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United States
Department of
Agriculture

Rural Electrification Administration

REA Bulletin 800-1

February 1990

## A Brief History of the Rural Electric and Telephone Programs

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Rural Electrification Administration Office of the Administrator

Washington, D.C. 20250

February 21, 1990

Honorable Jamie L. Whitten Chairman, Committee on Appropriations House of Representatives Washington, D.C. 20515

Dear Mr. Chairman:

As you requested, enclosed is a summary of the legislative history and accomplishments of the Rural Electrification and Telphone programs for your use in review of the Fiscal Year 1991 Budget Proposals.

Sincerely,

JACK VAN MARK

Acting Administrator



### REA Brief History of the Rural Electrification and Telephone Programs

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- A. History
- B. Chronology of Legislative Changes
- C. Program Accomplishments
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#### HISTORY

The Rural Electrification Administration (REA) is a credit agency of the U.S. Department of Agriculture which assists rural electric and telephone organizations in obtaining the financing required to provide electric and telephone service in rural areas. These essential services help improve the quality of life for people who live, work, or do business throughout rural America. Financial assistance may include (a) loans from REA, (b) guarantees of loans made by others, and (c) REA approval of security arrangements which permit the borrower to obtain financing from other lenders without a guarantee.

REA was first established by Executive Order 7037 on May 11, 1935, as part of a general program of unemployment relief. It soon became clear, however, that the task of extending central station electric service to rural areas required very specialized skills (engineering, management, etc.) that would be difficult to attract if REA operated under the constraints of the unemployment relief authorization. REA was given its own statutory authorization by the Rural Electrification Act of May 20, 1936. It became a part of the U.S. Department of Agriculture on July 1, 1939.

Federal support was needed to electrify rural America because most of the established utilities served high density areas and did not extend lines to farmers and other rural residents because such investments were not considered to be feasible.

When Congress established REA, its purpose was to assure that funds would be available for rural electrification. Loans were made at interest rates that fluctuated with the cost of money to the Government. It was not until 1944 that Congress established a fixed interest rate of 2 percent, which, at that time, was the approximate cost of money to the Government. As time went by and interest rates rose, the subsidy associated with REA loans grew. The performance of the difficult tasks involved with the initial organizing and constructing of rural electric systems was made possible by the availability of capital from REA, innovative construction techniques and the establishment of cooperatives—not by subsidized interest rates.

The purpose of REA was expanded in 1949 when REA was authorized to loan funds for telephone service in rural areas. As in the case of electricity, it became clear that rural residents would not have access to adequate and dependable telephone service unless Federal support was provided. Both the rural Telephone and rural Electric programs of REA have been successful in achieving their goals.

During the late 1960's and early 1970's, rural electric and telephone leaders came to realize that (a) their capital needs were growing at a very rapid rate and would very likely continue to grow, (b) it was no longer reasonable to expect the Government to meet all of their growing capital needs, and (c) they had developed sufficient financial strength to obtain a portion of their capital needs from private sources. For these reasons, supplemental sources of financing were developed for both rural electric and telephone utilities.

The National Rural Utilities Cooperative Finance Corporation (CFC) was formed in 1969 by the rural electric cooperatives. It obtains funds from the private credit markets for its loans to electric systems. As of December 31, 1987, CFC had provided more than \$4.0 billion in long-term loans to its membership, which includes 889 systems. In addition to CFC, rural electric systems obtain loan funds from the Banks for Cooperatives and other private sources.

The Rural Telephone Bank (RTB) was established in 1971 by Public Law 92–12 which amended the Rural Electrification Act. It is the primary supplemental source of financing for the growing capital needs of rural telephone systems.

The Rural Telephone Bank is managed by a 13-member board of directors. The Administrator of REA serves as Governor of the Bank until conversion to private ownership, control, and operation. This will take place when 51 percent of the Class A stock issued to the United States and outstanding at any time after September 30, 1985, has been fully redeemed and retired. The Bank board holds at least four regularly scheduled meetings a year. Activities of the Bank are carried out by REA employees and the Office of the General Counsel of the U.S. Department of Agriculture.

In 1973, a major amendment to the Rural Electrification Act established the "Rural Electrification and Telephone Revolving Fund" (RETRF) for the purpose of making loans to REA electric and telephone borrowers. The amended Act established that loans to be made from the RETRF would be at a standard rate of 5 percent instead of the 2 percent rate at which REA loans had previously been made. The 2 percent rate was retained as a special rate for borrowers that met criteria specified in the Act. It was also available, at the Administrator's discretion, for hardship cases.

In addition to establishing the RETRF, and increasing the interest rate of REA loans, the 1973 amendment authorized REA to guarantee loans made by other lenders. Today these loan guarantees account for most of the loan funds obtained by electrification borrowers.

The Legislation adopted in 1973 contained a statement whereby Congress declared that it is its policy that "rural electric and telephone systems should be encouraged and assisted to develop their resources and ability to achieve the financial strength needed to enable them to satisfy their credit needs from their own financial organizations and other sources...."

In 1981, Congress further amended the RE Act by eliminating the special 2 percent interest rate on loans to rural electric and telephone systems. Such utilities now receive loans at 5 percent from the RETRF, as do other borrowers. Exceptions to the 5 percent rate may still be made at the discretion of the REA Administrator where there is a finding of hardship.

A 1986 amendment to the RE Act authorized, through September 30, 1987, prepayment of certain REA guaranteed Federal Financing Bank Loans, as well as, the sale or prepayment of REA direct or insured loans, at discount, by the borrower. Another 1986 amendment established a privatization demonstration program which allowed Alaska borrowers to prepay all of their REA, RTB or REA guaranteed borrowings,

In 1987 Congress amended the RE Act to extend the prepayment of FFB loans through September 30, 1988, and authorized the prepayment of RTB loans at face value without a prepayment premium during fiscal year 1988. In addition electric borrowers were authorized to use their own funds for investments without prior Administrator approval for amounts not in excess of 15 percent of their total utility plant. A new grant or zero interest rate loan program was established to promote rural economic development. Another amendment established a formula for determining the RTB interest rate.

During fiscal year 1987, a total of 50 rural electric and telephone borrowers retired their REA debt under the prepayment program authorized under the Omnibus Budget Reconciliation Act of 1986. This resulted in the return to the federal Treasury \$429 million in advance of loan payment due dates.

During fiscal year 1988, six power supply borrowers prepaid \$2 billion in long-term high interest-rate loans held by the Federal Financing Bank. The prepayments were funded by private-sector loans with an REA guarantee.

# CHRONOLOGY OF LEGISLATIVE CHANGES Rural Electrification Act of 1936 7 U.S.C. 901-950b

1935	The Rural Electrification Administration was created by Executive Order 7037 of May 11 under authority of the Emergency Relief Appropriation Act of 1935, approved April 8, 1935 (49 Stat. 115).
1936	Statutory provision for the Agency was made in the Rural Electrification Act of 1936, approved May 20 (49 Stat. 1363; 7 U.S. Code, Chapter 31).
1938	Title IV of the Work Relief and Public Works Appropriation Act of 1938, approved June 21 ("RE Act of 1938," 52 Stat. 818) authorized further borrowing from the Reconstruction Finance Corporation and added a requirement that borrowers from REA agree to use materials and supplies produced in the United States.
1939	REA became part of the Department of Agriculture under Reorganization Plan II, effective July 1.
1944	Title V of the Department of Agriculture Organic Act of 1944, approved September 21 (58 Stat. 739; 7 U.S.C. 903 – 905; 915) liberalized the terms of REA loans and removed the time limitation from its lending program.
1944	On December 23, the Rural Electrification Act was further amended to authorize REA to refinance certain rural electrification obligations owed to the Tennessee Valley Authority (58 Stat. 925; 7 U.S.C. 904).
1947	The Department of Agriculture Appropriation Act, 1948, approved July 30, (61 Stat. 546; 7 U.S.C. 903) further amended the Rural Electrification Act by transferring from the Reconstruction Finance Corporation to the Secretary of the Treasury the authority to make loans to REA.
1948	On June 29, the Rural Electrification Act was again amended to authorize REA to refinance certain additional rural electrification obligations owed to the Tennessee Valley Authority (62 Stat. 1070; 7 U.S.C. 904).
1949	On October 28, the Rural Electrification Act was further amended to authorize REA to make loans for the purpose of furnishing and improving rural telephone service (63 Stat. 948; 7 U.S.C. 901 - 914; 922 - 924).
1955	On June 15, the Rural Electrification Act was amended by revising the formula governing the allotment of electrification loan funds (69 Stat. 131; 7 U.S.C. 903; 904).
1962	On October 23, the Rural Electrification Act was amended by broadening the definition of telephone service (76 Stat. 1140; 7 U.S.C. 924).

1971 On May 7, the Rural Electrification Act was amended to establish a Rural Telephone Account and the Rural Telephone Bank (85 Stat. 29; 7 U.S.C. 903; 922; 931; 932; 941 - 950b). 1972 On June 30, the Rural Electrification Act was amended to authorize the Secretary of the Treasury to purchase Telephone Bank debentures (86 Stat. 390; 7 U.S.C. 947). On May 11, the Rural Electrification Act was amended to establish a revolving fund for 1973 insured and guaranteed loans under Title III (87 Stat. 65; 7 U.S.C. 903; 931 - 940; 945 - 948). On November 4, the Rural Electrification Act was amended to expressly authorize the 1975 assignment of REA guarantees to the extent provided in contract of guarantee, to clarify the incontestability of the Government guarantee, and to specifically require justification of budget estimates (89 Stat. 677; 7 U.S.C. 906; 936; and 938). 1976 On April 21, the "Fiscal Year Adjustment Act," amended the Rural Electrification Act to reflect necessary changes in laws because of the October-September fiscal year (90 Stat. 375; 31 U.S.C. 910; 946; 950). 1976 On October 20, the Rural Electrification Act was amended to correct unintended inequities in the interest rate criteria and to transfer the unobligated balance of the 1973 loan authorizations to the Rural Electrification and Telephone Revolving Fund (90 Stat. 2701; 7 U.S.C. 931; 935). 1977 On August 4, the "Department of Energy Organization Act" added Section 16 to Title I, to require the Administrator, when making or guaranteeing generation or transmission loans, to consider general criteria published by the Secretary of Energy (91 Stat. 608; 7 U.S.C. 916). On August 13, the "Omnibus Reconciliation Act of 1981," amended the Rural Electrification 1981 Act: (1) to establish a 5 percent interest rate, with certain exceptions, for loans from the revolving fund; and (2) to require the Federal Financing Bank to make a loan under an REA guarantee if requested by a borrower with such a guarantee (95 Stat. 379; 7 U.S.C. 935 -937). 1981 On December 22, the "Agriculture and Food Act of 1981," amended the Rural Electrification Act to extend for another 10 years the authorization for Federal stock purchases in the Rural Telephone Bank (95 Stat. 1347; 7 U.S.C. 946). 1986 On October 21, the "Omnibus Budget Reconciliation Act of 1986," amended the Rural Electrification Act to authorize the prepayment of certain loans made by the Federal Financing Bank and guaranteed by the Rural Electrification Administration. The Act further provides for sale or prepayment of direct or insured loans by the borrower through September 30, 1987. (100 Stat. 1876; 7 U.S.C. 936.) 1986 On October 30, an act "Making Continuing Appropriations For Fiscal Year 1987, And For Other Purposes," amended the Rural Electrification Act to establish a privatization demonstration program in the State of Alaska to allow electric and telephone borrowers under the Rural Electrification Act to prepay with private capital all their loans guaranteed or otherwise made by and through the Rural Electrification Administration providing certain conditions are met. (100 Stat. 1876; 7 U.S.C. 936.)

1987

Amendments to the RE Act in 1987: 1) extended during fiscal year 1988 the program for the prepayment of certain REA guaranteed Federal Financing Bank loans, including giving priority to eight financially troubled borrowers; 2) authorized borrowers of insured or guaranteed electric loans to invest its own funds or make loans or guarantees, not in excess of 15 percent of its total utility plant, without restriction or prior approval of the Administrator; 3) directed the Administrator to develop and promote a program to encourage borrowers to voluntarily make deposits into cushion of credit accounts established within the Rural Electrification and Telephone Revolving Fund (RETRF), maintain a sub-account within the RETRF to which certain interest credits would be credited for the purpose of making grants or zero interest loans to borrowers for the purpose of promoting rural economic development; 4) authorizes during fiscal year 1988 prepayment of Rural Telephone Bank loans (or any part thereof ) by prepaying the face amount thereof without being required to prepay the prepayment penalty; 5) establishes the RTB interest rate formulas; 6) establishes in the Telephone Bank a reserve for losses due to interest rate fluctuations; and 7) requires publication of all rules, regulations, bulletins and other written policy standards governing the operation to the Telephone Bank's programs in accordance with Section 553 of Title 5, United States Code. (101 Stat. 1330)

#### PROGRAM ACCOMPLISHMENTS

#### Extending and Improving Service

REA's programs have been very successful in extending electric and telephone service to persons in rural areas. By 1953 more than 90 percent of all farms in the U. S. had electricity; for telephone service, the 90 percent mark was passed in 1976.

Chart C-1: Percent of Farms with Electric and Telephone Service U.S. Totals

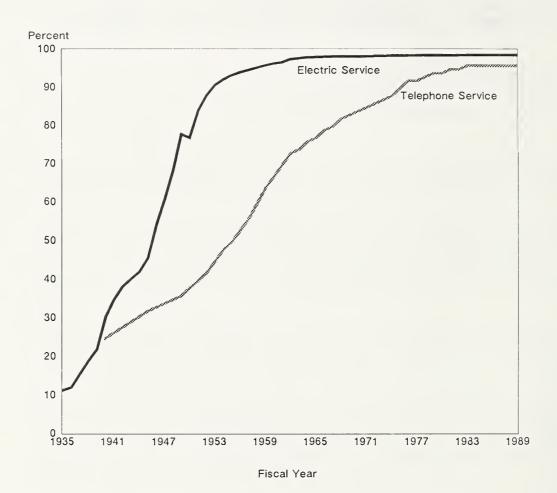


Table C-1: Percent of Farms with Electric and Telephone Service

Fiscal Year	Electricity	Telephone	<u>Fişçal Year</u>	Electricity	Telephone
1935	11.6%		1963	97.9%	74.0%
1936	12.3		1964	98.1	76.0
1937	15.8		1965	98.2	77.0
1938	19.1		1966	98.3	79.0
1939	22.1		1967	98.4	80.0
1940	30.4	25.0%	1968	98.4	82.0
1941	34.9		1969	98.4	83.0
1942	38.3		1970	98.4	84.0
1943	40.3		1971	98.4	85.0
1944	42.2		1972	98.5	86.0
1945	45.7	32.0	1973	98.5	87.0
1946	54.3		1974	98.6	88.0
1947	61.0	34.0	1975	98.6	90.0
1948	68.6	35.0	1976	98.6	92.0
1949	78.2	36.0	1977	98.7	92.0
1950	77.2	38.0	1978	98.7	93.0
1951	84.2	40.0	1979	98.7	94.0
1952	88.1	42.0	1980	98.7	94.0
1953	90.8	45.0	1981	98.7	95.0
1954	92.3	48.0	1982	98.7	95.0
1955	93.4	50.0	1983	98.8	96.0
1956	94.2	53.0	1984	98.8	96.0
1957	94.8	56.0	1985	98.8	96.0
1958	95.4	60.0	1986	98.8	96.0
1959	96.0	64.0	1987	98.8	96.0
1960	96.5	67.0	1988	98.8	96.0
1961	96.8	70.0	1989	98.8	96.0
1962	97.6	73.0			

In addition to financing the extensions of electric and telephone service to rural areas, REA has provided credit to rural telephone utilities for system improvements that have dramatically upgraded the quality of telephone service in rural America.

Before the REA Telephone Program, rural telephone service was often antiquated and unreliable—even where it was available.

Today modern and reliable telephone service is available for people who live, work, or do business in rural areas. The availability of modern communications systems has improved the quality of life of rural people and has strengthened their local economies. Improvement continues as more rural residents receive single party service.

Chart C-2: Grades of Service Provided to Subscribers Served by REA Telephone Borrowers

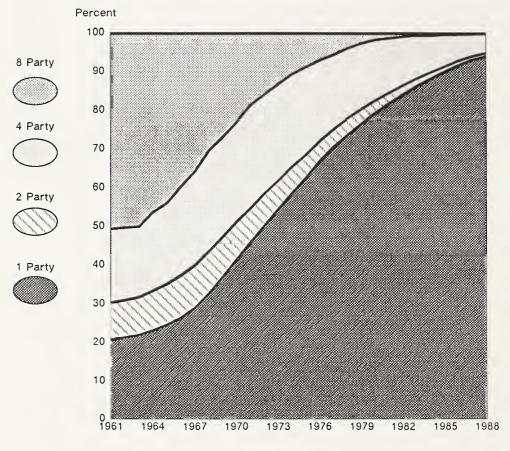


Table C-2: Number of Subscribers Served by REA Telephone Borrowers, by Grade of Service\*

(Subscribers in Thousands)

	One	Party	Two	Party	Four	Party**	Eight	Party***
Year	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1961	269.6	20.9	124.3	9.6	246.9	19.1	650.7	50.4
1962	306.2	21.6	136.8	9.6	266.1	18.7	710.8	50.1
1963	338.2	22.2	147.6	9.7	278.4	18.3	759.2	49.8
1964	381.2	23.4	165.0	10.2	330.4	20.3	750.0	46.1
1965	428.7	24.8	182.0	10.5	362.7	21.0	752.9	43.7
1966	486.5	26.6	199.2	10.9	418.6	22.9	721.5	39.6
1967	567.1	29.2	211.8	10.9	472.4	24.3	693.0	35.6
1968	680.0	32.9	223.8	10.8	537.8	26.0	625.4	30.3
1969	810.7	37.1	227.5	10.4	560.1	25.7	586.3	26.8
1970	972.3	41.6	227.4	9.8	598.7	25.6	536.1	23.0
1971	1,117.2	46.0	217.0	8.9	642.5	26.5	452.2	18.6
1972	1,298.0	50.4	212.5	8.3	655.1	25.4	409.2	15.9
1973	1,489.9	54.7	200.4	7.3	675.2	24.8	359.5	13.2
1974	1,717.0	58.8	196.9	6.8	695.8	23.8	309.4	10.6
1975	1,909.2	62.7	183.3	6.0	685.2	22.5	267.6	8.8
1976	2,205.2	67.1	166.8	5.1	682.0	20.8	229.2	7.0
1977	2,545.6	70.7	165.2	4.6	688.7	19.1	199.6	5.6
1978	2,861.4	73.8	162.3	4.2	700.2	18.1	153.1	3.9
1979	3,122.8	76.7	153.0	3.7	691.1	17.0	104.8	2.6
1980	3,383.1	79.4	136.1	3.2	669.7	15.7	72.4	1.7
1981	3,582.6	81.9	120.9	2.7	615.6	14.1	54.9	1.3
1982	3,826.7	84.2	103.0	2.3	574.1	12.6	41.8	0.9
1983	3,998.5	86.4	86.9	1.9	519.0	11.2	24.3	0.5
1984	4,193.2	88.3	74.7	1.6	451.0	9.5	28.0	0.6
1985	4,318.2	90.1	62.1	1.3	392.7	8.2	19.2	0.4
1986	4,437.5	91.8	53.5	1.1	328.4	6.8	13.3	0.3
1987	4,663.7	93.2	45.2	0.9	287.7	5.7	7.9	0.2
1988	4,797.1	94.1	39.0	0.8	254.0	5.0	6.8	0.1

<sup>\*</sup> To provide a more accurate representation, data for borrowers with total REA and RTB loans and REA loan guarantee commitments of less than 20 percent of their total assets have been excluded beginning in 1971.

<sup>\*\*</sup> Before 1984, Five Party was included with Four Party.

<sup>\*\*\*</sup> Includes service stations (switchers) which represent less than 1 percent of the total number of subscribers.

Also Includes any line with more than Four Party Service, begining in 1984.

#### Meeting the Growing Demand for Service

Rural electric and telephone systems have been able to meet an ever increasing demand for service. Each year the number of households served by REA electric and telephone borrowers has increased. In the early years this growth was mainly due to service being extended to households that had never before had electricity or telephones. More recently the growth is primarily because of the rapid population increases that have occurred in rural America—particularly in "sunbelt" and western states.

Chart C-3: Number of Consumers & Subscribers Served

By REA Electric & Telephone Borrowers

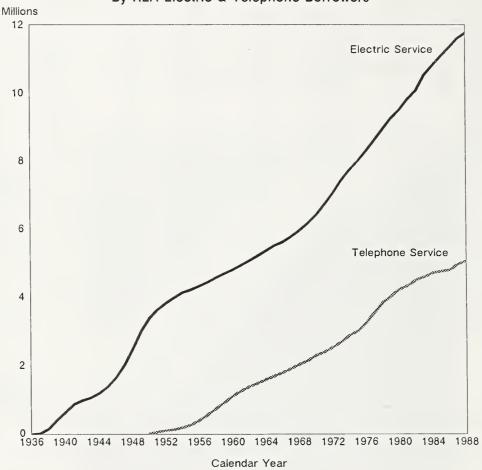


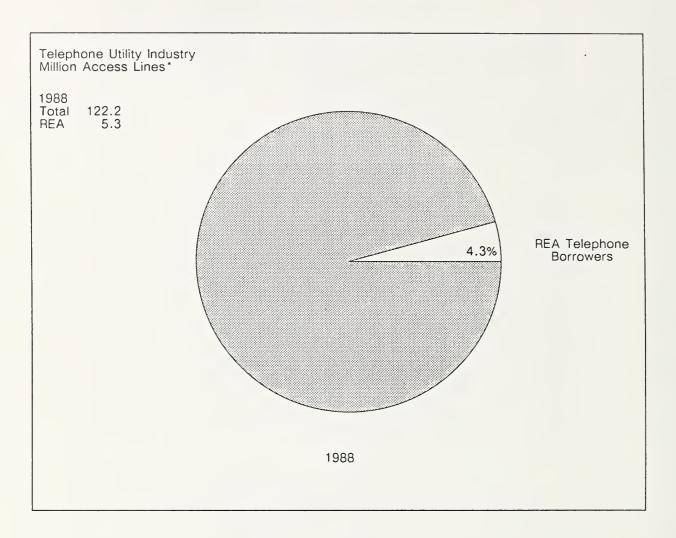
Table C-3: Number of Consumers and Subscribers Served by REA Electric and Telephone Borrowers (in Thousands)

		(in	nousands)		
Calendar Year	Electric Consumers	Telephone Subscribers	Calendar Year	Electric Consumers	Telephone Subscribers
1936	7.5		1963	5,237.9	1,523.4
1937	43.9		1964	5,386.1	1,626.6
1938	176.4		1965	5,541.5	1,726.4
1939	435.6		1966	5,652.8	1,825.9
1940	674.5		1967	5,806.0	1,944.3
1941	902.3		1968	5,986.1	2,067.0
1942	1,012.3		1969	6,197.0	2,184.6
1943	1,087.8		1970	6,442.3	2,334.5
1944	1,216.8		1971	6,747.7	2,428.9
1945	1,408.9		1972	7,076.2	2,574.8
1946	1,683.9		1973	7,457.1	2,725.0
1947	2,046.1		1974	7,767.8	2,919.1
1948	2,518.5		1975	8,017.7	3,045.3
1949	3,040.4		1976	8,311.8	3,283.2
1950	3,413.4	29.1	1977	8,630.8	3,599.1
1951	3,666.0	86.9	1978	8,962.5	3,877.1
1952	3,858.4	131.4	1979	9,275.1	4,072.7
1953	4,024.8	157.4	1980	9,523.6	4,262.4
1954	4,174.4	215.8	1981	9,844.3	4,374.9
1955	4,251.3	296.2	1982	10,096.5	4,545.6
1956	4,361.9	432.0	1983	10,555.4	4,628.8
1957	4,466.4	604.7	1984	10,836.4	4,746.9
1958	4,596.3	778.5	1985	11,110.2	4,792.1
1959	4,721.6	958.9	1986	11,357.1	4,832.7
1960	4,825.8	1,142.0	1987	11,628.1	5,004.6
1961	4,955.6	1,291.5	1988	11,798.0	5,096.9
1962	5,095.0	1,419.9			

Note: The number of consumers and subscribers served is approximately equal to the number of households and business establishments served.

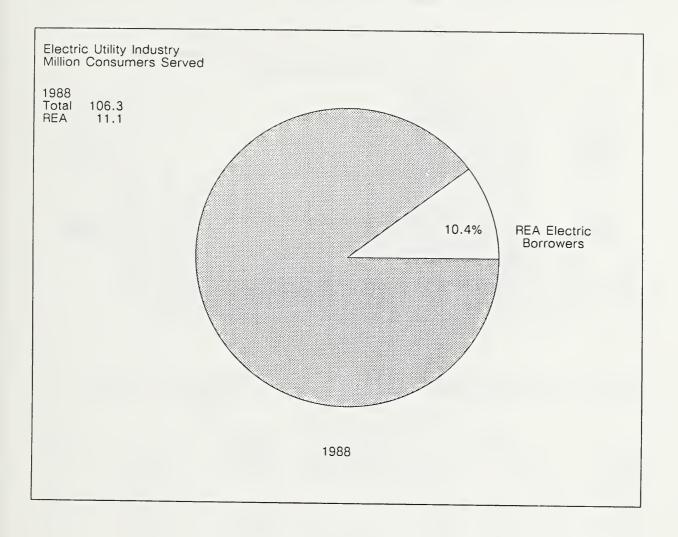
Today the rural electric and telephone utilities that receive financing from REA have developed into strong business organizations. Although not large when compared with many urban utilities, they are vital components of their respective industries.

Chart C-4: Percent of Telephone Subscribers Served by REA Borrowers



<sup>\*</sup> An access line Is any line (or loop) terminating at the telephone company central office. In prior years, estimates were based on subscribers served, however, while REA borrowers still report subscriber data, the rest of the telephone industry does not.

Chart C-5: Percent of Electric Consumers Served by REA Borrowers



#### LOAN STATISTICS

REA telephone borrowers have received a greater amount of their financing needs from REA loans than from other sources. These REA loans are supplemented by loans from the Rural Telephone Bank and REA guarantees of loans from other sources—mainly the Federal Financing Bank.

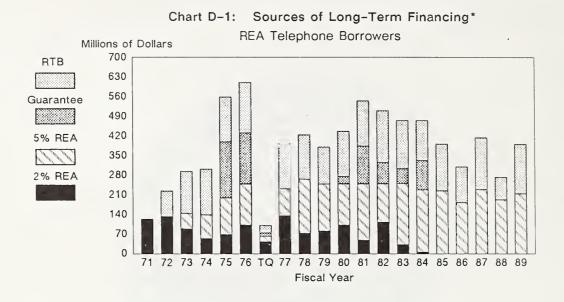


Table D-1: Long-Term Financing Approved by Fiscal Year - REA Telephone Borrower\*

(in Millions)

	REA		Non-RE	Non-REA		
			REA	Rural		
Fiscal			Guarantee	Telephone		
<u>Year</u>	<u>2%</u>	<u>5%</u>	Commitments	Bank	<u>Total</u>	
1971	\$125.0				\$125.0	
1972	133.7			\$ 91.0	224.7	
1973	90.0	\$ 55.0		150.0	295.0	
1974	55.2	84.8		163.0	303.0	
1975	70.0	129.9	\$200.0	160.2	560.1	
1976	103.8	146.3	181.6	180.1	612.8	
TQ	43.1	19.4	12.3	26.5	101.2	
1977	136.5	96.7	0.0	160.3	393.6	
1978	74.7	191.9	0.0	159.2	425.8	
1979	81.6	168.3	0.0	130.8	380.7	
1980	103.2	146.9	27.4	160.0	437.5	
1981	49.7	200.1	136.4	159.9	546.1	
1982	113.3	136.0	77.0	184.8	511.1	
1983	33.1	217.6	54.0	171.6	476.3	
1984	5.8	222.8	105.1	143.0	476.7	
1985	0.0	224.6	0.0	167.8	392.4	
1986	0.0	183.3	0.0	127.9	311.2	
1987	0.0	229.8	0.0	185.1	414.9	
1988	0.0	193.4	0.0	80.1	273.6	
1989	0.0	214.1	0.0	177.0	391.1	

<sup>\*</sup> Does not include Lien Accommodations and Non-Loan Funds.

Until the 1973 amendment to the Rural Electrification Act, virtually all financing to REA electric borrowers was supplied by direct REA loans at an interest rate of 2 percent. Beginning in 1973 the amount of financing received by rural electric systems increased greatly and most of this financing has been approved by non-REA sources, primarily the Federal Financing Bank (FFB), with an REA guarantee, at FFB's market rate of interest. During fiscal year 1989, less than one-half of electric borrowers' financing needs were supplied by non-government sources.

Millions of Dollars 7000

Chart D-2: Sources of Long-Term Financing REA Electric Borrowers

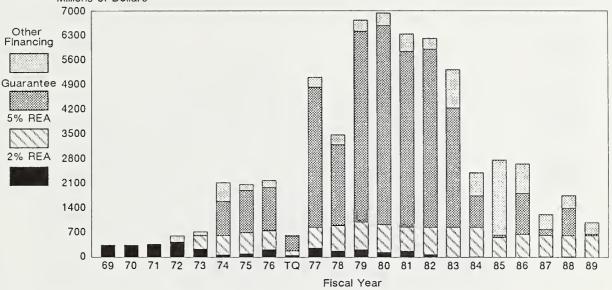


Table D-2: Long-Term Financing Approved by Fiscal Year - REA Electric Borrowers (in Millions)

		REA	Non-Ri	ΞA	
			REA		
Fiscal			Guarantee	Other	
<u>Year</u>	<u>2%</u>	<u>5%</u>	Commitments	<u>Financing</u>	<u>Total</u>
1969	\$344.8				\$ 344.8
1970	345.0				345.0
1971	361.8			\$ 12.8	374.6
1972	438.3			168.4	606.7
1973	235.1	\$382.8		107.6	725.5
1974	65.5	553.1	\$ 974.4	533.9	2,126.9
1975	105.0	595.0	1,206.3	165.0	2,071.3
1976	222.5	527.5	1,241.5	198.4	2,189.9
TQ	47.2	140.3	403.9	31.9	623.3
1977	268.2	581.8	3,985.5	278.3	5,113.8
1978	176.2	723.8	2,309.1	276.3	3,485.4
1979	222.9	777.1	5,429.7	311.9	6,741.6
1980	142.5	782.5	5,660.1	368.3	6,953.4
1981	178.3	671.7	4,994.9	503.9	6,348.8
1982*	77.8	772.2	5,064.6	304.7	6,219.3
1983*	2.7	847.3	3,388.3	1,096.5	5,334.8
1984*	12.6	837.4	897.2	656.5	2,403.7
1985	2.0	560.0	74.6	2,135.6	2,772.2
1986	0.0	651.9	1,167.5	841.0	2,660.4
1987	12.5	615.9	174.7	410.1	1,213.2
1988	10.1	612.0	774.7	360.1	1,756.8
1989	1.3	620.8	39.5	324.9	986.4

<sup>\*</sup> Does not include funds made available through the provisions of the Economic Recovery Tax Acts (\$629.2 million in F.Y. 1982, \$526.4 million in F.Y. 1983 and \$46.1 million in F.Y. 1984).

REA electric distribution borrowers receive most of their financing from REA at a 5 percent interest rate. The remainder is obtained from REA at interest rates as low as 2 percent (a very small amount since the 1981 amendment to the RE Act) and from non-REA sources such as the National Rural Utilities Cooperative Finance Corporation (CFC) and the Bank for Cooperatives.

Chart D-3: Sources of Long-Term Financing REA Distribution Borrowers

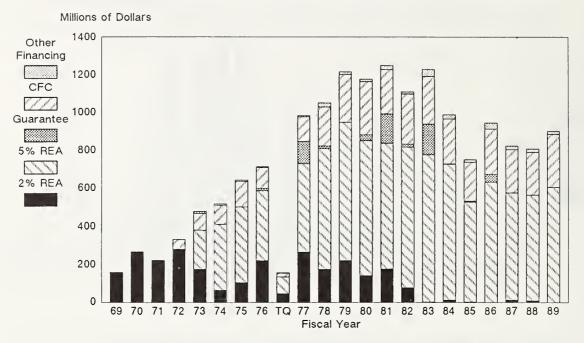


Table D-3: Long-Term Financing Approved by Fiscal Year REA Electric Distribution Borrowers (in Millions)

		REA		Non-REA		
			REA			
Fiscal			Guarantee		Other	
<u>Year</u>	<u>2%</u>	<u>5%</u>	<u>Commitments</u>	<u>CFC</u>	<u>Financing</u>	Total
1969	\$ 162.0					\$ 162.0
1970	269.7					269.7
1971	222.0			\$ 1.8		223.8
1972	282.6			50.7	\$ 0.6	333.9
1973	176.8	\$ 206.0		88.3	8.9	480.0
1974	65.5	347.6		99.9	7.1	520.1
1975	105.0	398.5		134.7	6.6	644.8
1976	222.5	365.9	\$ 13.4	108.1	6.1	716.0
TQ	47.2	88.3	0.0	20.4	1.6	157.5
1977	268.2	462.1	117.8	129.9	6.6	984.6
1978	176.2	633.8	15.7	204.5	22.1	1,052.3
1979	222.9	727.5	0.0	254.6	13.3	1,218.3
1980	142.4	709.8	32.5	280.8	14.9	1,180.4
1981	178.3	660.5	156.3	234.5	23.3	1,252.9
1982	77.8	740.1	16.4	265.6	11.9	1,111.8
1983	2.7	774.7	164.3	252.6	37.4	1,231.7
1984	12.6	716.9	1.1	237.8	22.4	990.8
1985	2.0	526.9	5.0	205.4	13.8	753.1
1986	0.0	634.7	42.0	237.2	32.9	946.8
1987	12.5	565.1	0.0	229.1	17.5	824.2
1988	10.1	556.1	0.0	224.4	19.6	810.2
1989	1.3	606.5	0.0	279.5	14.8	902.1

REA electric power supply borrowers receive most of the financing approved by REA; almost all of this is provided by non-REA sources, mainly the Federal Financing Bank, with an REA loan guarantee. Since the 1973 amendment to the Rural Electrification Act, which gave REA the authority to guarantee loans made by other lenders, REA's program of financing for power supply projects has grown from a modest one to one of large magnitude.

Chart D-4: Sources of Long-Term Financing REA Power Supply Borrowers

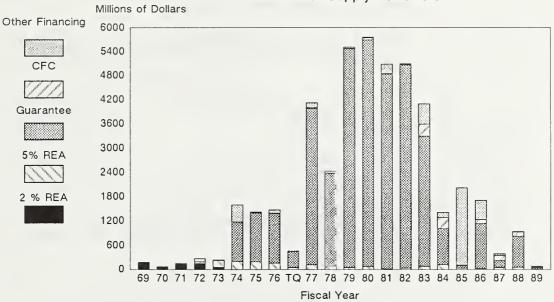


Table D-4: Long-Term Financing Approved by Fiscal Year REA Electric Power Supply Borrowers (in Millions)

		REA		Non-REA		
Fiscal			REA Guarantee		Other	
<u>Year</u>	<u>2%</u>	<u>5%</u>	Commitments	<u>CFC</u>	<u>Financing</u>	<u>Total</u>
1969	\$182.8					\$ 182.8
1970	75.2					75.2
1971	139.8			\$ 11.0		150.8
1972	155.6			42.1	\$ 75.0	272.7
1973	58.3	\$176.8		10.1	0.0	245.2
1974	0.0	205.5	\$ 974.4	4.9	422.0	1,606.8
1975	0.0	196.5	1,206.3	23.7	0.0	1,426.5
1976	0.0	161.6	1,228.1	8.1	76.1	1,473.9
TQ	0.0	52.0	403.9	0.0	9.9	465.8
1977	0.0	119.7	3,867.7	20.4	121.4	4,129.2
1978	0.0	90.0	2,293.4	5.5	44.2	2,433.1
1979	0.0	49.6	5,429.7	8.4	35.6	5,523.3
1980	0.0	72.7	5,627.6	61.1	11.2	5,772.9
1981	0.0	11.2	4,838.7	13.2	232.9	5,096.0
1982*	0.0	32.1	5,048.2	22.7	4.5	5,107.5
1983*	0.0	72.6	3,224.0	298.8	507.7	4,103.1
1984*	0.0	120.4	896.1	272.5	123.8	1,412.9
1985	0.0	33.1	69.6	13.6	1,902.8	2,019.1
1986	0.0	17.2	1,125.6	93.7	477.2	1,713.7
1987	0.0	50.8	174.7	127.9	35.6	389.0
1988	0.0	55.8	774.7	108.1	8.0	946.6
1989	0.0	14.2	39.5	22.5	8.1	84.3

<sup>\*</sup> Does not Include funds made available through the provisions of Economic Recovery Tax Acts (\$629.2 million in F.Y. 1982, \$526.4 million In F.Y. 1983 and \$46.1 million in F.Y. 1984)

The number of REA electric borrowers has not changed much since about 1950. The small increases that have occurred during the last several years have been mainly because of the formation of new power supply systems that are wholly owned by REA electric distribution borrowers. The number of REA telephone borrowers increased rapidly during the first 10–15 years of the program. The number of telephone borrowers continues to increase each year mainly because of initial loans to existing telephone utilities to extend and upgrade telephone service to rural subscribers.

Electric Program Telephone Program Fiscal Year

Chart D-5: Number of REA Borrowers

Table D-5: Number of REA Electric and Telephone Borrowers Fiscal Years 1936-1986

Fiscal	Electric	Telephone	Fiscal	Electric	Telephone
Year	Borrowers	Borrowers	Year	Borrowers	Borrowers
1936 1937 1938 1939 1940 1941 1942 1943 1944 1945 1946 1947 1950 1951 1952 1953 1954 1955 1955 1956 1957 1958 1959 1960 1961 1962	66 266 367 632 692 823 874 869 996 1,019 1,053 1,070 1,076 1,080 1,077 1,078 1,078 1,078 1,078 1,080 1,083 1,087 1,089 1,094 1,098		1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 TQ 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988	1,102 1,104 1,103 1,100 1,099 1,097 1,094 1,091 1,093 1,093 1,097 1,101 1,099 1,097 1,101 1,099 1,105 1,106 1,105 1,106 1,105 1,106 1,105 1,106 1,105 1,101	838 848 855 867 874 873 878 867 876 900 915 930 946 957 974 985 1,004 1,034 1,034 1,035 1,037 1,037

Each year since the Rural Electrification and Telephone Revolving Fund (RETRF) was established in 1973, REA has paid out more in advances to borrowers and in interest, than it has received in payments on loans.

In 1987 loan payments totaling \$428 million were received as a result of the direct loan prepayment program established by Congress in the Omnibus Budget Reconciliation Act of 1986.

The RETRF obtains the additional funds necessary to meet advances and interest expenses from the U.S. Treasury, directly or through the Federal Financing Bank, at rates of interest greatly in excess of the interest rates charged borrowers.

Chart D-6: Rural Electrification and Telephone Revolving Fund

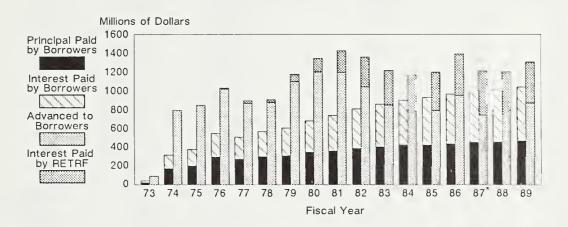


Table D-6: The Rural Electrification and Telephone Revolving Fund (RETRF) (Dollars in Millions)

RETRF Outlays

Loan Payments Received

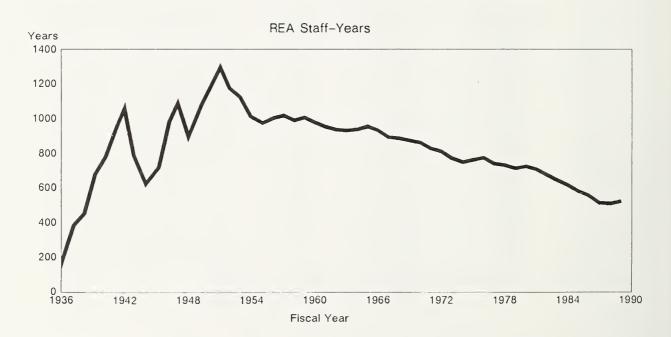
Fiscal Year	<u>Principal</u>	<u>Interest</u>	<u>Advances</u>	Interest Paid
1973	\$ 20.3	\$ 21.4	\$ 92.4	\$ 0.0
1974	173.1	144.2	802.4	0.0
1975	204.0	174.3	854.9	0.0
1976	299.2	252.3	1,027.9	11.4
1977	275.2	234.9	874.9	29.6
1978	303.1	268. <b>1</b>	881.4	33.3
1979	313.8	296.9	1,105.2	79.1
1980	349.1	336.9	1,206.8	144.1
1981	363.1	382.7	1,203.8	228.4
1982	389.3	425.8	1.048.0	316.5
1983	405.2	459.1	855.6	367.9
1984	425.5	479.2	780.0	395.6
1985	428.3	509.8	797.1	408.9
1986	439.1	536.0	960.9	438.0
1987 *	457.2	553.9	752.1	464.1
1988	461.2	560.5	757.3	453.3
1989	469.7	577.3	880.2	434.1

<sup>\*</sup>Excludes notes paid in full under the direct loan prepayment program.

Although the total amount of financing provided or guaranteed by REA has increased over the years, as has the complexity of many of the electric generation and telephone projects, REA's staff has effectively handled the increased work load.

Chart D-7: Loans, Guarantees, and Staff-Years





<sup>\*</sup>Includes REA electric and telephone loans, RTB loans and REA loan guarantee commitments.

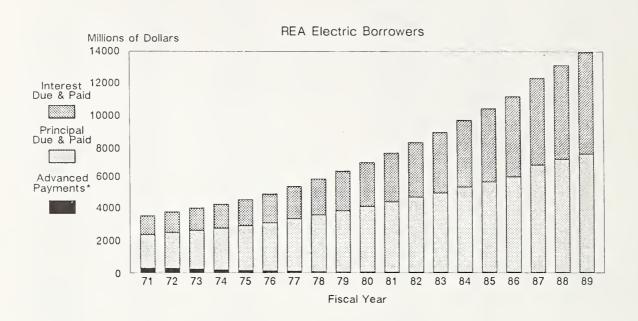
Table D-7: Staff - Years vs. Loan Funds Approved, Fiscal Years 1936-1989

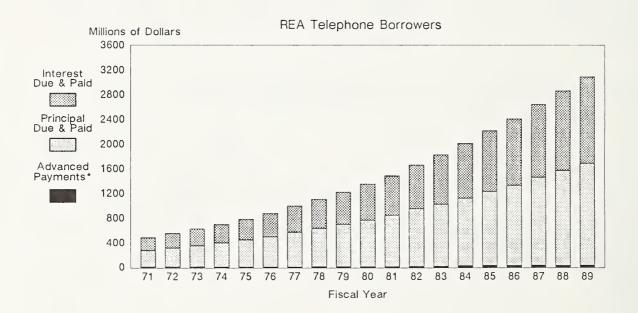
Fiscal Year	Staff Years	Loan Funds Approved* (in Thousands)	Fiscal Year	Staff Years	Loan Funds Approved* (in Thousands)
1936	206	\$ 17,929	1964	950	\$ 351.412
1937	391	50,347	1965	966	476,947
1938	460	31,660	1966	943	412,729
1939	684	141,899	1967	904	470,984
1940	785	44,880	1968	898	469,928
1941	950	101,710	1969	884	469,825
1942	1,094	91,282	1970	872	469,962
1943	790	8,225	1971	839	486,817
1944	646	34,002	1972	821	662,873
1945	723	26,343	1973	782	912,931
1946	987	290,914	1974	760	1,896,075
1947	1,117	256,389	1975	773	2,466,470
1948	929	319,110	1976	785	2,603,287
1949	1,076	449,318	TQ	168	692,585
1950	1,201	379,719	1977	751	5,229,061
1951	1,321	259,993	1978	741	3,634,935
1952	1,183	209,017	1979	724	6,810,338
1953	1,131	206,946	1980	735	7,022,604
1954	1,020	241,816	1981	718	6,391,064
1955	987	220,274	1982	686	6,425,693
1956	1,014	270,785	1983	655	4,714,614
1957	1,029	382,191	1984	626	2,223,891
1958	1,002	330,875	1985	591	1,028,998
1959	1,018	276,215	1986	566	2,130,682
1960	989	325,108	1987	524	1,628,074
1961	964	416,902	1988	520	1,670,272
1962	948	352,931	1989	533	1,052,746
1963	943	427,279			

<sup>\*</sup>Includes REA electric and telephone loans, RTB loans and REA loan guarantee commitments.

As of September 30, 1989, REA has collected more than \$17.1 billion in principal and interest payments from its rural electric and telephone borrowers. Total losses to date have amounted to only \$44,478.

Chart D-8: Cumulative Payments of Principal and Interest on REA Loans





<sup>\*</sup> Principal payments made ahead of schedule.

Table D-8: Payments of Principal and Interest on REA Loans
Cumulative Totals in Millions

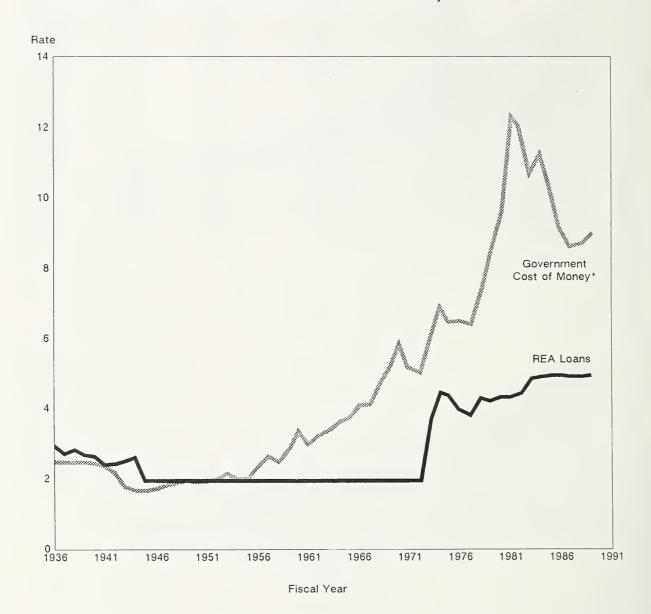
(Includes Notes Paid in Full)

		Electric			Telephone	
Fiscal	Advance	Principal	Interest	Advance	Principal	Interest
Year	Payments*	Due & Paid	Due & Paid	Payments*	Due & Paid	Due & Paid
1971	\$ 317.1	\$ 2,097.2	\$ 1,205.0	\$ 25.2	\$ 262.3	\$ 214.1
1972	293.5	2,267.4	1,302.8	25.2	302.2	242.1
1973	244.2	2,446.6	1,406.6	23.9	343.9	271.7
1974	192.5	2,628.6	1,519.6	20.6	389.8	302.9
1975	148.2	2,827.4	1,659.4	20.0	440.1	337.5
1976	125.6	3,038.3	1,822.5	19.4	492.8	374.9
1977	104.7	3,323.1	2,056.3	19.7	563.3	427.4
1978	93.8	3,574.1	2,277.1	21.4	624.6	473.7
1979	74.1	3,842.4	2,523.0	21.6	689.5	523.2
1980	67.0	4,127.5	2,801.7	21.3	760.4	578.5
1981	55.9	4,425.9	3,118.6	22.4	834.4	640.9
1982	48.5	4,736.0	3,469.9	27.0	935.5	710.6
1982 1983 1984 1985 1986 1987 1988 1989	48.5 47.6 50.7 55.5 47.8 35.9 35.3 29.0	4,730.0 5,007.5 5,376.8 5,704.8 6,040.7 6,793.2 7,146.9 7,504.6	3,469.9 3,845.0 4,240.4 4,658.4 5,098.2 5,552.9 6,006.4 6,471.9	30.3 37.1 44.1 40.4 42.4 40.6 44.0	935.5 1,004.1 1,097.8 1,198.1 1,301.4 1,430.3 1,540.2 1,655.5	805.6 892.2 983.9 1,080.2 1,183.2 1,290.3 1,402.1

<sup>\*</sup> Principal payments made ahead of schedule.

When Congress created the REA loan program it did not provide an interest rate subsidy. Interest rates charged borrowers fluctuated with the cost of money to the Government. It was not until 1944 that Congress established a fixed interest rate of 2 percent, which at that time was the approximate cost of money to the Government. As time went by and the interest rates rose, the subsidy associated with REA loans grew. During the late 70's and early 80's there has been a significant widening of the gap between the cost of money to the Government and the interest rate charged borrowers on REA loans. Although the gap has narrowed since 1981, the cost of money to the Government remains significantly higher than the REA rate.

Chart D-9: Interest Rate on REA Loans vs. Cost of Money to the Government



<sup>\*</sup> Computed Annual Interest Rate on Marketable Treasury Issues

Table D-9: Interest Rate on REA Loans vs. Cost of Money to the Government

Fiscal Year	REA Loans*	Government Cost of Money**	Fiscal Year	REA Loans*	Government Cost of Money**
Fiscal Year 1936 1937 1938 1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957	3.00 2.77 2.88 2.73 2.69 2.46 2.48 2.57 2.67 2.00 2.00 2.00 2.00 2.00 2.00 2.00 2.0	Government Cost of Money**  2.530 2.525 2.521 2.525 2.492 2.413 2.225 1.822 1.725 1.718 1.773 1.871 1.942 2.001 1.958 1.981 2.051 2.207 2.043 2.079 2.427 2.707	Fiscal Year  1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 TQ 1977 1978 1979 1980 1981 1982 1983	2.00 2.00 2.00 2.00 2.00 2.00 2.00 2.00	Government Cost of Money**  3.659 3.800 4.134 4.165 4.757 5.232 5.986 5.210 5.099 6.129 7.030 6.533 6.559 6.591 6.481 7.388 8.592 9.608 12.435 12.082 10.850 11.383
1957 1958 1959 1960 1961 1962	2.00 2.00 2.00 2.00 2.00 2.00	2.707 2.546 2.891 3.449 3.063 3.285		4.95 4.99 5.00 4.96 4.96 5.00	
1963	2.00	3.425			

Weighted average interest rate Paid by Borrowers on REA loans approved during the fiscal year.
 \*\* Computed Annual Interest Rate on Marketable Treasury Issues.
 Source: Monthly Statement of Public Debt, U.S. Department of Treasury.

As of September 1989, REA borrowers had received more than \$61 billion from REA loans, loan guarantee commitments, and RTB loans. Loan guarantee commitments account for most of this financing, however, a large proportion has been provided by REA loans at the 2 percent and 5 percent interest rates.

Chart D-10: Cumulative REA and RTB Loans and REA Guarantee Commitments as of September 30, 1989

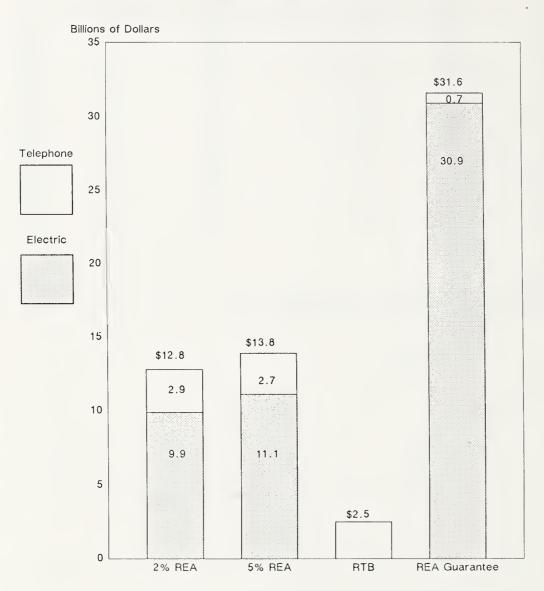


Table D-10: Cumulative REA Loans to Electric and Telephone Borrowers, as of Sept. 30, 1989

	Electric Loans	Telephone Loans
UNITED STATES	\$20,991,325,799	\$5,721,580,239
Alabama	408,687,006	168,176,119
Alaska	725,407,158	137,718,000
Arizona	206,110,419	42,995,000
Arkansas	683,228,151	102,380,326
California	75,516,523	84,981,614
Colorado	910,911,997	46,549,465
Connecticut		
Delaware	39,865,881	
Florida	678,852,153	42,897,463
Georgia	1,041,323,712	235,020,182
Hawaii		00 107 000
Idaho	126,450,683	36,497,926
Illinols	468,064,454	75,738,105
Indiana	373,188,723	97,197,545
lowa	624,212,475 491,705,455	138,427,207
Kansas		208,135,573 235,469,000
Kentucky Louisiana	893,087,296 558,590,944	107,832,118
Maine	24,536,765	31,090,472
Maryland	160,104,500	2,061,000
Massachusetts	100,104,000	1,835,000
Michigan	340,236,631	103,294,571
Minnesota	913,112,479	271,608,037
Mississippi	582,752,504	96,016,974
Missouri	1,046,350,398	213,682,841
Montana	290,791,837	167,468,218
Nebraska	443,745,603	109,265,218
Nevada	72,431,368	7,603,000
New Hampshire	100,397,884	17,017,000
New Jersey	13,399,660	14,295,000
New Mexico	307,961,517	158,952,000
New York	27,718,891	41,761,159
North Carolina	633,112,300	201,058,323
North Dakota	882,869,253	182,627,114
Ohio	346,976,099	30,446,240
Oklahoma	852,280,736	203,355,066
Oregon	239,664,749	54,859,641
Pennsylvania	220,964,329	77,542,890
Rhode Island		
South Carolina	642,763,725	194,933,274
South Dakota	439,551,698	180,647,038
Tennessee	350,910,033	299,607,000
Texas Utah	2,051,076,010	473,564,215
Vermont	71,809,996	38,487,000 4,785,000
Virginia	53,515,918 429,445,756	63,322,000
Washington	187,498,598	38,739,489
West Virginia	6,981,633	61,191,000
Wisconsin	457,148,178	249,450,805
Wyoming	229,426,593	11,797,000
Micronesia	220,720,000	41,000,000
Guam		106,298,000
Marshall Islands		18,800,000
Mariana Islands		11,212,000
Puerto Rico	266,157,000	115,677,000
Virgin Islands	430,126	66,214,000

## Cumulative REA Loan Guarantee Commitments and Rural Telephone Bank Loans, as of Sept. 30, 1989

	Guarantee	Commitments	
	Electric	<u>Telephone</u>	Rural Telephone Bank
UNITED STATES	\$30,879,101,072	\$630,894,093	\$2,525,809,488
Alabama	338,201,000	11,901,000	98,855,850
Alaska	279,439,000	34,013,093	81,123,000
Arizona	337,679,000	5,000,000	99,024,283
Arkansas	877,928,762	35,744,000	49,254,503
California		10,396,000	55,614,300
Colorado	1,407,984,520		18,525,140
Connecticut			
Delaware			
Florida	865,457,000	76,556,000	50,275,184
Georgia	4,871,248,886	82,184,000	154,929,215
Hawaii			
Idaho			10,519,950
Illinois	977,608,000		21,858,232
Indiana	1,926,888,000		25,525,973
Iowa	256,223,000	9,700,000	55,089,783
Kansas	692,849,000	11,434,000	44,144,307
Kentucky	2,234,761,262	28,840,000	57,291,957
Louisiana	3,077,621,000	13,651,000	50,127,636
Maine		1,875,000	45,024,000
Maryland			4,080,300
Massachusetts	822 062 000	2 053 000	1,039,500 82,823,717
Michigan	822,063,000	2,953,000 10,239,000	91,619,401
Minnesota	1,231,940,000 713,709,000	5,200,000	16.120,449
Mississippi Missouri	910,064,080	47,203,000	47,851,545
Montana	9,739,000	47,203,000	1,971,549
Nebraska	3,733,000		33,730,280
Nevada	1,689,000		7,585,854
New Hampshire	146,182,000		15,968,138
New Jersey	,	3,084,000	16,554,300
New Mexico	387,682,000		
New York		18,220,000	53,362,551
North Carolina	1,513,369,600	31,158,000	127,270,822
North Dakota	2,321,089,253		13,918,078
Ohio	72,110,000		7,623,525
Oklahoma	637,093,000	2,744,000	106,675,296
Oregon	54,128,000	18,228,000	39,792,139
Pennsylvania Rhode Island	607,713,000	43,247,000	246,754.113
South Carolina	523,036,000	7,885,000	164,785,020
South Dakota	13,628,000		16,453,759
Tennessee		14,358,000	72.508,800
Texas	1,156,645,986	76,131,000	172,892,445
Utah	1,036,341,723		10,210,200
Vermont	50,726,000		6,954,852
Virginia	263,000,000		20,201,318
Washington		5 252 222	19,960,235
West Virginia	260 670 000	5,250,000	18.421,200
Wisconsin Wyoming	260,679,000 2,585,000	23,700,000	146,987,549 5,691,789
Micronesia	2,305,000		5,031,763
Guam			19,609,800
Marshall Islands			10,000,000
Mariana Islands			4,090,800
Puerto Rico			15,116,850
Virgin Islands			

Table D-12: REA Loans to Electric and Telephone Borrowers Fiscal Year 1989

		Electric Loans	Т	elephone Loans
LINITED STATES	175	\$622,050,000	61	\$214,149,000
UNITED STATES	175	\$622,050,000	01	\$214,149,000
Alabama	4	10,842,000	4	21,712,000
Alaska				
Arizona	3	18,327,000	1	3,085,000
Arkansas	5	41,925,000	1	4,000,000
California				
Colorado	3	14,326,000	1	373,000
Connecticut				
Delaware				
Florida	5	38,719,000		
Georgia	16	88,008,000	1	2,586,000
Hawaii				
Idaho			2	1,759,000
Illinois	3	6,797,000	1	1,636,000
Indiana	3	3,163,000	1	880,000
Iowa	2	3,331,000	4	3,475,000
Kansas	4	4,530,000	4	3,657,000
Kentucky	9	31,301,000		
Louisiana	1	1,610,000	2	5,886,000
Maine	3	878,000	1	385,000
Maryland	1	16,806,000		,
Massachusetts	-	,,		
Michigan	6	26,889,000	2	6,657,000
Minnesota	8	28,770,000	7	13,481,000
Mississippi	4	13,342,000	1	613,000
Missouri	12	24,961,000	3	22,392,000
Montana	3	5,870,000	Ü	22,002,000
Nebraska	2	1,800,000	1	4,485,000
Nevada	1	5,393,000	'	4,400,000
New Hampshire	'	3,393,000	2	3,180,000
New Jersey			2	3,100,000
New Mexico	2	7 797 000	1	4,625,000
New York	2	7,787,000	1	869,000
North Carolina	12	F1 712 000	2	5,739,000
North Carolina North Dakota	5	51,713,000	2	5,739,000
Ohio		13,384,000		
	7	8,918,000	0	0 400 000
Oklahoma	4	7,924,000	3	6,469,000
Oregon	4	4,878,000		4 040 000
Pennsylvania	5	12,653,000	2	4,010,000
Rhode Island	~	00.040.000		
South Carolina	7	32,243,000		
South Dakota	7	8,621,000	3	5,433,000
Tennessee	2	5,681,000	_	
Texas	11	43,516,000	3	11,144,000
Utah				
Vermont				
VIrginia	3	22,960,000	1	4,729,000
Washington	1	2,725,000	1	1,111,000
West Virginia			1	120,000
Wisconsin	7	11,459,000	3	3,444,000
Wyoming				
Micronesia				
Guam				
Marshall Islands				
Mariana Islands				
Puerto Rico				
Virgin Islands			1	66,214,000

### REA Loan Guarantee Commitments and Rural Telephone Bank Loans, Fiscal Year 1989

Guarantee	Commitments
Qualatitee	Committeents

		<u>Guarantee Co</u> <u>Electric</u>	<u>mmitments</u> <u>Telephone</u>	Rural Telephone	Bank
4	UNITED STATES	\$39,502,000	\$0	\$177,044,700	Darin
-		***,,	•		
	Alabama			87,150	
	Alaska Arizona			14,716,800	
	Arkansas			1,155,000	
	California			9,955,050	
	Colorado				
	Connecticut				
	Delaware				
	Florida				
	Georgia Hawaii				
	Idaho				
	Illinois			1,803,900	
	Indiana				
	lowa			1,252,650	
	Kansas			1,648,500	
	Kentucky			7,964,250	
	Louisiana			244,650	
	Maine Maryland			1,753,500	
	Massachusetts			1,100,000	
	Michigan	6,651,000		20,260,800	
	Minnesota			6,053,250	
	Mississippi				
	Missouri	2,457,000			
	Montana				
	Nebraska				
	Nevada			1,892,100	
	New Hampshire New Jersey			1,002,100	
	New Mexico				
	New York				
	North Carolina				
	North Dakota			507.450	
	Ohio			507,150 9,286,200	
	Oklahoma			9,200,200	
	Oregon Pennsylvania			89,995,500	
	Rhode Island			00,000,000	
	South Carolina				
	South Dakota				
	Tennessee				
	Texas				
	Utah				
	Vermont Virginia				
	Washington			262,500	
	West Virginia				
	Wisconsin	30,394,000		8,205,750	
	Wyoming				
	Micronesia				
	Guam				
	Mariana Islands Marshall Islands				
	Puerto Rico				
	Virgin Islands				
	9 10.0				

Table D-14:

# Loans, Advances and Unadvanced Funds, Fiscal Years (FY) 1984-1989 (Dollars in Millions)

	,		,			
	1984	1985	1986	1987	1988	1989
REA Electric Loans						
(a) Approved during FY	\$ 850.0	\$ 562.0	\$ 651.9	\$ 628.4	\$ 622.1	\$ 622.1
(b) Funds advanced during FY	592.2	661.2	731.5	590.7	582.0	713.0
(c) Approved but unadvanced, Sept. 30	1,754.0	1,646.9	1,557.9	1,551.4	1,555.7	1,413.9
REA Telephone Loans						
(a) Approved during FY	\$228.6	\$224.6	\$183.3	\$229.8	\$193.4	\$ 214.1
(b) Funds advanced during FY	187.8	135.9	229.3	161.4	175.3	167.2
(c) Approved but unadvanced, Sept. 30	775.0	838.9	781.3	848.2	847.3	889.1
Rural Telephone Bank Loans						
(a) Approved during FY	\$143.0	\$167.8	\$127.9	\$185.1	\$ 80.1	\$ 177.0
(b) Funds advanced during FY	90.5	72.7	71.7	52.0	119.4	97.0
(c) Approved but unadvanced, Sept. 30	589.6	665.3	674.6	792.2	688.2	709.4
REA Loan Guarantee Commitments Electri	<u>c</u>					
(a) Approved during FY	\$ 897.2	\$ 72.5	\$1,167.5	\$ 174.7	\$ 774.7	\$ 774.7
(b) Funds advanced during FY	2,399.6	2,188.9	1,333.6	567.7	198.4	225.3
(c) Approved but unadvanced, Sept. 30	11,090.6	7,214.3	4,903.4	5,378.9	5,718.4	3,700.2
REA Loan Guarantee Commitments Teleph	<u>ione</u>					
(a) Approved during FY	\$105.1	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
(b) Funds advanced during FY	43.5	20.9	26.3	22.4	3.3	2.2
(c) Approved but unadvanced, Sept. 30	191.6	156.8	130.4	180.9	168.5	132.9

#### BORROWER STATISTICS

Rural electric systems have historically had more rapid rates of increase in electric demand than the total electric utility industry. Since 1973, growth in electric usage has declined for both REA borrowers and the total industry.

Chart E-1: Annual Percent Change in Electricity Usage

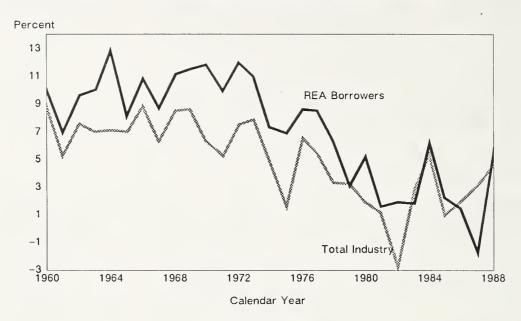


Table E-1: Growth Trends in Electricity Usage
Annual Percent Change in kWh Sales to Ultimate Consumers

<u>Year</u>	REA Borrowers	Total Electric Utility Industry	<u>Year</u>	REA Borrowers	Total Electric Utility Industry
1960	10.2%	9.0%	1975	7.0 %	1.9%
1961	7.2	5.5	1976	8.7	6.7
1962	9.7	7.7	1977	8.6	5.5
1963	10.1	7.1	1978	6.4	3.4
1964	13.1	7.2	1979	3.3	3.3
1965	8.4	7.1	1980	5.4	2.0
1966	11.0	9.0	1981	1.7	1.2
1967	8.9	6.5	1982	2.0	-2.4
1968	11.2	8.6	1983	1.9	2.9
1969	11.6	8.7	1984	6.5	5.6
1970	11.9	6.4	1985	2.3	1.1
1971	10.1	5.4	1986	1.5	2.1
1972	12.1	7.6	1987	-1.4	3.2
1973	11.0	8.0	1988	5.9	4.7
1974	7.4	0.0			

<sup>\*</sup> During calendar year 1987, 26 distribution borrowers prepaid their REA debt and are no longer in the active borrower category; as a result, they are not reflected in the report for the current year.

Sources: REA Bulletin 1–1; Edison Electric Institute Statistical Yearbook.

Except for the slight decline in 1988, consumers served by rural electric systems have been charged increasingly higher prices for electricity since the early 1970's. These price increases came after a long period of steadily declining prices. However, it is interesting to note that when inflation is adjusted for, there has been very little real increase in electricity prices to rural electric consumers—electricity remains a very good buy. Rural electric consumers are paying far less for electricity today in constant dollars than they were in the early days of the rural electric program.

Chart E-2: Average Residential Price per kWh

#### REA Electric Distribution Borrowers

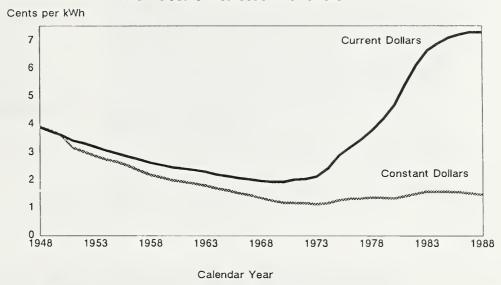


Table E-2: Average Residential Price per kWh Charged by REA Electric Distribution Borrowers

<u>Year</u>	<u>Current</u> *	Constant**	<u>Year</u>	Current*	Constant**
1948	3.92¢	3.92¢	1969	1.97¢	1.29¢
1949	3.77	3.81	1970	1.96	1.22
1950	3.63	3.63	1971	2.04	1.21
1951	3.44	3.19	1972	2.07	1.19
1952	3.35	3.04	1973	2.15	1,16
1953	3.22	2.90	1974	2.44	1.19
1954	3.09	2.77	1975	2.90	1.30
1955	2.98	2.68	1976	3.19	1.35
1956	2.87	2.54	1977	3.46	1.37
1957	2.77	2.37	1978	3.80	1.40
1958	2.65	2.21	1979	4.20	1.39
1959	2.57	2.12	1980	4.69	1.37
1960	2.49	2.02	1981	5.43	1.44
1961	2.44	1.96	1982	6.13	1.53
1962	2.39	1.90	1983	6.66	1.61
1963	2.33	1.83	1984	6.92	1.60
1964	2.23	1.73	1985	7.13	1.60
1965	2.17	1.66	1986	7.24	1.59
1966	2.10	1.56	1987	7.32	1.55
1967	2.06	1.49	1988	7.31	1.50
1968	2.00	1.38			

<sup>\*</sup> Current \$ = Dollars of the year.

The Consumer Price Index was used to convert current dollars to constant dollars.

<sup>\*\*</sup> Constant \$ = Dollars adjusted for inflation.

Electric rates charged rural electric consumers have increased mainly because of sharp escalation in the cost of power. In most cases, increases in the cost of distributing power have been more moderate. The cost of power has risen mainly because of: (a) increasing fuel costs; and (b) expensive new generating units that are coming

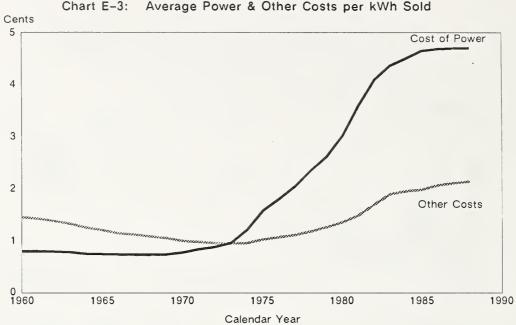


Chart E-3: Average Power & Other Costs per kWh Sold

Table E-3: Average Power and Other Costs per kWh Sold

Cost of Power	Other Costs		<u>Year</u>	Cost of Power	Other Costs
0.817¢	1.472¢		1975	1.593¢	1.039¢
0.819	1.446		1976	1.813	1.082
0.811	1.400		1977	2.056	1.129
0.802	1.346		1978	2.364	1.192
0.773	1.276		1979	2.631	1.277
0.766	1.224		1980	3.031	1.369
0.757	1.165		1981	3.606	1.504
0.750	1.138		1982	4.105	1.712
0.752	1.100		1983	4.383	1.912
0.757	1.069		1984	4.522	1.970
0.793	1.014		1985	4.672	1.998
0.854	0.999		1986	4.711	2.083
0.902	0.976		1987	4.723	2.127
0.974	0.969		1988	4.725	2.157
1.225	0.974				
	0.817 ¢ 0.819 0.811 0.802 0.773 0.766 0.757 0.750 0.752 0.757 0.793 0.854 0.902 0.974	0.817 ¢ 1.472 ¢ 0.819 1.446 0.811 1.400 0.802 1.346 0.773 1.276 0.766 1.224 0.757 1.165 0.750 1.138 0.752 1.100 0.757 1.069 0.793 1.014 0.854 0.999 0.902 0.976 0.974 0.969	0.817 ¢ 1.472 ¢ 0.819 1.446 0.811 1.400 0.802 1.346 0.773 1.276 0.766 1.224 0.757 1.165 0.750 1.138 0.752 1.100 0.757 1.069 0.793 1.014 0.854 0.999 0.902 0.976 0.974 0.969	0.817 ¢       1.472 ¢       1975         0.819       1.446       1976         0.811       1.400       1977         0.802       1.346       1978         0.773       1.276       1979         0.766       1.224       1980         0.757       1.165       1981         0.750       1.138       1982         0.752       1.100       1983         0.757       1.069       1984         0.793       1.014       1985         0.854       0.999       1986         0.902       0.976       1987         0.974       0.969       1988	0.817 ¢       1.472 ¢       1975       1.593 ¢         0.819       1.446       1976       1.813         0.811       1.400       1977       2.056         0.802       1.346       1978       2.364         0.773       1.276       1979       2.631         0.766       1.224       1980       3.031         0.757       1.165       1981       3.606         0.750       1.138       1982       4.105         0.752       1.100       1983       4.383         0.757       1.069       1984       4.522         0.793       1.014       1985       4.672         0.854       0.999       1986       4.711         0.902       0.976       1987       4.723         0.974       0.969       1988       4.725

Cost of Power includes power production expenses, transmission expense, and cost of purchased power. Other Costs are calculated as total revenue from sales of electric energy less cost of power.

Source: REA Bulletin 1-1

## Electric Program

Most of the power distributed by rural electric systems is purchased from investor-owned utilities (IOU's) and publicly-owned utilities. However, there has been a long-term trend toward REA borrowers generating more of their consumers' power needs.

Chart E-4: Sources of Wholesale Power

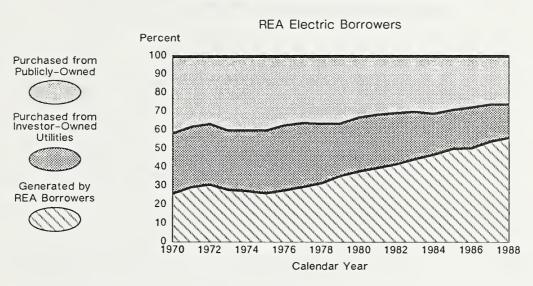


Table E-4: Sources of Wholesale Power for REA Electric Borrowers

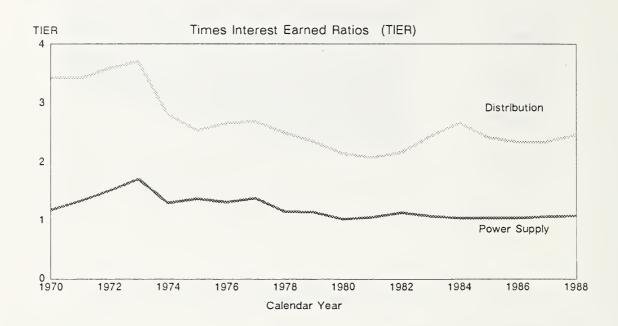
	Generated	d by REA	by REA Purchased from		Purchased from		
	Borro	owers	Investor-Ow	Investor-Owned Utilities		Sources	
Year	MWh	Percent	MWh	Percent	MWh	Percent	
1970	20,637,751	26.3	25,375,456	32.3	32,524,169	41.4	
1971	27,759,662	29.6	30,608,486	32.6	35,474,480	37.8	
1972	32,290,340	31.0	34,153,465	32.7	37,832,238	36.3	
1973	32,045,118	28.3	35,921,217	31.8	45,103,734	39.9	
1974	32,795,053	27.7	38,515,457	32.5	47,057,050	39.8	
1975	33,462,818	26.4	42,711,448	33.8	50,351,794	39.8	
1976	38,660,059	28.0	48,100,273	34.8	51,498,254	37.2	
1977	46,014,515	29.8	53,047,436	34.4	55,176,645	35.8	
1978	52,472,215	31.9	52,220,422	31.8	59,725,947	36.3	
1979	60,181,476	35.7	47,420,697	28.1	61,126,358	36.2	
1980	69,536,829	38.2	52,614,304	28.9	59,864,121	32.9	
1981	77,231,104	40.0	55,199,574	28.6	60,608,796	31.4	
1982	81,568,123	42.0	53,083,098	27.4	59,372,827	30.6	
1983	93,058,714	44.8	52,478,609	25.3	59,946,870	29.9	
1984	106,753,172	47.2	49,651,328	22.0	69,698,465	30.8	
1985	120,372,848	50.2	50,188,768	20.9	69,265,967	28.9	
1986	120,831,669	50.6	52,133,122	21.9	65,703,843	27.5	
1987	137,302,039	54.1	50,367,036	19.9	66,052,543	26.0	
1988	147,851,823	56.2	47,576,308	18.1	67,878,472	25.8	

SOURCE: REA Bulletin 111-2

The financial ratios of REA electric borrowers declined substantially during the latter half of the 1970's and into the 1980's when costs increased rapidly and were not matched by similar rate increases. Financial ratios of distribution borrowers have improved in the past few years, but those of power supply borrowers have remained very low.

Strong financial ratios are important because they affect the cost at which REA borrowers are able to obtain funds from private sources.

Chart E-5: Financial Ratios of REA Electric Borrowers



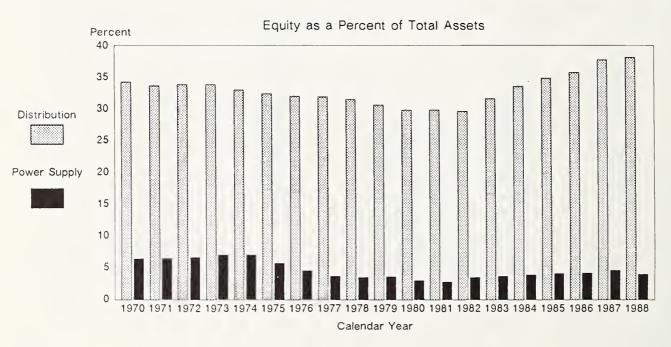


Table E-5: Financial Ratios of REA Electric Borrowers

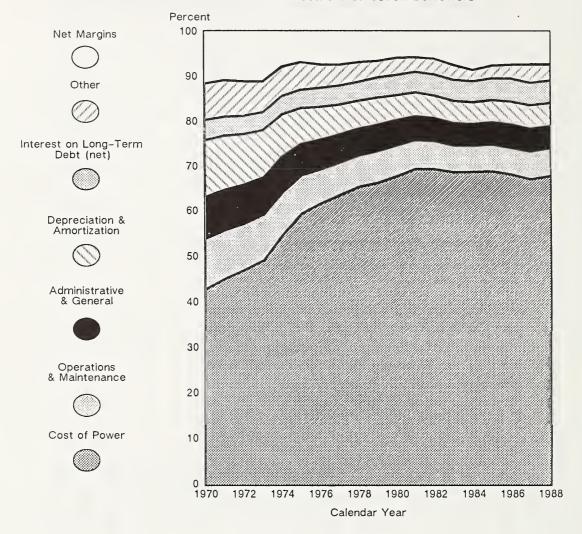
	Times Interest Ea	arned Ratio (TIER)	Equity as a Perc	ent of Total Assets
	Distribution	Power Supply	Distribution	Power Supply
Year	<u>Borrowers</u>	Borrowers	<u>Borrowers</u>	Borrowers
1970	3.45	1.20	34.3	6.4
1971	3.44	1.35	33.7	6.4
1972	3.61	1.53	33.9	6.6
1973	3.73	1.73	33.9	7.0
1974	2.83	1.32	33.0	7.0
1975	2.56	1.39	32.4	5.7
1976	2.68	1.33	32.0	4.5
1977	2.71	1.40	31.9	3.7
1978	2.52	1.17	31.5	3.5
1979	2.37	1.16	30.6	3.6
1980	2.16	1.04	29.8	3.0
1981	2.09	1.07	29.8	2.8
1982	2.18	1.15	29.6	3.5
1983	2.46	1.09	31.6	3.7
1984	2.69	1.06	33.6	3.9
1985	2.44	1.06	34.9	4.1
1986	2.36	1.06	35.8	4.2
1987	2.37	1.08	37.8	4.6
1988	2.48	1.10	38.2	4.0

Most of the revenue collected by REA electric distribution borrowers is used to pay for wholesale power. This component of cost has increased rapidly, and margins as a percent of total revenue have declined.

Interest expense represents only a small percentage of the revenue collected by distribution borrowers.

Chart E-6: Disposition of the Revenue Dollar

REA Electric Distribution Borrowers



Disposition of the Revenue Dollar: REA Electric Distribution Borrowers (Dollars in Thousands)

Table E-6:

76 <u>Percent</u>	100.0 61.9 7.7 6.7 7.3 7.3 7.0	30 Percent	0.00 68.1 6.9 6.9 6.5 6.5 7.5 8.5 8.5 8.5 8.5	34 Percent	100.0 69.1 5.8 4.9 4.7 2.5	38 <u>Percent</u>	100.0 68.1 6.2 6.2 6.2 6.3 6.9
1976 <u>Dollars</u>	\$3,436,513 2,126,877 263,649 232,464 250,686 143,550 178,295 240,992	1980 <u>Dollars</u>	\$6,529,782 4,449,392 453,149 362,969 364,704 295,524 248,746 355,298	1984 <u>Dollars</u>	\$10,811,893 7,468,582 625,866 529,564 518,103 510,922 274,814 884,042	1988 <u>Dollars</u>	\$12,316,016 8,382,065 766,604 605,378 645,103 616,026 445,083 855,757
1975 <u>Percent</u>	0.00.0 8.6 7.00 8.0 1.4 1.1	1979 <u>Percent</u>	100.0 66.6 7.1 5.9 6.0 6.0 8.7	1983 <u>Percent</u>	100.0 69.0 6.0 5.0 4.9 4.7 7.1	1987 <u>Percent</u>	100.0 67.5 6.2 5.1 5.2 5.0 4.1
19 <u>Dollars</u>	\$2,867,288 1,712,989 245,237 199,490 229,959 119,100 174,190	19 <u>Dollars</u>	\$5,514,270 3,672,897 392,919 325,121 331,899 245,532 203,130	19 <u>Dollars</u>	\$9,854,024 6,798,822 586,365 495,842 481,749 467,150 323,060 701,036	19 <u>Dollars</u>	\$11,716,438 7,913,818 726,287 602,285 609,840 588,037 470,314 805,857
1974 <u>Percent</u>	100.0 55.0 9.5 7.9 6.5 7.3	1978 Percent	100.0 65.7 7.0 6.0 6.2 4.2 4.4	1982 <u>Percent</u>	100.0 69.7 6.3 5.1 5.0 4.7 7.3	1986 <u>Percent</u>	100.0 68.5 6.0 5.2 5.1 5.1 3.1
19 <u>Dollars</u>	\$2,233,854 1,227,751 212,590 175,542 211,899 92,485 144,311 169,276	19 <u>Dollars</u>	\$4,851,705 3,189,470 340,134 291,054 301,942 203,156 210,877 315,072	19 <u>Dollars</u>	\$8,955,397 6,246,011 561,936 456,511 445,704 418,765 310,936 515,534	19 <u>Dollars</u>	\$11,789,628 8,080,345 709,924 607,292 596,359 597,142 367,718 830,848
1973 <u>Percent</u>	100.0 4.99.4 10.1 10.6 6.8 6.8	77 <u>Percent</u>	100.0 63.8 7.3 6.3 6.7 4.2 4.2	81 <u>Percent</u>	0.00 8.00 8.00 4.00 6.00 7.00 7.00 7.00 7.00 7.00 7.00 7	1985 <u>Percent</u>	100.0 69.2 6.0 5.0 4.9 4.9 7.2
19 <u>Dollars</u>	\$1,840,930 909,404 185,023 154,279 195,801 72,914 124,339 199,170	1977 <u>Dollars</u>	\$4,105,986 2,620,763 300,200 257,984 274,547 171,016 189,794 291,682	1981 <u>Dollars</u>	\$7,705,652 5,380,501 495,969 407,395 404,520 356,530 247,832 412,905	19 <u>Dollars</u>	511,393,955 7,889,914 681,569 566,108 558,344 554,195 324,468 819,357
	Total Operating Revenue Cost of Power Operation & Maintenance Administrative & General Deprec. & Amort. Int. on LT Debt (Net) Other		Total Operating Revenue Cost of Power Operation & Maintenance Administrative & General Deprec. & Amort. Int. on LT Debt (Net) Other Net Margins		Total Operating Revenue Cost of Power Operation & Maintenance Administrative & General Deprec. & Amort. Int. on LT Debt (Net) Other Net Margins		Total Operating Revenue \$11,393,955 Cost of Power Operation & Maintenance 681,569 Administrative & General 566,108 Deprec. & Amort. 558,344,101 Int. on LT Debt (Net) 554,195 Other Net Margins 819,357

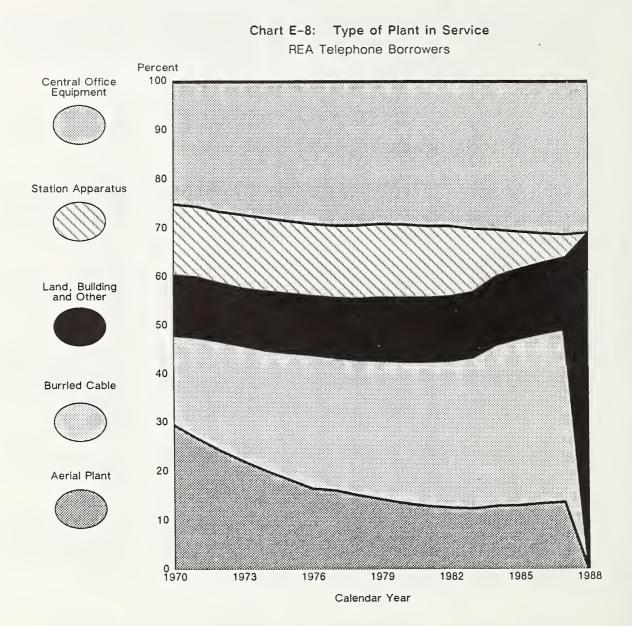
Most of the revenue collected by REA power supply borrowers is used for power production and to purchase wholesale power from other utilities. Increases in power production expenses are mainly due to increases in the cost of fuel.

REA Power Supply Borrowers Percent Net Margins 100 90 Other 80 Interest on Long-Term 70 Debt (net) 60 Depreciation & Amortization 50 40 Administrative & General 30 Purchased Power Cost 20 Power Production 10 Expense 1972 1974 1976 1978 1980 1982 1984 1986 1988 1970 Calendar Year

Chart E-7: Disposition of the Revenue Dollar

Disposition of the Revenue Dollar: REA Power Supply Borrowers (Dollars in Thousands)

The main trends regarding the type of plant that rural telephone systems are building to serve their subscribers are: (a) buried cable is quickly replacing aerial plant; and (b) central office equipment is increasing as a percentage of the total.



Note: Due to changes in the Uniform System of Accounts as promulgated by the Federal Communications Commission, several categories of plant and expenses have been consolidated in 1988. Therefore, this chart is not readily comparable to prior years.

Table E-8:

Type of Plant in Service: REA Telephone Borrowers

(Dollars in Thousands)

Percent Percent 14.0 14.8 29.0 0.00 33.0 0.001 69.2 16.7 27.4 29.0 100.0 Percent 13.7 13.1 15.1 29.1 Percent 13.1 30.8 100.0 12.1 9.7 Ϋ́ AN Ϋ́ 1976 1980 1988 1984 Dollars \$ 677,880 1,110,117 489,938 598,480 1,176,667 \$4,053,082 \$ 942,358 1,990,426 1,035,624 2,001,295 \$6,869,934 \$1,274,846 1,362,515 942,570 2,955,645 \$9,761,267 ₹ Z ۲ \$ 8,014,611 3.570.255 \$ 11,584,866 900,231 3,225,691 Dollars Dollars Dollars 14.9 14.5 Percent 18.5 12.2 Percent 13.0 12.6 30.9 13.4 0.00 13.9 14.8 28.4 100.0 28.4 15.1 29.0 0.00 Percent 13.1 30.0 35.4 31.2 0.00 Percent 4.7 1975 1979 1983 1987 \$6,075,386 910,440 881,086 1,724,348 788,006 \$1,144,646 2,795,283 1,190,245 \$9,060,205 523,469 646,194 426,827 520,577 992,808 \$3,496,846 918.001 1,763,945 1,215,307 2,714,724 \$ 1,544,154 3,943,628 1,648,752 3,472,825 \$11,132,828 Dollars Dollars Dollars Dollars <del>69</del> 49 1978 Percent 13.6 Percent 0.001 12.6 0.001 12.8 13.3 14.5 100.0 14.6 20.3 12.2 15.1 15.3 27.7 15.1 29.3 Percent Percent 34.8 30.9 100.0 27.7 29.4 6.1 1974 1982 1986 \$3,102,119 810,473 1,222,583 \$ 1,428,020 3.242,115 766,162 379,098 469.224 858,464 823,309 1,492,621 678,351 .577.726 \$5,382,480 \$1,082,725 2,524,514 1,122,753 2.476.062 \$8,428,637 Dollars 3,658,327 1,531,767 643,572 \$10,503,801 629,171 Dollars Dollars Dollars υ 49 1973 Percent 1985 s Percent 100.0 13.2 22.3 11.8 100.0 16.3 27.2 12.3 14.9 13.1 14.8 34.2 14.3 30,6 100.0 23.7 15.1 Percent 29.3 100.0 29.4 27.1 Percent 13.1 1977 1981 Dollars 603,435 639,646 318,415 406,770 731,129 \$2,699,395 770,373 1,283,449 580,679 1,383,950 \$4,721,632 1,118,827 2,224,379 \$7,578,452 3,501,316 784,131 3,133,805 \$10,243,747 703,181 Dollars \$ 993,164 996,291 Dollars 1,468,551 Dollars 2,245,791 \$ 1,355,944 49 49 Central Office Equipment Central Office Equipment Central Office Equipment Central Office Equipment Land, Buildings & Other Land, Buildings & Other Land, Buildings & Other and, Buildings & Other Station Apparatus Station Apparatus Station Apparatus Station Apparatus **Buried Cable Buried Cable Buried Cable Burjed Cable** Aerial Plant **Aerial Plant** Aerial Plant **Aerial Plant** Total Total Total

Note: Due to changes in the Uniform System of Accounts as promulgated by the Federal Communications Commission, several categories of plant and expenses have been consolidated in 1988. Therefore, this table is not readily comparable to prior years.

An increasing percentage of the revenue collected by REA telephone borrowers has been obtained from toll revenues. Local service revenues have decreased in relative importance.

Chart E-9: Sources of Revenues

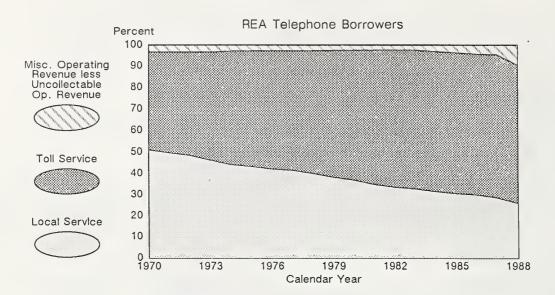


Table E-9: Sources of

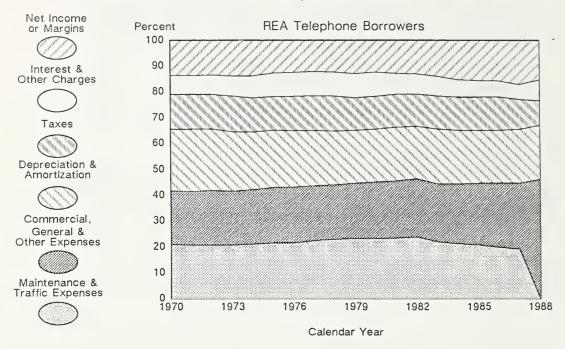
Sources of Revenues: REA Telephone Borrowers (Dollars in Thousands)

Percent	42.0 55.3 3.3	Pe	36.9 60.7 3.1 0.7 100.0	Percent	31.3 65.6 3.5 0.4	100.0 Bercent	25.9 64.6 9.9 0.4
1976 <u>Dollars</u>	\$377,349 497,544 30,125 5,683	1980 Dollars	\$ 648.608 1,066,488 54,980 12,336 \$1,757,740	1984 <u>Dollars</u>	\$ 910,039 1,909,122 102,417 11,384	\$2,910,194 1988 <u>Dollars</u>	\$ 931,117 2,324,182 356,476 13,485 \$3,598,291
5 <u>Percent</u>	43.3 54.0 3.4 0.7	Pe	38.1 59.3 3.2 0.6 100.0	3 <u>Percent</u>	32.6 65.0 2.9 0.5	100.0 7 Percent	28.5 66.9 5.0 0.4
1975 <u>Dollars</u>	\$325,894 406,649 25,928 5,371 \$753,100	1979 Dollars	\$ 586,323 913,310 49,456 9,346 \$1,539,743	1983 <u>Dollars</u>	\$ 862,463 1,716,767 77,265 13,990	\$2,642,505 1987 <u>Dollars</u>	\$ 950,755 2,235,394 166,964 13,686 \$3,339,427
4 <u>Percent</u>	53.0 3.5 0.6	Pe	40.0 57.4 3.2 0.6 100.0	2 <u>Percent</u>	33.4 64.3 2.9 0.6	100.0 6 Percent	29.9 65.9 4.6 0.4
1974 <u>Dollars</u>	\$291,894 349,839 23,132 4,366 6650 732	1978 Dollars	\$ 522,406 748,912 42,157 8,213 \$1,305,262	1982 <u>Dollars</u>	\$ 798,273 1,535,565 70,237 15,228	\$2,388,847 1986 <u>Dollars</u>	\$ 952,101 2,094,884 145,608 11,800 \$3,180,792
3 <u>Percent</u>	46.2 50.5 3.9 0.6	Pe	41.4 55.8 3.3 0.5 100.0	1 <u>Percent</u>	34.7 62.9 3.0 0.6	100.0 5 Percent	30.5 65.8 4.0 0.3
1973 <u>Dollars</u>		\$555,318 1977 <u>Dollars</u>	\$ 449,804 606,795 36,164 ss 6,159 \$1,086,604	198 <sup>.</sup> <u>Dollars</u>	\$ 709,132 1,284,666 61,498 es 13,231	\$2,042,065 1985 <u>Dollars</u>	\$ 947,561 2,044,198 126,043 es 9,579 \$3,108,223
	Local Service Revenue Net Toll Revenue Misc Operating Revenues - Uncollectable Op. Revenues	l 0tal	Local Service Revenue \$ Net Toll Revenue Misc Operating Revenues - Uncollectable Op. Revenues Total \$		Local Service Revenue \$ 709,132 Net Toll Revenue 1,284,666 Misc Operating Revenues 61,498 - Uncollectable Op. Revenues 13,231	Total	Local Service Revenue  Net Toll Revenue Misc Operating Revenues  - Uncollectable Op. Revenues Total

The major expenses of rural telephone borrowers have been relatively stable as a percent of their total revenue: there have been no dramatic trends among any of the major expense items.

Interest on long-term debt, like other items has been stable--accounting for about 10 percent of telephone borrower revenue for the past 20 years.

Chart E-10: Disposition of the Revenue Dollar



Note: Due to changes in the Uniform System of Accounts as promulgated by the Federal Communications Commission, several categories of plant and expenses have been consolidated in 1988. Therefore, this chart is not readily comparable to prior years.

Table E-10:

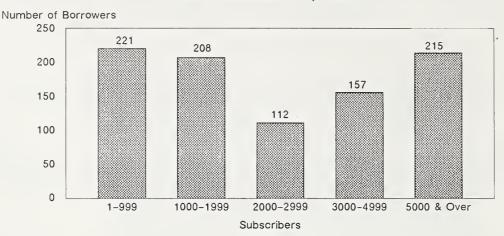
Disposition of the Revenue Dollar: REA Telephone Borrowers (Dollars in Thousands)

1976 Percent	100.0 21.7 21.7 21.7 13.4 9.5 0.5 12.8	1980 <u>Percent</u>	100.0 23.1 22.0 20.5 12.7 1.2 1.2 1.2 1.3	1984 <u>Percent</u>	100.0 23.1.2 20.8 12.9 8.5 0.4 15.3	988 <u>Percent</u>	100.0 NA 46.1 20.9 9.6 7.7 NA 15.4
19 <u>Dollars</u>	\$899,335 192,993 194,720 195,087 120,501 85,705 4,841 -6,909	19 <u>Dollars</u>	\$1,757,740 405,560 387,127 361,059 222,568 167,764 21,701 -24,395 216,356	19 <u>Dollars</u>	\$2,910,194 617,672 673,473 603,913 374,059 247,370 12,872 -64,916 445,751	19 <u>Dollars</u>	\$ 3,598,291 NA 1,658,715 751,206 345,923 276,539 11,267 NA 554,641
1975 Percent	100.0 21.5 21.6 222.1 13.0 8.8 8.8 1.0 7.0-7	1979 <u>Percent</u>	100.0 23.3 22.1.4 20.3 12.7 12.7 13.0	983 <u>Percent</u>	100.0 21.9 22.5 21.1 12.9 8.8 0.5 1.7	1987 Percent	100.0 19.1 25.5 20.8 11.7 8.2 0.2 -2.6
19 Dollars	\$753,100 162,191 162,765 166,709 97,440 66,202 7,575 -5,238 95,456	19 Dollars	\$1,539,743 357,938 329,888 312,337 196,064 140,605 18,920 -15,598	19 <u>Dollars</u>	\$2,642,505 579,971 595,971 557,648 341,171 231,580 12,495 -44,707 369,061	19 <u>Dollars</u>	\$3,339,427 637,393 852,404 694,991 390,864 274,736 6,535 -87,236 569,741
1974 Percent	100.0 21.1 22.2 13.3 8.2 1.1 13.8	1978 <u>Percent</u>	100.0 22.9 21.2 20.7 13.7 13.7 9.0 0.9	982 <u>Percent</u>	100.0 23.8 22.6 20.3 12.5 9.0 0.6 1.9	986 <u>Percent</u>	100.0 19.8 25.0 20.2 13.1 13.1 15.8
19 Dollars	\$659,732 139,139 139,047 146,475 87,866 53,830 7,364 -5,250 91,261	19 Dollars	\$1,305,262 298,834 277,085 270,383 178,101 117,456 11,536 -8,940	19 <u>Dollars</u>	\$2,388,847 567,870 540,339 483,498 299,197 215,923 13,667 -45,240 313,593	19 <u>Dollars</u>	\$3,180,792 629,105 793,704 642,118 418,039 265,183 8,379 -78,917 503,181
1973 <u>Percent</u>	100.0 20.7 20.9 23.0 13.8 7.4 0.9	1977 <u>Percent</u>	100.0 22.4 21.3 21.4 13.5 9.4 0.6	981 <u>Percent</u>	100.0 23.4 22.1 20.8 12.7 9.4 0.8	1985 <u>Percent</u>	100.0 20.7 24.0 280.2 13.0 8.4 0.3 -2.3
19 Dollars	\$555.318 116.201 127,728 76,440 41,246 5,346 -3,259 76,801	19 Dollars	\$1,086,604 242,908 231,746 232,252 147,213 101,997 6,662 -7,659	19 Dollars	\$2,042,065 477,895 450,339 423,536 258,441 192,568 16,657 9039,027 261,656	19 <u>Dollars</u>	\$3,108,223 644,601 746,603 627,547 402,353 261,690 10,537 10,537 10,537 10,537
	Total Operating Revenue Maintenance & Traffic Commercial, General & Other Depreciation & Amortization Taxes Interest on Long-term Debt (Net) Other Fixed Charges Other Income & Ded (Net) - unreg Net Income or Margin - regulated		Total operating Revenue  Maintenance & Traffic Commercial, General & Other Depreciation & Amortization Taxes Interest on Long-term Debt (Net) Other Fixed Charges Other Income & Ded (Net) - unreg. Net Income or Margin - regulated		Total Control Peverue \$28 Maintenance & Traffic Commercial, General & Other Depreciation & Amortization Taxes Interest on Long-term Debt (Net) Other Fixed Charges Other Income & Ded (Net) - unreg.		Total Operating Revenue  Maintenance & Traffic Commercial, General & Other Depreciation & Amortization Taxes Interest on Long-term Debt (Net) Other Fixed Charges Other Income & Ded (Net) - unreg Net Income or Margin - regulated

Note: Due to changes in the Uniform System of Accounts as promulgated by the Federal Communications Commission, several categories of plant and expenses have been consolidated in 1988. Therefore, this table is not readily comparable to prior years.

Most REA telephone borrowers are quite small businesses, in terms of the number of subscribers they serve. As of December 31, 1988, the average REA telephone borrower served 5,582 subscribers with an average of 7.1 subscribers per route mile.

Chart E-11: Subscribers Served per REA Telephone Borrower as of December 31, 1988



Selected operating ratios of borrowers for 1988 and the 4 prior years are presented below. The ratios of total operating revenues and net operating income or margin to average plant in service show an increase from 30.9 to 31.7 and from 6.8 to 7.5 respectively, in a comparison of 1984 with 1988. The depreciation expense ratio has also shown an increase in this period. The accrual ratio in the 5–year period has decreased slightly from 86.9 in 1984 to 84.6 in 1988.

Table E-11:	perating Ratios of REA Telephone Borrowers					
	1984	<u> 1985</u>	1986	1987	<u>1988</u> *	
Dollars per subscriber:						
(Total Telephone Plant)	\$2,147.66	\$2,226.74	\$2,259.09	\$2,322.10	\$2,368.39	
Plant in service	2,056.34	2,137.61	2,173.78	2,224.70	2,272.94	
Plant in service less dep.	,	·	,	·		
and amort, reserves	1,404.88	1,425.10	1,423.00	1,427.36	1,525.02	
Total assets	1,908.38	1,979.70	2,047.67	2,087.78	2,102.97	
Percent of average plant in service:						
Total operating revenues	30.9%	31.2%	31.2 %	30.8 %	31.9 %	
Maintenance expenses	5.7	5.6	5.4	5.1	NA	
Depreciation expenses	6.2	6.2	6.1	6.2	6.7	
All other operating expenses						
and taxes	12.1	12.5	12.8	12.4	17.7	
Net Operating income or margin	6.8	6.9	6.8	7.0	7.5	
Percent of total operating revenue:						
Total operating deductions and						
Fixed charges (accrual ratio)	86.9	86.7	86.7	85.6	84.7	
Other income and deduction (net) -	unreg. 2.2	2.3	2.5	2.6	NA	
Net income or margin-regulated	15.3	15.7	15.8	17.1	15.4	

Due to changes in the Uniform System of Accounts as promulgated by the Federal Communications Commission, several categories of plant and expenses have been consolidated in 1988. Therefore, this table is not readily comparable to prior years.

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