19%	3.13%
UTC OF OHIO	3.41%	2.17%	-0.07%	4.55%	4.98%	2.94%	3.03%	-6.06%
CINCINNATI BELL-OH	-2.33%	3.41%	1.98%	6.17%	0.88%	0.79%	1.10%	7.30%
OHIO BELL TEL CO	-2.92%	3.17%	3.52%	3.54%	3.15%	-6.01%	5.26%	4.70%

TABLE 4.20 B

TOTAL SUBSCRIBER LINE USAGE MINUTES
YEAR OVER YEAR GROWTH
BY COMPANY

CARRIER	1981	1982	1983	1984	1985	1986	1987	1988
GTE NORTH INC. - MI	0.25%	0.17%	0.81%	4.00%	3.69%	2.83%	1.95%	5.73%
MICHIGAN BELL TEL CO	0.24%	-0.60%	2.71%	4.05%	2.64%	3.16%	-0.74%	11.17%
GTE NORTH INC. - IN	-0.59%	1.95%	3.70%	9.06%	-0.02%	2.07%	7.12%	1.18%
UTC OF INDIANA	5.65%	5.12%	-0.08%	7.47%	1.15%	1.68%	4.72%	5.55%
INDIANA BELL TEL CO	-1.69%	5.01%	0.20%	3.23%	1.80%	0.44%	1.82%	5.27%
GTE NORTH INC. - WI	2.87%	2.25%	1.13%	3.25%	4.49%	2.37%	1.14%	6.31%
WISCONSIN BELL	-2.83%	2.62%	-0.38%	2.30%	3.96%	2.29%	-0.49%	9.41%
GTE NORTH INC. - IL	11.93%	2.54%	2.33%	5.70%	0.88%	-2.25%	0.04%	3.55%
ILLINOIS BELL TEL CO	3.22%	0.13%	1.60%	7.99%	3.63%	0.40%	0.01%	3.72%
GTE NORTH INC. - IA	0.39%	6.50%	3.06%	5.59%	-2.24%	-1.12%	-1.18%	6.20%
NORTHWESTERN BELL-IA	-1.31%	2.53%	1.52%	5.20%	2.02%	1.89%	-2.65%	5.37%
GTE NORTH INC. - MN	9.35%	5.07%	1.86%	-2.74%	-3.01%	-2.10%	-1.77%	5.54%
CENDEL OF MN	8.00%	4.73%	7.90%	2.55%	6.93%	3.31%	6.81%	7.62%
NORTHWESTERN BELL-MN	-0.18%	5.29%	5.51%	5.09%	2.90%	3.02%	-1.13%	7.97%
GTE NORTH INC. - NE	-5.73%	14.25%	4.67%	2.94%	-1.97%	-2.05%	0.95%	0.88%
LINCOLN TEL & TEL CO	2.43%	4.98%	4.69%	6.64%	1.75%	1.18%	5.73%	2.73%
NORTHWESTERN BELL-NE	7.45%	-0.04%	8.33%	0.24%	7.05%	1.12%	1.23%	5.87%
NORTHWESTERN BELL-ND	3.48%	4.33%	-1.26%	7.43%	1.67%	-2.34%	-1.33%	6.48%
NORTHWESTERN BELL-SD	0.66%	4.00%	-0.23%	8.38%	4.17%	2.23%	-2.20%	5.99%
UTC OF ARKANSAS	0.76%	2.44%	-0.74%	3.14%	6.93%	-3.18%	1.23%	7.03%
GTE SOUTHWEST INC-AR	5.28%	1.09%	1.31%	7.86%	2.59%	-1.20%	-1.69%	2.31%
SOUTHWESTERN BELL-AR	0.12%	3.15%	4.48%	7.08%	3.40%	0.38%	1.26%	2.04%
UTC OF KANSAS	0.54%	2.42%	3.45%	-0.89%	1.55%	-4.19%	2.95%	5.69%
SOUTHWESTERN BELL-KS	-0.82%	1.58%	3.34%	3.06%	6.15%	-0.03%	-0.66%	5.42%
GTE NORTH INC. - MO	1.20%	4.34%	3.40%	5.14%	4.60%	3.30%	4.25%	4.08%
UTC OF MISSOURI	4.14%	6.34%	2.35%	0.32%	6.16%	-0.08%	4.15%	6.42%
SOUTHWESTERN BELL-MO	0.05%	3.67%	-0.93%	5.02%	5.52%	1.56%	1.40%	3.18%
GTE SOUTHWEST INC-OK	8.77%	6.95%	1.85%	7.16%	6.05%	-0.45%	-23.33%	25.38%
SOUTHWESTERN BELL-OK	2.91%	6.41%	2.69%	0.11%	0.56%	-2.13%	-1.80%	2.00%
GTE SOUTHWEST INC-TX	7.95%	3.22%	3.84%	7.82%	6.91%	2.55%	4.07%	0.25%
CENDEL OF TEXAS	9.15%	10.30%	5.82%	9.89%	8.24%	4.24%	0.02%	13.68%
CONTEL OF TEXAS	8.00%	10.11%	3.86%	11.24%	7.58%	3.67%	7.62%	-1.15%
SOUTHWESTERN BELL-TX	6.28%	8.72%	3.06%	4.89%	7.25%	0.87%	-2.23%	3.66%
MOUNTAIN BELL - AZ	6.30%	1.24%	7.02%	-1.74%	21.95%	8.63%	5.58%	10.90%
MOUNTAIN BELL-CO	7.05%	7.89%	-0.11%	3.08%	4.38%	2.52%	2.87%	8.57%
GTE NORTHWEST INC-ID	-0.22%	-0.16%	5.00%	9.59%	5.68%	-0.32%	3.78%	7.02%
MOUNTAIN BELL-ID	3.50%	2.38%	0.14%	3.43%	3.92%	0.12%	-0.21%	7.12%
PACIFIC NW BELL-ID	-0.56%	-0.76%	5.51%	3.31%	2.17%	-2.22%	-0.02%	9.64%
GTE NORTHWEST INC-MT	6.75%	-3.10%	15.63%	4.69%	3.11%	-1.29%	-0.27%	-4.08%
MOUNTAIN BELL-MT	1.02%	3.17%	2.46%	4.11%	2.66%	2.99%	-1.80%	10.03%
GTE SOUTHWEST INC-NM	5.59%	5.15%	-1.62%	0.88%	-0.70%	-2.45%	0.35%	-4.34%
MOUNTAIN BELL-NM	0.44%	2.22%	3.54%	5.98%	5.14%	6.20%	3.75%	6.35%
MOUNTAIN BELL-UT	2.12%	4.96%	4.54%	4.80%	3.35%	2.88%	-0.36%	8.32%
MOUNTAIN BELL-WY	4.78%	3.85%	-3.50%	-7.43%	14.55%	-1.87%	-5.63%	8.41%

TABLE 4.20 B

TOTAL SUBSCRIBER LINE USAGE MINUTES
YEAR OVER YEAR GROWTH
BY COMPANY

CARRIER	1981	1982	1983	1984	1985	1986	1987	1988
UTC OF THE NW-WA	5.26%	4.15%	3.40%	-0.40%	7.25%	-2.34%	3.32%	2.91%
GTE NORTHWEST INC-WA	-0.62%	3.10%	5.13%	6.73%	8.51%	8.33%	9.66%	13.27%
PACIFIC NW BELL-WA	3.47%	0.88%	5.31%	2.22%	2.55%	5.59%	3.80%	6.58%
UTC OF THE NW - OR	4.17%	-2.28%	4.30%	4.31%	23.98%	-9.99%	7.13%	7.18%
GTE NORTHWEST INC-OR	5.96%	0.85%	4.44%	5.84%	5.17%	3.07%	5.37%	3.71%
PACIFIC NW BELL-OR	-0.42%	-2.03%	3.35%	1.03%	1.60%	1.42%	0.91%	8.64%
CONTEL OF CALIFORNIA	5.20%	5.59%	3.38%	5.35%	9.14%	6.06%	6.35%	11.83%
GTC OF CALIFORNIA	1.97%	4.47%	5.30%	1.79%	2.81%	5.01%	6.62%	1.54%
WEST COAST TEL OF CA	19.61%	0.43%	5.48%	5.47%	-1.06%	-1.45%	9.93%	9.93%
PACIFIC BELL	3.32%	3.12%	4.12%	2.80%	4.45%	1.24%	3.26%	3.45%
CENDEL OF NV	5.40%	1.65%	3.30%	3.40%	8.59%	11.34%	7.90%	26.89%
NEVADA BELL	5.47%	4.63%	5.30%	6.83%	2.56%	1.39%	7.11%	8.49%
DIAMOND STATE TEL	1.69%	0.05%	4.04%	6.33%	3.02%	6.09%	9.24%	7.82%
C & P TEL CO OF WASH	2.17%	1.16%	2.27%	5.98%	0.45%	1.97%	3.57%	-4.71%
NEW ENGLAND TEL - RI	2.26%	2.21%	2.35%	3.70%	2.75%	0.98%	1.38%	2.23%
TOTAL TIER 1A	2.80%	3.22%	3.25%	4.78%	4.37%	2.17%	2.47%	5.61%
ROCHESTER TEL CORP	NA	NA	NA	NA	4.94%	2.45%	2.53%	7.72%
UNITED TEL - NJ, INC	NA	4.43%	6.20%	11.15%	18.93%	2.91%	11.40%	9.99%
CONTEL OF VIRGINIA	NA	6.36%	4.43%	17.64%	13.75%	7.36%	12.69%	5.33%
UTC OF FLORIDA	NA	9.32%	5.15%	8.91%	9.92%	7.50%	9.15%	4.11%
CENDEL OF OHIO	NA	-3.49%	1.01%	5.76%	3.78%	0.90%	5.97%	4.52%
CENDEL OF ILLINOIS	NA	2.20%	2.32%	3.97%	-2.90%	2.81%	3.20%	11.07%
UTC OF IOWA	NA	5.17%	1.66%	1.11%	6.39%	-1.92%	2.04%	3.52%
UTC OF MINNESOTA	NA	5.12%	5.58%	2.55%	11.96%	2.90%	3.48%	8.88%
UTC OF THE WEST-NE	NA	0.61%	3.20%	-6.66%	4.84%	5.73%	3.14%	5.74%
UTC OF TEXAS INC	NA	NA	2.31%	5.25%	4.08%	5.61%	3.68%	6.11%
UTC OF THE WEST-WY	NA	-2.12%	2.39%	3.02%	4.62%	-0.87%	2.07%	9.07%
GTE HAWAIIAN TEL. CO	NA	NA	-0.89%	4.94%	6.97%	8.37%	5.23%	5.58%
PUERTO RICO TEL CO	NA	NA	NA	NA	2.32%	11.88%	9.06%	17.18%
TOTAL TIER 1B	NA	NA	NA	NA	6.74%	6.74%	7.04%	8.18%
ALL OTHER COST CO.	NA	NA	NA	NA	-56.26%	6.62%	-0.67%	10.43%
TOTAL COST CO.	NA	NA	NA	NA	0.22%	2.40%	2.48%	5.82%
AVERAGE SCHEDULE CO.	NA	NA	NA	NA	-56.30%	-11.69%	42.95%	28.46%
TOTAL INDUSTRY	NA	NA	NA	NA	-1.15%	2.25%	2.85%	6.11%

TABLE 4.21

INTERSTATE SUBSCRIBER PLANT FACTOR
BY COMPANY

FCD	CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
105111	NEW ENGLAND TEL-ME	0.2725	0.2987	0.2924	0.2987	0.2987	0.2987	0.2926	0.2865	0.2804
115112	NEW ENGLAND TEL-MA	0.2581	0.2794	0.2786	0.2794	0.2794	0.2794	0.2757	0.2721	0.2684
125113	NEW ENGLAND TEL-NH	0.4274	0.4299	0.4243	0.4299	0.4299	0.4299	0.4074	0.3849	0.3625
135200	SOUTHERN NEW ENGLAND	0.3388	0.3388	0.3388	0.3388	0.3388	0.3388	0.3277	0.3166	0.3055
145115	NEW ENGLAND TEL-VT	0.4222	0.4394	0.4372	0.4394	0.4394	0.4394	0.4158	0.3921	0.3684
150096	CONTEL OF NY, INC	0.2208	0.2286	0.2379	0.2286	0.2286	0.2286	0.2313	0.2340	0.2331
150121	ROCHESTER TEL CORP	NA	NA	NA	NA	0.2184	0.2217	0.2217	0.2230	0.2323
155130	NEW YORK TEL CO	0.2710	0.2761	0.2731	0.2647	0.2823	0.2823	0.2783	0.2742	0.2702
160138	UNITED TEL - NJ, INC	NA	0.4156	0.4156	0.4156	0.4156	0.4156	0.3949	0.3190	0.3535
165120	NEW JERSEY BELL	0.3108	0.3154	0.3188	0.3186	0.3186	0.3186	0.3100	0.3015	0.2929
170169	GTE NORTH INC. - PA	0.1813	0.1797	0.1785	0.1785	0.2236	0.2258	0.2215	0.2277	0.2322
170209	UTC OF PENNSYLVANIA	0.2108	0.2197	0.2197	0.2197	0.2197	0.2197	0.2235	0.2277	0.2311
175000	BELL OF PENNSYLVANIA	0.2090	0.2138	0.2154	0.2152	0.2152	0.2152	0.2195	0.2239	0.2282
185030	C & P TEL CO OF MD	0.2112	0.2121	0.2117	0.2142	0.2142	0.2142	0.2186	0.2232	0.2276
190233	CONTEL OF VIRGINIA	NA	0.3248	0.3332	0.3248	0.3248	0.3248	0.3154	0.3061	0.2967
190254	CENTEL OF VIRGINIA	0.2838	0.2903	0.2903	0.2903	0.2903	0.2903	0.2853	0.2814	0.2752
190479	GTE SOUTH INC. - VA	0.1972	0.2079	0.2005	0.2005	0.2005	0.2005	0.2005	0.2129	0.2190
190567	UNITED INTER-MT-VA	0.1910	0.2103	0.2103	0.2103	0.2103	0.2129	0.2175	0.2202	0.2268
195040	C & P TEL CO OF VA	0.2564	0.2666	0.2680	0.2693	0.2693	0.2693	0.2669	0.2645	0.2620
200479	GTE SOUTH INC. - WV	0.2851	0.2957	0.2933	0.2933	0.2933	0.2933	0.2933	0.2825	0.2771
205050	C & P TEL CO OF WV	0.2042	0.2124	0.2151	0.2152	0.2152	0.2152	0.2195	0.2239	0.2282
210328	GTE FLORIDA INC.	0.3634	0.4053	0.4335	0.4335	0.4354	0.4354	0.4354	0.3876	0.3659
210340	CENTEL OF FLORIDA	0.3398	0.3593	0.3605	0.3593	0.3593	0.3593	0.3405	0.3320	0.3146
210341	UTC OF FLORIDA	NA	0.5015	0.5015	0.5015	0.5015	0.5015	0.4700	0.4386	0.4072
215191	SOUTHERN BELL-FL	0.3492	0.3646	0.3643	0.3643	0.3643	0.3643	0.3500	0.3357	0.3214
220479	GTE SOUTH INC.- GA	0.2060	0.2148	0.2213	0.2170	0.2170	0.2170	0.2170	0.2253	0.2294
225192	SOUTHERN BELL-GA	0.2741	0.2892	0.2891	0.2891	0.2891	0.2891	0.2842	0.2793	0.2744
230470	CAROLINA TEL & TEL	0.2340	0.2444	0.2444	0.2444	0.2444	0.2444	0.2451	0.2432	0.2465
230471	CENTEL OF NC	0.1892	0.2009	0.2009	0.2009	0.2009	0.2009	0.2070	0.2132	0.2193
230479	GTE SOUTH INC - NC	0.2632	0.2992	0.3102	0.3102	0.3102	0.3102	0.3102	0.2952	0.2876
235193	SOUTHERN BELL-NC	0.2213	0.2442	0.2444	0.2444	0.2444	0.2441	0.2448	0.2456	0.2463
240479	GTE SOUTH INC. - SC	0.3590	0.3705	0.3261	0.3291	0.3291	0.3291	0.3291	0.3093	0.2994
240506	UTC OF THE CAROLINAS	0.2733	0.2916	0.2916	0.2916	0.2916	0.2916	0.2864	0.2812	0.2760
245194	SOUTHERN BELL-SC	0.2013	0.2207	0.2207	0.2207	0.2207	0.2207	0.2244	0.2280	0.2317
250293	GTE SOUTH INC. - AL	0.2907	0.3172	0.3123	0.3123	0.3123	0.3123	0.3123	0.2967	0.2889
255181	SO CENTRAL BELL-AL	0.2002	0.2077	0.2078	0.2078	0.2078	0.2078	0.2131	0.2184	0.2236
260407	GTE SOUTH INC. - KY	0.2553	0.2503	0.2537	0.2537	0.2537	0.2537	0.2537	0.2528	0.2523
265061	CINCINNATI BELL-KY	0.1205	0.1304	0.1304	0.1304	0.1304	0.1304	0.1454	0.1603	0.1753
265182	SO CENTRAL BELL-KY	0.1962	0.2030	0.2047	0.2047	0.2047	0.2047	0.2103	0.2160	0.2217
275183	SO CENTRAL BELL-LA	0.1934	0.1985	0.2023	0.2023	0.2023	0.2023	0.2082	0.2142	0.2202
285184	SO CENTRAL BELL-MS	0.2338	0.2493	0.2492	0.2492	0.2492	0.2492	0.2493	0.2494	0.2495
290479	GTE SOUTH INC. - TN	0.2054	0.2275	0.2335	0.2335	0.2335	0.2335	0.2335	0.2376	0.2397
290567	UNITED INTER-MT-TN	0.2088	0.2192	0.2192	0.2192	0.2192	0.2192	0.2231	0.2269	0.2308
295185	SO. CENTRAL BELL -TN	0.2065	0.2220	0.2236	0.2236	0.2236	0.2236	0.2269	0.2302	0.2335
300615	GTE NORTH INC. - OH	0.2128	0.2218	0.0223	0.2226	0.2226	0.2258	0.2258	0.2319	0.2348

TABLE 4.21

INTERSTATE SUBSCRIBER PLANT FACTOR
BY COMPANY

FCODE	CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
300630	CENDEL OF OHIO	NA	0.1784	0.1837	0.1784	0.1784	0.1784	0.1874	0.2003	0.2053
300661	UTC OF OHIO	0.2091	0.2168	0.2168	0.2168	0.2168	0.2168	0.2209	0.2251	0.2292
305062	CINCINNATI BELL-OH	0.1904	0.1973	0.1973	0.1973	0.1973	0.1973	0.2039	0.2105	0.2170
305150	OHIO BELL TEL CO	0.1841	0.1896	0.1845	0.1972	0.1972	0.1972	0.1972	0.2104	0.2170
310695	GTE NORTH INC. - MI	0.1808	0.1845	0.1912	0.1920	0.1920	0.1920	0.1920	0.2065	0.2138
315090	MICHIGAN BELL TEL CO	0.1642	0.1691	0.1636	0.1725	0.1725	0.1725	0.1725	0.1919	0.2015
320772	GTE NORTH INC. - IN	0.2869	0.3106	0.3179	0.3179	0.3182	0.3182	0.3182	0.3009	0.2926
320832	UTC OF INDIANA	0.2880	0.3059	0.3067	0.3067	0.3067	0.3067	0.3020	0.2946	0.2872
325080	INDIANA BELL TEL CO	0.2184	0.2311	0.2261	0.2355	0.2355	0.2355	0.2355	0.2391	0.2409
330886	GTE NORTH INC. - WI	0.2570	0.2697	0.2611	0.2611	0.2611	0.2611	0.2611	0.2583	0.2569
335220	WISCONSIN BELL	0.1994	0.2166	0.2109	0.2201	0.2201	0.2201	0.2201	0.2276	0.2313
340985	CENDEL OF ILLINOIS	NA	0.3181	0.3168	0.3181	0.3181	0.3181	0.3096	0.3001	0.2925
341015	GTE NORTH INC. - IL	0.2301	0.2561	0.2570	0.2570	0.2570	0.2570	0.2570	0.2553	0.2544
345070	ILLINOIS BELL TEL CO	0.2609	0.2639	0.2550	0.2701	0.2701	0.2701	0.2701	0.2651	0.2626
351186	GTE NORTH INC. - IA	0.2502	0.2864	0.2856	0.2856	0.2856	0.2856	0.2856	0.2767	0.2723
351317	UTC OF IOWA	0.0000	0.2574	0.2574	0.2574	0.2574	0.2574	0.2565	0.2562	0.2546
355141	NORTHWESTERN BELL-IA	0.2677	0.3069	0.2894	0.3152	0.2849	0.2849	0.2805	0.2762	0.2718
361186	GTE NORTH INC. - MN	0.2421	0.2473	0.2604	0.2604	0.2604	0.2604	0.2604	0.2578	0.2565
361367	CENDEL OF MN	0.2269	0.2344	0.2299	0.2344	0.2344	0.2344	0.2364	0.2383	0.2403
361456	UTC OF MINNESOTA	NA	0.1913	0.1913	0.1913	0.1913	0.1913	0.1986	0.2060	0.2133
365142	NORTHWESTERN BELL-MN	0.2555	0.2718	0.2665	0.2750	0.2707	0.2707	0.2681	0.2655	0.2630
371186	GTE NORTH INC. - NE	0.2506	0.2759	0.2718	0.2718	0.2715	0.2718	0.2715	0.2664	0.2635
371568	LINCOLN TEL & TEL CO	0.3055	0.3167	0.3167	0.3167	0.3167	0.3167	0.3083	0.3000	0.2917
371595	UTC OF THE WEST-NE	NA	0.3783	0.3783	0.3783	0.3783	0.3783	0.3323	0.3516	0.3302
375143	NORTHWESTERN BELL-NE	0.3469	0.3858	0.3876	0.3787	0.1296	0.3784	0.3623	0.3463	0.3302
385144	NORTHWESTERN BELL-ND	0.2993	0.3241	0.3503	0.3430	0.3241	0.3241	0.3149	0.3056	0.2963
395145	NORTHWESTERN BELL-SD	0.3301	0.3571	0.3674	0.4002	0.3620	0.3620	0.3480	0.3340	0.3200
401728	UTC OF ARKANSAS	0.3457	0.3457	0.3457	0.3457	0.3457	0.3457	0.3337	0.3218	0.3852
402080	GTE SOUTHWEST INC-AR	0.2729	0.3008	0.2896	0.2896	0.2896	0.2896	0.2896	0.2797	0.2748
405211	SOUTHWESTERN BELL-AR	0.2597	0.2855	0.2851	0.2855	0.2855	0.2855	0.2855	0.2766	0.2722
411842	UTC OF KANSAS	0.4663	0.4663	0.4663	0.4663	0.4663	0.4663	0.4392	0.4122	0.3852
415214	SOUTHWESTERN BELL-KS	0.2758	0.2997	0.2999	0.3001	0.3001	0.3001	0.3001	0.2876	0.2813
421186	GTE NORTH INC. - MO	0.2979	0.3017	0.3115	0.3115	0.3115	0.3115	0.3155	0.2961	0.2885
421957	UTC OF MISSOURI	0.3503	0.3503	0.3503	0.3503	0.3503	0.3503	0.3378	0.3255	0.3127
425213	SOUTHWESTERN BELL-MO	0.2691	0.2711	0.2671	0.2709	0.2709	0.2709	0.2709	0.2657	0.2631
432080	GTE SOUTHWEST INC-OK	0.3167	0.3208	0.3302	0.3302	0.3302	0.3302	0.3302	0.3102	0.3002
435215	SOUTHWESTERN BELL-OK	0.3031	0.3222	0.3239	0.3223	0.3223	0.3223	0.3223	0.3042	0.2952
442080	GTE SOUTHWEST INC-TX	0.2261	0.2493	0.2504	0.2504	0.2506	0.2506	0.2506	0.2503	0.2504
442084	UTC OF TEXAS INC	NA	0.1722	0.1722	0.1722	0.1722	0.1722	0.1820	0.1975	0.2014
442114	CENDEL OF TEXAS	0.4094	0.4130	0.3973	0.4145	0.4118	0.3847	0.3678	0.3918	0.3342
442154	CONTEL OF TEXAS	0.2072	0.2194	0.2220	0.2194	0.2194	0.2194	0.2232	0.2271	0.2306
445216	SOUTHWESTERN BELL-TX	0.2205	0.2327	0.2372	0.2347	0.2347	0.2347	0.2347	0.2385	0.2405
455101	MOUNTAIN BELL - AZ	0.4279	0.4242	0.4423	0.4120	0.4364	0.4364	0.4131	0.3898	0.3665
465102	MOUNTAIN BELL-CO	0.3925	0.4294	0.4308	0.4477	0.4298	0.4298	0.4073	0.3849	0.3624

TABLE 4.21

INTERSTATE SUBSCRIBER PLANT FACTOR
BY COMPANY

FCODE	CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
472416	GTE NORTHWEST INC-ID	0.5299	0.5863	0.5895	0.5801	0.5731	0.5731	0.5731	0.4918	0.4520
475103	MOUNTAIN BELL-ID	0.3409	0.3534	0.3589	0.3867	0.3535	0.3535	0.3406	0.3276	0.3147
475162	PACIFIC NW BELL-ID	0.3705	0.3778	0.4055	0.3931	0.3787	0.3787	0.3626	0.3465	0.3304
482416	GTE NORTHWEST INC-MT	0.4597	0.4591	0.4363	0.4510	0.4648	0.4648	0.4648	0.4115	0.3843
485104	MOUNTAIN BELL-MT	0.3998	0.4454	0.4469	0.4372	0.4450	0.4450	0.4207	0.3963	0.3719
492080	GTE SOUTHWEST INC-NM	0.4203	0.4300	0.4534	0.4853	0.4853	0.4853	0.4853	0.4026	0.3971
495105	MOUNTAIN BELL-NM	0.3457	0.3607	0.3782	0.3835	0.3577	0.3577	0.3442	0.3330	0.3173
505107	MOUNTAIN BELL-UT	0.2851	0.3195	0.3278	0.3466	0.0886	0.3195	0.3108	0.3021	0.2935
511595	UTC OF THE WEST-WY	NA	0.5004	0.5004	0.5004	0.5004	0.5004	0.4691	0.4378	0.4065
515108	MOUNTAIN BELL-WY	0.5220	0.5704	0.5754	0.5795	0.5670	0.5670	0.5274	0.4878	0.4481
522400	UTC OF THE NW-WA	0.3987	0.4063	0.4063	0.4063	0.4063	0.4063	0.3867	0.3672	0.3477
522416	GTE NORTHWEST INC-WA	0.2964	0.3307	0.3384	0.3557	0.3263	0.3263	0.3263	0.3081	0.2977
525161	PACIFIC NW BELL-WA	0.2848	0.3027	0.3174	0.3187	0.3024	0.3024	0.2959	0.2893	0.2828
532400	UTC OF THE NW - OR	0.4129	0.4209	0.4148	0.4209	0.4209	0.4209	0.3996	0.3782	0.3568
532416	GTE NORTHWEST INC-OR	0.3737	0.3903	0.3786	0.3846	0.3917	0.3917	0.3917	0.3516	0.3385
535163	PACIFIC NW BELL-OR	0.2852	0.3281	0.3361	0.3443	0.3276	0.3276	0.3179	0.3082	0.2985
542302	CONTEL OF CALIFORNIA	0.2500	0.2536	0.2537	0.2537	0.2537	0.2537	0.2532	0.2699	0.2523
542319	GTC OF CALIFORNIA	0.2355	0.2413	0.2445	0.2445	0.2486	0.2489	0.2489	0.2492	0.2493
542344	WEST COAST TEL OF CA	0.4259	0.4086	0.4015	0.4008	0.3980	0.3980	0.3980	0.3615	0.3425
545170	PACIFIC BELL	0.2438	0.2472	0.2495	0.2496	0.2466	0.2496	0.2496	0.2497	0.2497
552348	CENDEL OF NV	0.5723	0.5886	0.5886	0.5886	0.5886	0.5886	0.5463	0.5040	0.4616
555173	NEVADA BELL	0.5993	0.6201	0.6073	0.6264	0.6264	0.6264	0.5793	0.5323	0.4852
565010	DIAMOND STATE TEL	0.3375	0.3428	0.3436	0.3452	0.3452	0.3452	0.3333	0.3214	0.3095
575020	C & P TEL CO OF WASH	0.4298	0.4360	0.4358	0.4376	0.4376	0.4376	0.4142	0.3907	0.3673
585114	NEW ENGLAND TEL - RI	0.2673	0.2868	0.2847	0.2868	0.2868	0.2868	0.2822	0.2776	0.2730
623100	GTE HAWAIIAN TEL. CO	NA	NA	0.2885	0.2807	0.2885	0.2885	0.2885	0.2789	0.2850
633201	PUERTO RICO TEL CO	NA	NA	NA	NA	0.2569	0.2569	0.2560	0.3250	0.2543
888888	AVERAGE SCHEDULE	NA	NA	NA	NA	0.3400	0.3400	0.3288	0.3175	0.3063

TABLE 4.22

INTERSTATE SUBSCRIBER LINE USAGE FACTOR
BY COMPANY

FCODE CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
105111 NEW ENGLAND TEL-ME	0.0859	0.0910	0.0958	0.1025	0.1111	0.1314	0.1440	0.1284	0.1544
115112 NEW ENGLAND TEL-MA	0.0844	0.0869	0.0891	0.0928	0.0984	0.1228	0.1362	0.1282	0.1498
125113 NEW ENGLAND TEL-NH	0.1496	0.1556	0.1612	0.1690	0.1744	0.2062	0.2266	0.2149	0.2198
135200 SOUTHERN NEW ENGLAND	0.1040	0.1375	0.1395	0.1421	0.1502	0.1513	0.1515	0.1690	0.1758
145115 NEW ENGLAND TEL-VT	0.1483	0.1491	0.1498	0.1553	0.1721	0.1871	2.1995	0.1976	0.2258
150096 CONTEL OF NY, INC	0.0659	0.0681	0.0710	0.0744	0.0827	0.0958	0.1038	0.1088	0.1216
150121 ROCHESTER TEL CORP	NA	NA	NA	NA	0.0721	0.0759	0.0856	0.0885	0.0939
155130 NEW YORK TEL CO	0.0855	0.0871	0.0894	0.0895	0.1068	0.1167	0.1257	0.1166	0.1427
160138 UNITED TEL - NJ, INC	NA	0.1337	0.1373	0.1447	0.1472	0.1630	0.1700	0.1892	0.1964
165120 NEW JERSEY BELL	0.1155	0.1173	0.1214	0.1260	0.1373	0.1605	0.1565	0.1800	0.1914
170169 GTE NORTH INC. - PA	0.0554	0.0549	0.0586	0.0574	0.0713	0.0702	0.0807	0.0945	0.1036
170209 UTC OF PENNSYLVANIA	0.0673	0.0702	0.0707	0.0733	0.0860	0.0914	0.0909	0.1077	0.1186
175000 BELL OF PENNSYLVANIA	0.0709	0.0725	0.0742	0.0786	0.0921	0.1108	0.1001	0.1149	0.1238
185030 C & P TEL CO OF MD	0.0688	0.0691	0.0672	0.0692	0.0776	0.0871	0.0981	0.1171	0.1236
190233 CONTEL OF VIRGINIA	NA	0.1018	0.1045	0.1080	0.1240	0.1363	0.1510	0.1694	0.1850
190254 CENTEL OF VIRGINIA	0.0890	0.0910	0.0904	0.0971	0.1063	0.1183	0.0963	0.1397	0.1536
190479 GTE SOUTH INC. - VA	0.0733	0.0773	0.0761	0.0711	0.0828	0.0873	0.0862	0.1006	0.1203
190567 UNITED INTER-MT-VA	0.0661	0.0722	0.0749	0.0756	0.0905	0.1027	0.1067	0.1161	0.1267
195040 C & P TEL CO OF VA	0.0789	0.0820	0.0827	0.0862	0.0991	0.1082	0.1043	0.1278	0.1299
200479 GTE SOUTH INC. - WV	0.1037	0.1083	0.1039	0.1004	0.1152	0.1263	0.1604	0.1546	0.1702
205050 C & P TEL CO OF WV	0.0697	0.0725	0.0734	0.0757	0.0837	0.0908	0.0897	0.1018	0.1051
210328 GTE FLORIDA INC.	0.0944	0.1047	0.1074	0.1093	0.1175	0.1207	0.1223	0.1528	0.1644
210340 CENTEL OF FLORIDA	0.0981	0.1041	0.1110	0.1144	0.1176	0.1338	0.1437	0.1581	0.1586
210341 UTC OF FLORIDA	NA	0.1282	0.1316	0.1341	0.1275	0.1441	0.1446	0.1643	0.1714
215191 SOUTHERN BELL-FL	0.0921	0.0962	0.0986	0.1007	0.1072	0.1162	0.1331	0.1484	0.1635
220479 GTE SOUTH INC.- GA	0.0642	0.0669	0.0689	0.0691	0.0821	0.0877	0.0775	0.0879	0.0996
225192 SOUTHERN BELL-GA	0.0823	0.0869	0.0910	0.0887	0.0938	0.1025	0.1133	0.1265	0.1325
230470 CAROLINA TEL & TEL	0.0699	0.0725	0.0741	0.0800	0.0875	0.1014	0.1068	0.1270	0.1420
230471 CENTEL OF NC	0.0593	0.0630	0.0613	0.0660	0.0729	0.0787	0.0860	0.0917	0.1040
230479 GTE SOUTH INC - NC	0.0786	0.0888	0.0890	0.0986	0.1040	0.1266	0.0988	0.1461	0.1420
235193 SOUTHERN BELL-NC	0.0698	0.0770	0.0799	0.0846	0.0884	0.0949	0.1020	0.1239	0.1306
240479 GTE SOUTH INC. - SC	0.1098	0.1133	0.1223	0.1343	0.1411	0.1317	0.1559	0.1667	0.1756
240506 UTC OF THE CAROLINAS	0.0821	0.0876	0.0941	0.0958	0.1110	0.1116	0.1096	0.1227	0.1292
245194 SOUTHERN BELL-SC	0.0639	0.0701	0.0724	0.0773	0.0849	0.0851	0.0990	0.1161	0.1248
250293 GTE SOUTH INC. - AL	0.0895	0.0976	0.0937	0.0989	0.1071	0.1090	0.1172	0.1320	0.1337
255181 SO CENTRAL BELL-AL	0.0612	0.0635	0.0643	0.0647	0.0721	0.0854	0.0919	0.0953	0.1003
260407 GTE SOUTH INC. - KY	0.0810	0.0790	0.0820	0.0795	0.0882	0.0908	0.0871	0.1261	0.1180
265061 CINCINNATI BELL-KY	0.0419	0.0430	0.0493	0.0602	0.0641	0.0874	0.0888	0.0930	0.0981
265182 SO CENTRAL BELL-KY	0.0643	0.0667	0.0668	0.0676	0.0743	0.0832	0.0951	0.1001	0.1080
275183 SO CENTRAL BELL-LA	0.0579	0.0597	0.0595	0.0611	0.0694	0.0813	0.0849	0.0882	0.0978
285184 SO CENTRAL BELL-MS	0.0734	0.0781	0.0780	0.0803	0.0874	0.0991	0.1096	0.1135	0.1190
290479 GTE SOUTH INC. - TN	0.0620	0.0683	0.0853	0.0862	0.0896	0.1149	0.0975	0.1002	0.1134
290567 UNITED INTER-MT-TN	0.0684	0.0723	0.0782	0.0811	0.0895	0.0933	0.0905	0.1132	0.1134
295185 SO. CENTRAL BELL -TN	0.0640	0.0693	0.0733	0.0777	0.0895	0.0992	0.1038	0.1096	0.1153
300615 GTE NORTH INC. - OH	0.0651	0.0692	0.0647	0.0660	0.0685	0.0683	0.0796	0.0930	0.1024

TABLE 4.22

INTERSTATE SUBSCRIBER LINE USAGE FACTOR
BY COMPANY

F CODE CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
300630 CENTEL OF OHIO	NA	0.0514	0.0564	0.0567	0.0673	0.0826	0.0864	0.1027	0.1067
300661 UTC OF OHIO	0.0636	0.0659	0.0698	0.0752	0.0793	0.0901	0.0817	0.0917	0.1048
305062 CINCINNATI BELL-OH	0.0531	0.0580	0.0644	0.0672	0.0687	0.0959	0.1025	0.1093	0.1033
305150 OHIO BELL TEL CO	0.0570	0.0587	0.0599	0.0593	0.0670	0.0801	0.0986	0.1069	0.1079
310695 GTE NORTH INC. - MI	0.0543	0.0554	0.0602	0.0618	0.0668	0.0695	0.0822	0.0860	0.0965
315090 MICHIGAN BELL TEL CO	0.0496	0.0511	0.0504	0.0504	0.0652	0.0776	0.0851	0.0908	0.0917
320772 GTE NORTH INC. - IN	0.0899	0.0974	0.0977	0.0966	0.0980	0.1061	0.1095	0.1219	0.1465
320832 UTC OF INDIANA	0.0924	0.0995	0.0987	0.1050	0.1052	0.1123	0.1027	0.1147	0.1286
325080 INDIANA BELL TEL CO	0.0689	0.0729	0.0717	0.0743	0.0834	0.1008	0.1041	0.1159	0.1220
330886 GTE NORTH INC. - WI	0.0796	0.0835	0.0842	0.0873	0.0920	0.0991	0.1010	0.1036	0.1230
335220 WISCONSIN BELL	0.0625	0.0679	0.0694	0.0726	0.0874	0.0959	0.1058	0.1169	0.1205
340985 CENTEL OF ILLINOIS	NA	0.0911	0.0872	0.0952	0.1032	0.1145	0.1386	0.1702	0.1917
341015 GTE NORTH INC. - IL	0.0717	0.0798	0.0830	0.0830	0.0798	0.0850	0.0895	0.1013	0.1136
345070 ILLINOIS BELL TEL CO	0.0798	0.0807	0.0773	0.0780	0.0930	0.1038	0.1111	0.1266	0.1396
351186 GTE NORTH INC. - IA	0.0774	0.0887	0.0872	0.0882	0.0948	0.1031	0.1040	0.1156	0.1233
351317 UTC OF IOWA	NA	0.0787	0.0830	0.0865	0.1002	0.1209	0.1183	0.1260	0.1362
355141 NORTHWESTERN BELL-IA	0.0839	0.0883	0.0907	0.0988	0.1177	0.1420	0.1478	0.1536	0.1616
361186 GTE NORTH INC. - MN	0.0861	0.0899	0.0968	0.0993	0.1123	0.1147	0.1142	0.1307	0.1352
361367 CENTEL OF MN	0.0685	0.0713	0.0721	0.0718	0.0844	0.0892	0.0938	0.1103	0.1247
361456 UTC OF MINNESOTA	NA	0.0551	0.0551	0.0566	0.0596	0.0702	0.0718	0.0813	0.0901
365142 NORTHWESTERN BELL-MN	0.0740	0.0788	0.0773	0.0797	0.0858	0.1097	0.1178	0.1275	0.1306
371186 GTE NORTH INC. - NE	0.0735	0.0809	0.0808	0.0829	0.0920	0.1001	0.1038	0.1257	0.1303
371568 LINCOLN TEL & TEL CO	0.0883	0.0913	0.0905	0.0861	0.1006	0.1075	0.1188	0.1362	0.1534
371595 UTC OF THE WEST-NE	NA	0.1186	0.1239	0.1215	0.1311	0.1466	0.1515	0.1567	0.1769
375143 NORTHWESTERN BELL-NE	0.1054	0.1173	0.1178	0.1151	0.1198	0.1460	0.1610	0.1801	0.1936
385144 NORTHWESTERN BELL-ND	0.0915	0.0991	0.1071	0.1049	0.1115	0.1322	0.1412	0.1557	0.1577
395145 NORTHWESTERN BELL-SD	0.1022	0.1106	0.1137	0.1239	0.1437	0.1466	0.1661	0.1779	0.1874
401728 UTC OF ARKANSAS	0.1038	0.1112	0.1163	0.1221	0.1218	0.1418	0.1541	0.1700	0.1752
402080 GTE SOUTHWEST INC-AR	0.0835	0.0920	0.0910	0.0847	0.0912	0.1057	0.1079	0.1244	0.1381
405211 SOUTHWESTERN BELL-AR	0.0806	0.0886	0.0897	0.0915	0.1006	0.1179	0.1135	0.1153	0.1172
411842 UTC OF KANSAS	0.1340	0.1367	0.1362	0.1433	0.1478	0.1577	0.1715	0.1871	0.2036
415214 SOUTHWESTERN BELL-KS	0.0834	0.0907	0.0906	0.0951	0.1061	0.1181	0.1186	0.1299	0.1406
421186 GTE NORTH INC. - MO	0.0889	0.0901	0.0929	0.0963	0.1039	0.1135	0.1248	0.1547	0.1671
421957 UTC OF MISSOURI	0.0964	0.1039	0.1104	0.1187	0.1095	0.1460	0.1453	0.1485	0.1550
425213 SOUTHWESTERN BELL-MO	0.0824	0.0831	0.0808	0.0835	0.0912	0.1082	0.1016	0.1001	0.1104
432080 GTE SOUTHWEST INC-OK	0.0974	0.0981	0.1016	0.0948	0.1030	0.1107	0.1201	0.1574	0.1544
435215 SOUTHWESTERN BELL-OK	0.0890	0.0947	0.0966	0.0925	0.1004	0.1124	0.1098	0.1173	0.1270
442080 GTE SOUTHWEST INC-TX	0.0623	0.0683	0.0678	0.0651	0.0751	0.0774	0.0820	0.1174	0.1154
442084 UTC OF TEXAS INC	NA	NA	0.0479	0.0439	0.0544	0.0628	0.0606	0.0731	0.0804
442114 CENTEL OF TEXAS	0.0986	0.1000	0.0940	0.0985	0.1181	0.1222	0.1443	0.1526	0.1445
442154 CONTEL OF TEXAS	0.0580	0.0618	0.0647	0.0629	0.0714	0.0864	0.0819	0.0927	0.0997
445216 SOUTHWESTERN BELL-TX	0.0598	0.0631	0.0652	0.0650	0.0724	0.0854	0.0802	0.0850	0.0927
455101 MOUNTAIN BELL - AZ	0.1153	0.1148	0.1167	0.1087	0.1323	0.1415	0.1461	0.1622	0.1650
465102 MOUNTAIN BELL-CO	0.1095	0.1176	0.1180	0.1227	0.1383	0.1450	0.1595	0.1676	0.1689

TABLE 4.22

INTERSTATE SUBSCRIBER LINE USAGE FACTOR
BY COMPANY

FCODE CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
472416 GTE NORTHWEST INC-ID	0.1661	0.1826	0.1825	0.1796	0.2038	0.2113	0.2244	0.2131	0.2270
475103 MOUNTAIN BELL-ID	0.1012	0.1049	0.1065	0.1148	0.1350	0.1561	0.1640	0.1732	0.1724
475162 PACIFIC NW BELL-ID	0.1099	0.1121	0.1203	0.1167	0.1285	0.1377	0.1500	0.1676	0.1707
482416 GTE NORTHWEST INC-MT	0.1356	0.1346	0.1351	0.1315	0.1534	0.1663	0.1689	0.1728	0.1913
485104 MOUNTAIN BELL-MT	0.1120	0.1248	0.1252	0.1225	0.1365	0.1493	0.1500	0.1645	0.1698
492080 GTE SOUTHWEST INC-NM	0.1326	0.1348	0.1498	0.1241	0.1615	0.1665	0.1512	0.1696	0.1854
495105 MOUNTAIN BELL-NM	0.0991	0.1034	0.1084	0.1099	0.1254	0.1346	0.1405	0.1528	0.1474
505107 MOUNTAIN BELL-UT	0.0810	0.0895	0.0918	0.0971	0.0868	0.1225	0.1290	0.1302	0.1377
511595 UTC OF THE WEST-WY	NA	0.1674	0.1621	0.1573	0.1749	0.2050	0.2255	0.2301	0.2396
515108 MOUNTAIN BELL-WY	0.1577	0.1723	0.1738	0.1751	0.2114	0.2016	0.2080	0.2237	0.2244
522400 UTC OF THE NW-WA	0.1117	0.1132	0.1135	0.1192	0.1324	0.1365	0.1356	0.1408	0.1390
522416 GTE NORTHWEST INC-WA	0.0778	0.0868	0.0888	0.0924	0.0923	0.0976	0.0917	0.1087	0.1233
525161 PACIFIC NW BELL-WA	0.0789	0.0838	0.0879	0.0883	0.1042	0.1223	0.1244	0.1340	0.1386
532400 UTC OF THE NW - OR	0.1170	0.1186	0.1231	0.1280	0.1372	0.1384	0.1491	0.1437	0.1609
532416 GTE NORTHWEST INC-OR	0.1024	0.1069	0.1031	0.1054	0.1020	0.1049	0.1036	0.1269	0.1559
535163 PACIFIC NW BELL-OR	0.0817	0.0940	0.0963	0.0986	0.1189	0.1552	0.1438	0.1558	0.1558
542302 CONTEL OF CALIFORNIA	0.0630	0.0639	0.0662	0.0710	0.0733	0.0796	0.0852	0.1029	0.1101
542319 GTC OF CALIFORNIA	0.0557	0.0570	0.0567	0.0581	0.0590	0.0700	0.0817	0.0893	0.1060
542344 WEST COAST TEL OF CA	0.1310	0.1265	0.1235	0.1233	0.1195	0.1269	0.1170	0.1173	0.1335
545170 PACIFIC BELL	0.0587	0.0596	0.0601	0.0639	0.0722	0.0834	0.0825	0.0851	0.0855
552348 CENTEL OF NV	0.1502	0.1553	0.1554	0.1560	0.2003	0.1874	0.2387	0.2356	0.2344
555173 NEVADA BELL	0.1822	0.1885	0.1846	0.1966	0.2098	0.2179	0.2036	0.2029	0.2302
565010 DIAMOND STATE TEL	0.1264	0.1284	0.1296	0.1326	0.1507	0.1804	0.1784	0.1930	0.2021
575020 C & P TEL CO OF WASH	0.1322	0.1341	0.1327	0.1362	0.1531	0.1917	0.1834	0.1764	0.1418
585114 NEW ENGLAND TEL - RI	0.0963	0.0990	0.1016	0.1061	0.1159	0.1392	0.1552	0.1506	0.1767
623100 GTE HAWAIIAN TEL. CO	NA	NA	0.0595	0.0678	0.0656	0.0829	0.0904	0.1378	0.1453
633201 PUERTO RICO TEL CO	NA	NA	NA	NA	0.0644	0.0784	0.0819	0.0889	0.1024
888888 AVERAGE SCHEDULE	NA	NA	NA	NA	0.1172	0.1209	0.1242	0.1292	0.1273

TABLE 4.23

INTERSTATE DIAL EQUIPMENT MINUTES FACTOR
BY COMPANY

FCODE CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
105111 NEW ENGLAND TEL-ME	0.0859	0.0910	0.0958	0.1029	0.1135	0.1358	0.1494	0.1458	0.1534
115112 NEW ENGLAND TEL-MA	0.0863	0.0903	0.0944	0.1031	0.1190	0.1322	0.1444	0.1466	0.1529
125113 NEW ENGLAND TEL-NH	0.1496	0.1556	0.1626	0.1739	0.1861	0.2137	0.2394	0.2408	0.2231
135200 SOUTHERN NEW ENGLAND	0.1121	0.1166	0.1196	0.1273	0.1494	0.1689	0.1698	0.1798	0.1858
145115 NEW ENGLAND TEL-VT	0.1483	0.1491	0.1498	0.1553	0.1736	0.1910	0.2093	0.2311	0.2387
150096 CONTEL OF NY, INC	0.0659	0.0681	0.0710	0.0744	0.0827	0.0958	0.1038	0.1098	0.1228
150121 ROCHESTER TEL CORP	NA	NA	NA	NA	0.0721	0.0759	0.0856	0.0885	0.0939
155130 NEW YORK TEL CO	0.0840	0.0857	0.0883	0.0887	0.1160	0.1285	0.1362	0.1419	0.1464
160138 UNITED TEL - NJ, INC	NA	0.1337	0.1373	0.1447	0.1472	0.1630	0.1751	0.1898	0.1971
165120 NEW JERSEY BELL	0.1156	0.1177	0.1234	0.1307	0.1476	0.1764	0.1757	0.1868	0.1940
170169 GTE NORTH INC. - PA	0.0934	0.1008	0.1009	0.0960	0.1104	0.0954	0.1289	0.0000	0.1096
170209 UTC OF PENNSYLVANIA	0.0673	0.0702	0.0707	0.0733	0.0860	0.0932	0.0989	0.1090	0.1196
175000 BELL OF PENNSYLVANIA	0.0720	0.0739	0.0768	0.0841	0.1025	0.1215	0.1153	0.1209	0.1277
185030 C & P TEL CO OF MD	0.0697	0.0700	0.0691	0.0723	0.0824	0.1013	0.1108	0.1218	0.1255
190233 CONTEL OF VIRGINIA	NA	0.1018	0.1045	0.1080	0.1240	0.1363	0.1527	0.1727	0.1882
190254 CONTEL OF VIRGINIA	0.0891	0.0918	0.0917	0.0994	0.1065	0.1177	0.1245	0.1394	0.1534
190479 GTE SOUTH INC. - VA	0.1266	0.1342	0.1296	0.1266	0.1437	0.1583	0.1551	0.0000	0.1207
190567 UNITED INTER-MT-VA	NA	0.0714	0.0740	0.0749	0.0905	0.1035	0.1089	0.1161	0.1280
195040 C & P TEL CO OF VA	0.0774	0.0808	0.0816	0.0858	0.1026	0.1127	0.1166	0.1307	0.1321
200479 GTE SOUTH INC. - WV	0.1661	0.1733	0.1656	0.1662	0.1864	0.2079	0.2162	0.0000	0.1734
205050 C & P TEL CO OF WV	0.0697	0.0725	0.0734	0.0764	0.0860	0.0935	0.1001	0.1076	0.1078
210328 GTE FLORIDA INC.	0.1345	0.1453	0.1492	0.1454	0.1541	0.1646	0.1755	0.0000	0.1664
210340 CONTEL OF FLORIDA	0.0972	0.1057	0.1121	0.1127	0.1124	0.1253	0.1366	0.1478	0.1620
210341 UTC OF FLORIDA	NA	0.1282	0.1316	0.1341	0.1275	0.1423	0.1514	0.1685	0.1765
215191 SOUTHERN BELL-FL	0.0913	0.0957	0.0996	0.1048	0.1165	0.1255	0.1385	0.1555	0.1667
220479 GTE SOUTH INC.- GA	0.1033	0.1048	0.1018	0.1043	0.1265	0.1331	0.1344	0.0000	0.1022
225192 SOUTHERN BELL-GA	0.0813	0.0855	0.0907	0.0902	0.0977	0.1086	0.1189	0.1334	0.1356
230470 CAROLINA TEL & TEL	0.0699	0.0725	0.0741	0.0800	0.0878	0.1026	0.1134	0.1345	0.1450
230471 CONTEL OF NC	0.0561	0.0594	0.0582	0.6291	0.8863	0.0757	0.0827	0.0916	0.1040
230479 GTE SOUTH INC - NC	0.1105	0.1195	0.1220	0.1337	0.1236	0.1798	0.1896	0.0000	0.1532
235193 SOUTHERN BELL-NC	0.0697	0.0771	0.0806	0.0867	0.0910	0.0982	0.1070	0.1345	0.1368
240479 GTE SOUTH INC. - SC	0.1532	0.1588	0.1633	0.1728	0.1639	0.2105	0.2127	0.0000	0.1752
240506 UTC OF THE CAROLINAS	NA	0.0870	0.0939	0.0950	0.1100	0.1107	0.1087	0.1227	0.1309
245194 SOUTHERN BELL-SC	0.0635	0.0697	0.0726	0.0790	0.0831	0.0856	0.1072	0.1257	0.1292
250293 GTE SOUTH INC. - AL	0.1443	0.1478	0.1443	0.1501	0.1678	0.1899	0.1914	0.0000	0.1404
255181 SO CENTRAL BELL-AL	0.0606	0.0630	0.0643	0.0656	0.0761	0.0954	0.1006	0.1009	0.1031
260407 GTE SOUTH INC. - KY	0.1160	0.1181	0.1191	0.1147	0.1208	0.1690	0.1654	0.0000	0.1223
265061 CINCINNATI BELL-KY	0.0419	0.0430	0.0493	0.0602	0.0641	0.0885	0.0893	0.0932	0.0945
265182 SO CENTRAL BELL-KY	0.0640	0.0666	0.0675	0.0692	0.0785	0.0916	0.1049	0.1075	0.1126
275183 SO CENTRAL BELL-LA	0.0581	0.0601	0.0610	0.0642	0.0748	0.0919	0.0939	0.0938	0.1005
285184 SO CENTRAL BELL-MS	0.0727	0.0774	0.0775	0.0803	0.0885	0.1062	0.1185	0.1193	0.1214
290479 GTE SOUTH INC. - TN	0.0984	0.1135	0.1339	0.1399	0.1424	0.1871	0.1678	0.0000	0.1214
290567 UNITED INTER-MT-TN	NA	0.0696	0.0742	0.0770	0.0828	0.0943	0.0952	0.1132	0.1155
295185 SO. CENTRAL BELL -TN	0.0625	0.0685	0.0748	0.0810	0.0976	0.1116	0.1154	0.1180	0.1185
300615 GTE NORTH INC. - OH	0.1032	0.1051	0.1030	0.1030	0.1087	0.1164	0.1251	0.0000	0.1045

TABLE 4.23

INTERSTATE DIAL EQUIPMENT MINUTES FACTOR
BY COMPANY

F	C	1980	1981	1982	1983	1984	1985	1986	1987	1988
300630	CEN TEL OF OHIO	NA	0.0513	0.0563	0.0567	0.0710	0.0815	0.0886	0.1132	0.1126
300661	UTC OF OHIO	0.0636	0.0659	0.0698	0.0752	0.0823	0.0940	0.0930	0.1048	0.1527
305062	CINCINNATI BELL-OH	0.0531	0.0580	0.0644	0.0672	0.0687	0.1140	0.1156	0.1176	0.1077
305150	OHIO BELL TEL CO	0.0566	0.0594	0.0645	0.0637	0.0705	0.0742	0.0842	0.1135	0.1107
310695	GTE NORTH INC. - MI	0.0852	0.0882	0.0882	0.0933	0.1043	0.1106	0.1196	0.0000	0.1007
315090	MICHIGAN BELL TEL CO	0.0473	0.0484	0.0494	0.0596	0.0619	0.0674	0.0674	0.0967	0.0951
320772	GTE NORTH INC. - IN	0.1277	0.1373	0.1357	0.1354	0.1424	0.1588	0.1689	0.0000	0.1559
320832	UTC OF INDIANA	0.0877	0.0951	0.0942	0.0997	0.0993	0.1035	0.1073	0.1194	0.1328
325080	INDIANA BELL TEL CO	0.0674	0.0706	0.0766	0.0777	0.0767	0.0845	0.0845	0.1243	0.1274
330886	GTE NORTH INC. - WI	0.1277	0.1298	0.1287	0.1327	0.1418	0.1488	0.1532	0.0000	0.1352
335220	WISCONSIN BELL	0.0644	0.0696	0.0774	0.0765	0.0792	0.0807	0.0864	0.1269	0.1261
340985	CEN TEL OF ILLINOIS	NA	0.0911	0.0872	0.0952	0.1032	0.1151	0.1410	0.1829	0.2446
341015	GTE NORTH INC. - IL	0.1130	0.1210	0.1239	0.1243	0.1211	0.1074	0.1333	0.0000	0.1254
345070	ILLINOIS BELL TEL CO	0.0757	0.0779	0.0797	0.0775	0.0842	0.0895	0.0917	0.1314	0.1425
351186	GTE NORTH INC. - IA	0.1232	0.1365	0.1365	0.1404	0.1434	0.1128	0.1633	0.0000	0.1279
351317	UTC OF IOWA	NA	0.0768	0.0810	0.0845	0.0961	0.1189	0.1270	0.1394	0.1409
355141	NORTHWESTERN BELL-IA	0.0824	0.0882	0.0878	0.0935	0.1013	0.1651	0.1742	0.1746	0.1737
361186	GTE NORTH INC. - MN	0.1413	0.1513	0.1538	0.1652	0.1717	0.1613	0.1814	0.0000	0.1352
361367	CEN TEL OF MN	0.0659	0.0682	0.0681	0.0678	0.0792	0.0838	0.0929	0.0991	0.1261
361456	UTC OF MINNESOTA	NA	0.0503	0.0499	0.0517	0.0559	0.0665	0.0735	0.0837	0.0951
365142	NORTHWESTERN BELL-MN	0.0719	0.0764	0.0678	0.0748	0.0788	0.1257	0.1321	0.1355	0.1349
371186	GTE NORTH INC. - NE	0.1140	0.1186	0.1178	0.1214	0.1304	0.1488	0.1666	0.0000	0.1554
371568	LINCOLN TEL & TEL CO	0.0883	0.0913	0.0905	0.0861	0.1006	0.1075	0.1188	0.1362	0.1534
371595	UTC OF THE WEST-NE	NA	0.1184	0.1216	0.1209	0.1287	0.1457	0.1455	0.1506	0.1843
375143	NORTHWESTERN BELL-NE	0.1063	0.1119	0.1081	0.1090	0.1133	0.1609	0.1733	0.1895	0.1982
385144	NORTHWESTERN BELL-ND	0.0916	0.0991	0.0910	0.1021	0.1072	0.1424	0.1525	0.1662	0.1637
395145	NORTHWESTERN BELL-SD	0.1022	0.1106	0.1137	0.1210	0.1322	0.1510	0.1844	0.1920	0.1972
401728	UTC OF ARKANSAS	0.1007	0.1101	0.1122	0.1157	0.1178	0.1331	0.1541	0.1700	0.1744
402080	GTE SOUTHWEST INC-AR	0.1453	0.1472	0.1444	0.1439	0.1414	0.1646	0.1802	0.0000	0.1525
405211	SOUTHWESTERN BELL-AR	0.0806	0.0888	0.0906	0.0934	0.1069	0.1300	0.1351	0.1411	0.1404
411842	UTC OF KANSAS	0.1331	0.0000	0.1348	0.1410	0.1454	0.1558	0.1729	0.1890	0.2060
415214	SOUTHWESTERN BELL-KS	0.0806	0.0889	0.0908	0.0967	0.1128	0.1289	0.1359	0.1527	0.1603
421186	GTE NORTH INC. - MO	0.1330	0.1359	0.1350	0.1457	0.1543	0.1690	0.1869	0.0000	0.1739
421957	UTC OF MISSOURI	0.0943	0.1009	0.1070	0.1141	0.1047	0.1414	0.1484	0.1512	0.1567
425213	SOUTHWESTERN BELL-MO	0.0803	0.0824	0.0838	0.0897	0.1024	0.1264	0.1253	0.1280	0.1337
432080	GTE SOUTHWEST INC-OK	0.1460	0.1472	0.1445	0.1417	0.1408	0.1546	0.1685	0.0000	0.1586
435215	SOUTHWESTERN BELL-OK	0.0827	0.0887	0.0942	0.0931	0.1103	0.1258	0.1239	0.1347	0.1399
442080	GTE SOUTHWEST INC-TX	0.0943	0.0943	0.0910	0.0895	0.0942	0.1014	0.1162	0.0000	0.1174
442084	UTC OF TEXAS INC	NA	NA	0.0485	0.0437	0.0550	0.0608	0.0600	0.0735	0.0812
442114	CEN TEL OF TEXAS	0.0963	0.0981	0.1043	0.0854	0.1172	0.1218	0.1429	0.1531	0.1455
442154	CEN TEL OF TEXAS	0.0571	0.0609	0.0640	0.0619	0.0698	0.0902	0.0851	0.0928	0.1050
445216	SOUTHWESTERN BELL-TX	0.0586	0.0635	0.0672	0.0690	0.0804	0.0980	0.0952	0.1025	0.1061
455101	MOUNTAIN BELL - AZ	0.1109	0.1103	0.1092	0.1080	0.1107	0.1569	0.1597	0.1694	0.1677
465102	MOUNTAIN BELL-CO	0.1074	0.1153	0.1134	0.1129	0.1129	0.1602	0.1730	0.1711	0.1709

TABLE 4.23

INTERSTATE DIAL EQUIPMENT MINUTES FACTOR
BY COMPANY

FCODE CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
472416 GTE NORTHWEST INC-ID	0.2597	0.2721	0.2696	0.2698	0.2903	0.3075	0.3124	0.0000	0.2354
475103 MOUNTAIN BELL-ID	0.1012	0.1049	0.1060	0.1119	0.1203	0.1705	0.1718	0.1792	0.1754
475162 PACIFIC NW BELL-ID	0.1097	0.1121	0.1115	0.1167	0.1282	0.1377	0.1511	0.1689	0.1731
482416 GTE NORTHWEST INC-MT	0.2247	0.2330	0.2376	0.2218	0.2436	0.2631	0.2689	0.0000	0.1913
485104 MOUNTAIN BELL-MT	0.1119	0.1248	0.1252	0.1241	0.1337	0.1606	0.1557	0.1682	0.1733
492080 GTE SOUTHWEST INC-NM	0.2068	0.2135	0.2169	0.2230	0.2290	0.2290	0.2129	0.0000	0.1867
495105 MOUNTAIN BELL-NM	0.0949	0.1025	0.1056	0.1051	0.1102	0.1489	0.1553	0.1652	0.1516
505107 MOUNTAIN BELL-UT	0.0798	0.0876	0.0812	0.0897	0.0852	0.1433	0.1392	0.1354	0.1415
511595 UTC OF THE WEST-WY	NA	0.1672	0.1617	0.1565	0.1735	0.2050	0.2268	0.2311	0.2421
515108 MOUNTAIN BELL-WY	0.1385	0.1720	0.1696	0.1648	0.1720	0.2129	0.2183	0.2309	0.2280
522400 UTC OF THE NW-WA	0.1117	0.1132	0.1135	0.1192	0.1324	0.1370	0.1404	0.1409	0.1390
522416 GTE NORTHWEST INC-WA	0.1086	0.1149	0.1140	0.1163	0.1199	0.1231	0.1249	0.0000	0.1308
525161 PACIFIC NW BELL-WA	0.0786	0.0836	0.0870	0.0851	0.0842	0.1378	0.1339	0.1405	0.1424
532400 UTC OF THE NW - OR	0.1170	0.1186	0.1231	0.1280	0.1372	0.1385	0.1526	0.1439	0.1652
532416 GTE NORTHWEST INC-OR	0.1356	0.1361	0.1327	0.1328	0.1349	0.1367	0.1587	0.0000	0.1660
535163 PACIFIC NW BELL-OR	0.0878	0.0938	0.0950	0.0876	0.1048	0.1888	0.1574	0.1653	0.1622
542302 CONTEL OF CALIFORNIA	0.0630	0.0639	0.0662	0.0710	0.0733	0.0805	0.0860	0.1044	0.1111
542319 GTC OF CALIFORNIA	0.0735	0.0751	0.0728	0.0722	0.0625	0.0840	0.0939	0.0000	0.1091
542344 WEST COAST TEL OF CA	0.1775	0.1768	0.1714	0.1716	0.1796	0.1815	0.1762	0.0000	0.1344
545170 PACIFIC BELL	0.0607	0.0619	0.0644	0.0722	0.0881	0.0970	0.0964	0.0976	0.0954
552348 CENTEL OF NV	0.1856	0.1926	0.1855	0.1838	0.2213	0.1969	0.2015	0.2214	0.2359
555173 NEVADA BELL	0.1831	0.1893	0.1884	0.2034	0.2204	0.2341	0.2331	0.2055	0.2499
565010 DIAMOND STATE TEL	0.1282	0.1299	0.1321	0.1372	0.1589	0.1878	0.1989	0.1968	0.2032
575020 C & P TEL CO OF WASH	0.0991	0.1022	0.1076	0.1226	0.1568	0.2091	0.2145	0.1745	0.1537
585114 NEW ENGLAND TEL - RI	0.0981	0.1018	0.1053	0.1119	0.1277	0.1487	0.1654	0.1775	0.1811
623100 GTE HAWAIIAN TEL. CO	NA	NA	0.0958	0.1041	0.1058	0.1163	0.1380	0.0000	0.1492
633201 PUERTO RICO TEL CO	NA	NA	NA	NA	0.0644	0.0783	0.0818	0.0889	0.1024
888888 AVERAGE SCHEDULE	NA	NA	NA	NA	0.1172	0.1209	0.1242	0.1292	0.1294

TABLE 4.24

WEIGHTED DIAL EQUIPMENT MINUTE FACTOR
BY COMPANY

FCODE CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
105111 NEW ENGLAND TEL-ME	0.1230	0.1241	0.1295	0.1396	0.1557	0.1944	0.2024	0.1943	0.2084
115112 NEW ENGLAND TEL-MA	0.0977	0.1021	0.1078	0.1198	0.1395	0.1565	0.1593	0.1618	0.1883
125113 NEW ENGLAND TEL-NH	0.1810	0.1883	0.1992	0.2149	0.2309	0.2654	0.2982	0.2981	0.3320
135200 SOUTHERN NEW ENGLAND	0.1423	0.1455	0.1475	0.1534	0.1640	0.1936	0.1931	0.2086	0.2446
145115 NEW ENGLAND TEL-VT	0.2110	0.2132	0.2177	0.2286	0.2523	0.2692	0.3127	0.3363	0.3512
150096 CONTEL OF NY, INC	0.2065	0.1158	0.1695	0.1143	0.1195	0.1398	0.1463	0.1549	0.1875
150121 ROCHESTER TEL CORP	NA	NA	NA	NA	0.1023	0.1053	0.1173	0.1286	0.1731
155130 NEW YORK TEL CO	0.1581	0.1632	0.1629	0.1764	0.1310	0.1439	0.1542	0.1608	0.2126
160138 UNITED TEL - NJ, INC	NA	0.1671	0.1697	0.1766	0.1798	0.1932	0.1960	0.2132	0.3159
165120 NEW JERSEY BELL	0.1375	0.1385	0.1426	0.1484	0.1660	0.1950	0.1960	0.2082	0.2460
170169 GTE NORTH INC. - PA	0.0934	0.1008	0.1009	0.0960	0.1104	0.0954	0.1289	0.1435	0.1907
170209 UTC OF PENNSYLVANIA	0.1145	0.1193	0.1061	0.1114	0.1169	0.1258	0.1357	0.1496	0.1865
175000 BELL OF PENNSYLVANIA	0.0902	0.0919	0.0935	0.1002	0.1173	0.1399	0.1362	0.1431	0.1700
185030 C & P TEL CO OF MD	0.0905	0.0903	0.0877	0.0899	0.1004	0.1287	0.1442	0.1570	0.1834
190233 CONTEL OF VIRGINIA	NA	0.1486	0.1548	0.1574	0.1775	0.1804	0.1908	0.2132	0.2797
190254 CENTEL OF VIRGINIA	0.1514	0.1560	0.1743	0.1788	0.1811	0.2001	0.2122	0.1995	0.2497
190479 GTE SOUTH INC. - VA	0.1266	0.1342	0.1296	0.1266	0.1437	0.1583	0.1551	0.1738	0.2021
190567 UNITED INTER-MT-VA	NA	0.1220	0.1280	0.1266	0.1460	0.1627	0.1712	0.1810	0.0128
195040 C & P TEL CO OF VA	0.1000	0.1025	0.1012	0.1040	0.1166	0.1296	0.1322	0.1482	0.1906
200479 GTE SOUTH INC. - WV	0.1661	0.1733	0.1656	0.1662	0.1864	0.2079	0.2162	0.2424	0.2843
205050 C & P TEL CO OF WV	0.1054	0.1062	0.1060	0.1099	0.1159	0.1305	0.1371	0.1435	0.1739
210328 GTE FLORIDA INC.	0.1345	0.1453	0.1492	0.1454	0.1541	0.1646	0.1755	0.1958	0.3047
210340 CENTEL OF FLORIDA	0.1652	0.1475	0.1540	0.1546	0.1591	0.1869	0.1969	0.2097	0.2989
210341 UTC OF FLORIDA	NA	0.1669	0.1750	0.1762	0.1652	0.1833	0.1935	0.2102	0.3755
215191 SOUTHERN BELL-FL	0.1134	0.1175	0.1195	0.1230	0.1332	0.1420	0.1528	0.1625	0.2524
220479 GTE SOUTH INC.- GA	0.1033	0.1048	0.1018	0.1043	0.1265	0.1331	0.1344	0.1501	0.1884
225192 SOUTHERN BELL-GA	0.1024	0.1037	0.1074	0.1050	0.1122	0.1241	0.1330	0.1417	0.2064
230470 CAROLINA TEL & TEL	0.1040	0.1068	0.1096	0.1170	0.1260	0.1438	0.1560	0.1780	0.2103
230471 CENTEL OF NC	0.0954	0.1009	0.1107	0.1132	0.1507	0.1287	0.1406	0.1321	0.1732
230479 GTE SOUTH INC - NC	0.1105	0.1195	0.1220	0.1337	0.1236	0.1798	0.1896	0.2103	0.2799
235193 SOUTHERN BELL-NC	0.0959	0.1027	0.1038	0.1083	0.1126	0.1196	0.1268	0.1482	0.2023
240479 GTE SOUTH INC. - SC	0.1532	0.1588	0.1633	0.1728	0.1639	0.2105	0.2127	0.2604	0.3005
240506 UTC OF THE CAROLINAS	NA	0.1389	0.1517	0.1553	0.1761	0.1710	0.1664	0.1816	0.0131
245194 SOUTHERN BELL-SC	0.0866	0.0938	0.0959	0.1022	0.1042	0.1114	0.1314	0.1455	0.1989
250293 GTE SOUTH INC. - AL	0.1443	0.1478	0.1443	0.1501	0.1678	0.1899	0.1914	0.2083	0.2655
255181 SO CENTRAL BELL-AL	0.0836	0.0853	0.0849	0.0855	0.0959	0.1153	0.1175	0.1137	0.1592
260407 GTE SOUTH INC. - KY	0.1160	0.1181	0.1191	0.1147	0.1208	0.1690	0.1654	0.1937	0.2308
265061 CINCINNATI BELL-KY	0.0594	0.0596	0.0659	0.0777	0.0827	0.1054	0.1074	0.1138	0.1242
265182 SO CENTRAL BELL-KY	0.0955	0.0965	0.0946	0.0950	0.1043	0.1172	0.1301	0.1317	0.1631
275183 SO CENTRAL BELL-LA	0.0778	0.0794	0.0789	0.0814	0.0927	0.1100	0.1090	0.1044	0.1481
285184 SO CENTRAL BELL-MS	0.1090	0.1137	0.1127	0.1163	0.1248	0.1433	0.1534	0.1492	0.1941
290479 GTE SOUTH INC. - TN	0.0984	0.1135	0.1339	0.1399	0.1424	0.1871	0.1678	0.1789	0.2332
290567 UNITED INTER-MT-TN	NA	0.1067	0.1132	0.1169	0.1243	0.1352	0.1346	0.1611	0.0116
295185 SO. CENTRAL BELL -TN	0.0813	0.0869	0.0926	0.0984	0.1158	0.1296	0.1296	0.1276	0.1667
300615 GTE NORTH INC. - OH	0.1032	0.1051	0.1030	0.1030	0.1087	0.1164	0.1251	0.1412	0.1805

TABLE 4.24

WEIGHTED DIAL EQUIPMENT MINUTE FACTOR
BY COMPANY

F CODE CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
300630 CENTEL OF OHIO	NA	0.0759	0.0832	0.0817	0.1010	0.1129	0.1218	0.1484	0.1540
300661 UTC OF OHIO	0.0952	0.0983	0.1000	0.1053	0.1208	0.1364	0.1342	0.1451	0.1897
305062 CINCINNATI BELL-OH	0.0660	0.0706	0.0777	0.0814	0.0823	0.1261	0.1291	0.1325	0.1792
305150 OHIO BELL TEL CO	0.0799	0.0834	0.0859	0.0872	0.0720	0.1019	0.1161	0.1322	0.1547
310695 GTE NORTH INC. - MI	0.0852	0.0882	0.0882	0.0933	0.1043	0.1106	0.1196	0.1284	0.1648
315090 MICHIGAN BELL TEL CO	0.0676	0.0684	0.0688	0.0718	0.3553	0.0985	0.0990	0.1109	0.1364
320772 GTE NORTH INC. - IN	0.1277	0.1373	0.1357	0.1354	0.1424	0.1588	0.1689	0.1768	0.2781
320832 UTC OF INDIANA	0.1376	0.1506	0.1518	0.1622	0.1535	0.1616	0.1620	0.1754	0.2467
325080 INDIANA BELL TEL CO	0.0978	0.1022	0.1035	0.1068	0.1101	0.1340	0.1265	0.1478	0.1811
330886 GTE NORTH INC. - WI	0.1277	0.1298	0.1287	0.1327	0.1418	0.1488	0.1532	0.1613	0.2272
335220 WISCONSIN BELL	0.0833	0.0906	0.0942	0.1004	0.1129	0.1262	0.1216	0.1431	0.1714
340985 CENTEL OF ILLINOIS	NA	0.1166	0.1102	0.1230	0.1309	0.1445	0.1727	0.2155	0.2663
341015 GTE NORTH INC. - IL	0.1130	0.1210	0.1239	0.1243	0.1211	0.1074	0.1333	0.1532	0.2083
345070 ILLINOIS BELL TEL CO	0.1034	0.1036	0.1011	0.1067	0.1049	0.1285	0.1256	0.1486	0.1995
351186 GTE NORTH INC. - IA	0.1232	0.1365	0.1365	0.1404	0.1434	0.1128	0.1633	0.1754	0.2181
351317 UTC OF IOWA	NA	0.1234	0.1378	0.1287	0.1515	0.1791	0.1899	0.1935	0.2082
355141 NORTHWESTERN BELL-IA	0.0846	0.0902	0.0931	0.1031	0.1267	0.1998	0.1847	0.2210	0.2345
361186 GTE NORTH INC. - MN	0.1413	0.1513	0.1538	0.1652	0.1717	0.1613	0.1814	0.1947	0.2447
361367 CENTEL OF MN	0.1044	0.1053	0.1041	0.1013	0.1159	0.1216	0.1326	0.1505	0.1958
361456 UTC OF MINNESOTA	NA	0.0815	0.0815	0.0813	0.0855	0.1003	0.1090	0.1199	0.1577
365142 NORTHWESTERN BELL-MN	0.0746	0.0795	0.0728	0.0835	0.0893	0.1449	0.1440	0.1625	0.1978
371186 GTE NORTH INC. - NE	0.1140	0.1186	0.1178	0.1214	0.1304	0.1488	0.1666	0.2095	0.2536
371568 LINCOLN TEL & TEL CO	0.1230	0.1260	0.1192	0.1077	0.1252	0.1286	0.1452	0.1556	0.2440
371595 UTC OF THE WEST-NE	NA	0.1901	0.2062	0.2044	0.2040	0.2280	0.2327	0.2363	0.3372
375143 NORTHWESTERN BELL-NE	0.1107	0.1175	0.1165	0.1199	0.1330	0.1900	0.1925	0.2266	0.2953
385144 NORTHWESTERN BELL-ND	0.0916	0.0991	0.0911	0.1024	0.1116	0.1909	0.1940	0.2342	0.2569
395145 NORTHWESTERN BELL-SD	0.1022	0.1106	0.1137	0.1222	0.1350	0.2121	0.2244	0.2524	0.2822
401728 UTC OF ARKANSAS	0.1742	NA	0.1927	0.1969	0.1965	0.2196	0.2484	0.2640	0.3147
402080 GTE SOUTHWEST INC-AR	0.1453	0.1472	0.1444	0.1439	0.1414	0.1646	0.1802	0.2091	0.1777
405211 SOUTHWESTERN BELL-AR	0.1241	0.1221	0.1214	0.1221	0.1349	0.1583	0.1633	0.1695	0.2116
411842 UTC OF KANSAS	NA	NA	0.1935	0.2013	0.2040	0.2161	0.2356	0.2501	0.3449
415214 SOUTHWESTERN BELL-KS	0.1114	0.1197	0.1168	0.1221	0.1381	0.1534	0.1619	0.1804	0.2356
421186 GTE NORTH INC. - MO	0.1330	0.1359	0.1350	0.1457	0.1543	0.1690	0.1869	0.2142	0.2636
421957 UTC OF MISSOURI	0.1469	0.1515	0.1584	0.1673	0.1537	0.2025	0.2104	0.2062	0.2768
425213 SOUTHWESTERN BELL-MO	0.0958	0.0972	0.0977	0.1038	0.1164	0.1410	0.1418	0.1458	0.1921
432080 GTE SOUTHWEST INC-OK	0.1460	0.1472	0.1445	0.1417	0.1408	0.1546	0.1685	0.2029	0.2678
435215 SOUTHWESTERN BELL-OK	0.1089	0.1188	0.1196	0.1147	0.1318	0.1481	0.1479	0.1596	0.2204
442080 GTE SOUTHWEST INC-TX	0.0943	0.0943	0.0910	0.0895	0.0942	0.1014	0.1162	0.1511	0.2031
442084 UTC OF TEXAS INC	NA	NA	0.0759	0.0694	0.0829	0.0906	0.0904	0.0994	0.1421
442114 CENTEL OF TEXAS	0.1370	0.1112	0.1087	0.1145	0.1285	0.1560	0.1774	0.1899	0.3073
442154 CONTEL OF TEXAS	0.0885	0.0925	0.0943	0.0896	0.0964	0.1194	0.1153	0.1202	0.1761
445216 SOUTHWESTERN BELL-TX	0.0719	0.0762	0.0789	0.0798	0.0896	0.1080	0.1058	0.1139	0.1536
455101 MOUNTAIN BELL - AZ	0.1158	0.1161	0.1208	0.1246	0.1424	0.1765	0.1800	0.1936	0.2727
465102 MOUNTAIN BELL-CO	0.1113	0.1192	0.1217	0.1305	0.1478	0.1849	0.1975	0.1986	0.2790

TABLE 4.24

WEIGHTED DIAL EQUIPMENT MINUTE FACTOR
BY COMPANY

F CODE CARRIER	1980	1981	1982	1983	1984	1985	1986	1987	1988
472416 GTE NORTHWEST INC-ID	0.2597	0.2721	0.2696	0.2698	0.2903	0.3075	0.3124	0.3200	0.4336
475103 MOUNTAIN BELL-ID	0.1012	0.1049	0.1069	0.1170	0.1383	0.2082	0.2131	0.2247	0.2715
475162 PACIFIC NW BELL-ID	0.1097	0.1121	0.1115	0.1167	0.1282	0.1896	0.2026	0.2270	0.2860
482416 GTE NORTHWEST INC-MT	0.2247	0.2330	0.2376	0.2218	0.2436	0.2631	0.2689	0.2834	0.3839
485104 MOUNTAIN BELL-MT	0.1119	0.1248	0.1252	0.1243	0.1369	0.2185	0.2150	0.2360	0.3282
492080 GTE SOUTHWEST INC-NM	0.2068	0.2135	0.2169	0.2230	0.2290	0.2290	0.2129	0.2319	0.4254
495105 MOUNTAIN BELL-NM	0.0949	0.1031	0.1097	0.1126	0.1258	0.1849	0.1900	0.2118	0.2512
505107 MOUNTAIN BELL-UT	0.0820	0.0908	0.0913	0.1086	0.1146	0.1633	0.1619	0.1666	0.2312
511595 UTC OF THE WEST-WY	NA	0.2838	0.2773	0.2689	0.2778	0.3152	0.3432	0.3504	0.4823
515108 MOUNTAIN BELL-WY	0.1391	0.1726	0.1768	0.1816	0.2011	0.2774	0.2840	0.3076	0.3776
522400 UTC OF THE NW-WA	0.1548	0.1564	0.1565	0.1620	0.1804	0.1811	0.1908	0.1839	0.2760
522416 GTE NORTHWEST INC-WA	0.1086	0.1149	0.1140	0.1163	0.1199	0.1231	0.1249	0.1440	0.2352
525161 PACIFIC NW BELL-WA	0.0787	0.0840	0.0886	0.0904	0.1043	0.1555	0.1453	0.1661	0.2176
532400 UTC OF THE NW - OR	0.1655	0.1672	0.1685	0.1727	0.1876	0.1908	0.2088	0.1979	0.3445
532416 GTE NORTHWEST INC-OR	0.1356	0.1361	0.1327	0.1328	0.1349	0.1367	0.1587	0.1767	0.2959
535163 PACIFIC NW BELL-OR	0.0878	0.0942	0.0973	0.0944	0.1407	0.2063	0.1774	0.1931	0.2287
542302 CONTEL OF CALIFORNIA	0.0926	0.0915	0.0954	0.1010	0.1035	0.1144	0.1174	0.1332	0.2038
542319 GTC OF CALIFORNIA	0.0735	0.0751	0.0728	0.0722	0.0625	0.0840	0.0939	0.1087	0.1820
542344 WEST COAST TEL OF CA	0.1775	0.1768	0.1714	0.1716	0.1796	0.1815	0.1762	0.1739	0.2557
545170 PACIFIC BELL	0.0742	0.0745	0.0758	0.0821	0.0985	0.1088	0.1078	0.1084	0.0095
552348 CENTEL OF NV	0.2413	0.2504	0.2226	0.2206	0.2480	0.2303	0.2949	0.2983	0.4852
555173 NEVADA BELL	0.2317	0.2382	0.2324	0.2466	0.2639	0.2486	0.2481	0.2342	0.3760
565010 DIAMOND STATE TEL	0.1634	0.1696	0.1682	0.1697	0.1940	0.2221	0.2333	0.2304	0.2734
575020 C & P TEL CO OF WASH	0.1153	0.1182	0.1217	0.1348	0.1723	0.2278	0.2338	0.1962	0.2462
585114 NEW ENGLAND TEL - RI	0.1157	0.1220	0.1278	0.1384	0.1592	0.1850	0.1984	0.2117	0.2243
623100 GTE HAWAIIAN TEL. CO	NA	NA	0.0958	0.1041	0.1058	0.1163	0.1380	0.1893	0.2625
633201 PUERTO RICO TEL CO	NA	NA	NA	NA	0.0703	0.0784	0.1103	0.1171	0.2543
888888 AVERAGE SCHEDULE	NA	NA	NA	NA	0.1177	0.1237	0.1286	0.1368	0.3010

5. Rates and Revenues

This section contains 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 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 Consumer Price Index for telephone services was first published in 1935.¹ 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.²

1 BLS publishes two sets of Consumer Price Indexes. The CPI-U, used herein, is based on expenditures of all urban consumers. The CPI-W series is based on expenditures of wage earners and clerical workers.

2 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.

Table 5.1
Annual Rate of Change For Various Price Indexes*

	1935 to 1989	1979 to 1989
CPI all goods and services	4.2%	5.5%
CPI all services	4.6	6.9
CPI telephone services	2.2	4.5
CPI major categories		
- food & beverages	**	4.6
- housing	**	5.8
- apparel & upkeep	3.3	3.4
- transportation	3.9	4.9
- medical care	5.1	8.3
- entertainment	**	5.1
- other goods & services	**	7.9
CPI public transportation	5.0	9.0
CPI piped gas	3.8	5.8
CPI electricity	2.4	5.7
CPI sewer & water maintenance	**	7.3

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

** Series not established until after 1935.

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 since then. The annual rate of change during recent 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	3.8	4.4	-1.3
1988	4.6	4.4	1.3
1989	4.0	4.6	-0.3
1990	5.3*	6.1*	1.9*

* The percentage change from December 1989 to June 1990 was annualized exponentially.

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.

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	4.5	4.5
1989	0.6	1.9
1990*	4.4	0.5

* The percentage change from December 1989 to June 1990 was annualized exponentially.

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 three 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	-9.4	0.3
1987	-12.4	-3.0
1988	-4.2	-4.2
1989	-1.3	-2.6
1990 *	-2.9	- 2.7

* The percentage change from December 1989 to June 1990 was annualized exponentially.

E. Monthly Price Index Data:

Monthly data for the CPI telephone indexes are shown in Table 5.5. Monthly data for PPI indexes are shown in Table 5.6.

TABLE 5.5
Consumer Price Index Data

	All Goods & Services	All Telephone Services	Local Services	Interstate Toll Service	Intrastate Toll Service	
1983	January	97.8	98.1	97.2	100.9	97.3
	February	97.9	98.3	96.8	101.6	98.9
	March	97.9	98.5	97.0	101.6	99.3
	April	98.6	98.4	96.8	101.6	99.5
	May	99.2	98.9	97.5	101.6	100.0
	June	99.5	99.3	98.1	101.6	100.2
	July	99.9	99.5	98.1	101.7	100.9
	August	100.2	99.6	98.3	101.7	101.0
	September	100.7	99.9	98.6	101.7	101.2
	October	101.0	99.7	98.3	101.4	101.6
	November	101.2	100.4	99.5	101.4	102.3
	December	101.3	99.8	98.3	101.3	102.2
1984	January	101.9	105.0	106.7	101.3	104.2
	February	102.4	107.0	110.0	102.1	104.2
	March	102.6	106.4	109.1	102.1	104.1
	April	103.1	106.7	109.1	102.0	105.6
	May	103.4	106.9	109.5	102.3	105.1
	June	103.7	107.1	110.7	98.9	106.5
	July	104.1	107.7	112.3	96.9	107.5
	August	104.5	107.9	112.9	96.8	106.6
	September	105.0	108.7	114.3	96.8	106.5
	October	105.3	108.8	114.5	97.0	106.5
	November	105.3	109.4	115.4	96.9	107.1
	December	105.3	109.0	115.2	96.9	105.9
1985	January	105.5	109.3	115.6	96.9	105.9
	February	106.0	108.3	113.8	96.9	105.8
	March	106.4	109.5	116.0	96.9	106.1
	April	106.9	109.4	115.8	96.9	106.0
	May	107.3	109.6	116.0	97.4	105.8
	June	107.6	112.1	121.3	94.7	106.2
	July	107.8	112.9	123.0	93.1	107.5
	August	108.0	113.6	123.9	93.3	107.8
	September	108.3	113.7	124.2	93.3	107.8
	October	108.7	113.8	124.3	93.3	108.0
	November	109.0	114.2	125.2	93.3	107.9
	December	109.3	114.1	125.5	93.3	106.5
1986	January	109.6	114.6	126.2	93.3	106.7
	February	109.3	114.8	126.4	93.3	107.0
	March	108.8	115.3	127.2	93.3	107.1
	April	108.6	116.5	129.5	93.3	106.8
	May	108.9	116.5	129.5	93.3	106.9
	June	109.5	118.7	135.6	88.0	106.7
	July	109.5	118.7	137.0	84.7	106.7
	August	109.7	118.8	137.2	84.4	107.0
	September	110.2	118.3	136.5	84.4	106.5
	October	110.3	118.9	137.5	84.4	106.8
	November	110.4	117.6	135.1	84.4	106.5
	December	110.5	117.2	134.4	84.5	106.8

TABLE 5.5
Consumer Price Index Data

	All Goods & Services	All Telephone Services	Local Services	Interstate Toll Service	Intrastate Toll Service
1987					
January	111.2	116.6	137.6	77.1	107.0
February	111.6	116.4	137.5	77.1	106.4
March	112.1	116.4	137.4	77.1	106.4
April	112.7	116.7	138.2	77.0	106.3
May	113.1	116.4	138.1	76.7	105.2
June	113.5	115.6	137.5	76.7	102.7
July	113.8	116.6	141.0	73.4	104.0
August	114.4	117.0	141.9	73.4	103.8
September	115.0	116.6	140.9	73.7	103.5
October	115.3	117.0	141.3	73.7	104.1
November	115.4	116.9	141.4	73.7	103.6
December	115.4	115.7	138.9	74.0	103.6
1988					
January	115.7	115.8	139.9	72.2	104.1
February	116.0	116.6	141.6	72.2	103.6
March	116.5	116.2	141.1	72.0	103.2
April	117.1	116.6	142.0	72.1	102.9
May	117.5	116.6	142.0	72.1	102.8
June	118.0	115.8	140.8	72.1	102.3
July	118.5	115.8	141.4	72.1	100.3
August	119.0	114.8	139.4	72.1	100.3
September	119.8	115.6	140.6	73.1	100.0
October	120.2	115.8	141.1	73.1	99.4
November	120.3	115.7	140.9	73.1	99.4
December	120.5	117.2	145.2	70.9	99.2
1989					
January	121.1	116.8	145.0	70.9	97.4
February	121.6	116.6	144.7	70.8	97.4
March	122.3	116.2	144.1	70.8	96.9
April	123.1	117.2	146.6	70.0	96.8
May	123.8	117.9	147.8	69.8	97.4
June	124.1	117.6	147.2	69.8	97.4
July	124.4	117.8	147.8	69.6	97.0
August	124.6	117.7	147.6	69.6	97.0
September	125.0	117.8	147.9	69.6	96.9
October	125.6	116.9	146.2	69.6	96.7
November	125.9	117.2	146.8	69.6	96.8
December	126.1	116.9	146.0	70.0	96.6
1990					
January	127.4	117.6	148.4	69.1	95.2
February	128.0	117.9	149.0	69.0	95.1
March	128.4	118.2	149.7	69.0	95.0
April	128.9	118.4	150.0	69.0	95.1
May	129.2	118.0	149.2	69.0	95.2
June	129.9	118.0	149.2	69.0	95.3

TABLE 5.6
 Producer Price Index Data

	Local Services	Local Residential Services	Local Business Services	Local Optional Additional Usage	Local Coin Service
1983					
January	162.6	168.7	170.8	125.9	161.0
February	162.9	169.0	171.2	125.9	161.0
March	163.4	169.5	172.2	125.9	161.0
April	163.1	169.2	172.0	125.7	160.9
May	132.6	168.4	171.5	125.7	161.8
June	163.3	169.1	172.3	126.2	162.9
July	163.8	169.6	173.1	126.2	163.2
August	163.9	169.7	173.2	126.2	163.2
September	164.3	170.2	173.6	126.2	163.4
October	164.7	170.5	174.0	127.0	164.3
November	164.8	170.6	174.1	127.0	164.5
December	164.8	170.6	174.1	127.0	164.5
1984					
January	171.2	177.8	180.3	124.3	184.2
February	171.2	177.8	180.3	124.3	184.2
March	171.2	177.7	180.5	124.3	184.4
April	171.9	177.7	183.7	124.3	184.6
May	172.1	178.1	183.7	124.3	184.6
June	177.9	178.6	208.1	124.3	189.0
July	182.2	181.4	211.0	122.5	222.3
August	185.7	186.0	213.7	122.5	227.2
September	187.6	188.7	215.8	122.5	227.2
October	187.7	188.7	215.9	122.5	227.2
November	187.5	188.3	215.9	122.5	227.5
December	187.6	188.4	216.0	122.5	227.5
1985					
January	188.9	189.8	218.2	122.5	228.2
February	190.7	191.9	220.7	122.5	228.9
March	190.6	191.1	220.7	122.5	228.9
April	190.6	191.1	220.7	122.5	228.9
May	191.0	192.3	220.9	122.5	230.5
June	200.6	208.8	222.2	122.5	230.7
July	200.8	209.2	222.2	122.5	230.7
August	201.6	210.4	222.9	122.5	230.8
September	202.2	211.0	223.9	122.5	231.2
October	202.3	211.0	224.6	122.5	231.3
November	204.8	211.7	228.0	130.2	233.8
December	204.8	211.7	228.0	130.2	233.8
1986					
January	206.5	213.4	230.8	130.3	234.3
February	206.7	213.6	231.3	130.3	234.3
March	206.7	213.6	231.3	130.3	234.3
April	206.7	213.6	231.3	130.3	234.3
May	206.7	213.6	231.3	130.3	234.3
June	216.6	230.3	234.0	130.3	234.6
July	216.6	230.3	234.0	130.3	234.6
August	216.9	230.8	234.1	130.3	234.7
September	217.5	231.3	234.6	131.5	234.9
October	217.5	231.3	234.6	131.5	234.9
November	216.8	230.5	233.6	131.5	234.9
December	216.8	230.5	233.6	131.5	234.9

TABLE 5.6
 Producer Price Index Data

		Local Services	Local Residential Services	Local Business Services	Local Optional Additional Usage	Local Coin Service
1987	January	216.7	230.1	234.0	131.5	235.0
	February	216.6	230.0	234.0	131.5	234.9
	March	216.8	230.3	234.1	131.5	234.9
	April	216.1	229.2	233.5	131.5	234.9
	May	216.1	229.2	233.5	131.5	234.9
	June	216.1	229.2	233.5	131.5	234.9
	July	220.1	236.6	232.7	131.5	234.9
	August	219.9	236.6	232.0	131.5	234.6
	September	219.3	236.6	231.9	127.8	234.5
	October	219.3	236.6	231.8	127.8	234.5
	November	219.3	236.6	231.8	127.8	234.5
	December	219.3	236.6	231.8	127.7	234.5
1988	January	218.5	235.9	230.2	127.7	234.3
	February	218.2	235.5	230.3	127.7	233.1
	March	218.4	235.7	230.6	127.7	233.1
	April	218.4	235.7	230.6	127.7	233.1
	May	218.4	235.7	230.6	127.7	233.1
	June	218.3	235.7	230.6	127.7	233.1
	July	217.9	235.1	230.0	127.7	233.1
	August	218.1	235.4	230.3	127.7	233.1
	September	218.2	235.4	230.2	127.7	233.4
	October	219.5	235.9	230.8	127.7	246.0
	November	219.5	236.0	230.8	127.7	246.0
	December	226.4	247.4	233.0	127.7	246.2
1989	January	226.2	246.6	234.3	127.5	246.6
	February	226.2	246.6	234.4	127.5	246.6
	March	226.3	246.7	234.4	127.5	246.6
	April	229.5	252.2	234.8	127.5	246.7
	May	229.5	252.2	234.8	127.5	246.7
	June	229.5	252.3	234.8	127.5	246.7
	July	229.6	252.5	234.9	127.5	246.7
	August	229.5	252.2	234.7	127.5	246.7
	September	229.4	252.2	234.6	127.5	246.7
	October	229.4	252.2	234.5	127.5	246.6
	November	229.4	252.2	234.5	127.5	246.6
	December	229.4	252.2	234.5	127.5	246.6
1990	January	229.3	252.7	234.0	126.1	246.6
	February	229.7	253.1	234.3	126.1	246.7
	March	229.6	253.1	234.2	126.1	246.7
	April	229.4	252.7	234.2	126.1	246.6
	May	229.4	252.8	234.2	126.1	246.6
	June	229.4	252.8	234.2	126.1	246.6

TABLE 5.6
 Producer Price Index Data

	Toll Service	Intrastate MTS	Interstate MTS	International MTS	
1983	January	148.8	151.1	153.4	92.3
	February	148.8	151.1	153.4	92.3
	March	149.0	151.7	153.4	92.3
	April	148.9	151.5	153.4	92.3
	May	149.0	151.5	153.4	92.3
	June	149.3	152.2	153.4	92.3
	July	149.4	152.2	153.4	92.3
	August	149.4	152.3	153.4	92.3
	September	149.4	152.3	153.4	92.3
	October	149.8	153.2	153.4	92.7
	November	149.8	153.2	153.4	92.7
	December	149.8	153.2	153.4	92.7
1984	January	150.7	155.9	153.4	92.7
	February	150.6	155.9	153.4	92.5
	March	150.7	155.9	153.4	92.5
	April	150.8	156.1	153.4	92.5
	May	150.5	155.3	153.4	92.5
	June	146.2	155.9	145.6	87.3
	July	146.6	157.0	145.6	86.8
	August	147.1	158.3	145.6	86.8
	September	147.3	158.9	145.6	86.8
	October	147.3	158.9	145.6	86.8
	November	146.8	157.5	145.6	86.8
	December	147.4	159.0	145.6	86.8
1985	January	147.6	159.8	145.6	86.8
	February	147.7	159.8	145.6	86.8
	March	147.7	159.8	145.6	86.8
	April	148.1	161.0	146.6	86.8
	May	149.9	162.6	147.9	86.8
	June	146.3	162.8	141.3	86.5
	July	146.3	162.8	141.3	86.5
	August	146.6	163.4	141.3	86.5
	September	146.5	163.2	141.3	86.5
	October	146.5	163.2	141.3	86.5
	November	146.7	163.7	141.3	86.5
	December	146.2	162.4	141.3	86.5
1986	January	146.2	162.4	141.3	84.2
	February	146.2	162.5	141.3	84.2
	March	146.2	162.6	141.3	84.2
	April	144.1	156.9	141.3	84.3
	May	144.1	156.9	141.3	84.3
	June	135.9	156.1	127.2	84.1
	July	135.9	156.1	127.1	84.1
	August	135.8	156.1	127.1	84.1
	September	135.8	156.2	127.1	84.1
	October	136.0	156.8	127.1	84.1
	November	136.0	156.7	127.1	84.1
	December	136.0	156.7	127.1	84.1

TABLE 5.6
 Producer Price Index Data

	Toll Service	Intrastate MTS	Interstate MTS	International MTS	
1987	January	128.8	156.1	115.3	84.0
	February	128.5	155.4	115.3	84.0
	March	128.5	155.4	115.3	84.0
	April	128.4	155.2	115.3	84.0
	May	128.1	154.4	115.3	84.0
	June	128.0	154.2	115.3	84.0
	July	125.4	152.4	112.1	84.0
	August	125.4	152.4	112.1	84.0
	September	124.9	151.3	112.1	84.0
	October	124.9	151.3	112.1	84.0
	November	125.2	152.0	112.1	83.8
	December	125.2	152.0	112.1	83.8
1988	January	124.6	152.4	110.1	83.8
	February	124.3	151.7	109.1	83.8
	March	124.3	151.7	109.1	83.8
	April	124.2	151.7	109.1	83.8
	May	124.2	151.4	109.1	83.8
	June	124.2	151.7	109.1	83.8
	July	122.4	146.8	109.1	83.8
	August	122.7	147.9	109.1	83.8
	September	124.5	147.8	112.8	83.8
	October	123.8	146.0	112.8	83.8
	November	123.9	146.2	112.8	83.8
	December	122.3	146.3	109.7	83.8
1989	January	123.1	148.3	109.7	83.8
	February	125.1	153.7	109.7	83.8
	March	125.1	153.6	109.7	83.8
	April	124.1	153.8	108.0	83.8
	May	124.0	153.7	108.0	83.8
	June	124.0	153.7	108.0	83.8
	July	123.9	153.5	107.8	83.8
	August	123.9	153.5	107.8	83.8
	September	123.7	153.2	107.8	83.8
	October	122.2	149.3	107.8	83.8
	November	122.2	149.3	107.8	83.8
	December	122.2	149.3	107.8	83.8
1990	January	122.0	148.8	107.9	83.4
	February	122.4	149.8	107.9	83.4
	March	121.1	146.3	107.9	83.4
	April	121.1	146.3	107.9	83.4
	May	121.1	146.3	107.9	83.4
	June	121.1	146.3	107.9	83.4

TABLE 5.6
 Producer Price Index Data

	WATS	Interstate WATS	Intrastate WATS	Interstate Private Line
1983 January	131.8	127.1	144.1	156.9
February	131.8	127.1	144.3	156.9
March	131.8	127.1	144.3	156.9
April	131.8	127.1	144.3	156.9
May	132.4	127.1	146.3	156.9
June	132.7	127.1	147.6	156.9
July	133.7	127.1	151.2	156.9
August	133.7	127.1	151.2	156.9
September	133.7	127.1	151.2	156.9
October	133.7	127.1	151.2	156.9
November	133.7	127.1	151.2	156.9
December	133.7	127.1	151.1	158.4
1984 January	132.2	127.1	145.6	158.4
February	132.2	127.1	145.9	158.4
March	132.7	127.1	147.3	158.4
April	132.6	127.1	147.1	158.4
May	132.8	127.1	147.8	158.4
June	127.2	119.6	147.4	158.4
July	127.6	119.6	148.8	158.4
August	127.5	119.6	148.5	158.4
September	127.5	119.6	148.5	158.4
October	127.6	119.6	148.7	158.4
November	127.6	119.6	148.7	163.1
December	127.8	119.6	149.6	163.1
1985 January	127.6	119.6	148.8	163.1
February	127.6	119.6	148.8	163.1
March	127.8	119.6	149.7	159.2
April	127.8	119.6	149.5	159.2
May	128.2	119.6	150.9	159.2
June	123.5	113.1	151.0	168.3
July	123.5	113.1	151.0	168.3
August	123.5	113.1	151.0	168.3
September	123.7	113.1	151.6	168.3
October	123.6	113.1	151.3	168.3
November	123.5	113.1	150.9	168.3
December	123.3	113.1	150.3	168.3
1986 January	124.2	113.1	153.6	
February	124.2	113.1	153.6	
March	124.2	113.1	153.6	
April	124.4	113.1	154.2	
May	124.9	113.9	154.1	
June	115.4	100.8	154.3	
July	115.3	100.6	154.3	
August	114.2	100.6	150.2	
September	113.8	100.6	148.9	
October	113.8	100.6	148.7	
November	113.7	100.6	148.6	
December	113.3	100.6	146.9	

TABLE 5.6
 Producer Price Index Data

	WATS	Interstate WATS	Intrastate WATS	Interstate Private Line
1987 January	111.1	97.5	146.9	
February	110.9	97.5	146.4	
March	110.9	97.5	146.4	
April	110.9	97.5	146.4	
May	110.9	97.5	146.4	
June	110.3	97.5	144.2	
July	110.3	97.5	144.1	
August	110.2	97.5	143.7	
September	110.2	97.5	143.6	
October	110.1	97.5	143.4	
November	110.1	97.5	143.4	
December	110.1	97.5	143.4	
1988 January	106.4	93.1	141.4	
February	105.9	93.1	139.8	
March	105.9	93.1	139.8	
April	104.9	93.1	136.2	
May	104.9	93.1	136.2	
June	104.8	93.1	135.6	
July	105.0	93.1	135.6	
August	104.0	93.1	132.9	
September	103.3	93.1	130.1	
October	102.7	93.1	128.2	
November	103.4	93.1	130.5	
December	102.7	92.5	129.7	
1989 January	102.0	90.6	131.7	
February	102.0	90.6	131.7	
March	102.0	90.6	131.7	
April	99.8	87.0	131.4	
May	99.1	87.0	131.0	
June	99.3	87.0	131.8	
July	99.2	87.0	131.3	
August	99.0	87.0	130.8	
September	98.8	87.0	130.4	
October	98.8	87.0	130.1	
November	98.8	87.0	130.1	
December	98.8	87.0	130.1	
1990 January	98.4	87.0	128.6	
February	98.4	87.0	128.6	
March	98.4	87.0	128.7	
April	98.5	87.0	128.7	
May	98.5	87.0	128.7	
June	98.5	87.0	128.7	

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 \$8.35 for areas served by Pacific Bell and \$9.75 for areas served by General of California.

Table 5.7 presents average local residential rates. 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 October 1989, the national average for flat rate residential service was \$12.28 monthly. Lower-priced service alternatives are frequently available, at an average monthly charge of \$5.66. ³

3 The methodology used in conducting the survey is contained in the Primer and Sourcebook on Telephone Price Indexes and Rate Levels.

Table 5.7
Average Monthly Residential Rates
(in October of each year)

	1983	1984	1985	1986	1987	1988	1989
Unlimited Local Calling	\$10.50	\$12.10	\$12.17	\$12.58	\$12.44	\$12.32	\$12.28
Subscriber Line Charges*	.00	.00	1.01	2.04	2.66	2.67	3.53
Taxes	1.08	1.25	1.36	1.51	1.56	1.58	1.73
<u>Total</u>	<u>11.58</u>	<u>13.35</u>	<u>14.54</u>	<u>16.13</u>	<u>16.66</u>	<u>16.57</u>	<u>17.54</u>
Lowest Generally							
Available Monthly Rate	\$ 5.37	\$ 5.62	\$ 5.75	\$ 5.96	\$ 5.81	\$ 5.67	\$ 5.66
Subscriber Line Charges*	.00	.00	1.01	2.04	2.66	2.67	3.53
Taxes	.56	.58	.70	.84	.94	.91	1.05
<u>Total</u>	<u>5.93</u>	<u>6.20</u>	<u>7.46</u>	<u>8.84</u>	<u>9.41</u>	<u>9.25</u>	<u>10.24</u>
Minimum Connection Charge	\$35.01	\$43.71	\$44.32	\$45.63	\$44.04	\$42.94	\$42.71
Taxes	1.75	2.19	2.22	2.28	2.20	2.11	2.24
<u>Total</u>	<u>36.76</u>	<u>45.90</u>	<u>46.54</u>	<u>47.91</u>	<u>46.24</u>	<u>45.05</u>	<u>44.95</u>

* Includes both Federal and State charges.

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 available local rate survey, reflecting data as of October 15, 1989, indicated that assistance for monthly service charges was offered in 58 of the 95 sample cities, representing 63% of urban consumers. Connection assistance was offered in 81 of the 95 sample cities representing 85% of urban consumers. In October 1989, Lifeline and similar assistance programs provided an average benefit of \$7.37 per month. Link Up and similar connection assistance programs reduced connection costs by an average of \$23.98.

Table 5.8 presents average monthly rates for single line business customers. Like the residential rates presented above, they are based on a FCC survey using the same sampling areas and weights used by the BLS in constructing the Consumer Price Index.

Table 5.8

Average Monthly Single Line Business Rates
(in October of each year)

	1983	1984	1985	1986	1987	1988	1989
Representative Rate *	\$29.16	\$32.74	\$33.42	\$34.26	\$33.71	\$34.48	\$33.47
Subscriber Line Charges**	.00	.00	1.01	2.04	2.68	2.69	3.55
Taxes	<u>3.35</u>	<u>3.76</u>	<u>3.96</u>	<u>4.17</u>	<u>4.18</u>	<u>3.95</u>	<u>4.11</u>
Total	33.51	36.51	38.39	40.47	40.57	40.12	41.13
Minimum Connection Charge	\$56.04	\$68.84	\$70.82	\$79.94	\$72.15	\$72.51	\$72.79
Taxes	<u>3.08</u>	<u>3.79</u>	<u>3.90</u>	<u>4.01</u>	<u>3.97</u>	<u>3.92</u>	<u>4.18</u>
Total	59.12	72.63	74.72	76.95	76.12	76.43	76.98

* The "representative" rate is the monthly single line rate for touch tone service with unlimited service where offered, and the measure service with 200 messages in other cities.

** Includes both Federal and State charges.

Long Distance Rates

Table 5.9 compares the prices of directly dialed interstate long distance calls in all mileage bands and rate periods based on AT&T's tariffed rates in effect during January 1984 and July 1990. These rates are the basic message toll service rates and do not reflect discounts available in special calling plans. They also do not reflect any taxes or surcharges imposed by some states. During this period, AT&T's per minute charges for directly dialed interstate calls have been reduced about 40%.

Table 5.9
Changes in the Price of Directly Dialed Long Distance Calls
(AT&T Interstate Rates)

Calling Distance in airline miles, rate center to rate center		Five minute calls			10 minute calls		
		Jan. 1984	July 1990	Percent change	Jan. 1984	July 1990	Percent change
1 - 10	Day	\$0.96	\$0.86	-10.4%	\$1.76	\$1.71	-2.8%
	Evening	\$0.57	\$0.57	0.0%	\$1.05	\$1.14	8.6%
	Night	\$0.38	\$0.49	28.9%	\$0.70	\$0.97	38.6%
11 - 22	Day	\$1.28	\$0.98	-23.4%	\$2.38	\$1.97	-17.2%
	Evening	\$0.76	\$0.67	-11.8%	\$1.42	\$1.34	-5.6%
	Night	\$0.51	\$0.55	7.8%	\$0.95	\$1.10	15.8%
23 - 55	Day	\$1.60	\$0.98	-38.8%	\$3.00	\$1.97	-34.3%
	Evening	\$0.96	\$0.72	-25.0%	\$1.80	\$1.45	-19.4%
	Night	\$0.64	\$0.60	-6.3%	\$1.20	\$1.20	0.0%
56 - 124	Day	\$2.05	\$1.07	-47.8%	\$3.90	\$2.15	-44.9%
	Evening	\$1.22	\$0.72	-41.0%	\$2.34	\$1.45	-38.0%
	Night	\$0.82	\$0.60	-26.8%	\$1.56	\$1.20	-23.1%
125 - 292	Day	\$2.14	\$1.07	-50.0%	\$4.09	\$2.15	-47.4%
	Evening	\$1.28	\$0.72	-43.8%	\$2.45	\$1.45	-40.8%
	Night	\$0.85	\$0.60	-29.4%	\$1.63	\$1.21	-25.8%
293 - 430	Day	\$2.27	\$1.15	-49.3%	\$4.37	\$2.30	-47.4%
	Evening	\$1.36	\$0.72	-47.1%	\$2.62	\$1.45	-44.7%
	Night	\$0.90	\$0.61	-32.2%	\$1.74	\$1.22	-29.9%
431 - 925	Day	\$2.34	\$1.19	-49.1%	\$4.49	\$2.39	-46.8%
	Evening	\$1.40	\$0.74	-47.1%	\$2.69	\$1.49	-44.6%
	Night	\$0.93	\$0.63	-32.3%	\$1.79	\$1.26	-29.6%
926 - 1910	Day	\$2.40	\$1.24	-48.3%	\$4.60	\$2.49	-45.9%
	Evening	\$1.44	\$0.74	-48.6%	\$2.76	\$1.49	-46.0%
	Night	\$0.96	\$0.65	-32.3%	\$1.84	\$1.30	-29.3%
1911 - 3000	Day	\$2.70	\$1.24	-54.1%	\$5.15	\$2.49	-51.7%
	Evening	\$1.62	\$0.74	-54.3%	\$3.09	\$1.49	-51.8%
	Night	\$1.08	\$0.66	-38.9%	\$2.06	\$1.32	-35.9%
3001 - 4250	Day	\$2.80	\$1.51	-46.1%	\$5.35	\$3.01	-43.7%
	Evening	\$1.68	\$1.01	-39.9%	\$3.21	\$2.01	-37.4%
	Night	\$1.12	\$0.80	-28.6%	\$2.12	\$1.60	-24.5%
4251 - 5750	Day	\$2.91	\$1.61	-44.7%	\$5.56	\$3.21	-42.3%
	Evening	\$1.74	\$1.07	-38.5%	\$3.33	\$2.15	-35.4%
	Night	\$1.16	\$0.85	-26.7%	\$2.22	\$1.70	-23.4%

Subscriber Line and Access Charges

Monthly subscriber line charges (or "end user" charges) were first imposed in 1984 and were charged to residential customers beginning in 1985. Table 5.10 presents the level of these charges over time.

Table 5.10

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

	Residential and Single Line Business *	Multiline Business **	Embedded Centrex Rate Cap ***
05/26/84 to 05/31/85	\$0.00	\$4.99	\$2.00
06/01/85 to 09/30/85	1.00	4.99	2.00
10/01/85 to 05/31/86	1.00	4.97	2.00
06/01/86 to 12/31/86	2.00	4.97	3.00
01/01/87 to 06/30/87	2.00	5.12	3.00
07/01/87 to 12/31/87	2.60	5.12	4.00
01/01/88 to 11/30/88	2.60	5.01	4.00
12/01/88 to 03/31/89	3.20	5.01	5.00
04/01/89 to 12/31/89	3.50	4.94	6.00
01/01/90 to 06/30/90	3.48	4.84	6.00

* The monthly subscriber line charge for residential and single line business customers is capped at a maximum rate of \$3.50 monthly. Local companies are not permitted to charge the full amount unless justified by their underlying costs. As a result, a few companies do not charge the full \$3.50.

** The monthly subscriber line charge for multiline business customers has been capped at a maximum rate of \$6.00 monthly since 1984. 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 the national average calculated by NECA.

*** These rates represent the maximum charge applied to centrex lines in place or on order as of July 27, 1983. Prior to April 1, 1989, "embedded" centrex lines were capped at levels lower than new centrex lines. Customers with new centrex lines paid the multiline business subscriber line charge. Beginning on April 1, 1989, all centrex lines are charged the same rate as multiline business.

Access charges by local telephone companies to long distance carriers are an important component of the overall cost of providing long distance service. Table 5.11 shows the history of the average levels of these charges.

Table 5.11

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>
05/26/84 to 01/14/85	5.24	5.24	3.1	17.3
01/15/85 to 05/31/85	5.43	5.43	3.1	17.7
06/01/85 to 09/30/85	4.71	4.71	3.1	16.2
10/01/85 to 05/31/86	4.33	4.33	3.1	15.4
06/01/86 to 12/31/86	3.04	4.33	3.1	14.0
01/01/87 to 06/30/87	1.55	4.33	3.1	12.4
07/01/87 to 12/31/87	0.69	4.33	3.1	11.5
01/01/88 to 11/30/88	0.00	4.14	3.1	10.6
12/01/88 to 02/14/89	0.00	3.39	3.0	9.6
02/15/89 to 03/31/89	0.00	3.25	3.0	9.5
04/01/89 to 12/31/89	1.00	1.83	3.0	9.1
01/01/90 to 06/30/90	1.00	1.53	2.5	7.8

1/ Prior to 4/1/89, the rates shown are nationally uniform "premium" rates specified in tariffs filed by the National Exchange Carrier Association (NECA). Since 4/1/89, the terminating rate is no longer identical for all companies, and the rate shown is an average. 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 mid-1990, New York Telephone Company reported rate cases of nearly one billion dollars pending before the New York Public Utilities Commission. The total amount of rate increases requested and pending before other state commissions was only \$100 million. During 1987, 1988, and 1989, 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 5.12.

The information in Table 5.12 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 5.12

State Telephone Rate Cases
(Millions of Dollars)

	<u>Revenue</u> <u>Increases</u> <u>Requested</u> <u>During Quarter</u>	<u>Revenue</u> <u>Changes</u> <u>Ordered</u> <u>During Quarter</u>	<u>Requests</u> <u>Pending</u> <u>at End</u> <u>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	46.4	-215.3	148.5
Second quarter	155.2	-232.4	301.6
Third quarter	140.9	-387.8	377.0
Fourth quarter	<u>15.4</u>	<u>-530.9</u>	198.5
Total	357.9	-1,366.4	
1989 First quarter	52.1	-203.7	140.6
Second quarter	25.8	-107.6	148.7
Third quarter	362.9	-48.9	490.4
Fourth quarter	<u>6.2</u>	<u>-478.3</u>	419.5
Total	447.0	-838.5	
1990 First quarter	1,030.8	-134.8	1,036.9
Second quarter	58.3	-294.9	1,088.4

ADDITIONAL DATA RECEIVED

Twenty-five state utility commissions have filed data. 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 5.13.

Table 5.13
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
Missouri	46	0	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.

Comment Filed

The Colorado Public Utility Commission (CPUC) expresses concern about continued increases in local rates due to federally initiated action. As CPUC notes, BLS price index data indicates that access charges caused local residential rates to increase faster than overall inflation. CPUC recently received \$40 million in rate requests which it partially attributes to separations changes. CPUC cites an Oklahoma Corporate Commission Public Utility Division study which showed that three quarters of rural residential customers did not save enough on interstate service to offset the added cost of subscriber line charges. CPUC contends that business customers are receiving most of the benefits of the FCC's access charge policies, while residential customers are bearing a disproportionate share of the costs.

6. Bypass

The regional Bell holding companies and GTE submitted their fourth bypass reports on April 30, 1990. The estimated quantity losses (for the year 1989) are shown in Table 6.1. These estimated losses total 109 billion switched minutes of use and 0.5 million private line circuits. The switched minutes loss estimate represents about a 9 percent increase from the estimate for the previous year. This is less than the growth rate of access minutes from 1988 to 1989, which was about 13 percent.

The estimated revenue losses due to bypass are shown in Table 6.2. It should be noted that these losses represent the telephone companies' unaudited estimates of revenue loss and do not reflect associated cost savings. The total revenue losses were estimated to be about \$3.7 billion, based on annualized 1989 rates. This represents about a 6 percent increase from the previous year. The lower percentage increase in revenue losses than in minutes losses is the result of the reduction in access charges between 1988 and 1989.

To put the latest report in historical perspective, summaries of the three previous bypass reports are shown in Table 6.3. The data in this table reflect subsequent revisions since the original submission of this information, and thus may differ from the data in previous monitoring reports.

While not shown here, each carrier has also submitted data for individual states.¹ This information indicates that estimated bypass is heavily concentrated in the most populous states. The carriers have also reported many new examples of bypass. We note that since these are just examples, their totals cannot be regarded as totals for all new bypass. Therefore, we have not computed such totals. Also, as some companies have noted, some types of bypass are difficult to detect until long after they occur. The number of reported bypass abandonments is small. The descriptive materials included by the carriers in their April 1990 bypass reports are summarized following Table 6.3.

1 A detailed listing of all the data would be quite voluminous. The data can be found in the original company filings in this docket. A lengthy summary of this information by state can be found in State Telephone Regulation Report, May 31, 1990, pp 1-7.

Table 6.1
Estimated Quantity Losses Due to Bypass
April 1990 Report

Company	Facility Private Line	Facility Switched	Service Switched	Total Switched
	Thousands of Circuits	Billions of Minutes of Use		
Ameritech	131	8.9	13.9	22.8
Bell Atlantic	157	8.3	16.0	24.3
BellSouth	21	0.8	5.7	6.5
GTE	5	1.6	4.5	6.1
NYNEX	101	4.8	8.6	13.4
Pacific Telesis	25	2.0	8.8	10.8
Southwestern Bell	48	1.3	9.8	11.1
US West	16	0.9	13.0	13.8
Totals	504	28.5	80.4	108.9

Table 6.2
Estimated Revenue Losses Due to Bypass
April 1990 Report -- (Millions of Dollars)

Company	Facility Private Line	Facility Switched	Service Switched	Total Bypass
Ameritech	124	320	338	782
Bell Atlantic	131	277	315	723
BellSouth	25	29	161	215
GTE	9	80	200	289
NYNEX	178	238	190	606
Pacific Telesis	21	93	348	462
Southwestern Bell	42	46	163	251
US West	17	37	349	403
Totals	546	1120	2066	3732

Table 6.3
Estimated Losses Due to Bypass -- Previous Reports

April '88	Circuits			Billions of Minutes			Revenues in Millions of Dollars		
Company	Facility Private Line (000)	Facility Switched	Service Switched	Total Switched	Facility Private Line	Facility Switched	Service Switched	Total Bypass	
Ameritech	112	7.6	13.5	21.0	113	334	393	840	
Bell Atlantic	0	7.2	15.7	22.9	0	348	511	858	
BellSouth	0	0.2	8.3	8.5	2	9	273	283	
GTE	17	2.6	3.2	5.8	33	86	95	214	
NYNEX	0	1.7	8.8	10.5	0	97	226	323	
Pacific Telesis	7	1.7	6.6	8.2	11	93	226	330	
Southwestern	79	2.9	11.5	14.5	109	131	203	444	
US West	8	0.4	12.0	12.4	14	23	337	374	
Totals	223	24.3	79.5	103.8	282	1120	2264	3666	

Oct. '88	Circuits			Billions of Minutes			Revenues in Millions of Dollars		
Company	Facility Private Line (000)	Facility Switched	Service Switched	Total Switched	Facility Private Line	Facility Switched	Service Switched	Total Bypass	
Ameritech	123	8.3	13.7	22.1	143	370	351	864	
Bell Atlantic	133	7.2	16.0	23.2	145	283	404	832	
BellSouth	11	0.6	7.2	7.8	14	29	213	257	
GTE	10	1.7	3.1	4.8	13	100	178	291	
NYNEX	23	1.9	9.0	10.9	35	104	234	373	
Pacific Telesis	10	0.8	7.3	8.1	14	45	298	358	
Southwestern	118	1.8	10.8	12.6	137	68	136	341	
US West	14	0.8	11.3	12.0	20	41	379	440	
Totals	442	23.2	78.3	101.5	521	1041	2193	3755	

April '89	Circuits			Billions of Minutes			Revenues in Millions of Dollars		
Company	Facility Private Line (000)	Facility Switched	Service Switched	Total Switched	Facility Private Line	Facility Switched	Service Switched	Total Bypass	
Ameritech	127	8.6	13.7	22.3	138	332	329	799	
Bell Atlantic	131	7.0	15.4	22.3	136	271	362	768	
BellSouth	15	0.7	6.1	6.8	19	30	169	219	
GTE	6	0.9	3.2	4.1	8	48	151	207	
NYNEX	60	2.7	9.1	11.9	86	139	212	437	
Pacific Telesis	11	0.9	7.6	8.6	10	52	332	394	
Southwestern	128	1.9	10.3	12.3	139	69	125	332	
US West	15	0.8	10.7	11.5	22	40	313	375	
Totals	493	23.5	76.2	99.7	557	980	1993	3531	

Ameritech

Ameritech notes that its estimate of facility bypass in its region has grown by 3.5 percent in the past year and service bypass has grown by 1.9 percent. It reports that its estimate of bypass revenue loss declined by 2 percent, and it attributes this decline to the reduction in its rates. Ameritech includes a description of the methodology it uses to estimate bypass. It indicates that the assumptions used are based on studies done by its operating companies and outside consultants such as Spectrum Planning Research.

Bell Atlantic

Bell Atlantic indicates that, although it followed the same methodology in estimating the impact of bypass in its latest report that it had used in previous reports, more complete information was available in the preparation of the latest report with respect to DS-3 high capacity circuits employed in service bypass, and also satellite and fiber optics installations which constitute facility bypass. It notes that DS-3 service, for which tariffed rates were filed for the first time in 1989, is most widely used by interexchange carriers to connect their points of presence to hubbing locations, where lower capacity circuits are multiplexed to connect to end user premises. It says that a growing number of DS-3 installations are terminating directly at end user premises, and therefore it has included with its quantification of service bypass an estimate of the impact of DS-3 service. It reports that it has contracted with two consultants (Kessler Marketing Intelligence and Comsearch) to obtain user-specific data on non-licensed, privately owned fiber optics and Very Small Aperture Terminal (VSAT) satellite facilities. It states that facility bypass quantification is now based solely on the aggregate impact of individual installations of microwave, fiber, and satellite facilities identified by Bell Atlantic internally and by its consultants, whereas previously only microwave facilities were specifically quantified, with their total being adjusted upward (generally by 20%) to account for an assumed proportion of non-microwave facilities in operation. It reports that both service and facility bypass grew in 1989, but that the impact on revenues was mitigated by declining average rates.

BellSouth

BellSouth includes a description of the methodology it uses to estimate bypass. It indicates that this methodology is the same as in its previous filings. It notes that it used a March 1990 Comsearch Report to identify microwave circuits. It reports that the estimated revenue loss for facility bypass has increased by \$4.8 million in the past year, and it attributes this increase to the identification of more VSAT bypass in its region, and to an overall increase in the number of voice grade equivalent (VGE) circuits applicable to facility bypass. It states that its estimate of service bypass has decreased in the past year, and attributes this decrease to reductions in

the number of VGE circuits applicable to service bypass and in switched access rates.

GTE

The GTE bypass report contains bypass estimates for seven of its study areas. GTE finds that bypass has increased substantially in these study areas in the past year. It says that the most notable development since its previous report has been the accelerating infusion of competitive fiber network facilities into the local market. It asserts that fiber bypass networks, previously confined to only a few large metropolitan areas, are rapidly emerging in secondary markets and suburban business centers. It states that an extensive fiber bypass network is now operational in GTE Florida's Tampa market and construction has begun or is imminent in the three additional GTE markets by five different bypass providers. It indicates that it is also witnessing significant fiber deployment by electric utilities, and that extensive electric company fiber networks have been installed in at least seven GTE markets. It notes that, beyond serving internal communications needs, this electric company fiber capacity, in some instances, is being resold to interexchange carriers and business customers for bypass applications. It observes that fiber network deployment by state and local governments is also increasing, as is the use of cable television facilities to provide voice and data services to businesses. It concludes that this activity represents a significant increase in the level of bypass and competition for local exchange company access services. It argues that this fact is recognized by the investment community as reflected in articles in business publications and more directly in the March 22, 1990, downgrading of certain GTE Florida mortgage bonds and debentures by Moody's Investors Service due to "competitive pressures". It says that despite this significant increase in the supply of fiber bypass bandwidth, microwave continues to comprise the majority of facility bypass. It reports that in 1989, microwave circuit capacity increased by over 23,000 VGEs in the seven study areas covered by its report. In its description of assumptions and methodologies, it notes that new facility bypass systems were identified through studies performed by Kaiser and Associates for microwave and VSAT bypass installations, and by Kessler Marketing Intelligence for fiber bypass systems.

NYNEX

NYNEX notes that the basic methodology it has used to estimate bypass has remained the same since its previous report. It says it continues to update the factors used to calculate bypass using the most current data available in the NYNEX Telephone Companies' Carrier Access Billing System. It reports the factors used in the current report, as compared to those used in its previous report, are:

<u>Factor</u>	NYT		NET	
	<u>Old</u>	<u>New</u>	<u>Old</u>	<u>New</u>
Voice/Data Ratio				
Facility Bypass	56%	51%	48%	41%
Service Bypass	60%	55%	51%	46%
Fill Factor	52%	50%	51%	49%

NYNEX states that the most recent data provided by its vendor of microwave licensing information indicates that bypass by customers using private microwave systems is increasing significantly. It asserts that recent studies by NYNEX and others reveal that fiber based alternate local transport (ALT) providers have grown significantly, contributing large amounts of VGE circuits to bypass. It contends that these findings indicate that ALT providers are viable competitors and have more established networks than NYNEX previously estimated. It indicates that, in terms of VGE circuits, facility bypass has increased by 83% while service bypass has increased by only 2% in the past year, resulting in a 28% increase in total bypass. It expresses the opinion that the best method of measuring bypass over time is by comparing VGE circuits. It argues that this measurement of bypass is unaffected by changes in prices, factors or underlying assumption regarding minutes of use per VGE circuit. It concludes that the amount of total bypass of the public switched network is continuing to grow at a substantial rate. It observes that the bulk of new bypass in its territory has taken place in New York, with the New York metropolitan area continuing to be the major focus of ALT providers. It submits that the significant growth of facility bypass underscores the need for pricing flexibility and other regulatory relief so that it can effectively compete in this growing, competitive marketplace.

Pacific Telesis

Pacific Telesis reports that Nevada Bell experienced a dramatic increase in bypass in the past year. It notes that estimates for Nevada facility bypass are based on private microwave licenses and estimated carrier bypass and do not include bypass VSAT and fiber technologies. It indicates that these technologies have been included in the Pacific Bell estimates (for California) for the first time, with the aid of Kessler Marketing Intelligence and Comsearch, and have resulted in a significant increase in estimated facility bypass. It expects bypass to grow significantly over the next several years as a result of technological changes and alternative access providers' increased interest in the California market. It says that several such providers have been granted authority to provide service within California. It recommends that future bypass reports focus on minutes of use and private line circuit losses and not on revenue loss, because that would represent a more consistent measure of the net impact of bypass. It provides a description of the methodology it uses to estimate bypass for each of its two operating companies.

Southwestern Bell

Southwestern Bell indicates that it cannot fully determine the number of end users employing bypass arrangements, and only reports those examples it has documented. It advises caution in comparing aggregate bypass loss estimates with those previously reported. It says that although its latest report reflects a significant decrease in estimated bypass losses, reasons other than actual changes in bypass activity may explain the different levels of revenue losses reported. It states that it continues to rely on many assumptions in estimating the level of bypass activity because it lacks information, and gives as an example its limited knowledge of the number of fiber paths that may be used for bypass in its territory. It further notes that for those paths it has confirmed, it has little information on transmission capacity and no information on the extent to which they are being used for bypass. It contends that other factors that may have contributed to lower estimates of bypass revenue include: (1) switched and special access rate reductions; (2) refinement in the method used to configure private microwave path information into private microwave networks; (3) the development by a private vendor of a method to determine the exact geographic location of private microwave networks to allow the exclusion of those networks operating completely outside Southwestern Bell territory; and (4) significant unverified changes in data received from outside sources. It includes information obtained from a private study of the effects of private fiber optic facilities. It reports that it has changed its method for estimating service bypass revenue losses to provide broader coverage of high capacity DS-3 special access circuits.

US West

US West notes that its report contains interlata bypass examples and revenue losses, and do not reflect intralata and local bypass losses. It argues that the availability of facility bypass technologies is increasing rapidly. It contends that today there is a wide range of bypass technologies available to sophisticated end users and interexchange carriers, and that these technologies provide alternatives to local exchange carrier switched and special access services. It states that facility bypass technologies can be grouped into two broad categories: (1) radio systems and (2) cable systems. It provides a description of the methodology and assumptions it uses to estimate bypass. It acknowledges the use of information from Kessler Marketing Intelligence to identify private fiber optic systems. It indicates that for this report it uses private microwave license data purchased directly from the FCC, whereas it had previously used a Comsearch database for this information. It reports an increase in estimated service bypass minutes of nearly 21 percent, while estimated facility switched bypass minutes increased by only 9 percent over the previous year.

AT&T Facility Bypass Data

Information from users and providers of bypass arrangements has generally not been forthcoming because the companies involved regard it as proprietary and are not required to file it. AT&T, however, has been required to file monthly facility bypass reports to the FCC since June 1, 1985, in response to an order regarding AT&T Communications' Tariffs 9, 10, and 11.² Although this information is just for one company, it is a major one, and although the amount of information available is limited, it is useful as another perspective on bypass.

Table 6.4 shows the number of customer requests received by AT&T for technological bypass involving connections at its central offices, the number of agreements under which customers provide access, and the number of agreements where AT&T arranges access through alternative access suppliers. The table also shows the number of DS-1 and DS-3 level channels involved. Each DS-1 can be multiplexed into as many as 24 equivalent 4Khz circuits and each DS-3 can be multiplexed into as many as 672 equivalent 4Khz circuits, although a significant number of the equivalent circuits may not be initially active. Table 6.5 shows the total equivalent 4Khz circuit capacity associated with the indicated bypass arrangements. This was done by weighting the number of DS-1s by 24 and DS-3s by 672. All the data in both tables are provided on an annual basis, showing new amounts for each year and cumulative totals.

AT&T has verbally indicated that much of the capacity shown is associated with vendors (such as urban fiber carriers) who request capacity for their future activities. AT&T indicated that it does not have any record of disconnects of this capacity, nor does AT&T expect that any significant activity in this form existed prior to 1985 when the data was first provided to the Commission.

At the end of 1989, based on Table 6.4 data, about 150,000 potential bypass circuits were linked to AT&T's network. This represented about 21% of AT&T's currently estimated 709,000 private line circuits³ and about 30% of the

2 Memorandum Opinion and Order, FCC 85-221, released May 28, 1985, at para. 117 and 118.

3 AT&T's Section 214 Annual 1990 Blanket Filing, WPC-6441.

Table 6.4

Summary of AT&T Facility Bypass

Yearly Totals	Customer Requests	Customer Provided Access			AT&T Provided Access		
		Agree-ments	DS-1 Channels	DS-3 Channels	Agree-ments	DS-1 Channels	DS-3 Channels
Jun.-Dec. '85	74	2	500	4	1	0	4
Total 86	103	9	384	5	3	764	4
Total 87	90	14	644	12	0	0	0
Total 88	116	18	459	7	3	4	0
Total 89	104	39	1,835	19	6	7	3
Cumulative Totals							
Cum '85	74	2	500	4	1	0	4
Cum '86	177	11	884	9	4	764	8
Cum '87	267	25	1,528	21	4	764	8
Cum '88	383	43	1,987	28	7	768	8
Cum '89	487	82	3,822	47	13	775	11

Table 6.5

Capacity Associated with Bypass by AT&T and its Customers

Yearly Totals	Equivalent 4Khz Circuit Capacity		
	Customer Provided	AT&T Provided	Total Provided
Jun.-Dec. '85	14,688	2,688	17,376
Total 86	12,576	21,024	33,600
Total 87	23,520	0	23,520
Total 88	15,720	96	15,816
Total 89	56,808	2,184	58,992
Cumulative Totals			
Cum '85	14,688	2,688	17,376
Cum '86	27,264	23,712	50,976
Cum '87	50,784	23,712	74,496
Cum '88	66,504	23,808	90,312
Cum '89	123,312	25,992	149,304

total estimated 504,000 facility private line bypass circuits shown in Table 6.1.

Comments Filed

The State of Colorado Public Utilities Commission (CPUC) filed comments on May 31, 1990. It expresses concern about abuses of the bypass reports. It notes that no local exchange carriers (LECs) make an attempt to measure uneconomic bypass. It contends that the FCC needs to establish a common criteria for the measurement of all bypass - both economic and uneconomic. It argues that the main reason for the reporting of bypass is to uncover the impact of the increase in the subscriber line charge (SLC), and, therefore, if LECs fail to differentiate between economic and uneconomic bypass, then the true impact of the SLC increases can not be accurately assessed. It maintains that because economic bypass increases the efficiency of the network, it should be encouraged, whereas uneconomic bypass is inefficient and should be discouraged. It claims that from this distinction between uneconomic and economic bypass, an accurate conclusion could be reached as to the true amount of bypass which causes adverse economic effects to individual LECs. It contends that the fact that LECs refuse to submit cost offset information indicates their inability to prove that they are suffering the presumed negative effects of bypass. It says that they cannot point to the bottom line effect on profits, but that all they can do is point to possible revenue losses. It argues that only firms with excessive market power can be so cavalier about the bottom line.

CPUC notes the need to address the issue of the cross-elasticity of LEC services. It states that, instead of access service, bypassers tend to purchase other services from LECs, and, further, there is little effort by LECs to report the increase in other services which are due either to economic or uneconomic bypass. It claims that a recent study indicates that if LECs abandoned intraLATA toll service and were strictly access companies, revenues would go down while net profits would remain the same. It wonders whether LEC's main concern is revenues or profits.

CPUC suggests that an intensive, in-depth study be conducted specifically to discover the impact of bypass on a selected four or five LECs. It argues that in this way, various economic indicators and variables can be accounted for, data will be consistently reported and collected, and perhaps the true relationship between the SLC and bypass levels will be realized.

CPUC also contends that comments filed by NASUCA in August, 1988, have not been adequately addressed by the Joint Board and FCC in the monitoring process. It says that NASUCA claimed that the current methods of monitoring bypass activity need to be altered in order to develop an accurate causal relationship (if indeed it does exist) between the amount of bypass and the SLC level. It argues that the data collected from the LECs, which claim lost revenue due to bypass appears to have not been linked to the recent

increases in the SLC and the subsequent decreases in common carrier line charges, but rather that these data are so inconsistent and inaccurate that they should not be relied upon to develop telecommunications policy. It maintains that significant recommendations set forth by NASUCA remain unaddressed and it urges us to reconsider them. It says that these recommendations are: (1) LEC data submissions should include an explanation of methods used calculate losses due to bypass; (2) published market studies should be used to determine the amount of traffic unsuited for public networks, and LECs should subsequently be required to employ these findings in future calculations of losses attributable to bypass; (3) LECs should be required to document the source of capacity utilization estimates; (4) to quantify the entire bypass activity, the Joint Board should gather and distribute aggregate statistics on the growth of facility bypass alternatives; (5) a consistent time series of data needs to be developed which takes into account various economic indicators in order to draw an accurate conclusion as to the historic impact of the SLC; and (6) the joint board should conduct a statistical analysis of the relationship between increases in SLCs and increases in network utilization.

7. Pooling and Rate Deaveraging

The transition to jurisdictionally-specific Carrier Common Line (CCL) charges occurred on April 1, 1989, for the following local exchange carriers (LECs) that withdrew from the National Exchange Carrier Association (NECA) CCL pool at that time: Ameritech, Bell Atlantic, BellSouth, Centel, Cincinnati Bell, Continental Telcom, GTE, NYNEX, Pacific Telesis, Rochester Telephone, Seneca-Gorham Telephone, Southern New England Telephone, Southwestern Bell, US West, United Telephone Systems, and Warwick Valley. Seneca-Gorham has since been acquired by Rochester Telephone. On July 1, 1990, Great Plains Communications and Hughes Telephone also withdrew from the NECA CCL pool.

The latest nationwide pool results provided by NECA are shown in Tables 7.1 and 7.2. Table 7.1 summarizes the CCL pool revenues and expenses for the last nine months of 1989, and, separately, for the first three months of 1990. Table 7.2 has corresponding figures for NECA's voluntary traffic sensitive pool.

NECA's latest report on the dimensions of long term support and transitional support payments among the LECs, based on the tariffs that became effective on July 1, 1990, follows. Table 7.3 shows the transitional support payments being received by Level 1 Receivers. The first column of this table shows the base amount from which the payments are calculated, and the third column shows the actual support payments. The transition factors in the second and third columns will decline by .2 each year over a five year transition period. Table 7.4 shows the transitional support payments being made by Level 1 Contributors. Chart 7.1 summarizes the transitional support among carriers that withdrew from the NECA pool. Table 7.5 shows the long term support payments being made by Level 1 Contributors, in support of those companies remaining in the NECA CCL pool. Chart 7.2 summarizes the sources of revenue for the NECA CCL pool, showing the distribution of funds from long term support, CCL charges, subscriber line charges, and special access surcharges. Table 7.6 shows the total support payments being made by Level 1 Contributors.

As an indication of the effect of depooling on CCL rates, Chart 7.3 shows the terminating CCL rates being charged by the Bell companies ¹ and GTE, as well as the NECA rate for those companies remaining in the NECA pool. For comparison purposes, the rate that NECA would have had to establish in absence of long term support payments is also shown.

1 Since depooling, each Bell holding company has a single company-wide terminating CCL rate except NYNEX, which has separate rates for New York Telephone and New England Telephone.

TABLE 7.1

NATIONAL EXCHANGE CARRIER ASSOCIATION, INC.
SUMMARY OF POOL RESULTS FOR THE MONTH ENDING DECEMBER 31, 1989
REPORTED AS OF FEBRUARY 28, 1990

COMMON LINE (CL) (Note 1)	CURRENT MONTH	Post 04/01/89 Pool YTD (Note 2)
Carrier Common Line (CCL) Earned Revenue		
Premium	\$14,392,882	\$125,111,277
Non-premium	\$756,598	\$6,221,954
Special Access Surcharge	\$98,637	\$990,730
CCL Net Realized Uncollectibles	\$100,189	\$150,339
CCL Net Earned Revenue	\$15,147,928	\$132,173,622
End User Net Earned Revenues (Note 3)	\$27,402,553	\$244,911,819
Total Common Line Net Earned Revenues	\$42,550,481	\$377,085,441
CL Income from Interest Charged Construction	\$0	\$0
Total Common Line Revenues	\$42,550,481	\$377,085,441
Long Term Support	\$25,115,285	\$235,700,497
NECA Administrative Expenses	\$2,342,338	\$17,853,485
Average Schedule Company Settlements	\$22,873,541	\$217,324,107
Common Line Expenses and other Taxes	\$25,979,099	\$228,369,663
Common Line Adjusted Federal Income Tax	\$3,448,647	\$31,361,538
Total Common Line Expenses	\$54,643,625	\$494,908,793
Common Line Residue for Distribution (Note 4)	\$13,022,141	\$117,877,145
Common Line Net Investment	\$1,110,339,506	\$1,101,435,392
Annualized Common Line Residue Ratio (Note 5)	14.07%	14.27%

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

Note 2: The Post 04/01/89 Pool Year is the period beginning April 1, 1989 through the CURRENT MONTH. The Net Investment is an average of the cumulative months reported.

Note 3: Amount includes End User SLC Waiver Revenue for NECA Tariff participants.

Note 4: Residue for Distribution is Total Revenues Plus Long Term Support less Total Expenses.

Note 5: Annualized Residue Ratio in the CURRENT MONTH is calculated by dividing the amount of Residue for Distribution by the amount of Net Investment and multiplying by 12 months X 100. The Post 04/01/89 Pool YTD is similarly computed except that the calculation is then divided by the number of Pool Year Reporting Periods.

TABLE 7.1

NATIONAL EXCHANGE CARRIER ASSOCIATION, INC.
SUMMARY OF POOL RESULTS FOR THE MONTH ENDING APRIL 30, 1990
REPORTED AS OF JUNE 30, 1990

COMMON LINE (CL) (Note 1)	CURRENT MONTH	January - June 1990 Pool YTD (Note 2)
Carrier Common Line (CCL) Earned Revenue		
Premium	\$13,019,529	\$51,979,080
Non-premium	\$738,596	\$2,956,976
Special Access Surcharge	\$87,034	\$355,665
CCL Net Realized Uncollectibles	\$1	\$5,598
CCL Net Earned Revenue	\$13,845,158	\$55,286,123
End User Net Earned Revenues (Note 3)	\$27,936,918	\$110,661,518
Total Common Line Net Earned Revenues	\$41,782,076	\$165,947,641
CL Income from Interest Charged Construction	\$0	\$0
Long Term Support	\$22,333,332	\$89,333,328
Total Common Line Revenues	\$64,115,408	\$255,280,969
NECA Administrative Cost	\$1,784,099	\$7,280,492
Average Schedule Company Settlements	\$21,033,761	\$84,239,089
Common Line Expenses and other Taxes	\$26,309,691	\$105,235,048
Common Line Adjusted Federal Income Tax	\$3,058,566	\$11,859,016
Total Common Line Expenses	\$52,186,117	\$208,613,645
Common Line Residue for Distribution (Note 4)	\$11,929,291	\$46,667,324
Common Line Net Investment	\$1,139,255,249	\$1,136,950,361
Annualized Common Line Residue Ratio (Note 5)	12.57%	12.31%

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

Note 2: The January - June 1990 Pool Year is the period beginning January 1, 1990 through June 1990. The Net Investment is an average of the cumulative months reported.

Note 3: Amount includes End User SLC Waiver Revenue for NECA Tariff participants.

Note 4: Residue for Distribution is Total Revenues less Total Expenses.

Note 5: Annualized Residue Ratio in the CURRENT MONTH is calculated by dividing the amount of Residue for Distribution by the amount of Net Investment and multiplying by 12 months X 100. The January - June 1990 Pool YTD is similarly computed except that the calculation is then divided by the number of Pool Year Reporting Periods.

TABLE 7.2
 NATIONAL EXCHANGE CARRIER ASSOCIATION, INC.
 SUMMARY OF POOL RESULTS FOR THE MONTH ENDING DECEMBER 31, 1989
 REPORTED AS OF FEBRUARY 28, 1990

TRAFFIC SENSITIVE (TS) (Note 1)	CURRENT MONTH	Post 04/01/89 Pool YTD (Note 2)
TS Earned Revenue	\$51,646,021	\$433,664,074
TS Net Realized Uncollectibles	\$2,899	\$50,082
TS Net Earned Revenue	\$51,643,122	\$433,613,992
TS Income From Interest Charged Construction	\$2	-\$715
Total Traffic Sensitive Revenues	\$51,643,124	\$433,613,277
NECA Administrative Expenses	\$1,038,057	\$7,912,155
Average Schedule Company Settlements	\$20,371,768	\$175,184,570
TS Expenses and other Taxes	\$19,105,420	\$168,318,490
TS Adjusted Federal Income Tax	\$2,329,925	\$16,187,286
Total Traffic Sensitive Expenses	\$42,845,170	\$367,602,501
TS Residue For Distribution (Note 3)	\$8,797,954	\$66,010,776
TS Net Investment	\$698,584,597	\$693,541,595
Annualized Traffic Sensitive Residue Ratio (Note 4)	15.11%	12.69%

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

Note 2: The Post 04/01/89 Pool Year is the period beginning April 1, 1989 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 Net Investment and multiplying by 12 months X 100. The Post 04/01/89 Pool YTD is similarly computed except that the calculation is then divided by the number of Pool Year Reporting Periods.

TABLE 7.2

NATIONAL EXCHANGE CARRIER ASSOCIATION, INC.
SUMMARY OF POOL RESULTS FOR THE MONTH ENDING APRIL 30, 1990
REPORTED AS OF JUNE 30, 1990

TRAFFIC SENSITIVE (TS) (Note 1)	CURRENT MONTH	January - June 1990 Pool YTD (Note 2)
-----	-----	-----
TS Earned Revenue	\$52,619,618	\$209,507,865
TS Net Realized Uncollectibles	-\$580	\$1,372
TS Net Earned Revenue	\$52,620,198	\$209,506,493
TS Income From Interest Charged Construction	\$480	\$486
Total Traffic Sensitive Revenues	\$52,620,678	\$209,506,979
NECA Administrative Cost	\$790,662	\$3,226,507
Average Schedule Company Settlements	\$20,522,081	\$81,469,675
TS Expenses and other Taxes	\$20,339,604	\$81,532,034
TS Adjusted Federal Income Tax	\$2,294,386	\$9,034,107
Total Traffic Sensitive Expenses	\$43,946,733	\$175,262,323
TS Residue For Distribution (Note 3)	\$8,673,945	\$34,244,656
TS Net Investment	\$738,947,788	\$738,241,432
Annualized Traffic Sensitive Residue Ratio (Note 4)	14.09%	13.92%

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

Note 2: The January - June 1990 Pool Year is the period beginning January 1, 1990 through June 1990. 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 Net Investment and multiplying by 12 months X 100. The January - June 1990 Pool YTD is similarly computed except that the calculation is then divided by the number of Pool Year Reporting Periods.

TABLE 7.3
 NATIONAL EXCHANGE CARRIER ASSOCIATION, INC.
 LEVEL I & II RECEIVERS
 TRANSITIONAL SUPPORT AMOUNTS
 FOR TEST PERIOD JULY 1, 1990 THRU JUNE 30, 1991

LEVEL I & II RECEIVERS	(1) TRS BASE AMOUNT @ 100%	(2) TRANSITION FACTORS JUL-MAR APR-JUN		(3) ANNUAL TRS SUPPORT*	(4) UNITED-CONTEL ASSET EXCHANGE
BELL SOUTH	\$147,648,853	.6	.4	\$81,206,869	
GTE CORPORATION	\$207,448,673	.6	.4	\$114,096,770	
UNITED TELEPHONE SYSTEM	\$54,325,819	.6	.4	\$29,879,201	\$31,275,674
CONTEL CORPORATION	\$69,465,815	.6	.4	\$38,206,198	\$36,809,725
	----- \$478,889,160 =====			----- \$263,389,038 =====	
	(1) TRS BASE AMOUNT @ 100%	(2) TRANSITION FACTORS JUL-JUN		(3) ANNUAL TRS SUPPORT**	
GREAT PLAINS COMMUNICATIONS	\$608,963	.8		\$487,170	
HUGHES TELEPHONE CO.	\$100,997	.8		\$80,797	
	----- \$709,960 =====			----- \$567,968 =====	
TOTAL ALL COMPANIES	----- \$479,599,120 =====			----- \$263,957,006 =====	

* ANNUAL TRS SUPPORT = (COL 1*.75*.6)+(COL 1*.25*.4) - BELL SOUTH, GTE CORPORATION, UNITED TELEPHONE & CONTEL CORPORATION
 **ANNUAL TRS SUPPORT = (COL 1*.25*.8) - GREAT PLAINS COMMUNICATIONS, HUGHES TELEPHONE CO.

TABLE 7.4

NATIONAL EXCHANGE CARRIER ASSOCIATION, INC.
 LEVEL I CONTRIBUTORS
 TRANSITIONAL SUPPORT AMOUNTS
 FOR TEST PERIOD JULY 1, 1990 THRU JUNE 30, 1991

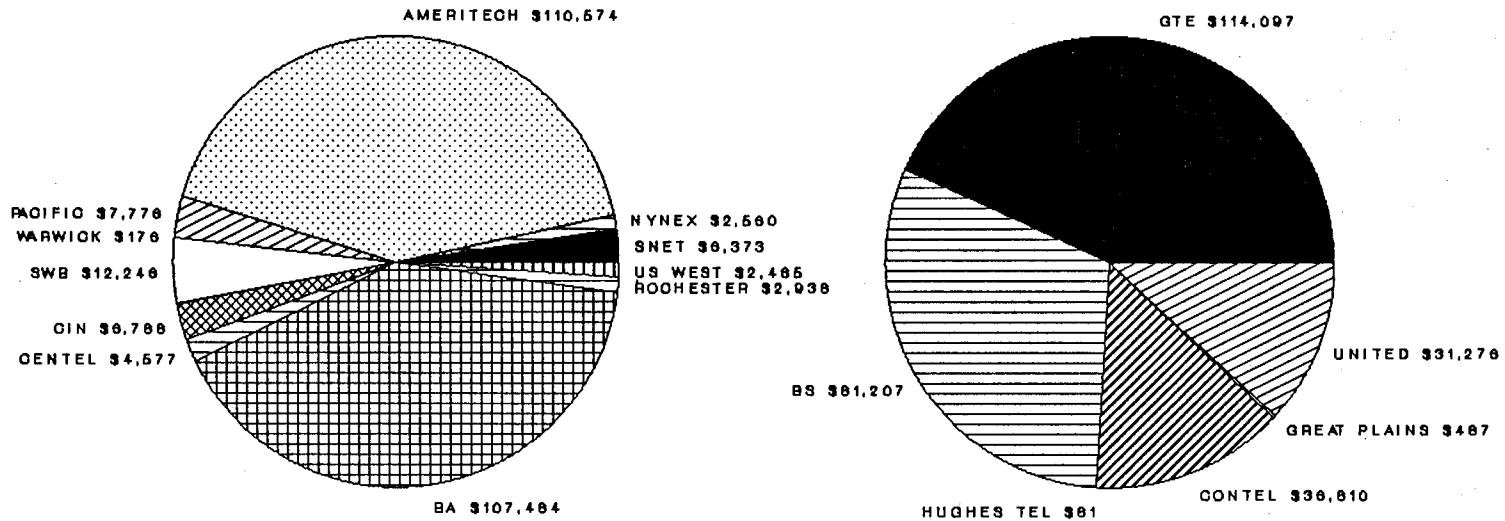
LEVEL I CONTRIBUTOR	(1) TRS AMOUNT*	(2) CONTRIBUTION FACTORS	(3)=(1)*(2) PAYMENT
SOUTHERN NEW ENGLAND TEL.	\$263,957,006	0.024144629258	\$6,373,144
AMERITECH	\$263,957,006	0.418907581190	\$110,573,591
BELL ATLANTIC	\$263,957,006	0.407204424667	\$107,484,461
NYNEX SVC. CO.	\$263,957,006	0.009698438350	\$2,559,971
PACIFIC TELESIS	\$263,957,006	0.029459837696	\$7,776,131
SOUTHWESTERN BELL	\$263,957,006	0.046392525252	\$12,245,632
CINCINNATI BELL	\$263,957,006	0.025715949951	\$6,787,905
CENDEL CORPORATION	\$263,957,006	0.017339514112	\$4,576,886
ROCHESTER TELEPHONE CORP	\$263,957,006	0.011130549108	\$2,937,986
WARWICK VALLEY	\$263,957,006	0.000666371948	\$175,894
U. S. WEST	\$263,957,006	0.009340178467	\$2,465,406
			=====
			\$263,957,006
			=====

*BELL SOUTH, GTE CORPORATION, UNITED TELEPHONE AND CONTEL CORPORATION ARE CALCULATED AT 60% FOR JUL '90 - MAR '91 AND 40% FOR APR '91 - JUN '91. GREAT PLAINS COMMUNICATIONS AND HUGHES TELEPHONE ARE CALCULATED AT 80% FOR JUL '90 - JUN '91.

07/18/90

CHART 7.1

7/90 THRU 6/91 TRANSITIONAL SUPPORT (\$000s)



CONTRIBUTORS
\$263,957.006

RECEIVERS
\$263,957.006

TABLE 7.5

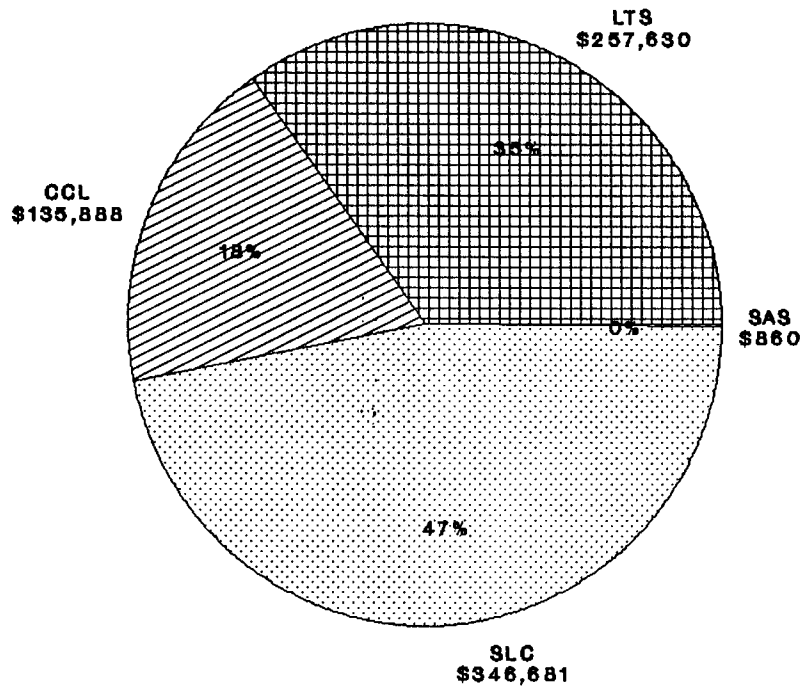
NATIONAL EXCHANGE CARRIER ASSOCIATION, INC.
 LEVEL I CONTRIBUTOR LONG TERM SUPPORT PAYMENTS
 FOR TEST PERIOD JULY 1, 1990 THRU JUNE 30, 1991

<u>LEVEL I CONTRIBUTOR</u>	<u>(1) LTS AMOUNT</u>	<u>(2) CONTRIBUTION FACTORS</u>	<u>(3)=(1)*(2) ANNUAL LTS</u>
SOUTHERN NEW ENGLAND TEL.	\$257,629,571	0.024144629258	\$6,220,370
AMERITECH	\$257,629,571	0.418907581190	\$107,922,980
BELL ATLANTIC	\$257,629,571	0.407204424667	\$104,907,901
NYNEX SVC. CO.	\$257,629,571	0.009698438350	\$2,498,605
PACIFIC TELESIS	\$257,629,571	0.029459837696	\$7,589,725
SOUTHWESTERN BELL	\$257,629,571	0.046392525252	\$11,952,086
CINCINNATI BELL	\$257,629,571	0.025715949951	\$6,625,189
CENDEL CORPORATION	\$257,629,571	0.017339514112	\$4,467,172
ROCHESTER TELEPHONE CORP	\$257,629,571	0.011130549108	\$2,867,559
WARWICK VALLEY	\$257,629,571	0.000666371948	\$171,677
U. S. WEST	\$257,629,571	0.009340178467	\$2,406,306
			=====
			\$257,629,571
			=====

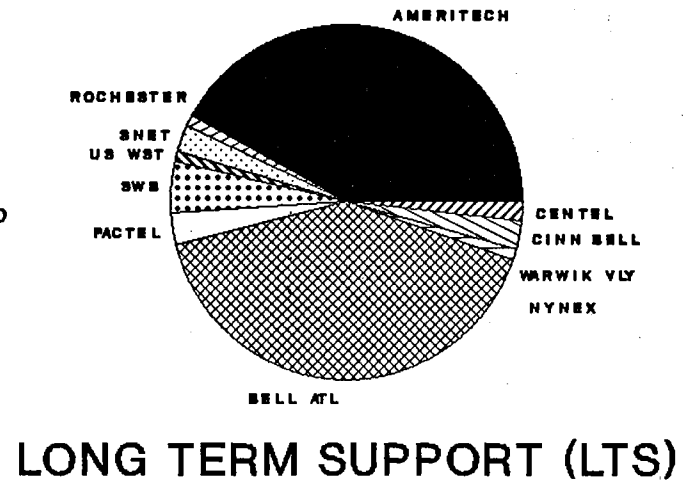
07/18/90

CHART 7.2

7/90 THRU 6/91 COMMON LINE POOL SOURCES OF REVENUE (\$000s)



NECA POOL (\$741,059)



LONG TERM SUPPORT (LTS)

TABLE 7.6
 NATIONAL EXCHANGE CARRIER ASSOCIATION, INC.
 LEVEL I CONTRIBUTORS
 LTS AND TRS SUPPORT AMOUNTS
 BASED UPON \$0.0100 ORIGINATING RATE
 AND \$0.0123 TERMINATING RATE
 FOR TEST PERIOD JULY 1, 1990 THRU JUNE 30, 1991

LEVEL I CONTRIBUTOR	(1) LTS AMOUNT	(2) CONTRIBUTION FACTORS	(3)=(1)*(2) ANNUAL LTS	(4) ANNUAL TRS*	(5)=(3)+(4) TOTAL SUPPORT
SOUTHERN NEW ENGLAND TEL.	\$257,629,571	0.024144629258	\$6,220,370	\$6,373,144	\$12,593,515
AMERITECH	\$257,629,571	0.418907581190	\$107,922,980	\$110,573,591	\$218,496,571
BELL ATLANTIC	\$257,629,571	0.407204424667	\$104,907,901	\$107,484,461	\$212,392,362
NYNEX SVC. CO.	\$257,629,571	0.009698438350	\$2,498,605	\$2,559,971	\$5,058,575
PACIFIC TELESIS	\$257,629,571	0.029459837696	\$7,589,725	\$7,776,131	\$15,365,856
SOUTHWESTERN BELL	\$257,629,571	0.046392525252	\$11,952,086	\$12,245,632	\$24,197,718
CINCINNATI BELL	\$257,629,571	0.025715949951	\$6,625,189	\$6,787,905	\$13,413,094
CENTEL CORPORATION	\$257,629,571	0.017339514112	\$4,467,172	\$4,576,886	\$9,044,058
ROCHESTER TELEPHONE CORP	\$257,629,571	0.011130549108	\$2,867,559	\$2,937,986	\$5,805,545
WARWICK VALLEY	\$257,629,571	0.000666371948	\$171,677	\$175,894	\$347,571
U. S. WEST	\$257,629,571	0.009340178467	\$2,406,306	\$2,465,406	\$4,871,712
			=====	=====	=====
			\$257,629,571	\$263,957,006	\$521,586,577
			=====	=====	=====

*BELL SOUTH, GTE CORPORATION, UNITED TELEPHONE AND CONTEL CORPORATION ARE CALCULATED AT 60% FOR JUL '90 - MAR '91 AND 40% FOR APR '91 - JUN '91. GREAT PLAINS COMMUNICATIONS AND HUGHES TELEPHONE ARE CALCULATED AT 80% FOR JUL '90 - JUN '91.

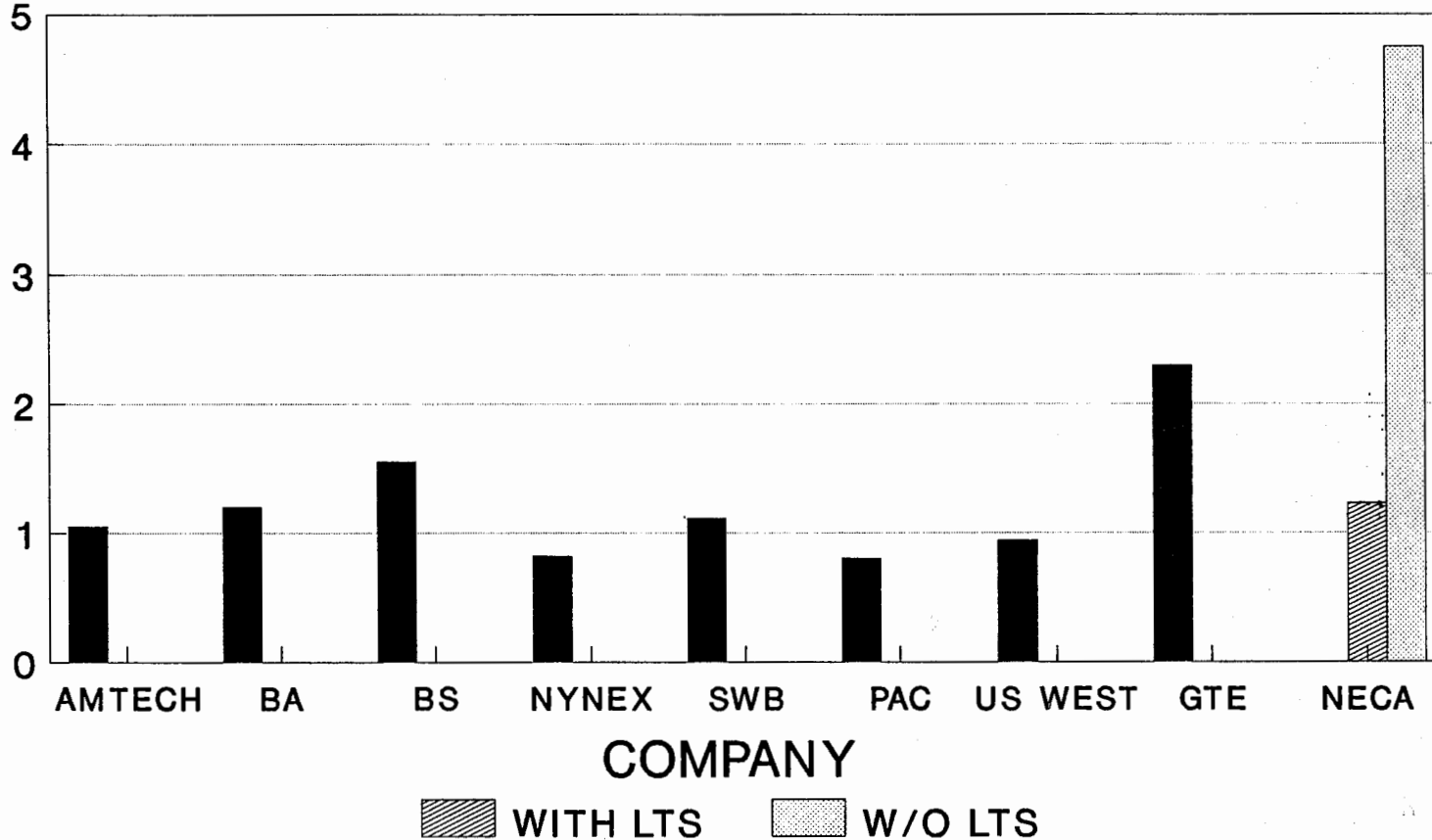
07/18/90

CHART 7.3

SUMMARIZED TERMINATING CCL RATES

ORIGINATING RATE AT \$.01 *

7/90 THRU 6/91 RATE IN CENTS PER MINUTE



* WITH THE EXCEPTION OF NYNEX, PACIFIC, AND US WEST, WHICH HAVE EQUALIZED ORIGINATING AND TERMINATING RATES

8. Jurisdictional Shifts in Revenue Requirements

Background. In April 1987, the Commission revised the jurisdictional separations rules to simplify them and to conform them to the revised Uniform System of Accounts. The Commission adopted all of the rules changes that had been recommended by the Docket 86-297 Joint Board. The Commission also adopted the Joint Board's recommendation that a review of the impact of these changes on jurisdictional revenue requirements be included in the monitoring program. This review is intended to address the concern that these changes might dramatically shift costs between jurisdictions, thereby leading to significant, unanticipated increases in rates.

In July 1988, the Commission issued the Monitoring Reconsideration Order¹ to clarify the appropriate method for reporting these jurisdictional shifts. The Commission stated that neither it nor the Joint Board had intended to request that LECs report actual data rather than modeled data. The Commission noted that, to report actual data, the LECs would have to maintain dual accounting systems and perform complex and costly studies. The Commission observed that such procedures would contravene the goal of simplifying the separations process. The Commission therefore concluded that LECs may report data using a modeling approach.

The Commission further concluded that, because it is desirable that all LECs use the same modeling technique to ensure consistency, alternative techniques would be examined and one would be established as the method that all reporting carriers must use. The Commission therefore solicited suggestions, to be filed in this proceeding, as to which technique would be the most appropriate. After studying the responsive pleadings, the Commission issued an order in December 1989 providing specific reporting procedures.² This order includes a reporting form that LECs must use to report any substantial jurisdictional shifts in revenue requirements that were experienced in 1988 due to the implementation on January 1, 1988, of the

1 Establishment of a Program to Monitor the Impact of Joint Board Decisions, CC Docket No. 87-339, FCC 88-244, released July 19, 1988. The Commission issued this order to act on issues raised in a Petition for Clarification and Reconsideration filed on October 28, 1987, by Pacific Bell and Nevada Bell.

2 Establishment of a Program to Monitor the Impact of Joint Board Decision, CC Docket No. 87-339, Memorandum Opinion and Order, 4 FCC Rcd 8766 (1989).

Commission's Part 36 conformance/simplification rules changes.³ Specifically, the Commission required all Tier 1 carriers to report, on a study area basis, all such jurisdictional shifts exceeding 5 percent of the total annual revenue requirements for its study area. The Commission provided that other carriers experiencing shifts of 5 percent or more could file reports on an optional basis. Furthermore, the Commission delegated to the Common Carrier Bureau, the determination whether to require an additional report for calendar year 1989 after the Bureau reviewed the carriers' 1988 reports.

Recent action. Since issuance of the last monitoring report in January 1990, the FCC staff issued a memorandum in February 1990 to the Docket 80-286 Joint Board staff, indicating that only three Tier 1 carriers had responded to the Commission's requirement concerning the impact of Part 36 rules on the 1988 revenue requirement. Ameritech submitted data, while Lincoln Telephone and Telegraph and Rochester Telephone filed letters, confirming that each of their study areas experienced shifts of less than 5 percent.

The Common Carrier Bureau released an order in March 1990 which concluded that a monitoring report concerning the impact of the Part 36 rules on 1989 revenue requirements is unnecessary and should be eliminated.⁴ It noted that only one carrier had submitted data on 1988 revenue requirement, and the impact for each of its study areas was well below 5 percent. The Bureau also noted that the Commission has not adopted any major changes to either its Part 32 accounting rules or its Part 36 separation rules that would lead it to believe that the impact of the new Part 36 rules would be more significant for 1989 than the impact reported for 1988.

The Colorado Public Utilities Commission (CPUC) filed comments on May 31, 1990 relating to the Monitoring Report. It continues to be dissatisfied with the process for monitoring jurisdictional shifts of revenue requirements. CPUC would like a more extensive study which is not limited to the analysis of jurisdictional shifts due only to the simplification and conformance of separations, but would include all shifts experienced because of changes in the entire separations manual. It believes that, although the effects of

3 This reporting requirement therefore excludes the effect on jurisdictional revenue requirements of other separations rules changes, including those revisions relating to Central Office Equipment and the other revisions recommended by the Docket 80-286 Joint Board.

4 Establishment of a Program to Monitor the Impact of Joint Board Decisions, CC Docket No. 87-339, Order, 5 FCC Rcd 1979 (1990).

separations changes on jurisdictional shifts were evaluated and considered before those changes were adopted, the actual impacts of the changes on the industry and the amount of actual revenue requirement shifts that are reported for state rate making purposes have not been addressed. CPUC notes that although the Bureau eliminated the 1989 report of jurisdictional shifts above 5 percent, there are significant effects on revenue requirements below the 5 percent threshold. It suggests that a model be created which evaluates separations changes, perhaps by using ARMIS data.