Rural Housing Programs: Long-Term Costs and Their Treatment in the Federal Budget

A CBO Study
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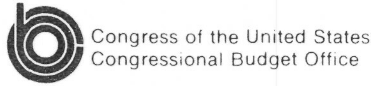

RURAL HOUSING PROGRAMS: LONG-TERM COSTS AND THEIR TREATMENT IN THE FEDERAL BUDGET

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NOTE: Unless otherwise noted, all years in this text refer to fiscal years.

PREFACE

The Congress is considering this year proposals to restructure rural housing assistance. This paper, requested by the Senate Budget Committee, describes current programs and explains how the budgetary treatment obscures their costs. It provides estimates of the long-term cost of the current programs and discusses options both for reducing costs and for modifying the budgetary treatment to make costs more apparent.

Roberta Drews of CBO's Human Resources and Community Development Division prepared this paper and Ben Steffen provided the computer modeling of long-term program costs. They worked under the supervision of Nancy M. Gordon and Martin D. Levine. Robin Seiler and Ann Hadley reviewed earlier drafts of the report and provided helpful comments. Many members of the CBO staff, including Brent Shipp, Lloyd Atkinson, Patricia Ruggles, Joel Slackman, and Peter Taylor, also contributed necessary information and useful comments. Numerous persons at the Farmers Home Administration of the Department of Agriculture provided program and budget data used in the study. Francis Pierce edited the paper. Mary Braxton typed the several drafts and prepared the manuscript for publication.

In accordance with CBO's mandate to provide objective and impartial analysis, this paper contains no recommendations.

Alice M. Rivlin
Director

June 1982

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SUMMARY

Although the federal government is a major mortgage lender in rural areas, current budget practices obscure the costs of this activity and make it difficult for the Congress to assess the consequences of annual funding decisions. The Farmers Home Administration (FmHA), an agency of the U.S. Department of Agriculture, subsidizes the housing costs of some low- and moderate-income households in rural areas by providing reduced-interest homeownership and rental housing loans. The cost to the federal government of outstanding mortgages totaled $1 billion in 1981 and is expected to reach $1.7 billion by 1983. Despite the growing cost of rural housing assistance, the Congress does not now have available estimates of the additional costs that result from each year's new lending activity.

MAJOR FmHA LENDING PROGRAMS

The two major FmHA lending programs are the Section 502 homeownership program, which finances the purchase of newly built or existing single-family homes, and the Section 515 rental housing program, which finances the construction or rehabilitation of multifamily rental projects.[1]

The Section 502 program provides 33-year mortgages at effective interest rates as low as 1 percent. For low-income borrowers[2]--the vast majority of Section 502 participants--the FmHA sets interest rates at levels that enable them to spend 20 percent of their incomes on mortgage payments, property taxes, and insurance. The FmHA then pays the difference between the interest rates charged on funds to finance the program and the rates paid

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1. The program names refer to section numbers of the Housing Act of 1949 (Public Law 81-171), as amended.

2. Low-income borrowers are those with incomes below a range of $11,500 to $18,000 in the continental United States, depending on area housing costs, with adjustments allowed for certain household expenses. Moderate-income levels are set $5,500 higher than low-income limits.

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by its borrowers; this difference is referred to as an interest credit. Over time, as borrowers' incomes change, the effective interest rates are recalculated to maintain the housing-cost-to-income ratio of 20 percent. Households receiving interest-credit loans must repay the government at least part of the interest subsidy received, if their homes have appreciated in value at the time they are sold. Moderate-income borrowers do not receive interest-credit agreements and pay interest rates that are tied to federal borrowing costs but that are generally below private mortgage rates.

The Section 515 rental housing program provides 50-year mortgages to developers with interest credits reducing effective interest rates to 1 percent, thereby permitting tenants to pay reduced rents. Tenants of Section 515 projects are required to contribute toward their housing expenses the greater of 25 percent of their incomes or the minimum project rent, which includes the costs of amortizing the 1 percent mortgage and project expenses. The developer keeps the minimum rent, and the FmHA collects any payments above the minimum. Payments above the minimum rent are referred to as "overage" payments and are treated as additional interest payments, thereby reducing total program costs.

THE LONG-TERM COST OF RURAL HOUSING PROGRAMS

If the Congress authorized $3.2 billion in Section 502 and Section 515 interest-credit assistance in 1983--the level funded in 1982--the resulting long-run cost would range from $1.0 billion to $1.6 billion in 1983 dollars. Although the Congress has modified the programs in recent years in order to lower program costs, other options exist to lower costs still further.

Long-Term Program Costs

The net long-term cost of providing $100 million in additional Section 502 interest-credit loans in 1983 would range from $23 million to $29 million in 1983 dollars (see Summary Table). The interest subsidies associated with these loans would range from $33 million to $41 million. The subsidy recapture provision would reduce the interest subsidy costs by about one-third, or from $10 million to $13 million.

SUMMARY TABLE. LONG-TERM COSTS OF INTEREST-CREDIT RURAL HOUSING PROGRAMS PER $100 MILLION IN ASSISTANCE IN 1983 (In millions of 1983 dollars)

Program	Range of Estimates[a]
Section 502 Net Costs	23 to 29
Interest Subsidy Costs	(33 to 41)
Offsetting Collections from Recapture Provisions[b]	(-10 to -13)
Section 515 Net Costs	54 to 100
Interest Subsidy Costs	(89 to 130)
Offsetting Collections from Overage Provisions[b]	(-19 to -58)

SOURCE: Congressional Budget Office.

a. These estimates are based on four sets of assumptions about long-term real interest rates, economic activity, and program operation. See the Appendix for details.

b. Net income to the FmHA.

Providing $100 million in additional interest-credit Section 515 loans in 1983 would cost from $54 million to $100 million in 1983 dollars over the term of the commitments. Interest subsidies for Section 515 lending would range from $89 million to $130 million, which is higher than for Section 502 loans because borrower interest rates remain fixed at 1 percent and because the term extends for 50, instead of 33, years. These costs would be partially offset by the overage collections, which could range from $19 million to $58 million. The FmHA has little information, however, on overage collections to date, making estimates of future overage collections especially uncertain.

Options That Would Reduce Costs

The long-term costs of Section 502 and Section 515 interest-credit loans in 1983 could be lowered either by reducing the loan

volume in any one year or by requiring tenants to pay a larger share of program costs. The savings realized by providing less assistance would be straightforward; any reduction in funding levels would yield a proportionate reduction in long-term costs. The savings realized from requiring tenants to pay an increased share of their housing costs would depend on how the increase was structured.

Increasing Homeowners' Interest Payments. One way to reduce Section 502 interest-credit program costs would be to require borrowers to pay 25 percent of their income for their mortgage payments, property taxes, and insurance--instead of the currently stipulated 20 percent. This would raise the effective interest rates paid and would reduce the long-run real costs of new assistance provided in 1983 by 30 to 50 percent. Some of the savings could be offset by increases in defaults, however.

Recapturing a Larger Share of Interest Subsidies. Another option would be for the FmHA to recapture a larger share of its subsidy when a property financed with a Section 502 interest-credit mortgage is sold. Currently, the FmHA receives from 9 to 78 percent of the net property appreciation, though not more than the total subsidy provided, depending on the number of months a property was held and the average interest rate paid. The FmHA could, instead, collect a fixed percentage of property appreciation, as is the case in homeownership programs operated by the Department of Housing and Urban Development (HUD). The reduction in long-term costs would depend on the percentage of property appreciation collected. If the FmHA collected 50 percent of net appreciation, long-term real program costs would fall by up to one-third and participants in FmHA and HUD homeowership programs would receive similar treatment. Recapturing a higher share of property appreciation would reduce program costs further but could decrease incentives for homeowners to maintain their properties, thereby lessening the amount of appreciation available for recapture.

Raising the Share of Income Renters Contribute Toward Their Housing Expenses. A third way to increase the share that assisted households pay of their housing costs would be to require that tenants in Section 515 projects pay the higher of 30 percent of their incomes--rather than the current 25 percent--or the minimum rent level. Such a change could reduce long-term costs by anywhere from 30 to 90 percent, depending on the assumptions about tenant incomes. This option would ensure similar treatment of assisted households across federal programs, since renters in

HUD-sponsored programs will be required to pay 30 percent of their incomes by 1986. On the other hand, it would decrease the income that such households would have to spend on other necessities.

THE BUDGETARY TREATMENT OF RURAL HOUSING PROGRAMS

The major FmHA housing loan programs are financed through the Rural Housing Insurance Fund (RHIF), a revolving fund from which program expenditures are made and into which program collections are deposited. Because the RHIF is a revolving fund, budget authority and outlay estimates are not adequate measures of program cost as they are in most federal programs.

The Operation of the RHIF

Each year the Congress authorizes an activity level for rural housing programs, which is financed through four funding sources available to the RHIF. The primary source is the sale of mortgage-backed securities called certificates of beneficial ownership (CBOs) to the Federal Financing Bank (FFB), an off-budget branch of the U.S. Treasury that coordinates federal agency financing. Another funding source is the appropriations made by the Congress to the fund to cover annual interest subsidies and losses on foreclosures for the last year in which they are known--generally two years prior. A third source of financing is borrower payments. Finally, to the extent that its other funding sources are insufficient to meet its needs, the RHIF has permanent, indefinite authority to borrow from the U.S. Treasury, authority that does not expire and that allows unlimited, unsecured borrowing to finance Congressionally authorized lending. Budget authority and outlay levels are the net result of the transactions of the RHIF; as a result they are difficult to estimate and do not represent either the full federal expenditures associated with rural housing aid or the long-run costs associated with any year's funding level.

Options for Changing the Current Budgetary Treatment to Make Costs More Apparent

Modifying the budgetary treatment of the RHIF would not change the actual cost of programs but would make the costs more apparent.

Treating CBO Asset Sales as Borrowing. Transactions between the RHIF and the FFB are treated by law as asset sales,[3] but they may be more appropriately viewed as RHIF borrowing from the FFB. The FmHA continues to maintain possession of and service the mortgages securing the CBO, and it guarantees the timely payment of principal and interest on the securities. Thus, the FFB is not purchasing a pool of mortgages but, rather, is lending to the FmHA based on the agency's guarantee.[4]

Treating the RHIF's transactions with the FFB as sales, rather than as borrowing, moves the financing of rural housing programs out of the unified budget.[5] When the RHIF sells a CBO to the FFB, it offsets its budget authority requirements and reduces its outlay levels by the amount of the sale, while the FFB's budget levels increase by the amount of the sale. Because the FFB spending totals are not included in the unified budget, a large share of the federal expenses of rural housing programs are, therefore, also not included in the budget. Changing the treatment of CBO transactions from asset sales to borrowing would not change actual spending by the federal government, but it would increase unified budget spending totals. Had this change been enacted in 1981 when CBO sales totaled $6 billion, RHIF budget authority requirements and outlays would have risen by that amount, as would the unified budget deficit.

Modifying the Interest Rate Paid on Treasury Borrowing. The Treasury is mandated to charge the RHIF an interest rate on its short-term borrowing based on the average rate on outstanding

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3. Both P.L. 81-171 and P.L. 87-128, as amended, authorize CBO transactions to be treated as asset sales.

4. For a more complete discussion of these transactions see: Congressional Budget Office, The Federal Financing Bank and the Budgetary Treatment of Federal Credit Activities (January 1982).

5. Treating RHIF transactions with the FFB as asset sales rather than as borrowing does not, however, affect program cost estimates. Because the RHIF pays an interest rate based on the government cost of borrowing on the funds, the full cost of the transaction is included in the budget.

long-term securities,[6] which leads at times to underestimated costs for rural housing programs. The Treasury currently charges the RHIF 9.4 percent on its borrowing, but the current rate on its short-term borrowing is over 12 percent. If the rate charged the RHIF were set at the short-term Treasury borrowing rate, the cost attributed to rural housing programs would increase under current interest rate patterns. Had the RHIF been charged in 1981 the average rate on three-month Treasury securities, instead of the rate on outstanding long-term securities, its borrowing costs would have increased from $140 million to $240 million, or by 70 percent.

Fully Funding the Cost of Rural Housing Programs in Advance. The FmHA currently reports the annual costs of the programs only after they are incurred, which is the basis for the appropriation for past-year losses. Thus, the Congress is not able to consider the long-term cost of rural housing loans at the time they are authorized.

The Congress could consider funding the full expected cost of rural housing loans at the time they are made by appropriating an amount equal to the interest subsidies and foreclosure losses expected to result from the new lending. This would allow the Congress to compare the costs of rural housing programs to other programs, particularly the housing programs operated by HUD, which are funded in a similar manner. It would also, however, require large increases in budget authority.

Requiring the FmHA to Provide Estimates of Long-Term Program Costs. As an alternative to providing full funding for rural housing programs, the Congress could require the FmHA to include estimates of the expected long-term costs of additional lending in its budget submissions. This would provide the Congress with cost estimates that it could compare with estimates of the cost of other federal programs. The FmHA might, however, require more resources to prepare such estimates.

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6. See Section 517(h) of Public Law 81-171, as amended.

CHAPTER I. INTRODUCTION

The Farmers Home Administration (FmHA) in the U.S. Department of Agriculture helps provide decent, affordable housing in rural areas, primarily by financing the construction and purchase of single-family and multifamily housing units. At the end of 1981, FmHA had provided over 1.6 million mortgages for single-family dwellings totaling $28 billion, and about 13,000 mortgages for multifamily dwellings--representing about 255,000 units--totaling $5 billion.

Current budget practices obscure the costs of the federal government's mortgage activity in rural areas. The major cost of federal lending is the difference between interest rates paid by borrowers, which range from as low as 1 percent to a current maximum of 13.5 percent, and the rates paid by the FmHA for funds to finance the programs, most recently at 14 percent. The budget for rural housing loan programs does not identify, however, either the total annual cost attributable to outstanding mortgage commitments or the additional expenses that would result from providing new assistance in any one year. Consequently, the Congress does not have available estimates of rural housing program costs that it can compare to other program costs when allocating federal resources.

This paper estimates the long-term cost of FmHA commitments and discusses some of the options available to the Congress both for reducing program costs and for making costs more apparent. Chapter II describes the types of assistance provided through the major FmHA housing loan programs. Chapter III estimates the long-term cost of providing mortgages in 1983 under a variety of assumptions about program operation and the economy's performance, and then discusses options for reducing the cost of rural assistance programs. Chapter IV describes the budget treatment of rural housing loan programs and provides options to make the costs of federal commitments more apparent.

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CHAPTER II. FmHA RURAL HOUSING PROGRAMS

The FmHA has provided housing loans in rural areas for over 30 years, beginning with homeownership loans to farm families and expanding to include a wide range of homeownership, rental housing, farm labor housing, site development, and repair and rehabilitation activities for nonfarm as well as farm households. Initially, FmHA aid was a means of providing credit in rural areas where private credit sources were either nonexistent or inadequate. Although studies suggest that such problems continue to exist in rural areas,[1] the emphasis of FmHA programs has shifted in recent years to focus principally on helping low- and moderate-income rural households who could not otherwise afford adequate housing.

DEVELOPMENT OF RURAL HOUSING PROGRAMS

Current rural housing programs date back to 1949 when, as part of a major effort to improve the nation's housing, the Congress authorized direct loans to farm households unable to obtain private credit.[2] The program assisted an average of 4,000 households a year until the early 1960s, when it was expanded to include nonfarm households and a supplementary program was established to finance multifamily projects for the elderly. By 1968, the FmHA had provided financing for 240,000 single-family units and about 5,000 multifamily units.

The Housing and Community Development Act of 1968 (P.L. 90-448) considerably broadened the scope and increased the volume of FmHA housing efforts. The act authorized the FmHA to make

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1. See: Hughes H. Spurlock and Ronald Bird, Housing Credit: A Rural-Urban Comparison, U.S. Department of Agriculture, Economics, Statistics, and Cooperatives Service, Rural Development Research Report No. 6 (November 1978). Copley International Corporation, Urban and Rural Housing Credit Market Differentials, prepared for the U.S. Department of Housing and Urban Development (January 1979).

2. This was authorized by the Housing Act of 1949, P.L. 81-171.

homeownership loans to low-income households at rates below the federal cost of borrowing and to make reduced-interest-rate loans to developers of multifamily rental projects.[3] Such low-interest loans help ensure the availability of adequate housing for households that could not otherwise afford it. In addition, the FmHA was authorized to finance homesite development and farm labor housing projects. Program levels following the passage of the 1968 act have averaged 92,000 single-family units and 20,000 multifamily units a year.

Currently, these programs are restricted to low- and moderate-income households living in rural areas.[4] By law, low-income households are defined as those with incomes below 80 percent of the median income in their area, or from $11,500 to $18,000 within the continental U.S. Moderate-income limits, which are established by the Secretary of Agriculture, are $5,500 above the low-income limits. In calculating households' incomes, adjustment are made for family size and other factors. Rural areas are currently defined to include undeveloped rural areas and towns with populations below 10,000. Loans may also be made in towns with populations under 20,000 that are outside Census-defined standard metropolitan statistical areas (SMSAs) and that have a certified lack of private credit.

CURRENT RURAL HOUSING PROGRAMS

The major FmHA programs are the Section 502 single-family loan program and the Section 515 multifamily loan program.[5] In addition, the FmHA provides financing for such activities as the repair of housing units occupied by very-low-income tenants, the construction of farm labor housing, site development, supervisory

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3. Residency in multifamily projects was restricted to elderly households from 1962, when such projects were first authorized, to 1966, when residency was widened to include low-income households.

4. Above-moderate-income households are eligible for guaranteed loans, but authorization for such loans has not been granted recently.

5. The section numbers used to identify the programs are the section numbers of the Housing Act of 1949 (Public Law 81-171), as amended, that authorize the programs.

assistance, and compensation for construction defects. These smaller programs represent about 2 percent of total FmHA rural housing aid.

Section 502 Homeownership Loans

The Section 502 homeownership loan program--the largest of the FmHA housing programs--provides qualified households with loans for the purchase, rehabilitation, repair, or relocation of single-family, owner-occupied units.[6] Most Section 502 assistance finances the purchase of new or existing homes; less than 3 percent of 1982 funding will be used for rehabilitation and repair of existing dwellings.

Section 502 mortgages are written with 33-year terms and carry widely-ranging effective interest rates, with the actual rate paid dependent on the borrower's income. Although all loans are written at the FmHA's note rate--approximately the federal cost of long-term borrowing, currently set at 13.5 percent--eligible borrowers may pay reduced rates as low as 1 percent. Under a two-year renewable agreement, the FmHA pays the difference between the government's cost of borrowing and the borrower's interest rate. This difference is referred to as an interest credit. Interest-credit mortgages are often referred to as "subsidized" mortgages, and those without interest-credit agreements as "unsubsidized." Actually, however, all Section 502 mortgages are subsidized from the borrower's point of view. Even the borrower who pays the full FmHA note rate is paying a lower interest rate than would otherwise be available, since the FmHA's note rates are generally below private mortgage rates. Section 502 interest-credit loans are currently limited to low-income households, while Section 502 mortgages without interest credits are made to moderate-income households.

Effective interest rates on interest-credit mortages are set at levels that enable borrowers to spend 20 percent of their adjusted income on mortgage principal and interest payments, real estate taxes, and insurance, with a minimum effective rate of 1 percent. As of January 1982, the average rate paid on outstanding

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6. The FmHA refers to the loans that it finances as insured loans. These are direct loans made by the government, however, and are not the same as the mortgage insurance provided by the Federal Housing Administration.

interest-credit mortgages was 2.7 percent. The FmHA reviews each interest-credit borrower's income every two years, and the interest rate charged on the remainder of the loan is either raised, lowered, or left constant to maintain the housing-cost-to-income ratio of 20 percent. A borrower remains eligible for interest credits as long as his income is below the moderate-income ceiling. Once a borrower's income reaches that level, however, the borrower loses the interest credit and must thereafter pay the full note rate at which the mortgage was written. Interest rates on mortgages written without interest-credit agreements, in contrast, remain fixed at the note rate at which they were written.

When a property that has been financed by an interest-credit mortgage is sold, the federal government may recapture some portion of the interest subsidy it has provided on the mortgage. Under the recapture provisions--which apply only to interest-credit mortgages made on or after October 1, 1979--FmHA may reclaim up to the full value of the interest subsidy, depending on how long the property was held, the average interest rate paid by the borrower, and the property's appreciation. Mortgages without interest-credit agreements have no comparable provisions.

As of the end of 1981, about 960,000 Section 502 mortgages were outstanding, with unpaid principal totaling $19 billion. About 345,000 of these mortgages--or one-third of the total--carried interest credits and had $9 billion in principal remaining; the other two-thirds were bearing interest at the note rates at which the loans were written. For fiscal year 1982, $2.7 billion of Section 502 assistance is planned to assist an estimated 67,500 households. Of that total, about 85 percent of the funding is expected to include interest-credit agreements.

Section 515 Rental Housing Loans

The Section 515 program finances both the construction of new rental housing and the purchase and rehabilitation of existing substandard rental housing projects. Units financed under the Section 515 program are then occupied by low- and moderate-income households, elderly households, or handicapped individuals.

Eligible developers of Section 515 projects include non-profit and limited-profit organizations, and state or local government agencies. Developers must demonstrate their ability to build and operate the proposed project and must be unable to ob-

tain private financing at rates that would allow rent levels that low- and moderate-income households could afford.

All Section 515 loans made in 1982 will include interest credits and will carry 50-year terms. Mortgages are written at the FmHA's note rate--that is, the current market rate for outstanding long-term Treasury securities, currently 13.5 percent--and borrowers then receive interest-credit agreements reducing their effective interest rates to a uniform 1 percent.[7]

In addition to making principal and interest payments based on a 1 percent mortgage, developers may be required to make additional payments depending on their tenants' income levels. Tenants are required to pay the higher of 25 percent of their adjusted annual income or the minimum project rent, with the developer collecting the minimum rent and the FmHA receiving any rental income above that level.[8] Minimum rent levels are established annually for every project, based on the principal and interest payment required to amortize a 1 percent mortgage, operating and maintenance expenses, reserve requirements, and return on investment. The rental income above minimum rent levels that is collected by the FmHA is referred to as "overage" and is treated as additional interest income, not reducing the principal due on a mortgage.

Because even with 1 percent financing the resulting project rent levels may be too high to be easily affordable to low-income households, two additional forms of subsidy may be linked to Section 515 interest-credit mortgages: rural rental assistance payments administered by the FmHA, and Section 8 assistance administered by the Department of Housing and Urban Development (HUD).

Under the rural rental assistance program, the FmHA contracts with Section 515 landlords to pay the difference between 25 percent of tenant income and minimum project rent levels, thus ensuring that low-income tenants pay no more than 25 percent of their income for housing expenses. Under current rent levels for

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7. Participants in the Section 515/Section 8 program, described later in this section, pay interest rates above 1 percent.

8. No tenant may be required, however, to pay more than the market rent for his unit, which is defined to include the cost of amortizing the note rate mortgage.

newly constructed projects, a household must have an adjusted annual income below about $13,000 to qualify for rental assistance payments.[9]

The Section 515/Section 8 program uses a subsidy very similar to rental assistance payments to assist a poorer population than may be served by Section 515 alone.[10] Under an agreement between the Secretaries of HUD and Agriculture, the FmHA finances the construction of rental housing at interest rates one to two percentage points below the current note rate. HUD then provides long-term commitments through its Section 8 new construction/substantial rehabilitation rental assistance program to pay the difference between a percentage of tenants' incomes--scheduled to be 30 percent for all tenants by 1986--and the project rent.

As of the end of 1981, 7,900 Section 515 loans were outstanding with $3.7 billion in unpaid principal. Since the start of the program over 250,000 units have been provided. About $940 million is planned for Section 515 assistance in 1982, which will provide 29,400 additional units. In addition, $398 million has been set aside for new rental assistance commitments in 1982, which will assist 14,280 households. Supplemental Section 8 assistance is also planned for 4,000 of the Section 515 units.

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9. This estimate is based on an assumed unit cost in 1982 of $32,800 and on a 1982 rent level of $275 per month for newly constructed projects.

10. For further information on housing programs administered by the U.S. Department of Housing and Urban Development in general and on Section 8 assistance in particular, see: Congressional Budget Office, *Federal Housing Assistance: Alternative Approaches* (May 1982).

CHAPTER III. THE LONG-TERM COSTS OF RURAL HOUSING PROGRAMS AND OPTIONS FOR REDUCING COSTS

For 1982, the Congress authorized $3.2 billion dollars in Section 502 and Section 515 interest-credit loans; if the Congress provided the same amount of new lending in 1983, the resulting long-run costs could be expected to range from $1.0 billion to $1.6 billion. This chapter estimates the total long-term costs of providing interest-credit Section 502 and Section 515 loans in 1983 and discusses strategies for lowering these costs.

PROGRAM COSTS

The costs of both the Section 502 and Section 515 interest-credit programs depend primarily on the interest rates the FmHA must pay to finance loans and on the rates that borrowers are able to pay over the term of the commitments. To develop the cost estimates described in this chapter, four sets of assumptions have been made about long-run economic conditions, which are described in detail in the Appendix. No one long-term scenario represents a forecast of future economic conditions. Instead, the four scenarios--taken together--encompass a range of possible future conditions and illustrate the resulting program costs.

Long-Term Costs of Section 502 Interest-Credit Loans

The major cost of interest-credit Section 502 mortgages is the difference in the FmHA's interest income and interest expense. The minimum required rate for a Section 502 interest-credit mortgage is 1 percent; the FmHA most recently obtained program financing at 14 percent.[1] If this interest rate differential were maintained for the 33-year term of a Section 502 mortgage, then a $42,000 home--the estimated rural average for 1983--would require a federal interest subsidy of $95,000 over the term of the mortgage.

1. At the current time, even borrowers who pay the full rate on an FmHA loan are receiving a federal subsidy since the note rate charged is 13.5 percent.

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A much smaller cost of the Section 502 interest-credit program is the loss due to foreclosed mortgages. Although the agency has little information about such costs, estimates are that about 7 percent of all mortgages are acquired by the FmHA and that the FmHA is able to collect about 91 percent of the balance due on these mortgages.[2]

The Section 502 interest-credit program contains two provisions designed to reduce federal costs. First, borrowers must have their income recertified once every two years in order to continue paying reduced interest rates.[3] At that time, the interest rate is adjusted to keep principal, interest, tax, and insurance payments at 20 percent of the borrower's income. Thus, during a period of rising incomes, the interest rates paid by Section 502 borrowers would increase every two years, thereby increasing the amount of interest income collected by the FmHA.

Second, Section 502 interest-credit mortgages include a subsidy recapture provision, so that when a property is sold the borrower must repay the FmHA at least a portion of the interest subsidy received if the home has appreciated in value. The borrower may be required to pay from 9 to 78 percent of net property appreciation. The exact amount repaid depends on the amount of interest subsidy received and on the amount of property appreciation (see the Appendix for details). Borrowers are not required to repay any of the subsidy if the property value has not appreciated, nor are they ever required to repay more than the total amount of the interest subsidy received.

Under a range of assumptions about long-term interest rates, growth in borrower income, and property appreciation rates, the net cost of providing $100 million in Section 502 interest-credit loans during 1983 would range from $23 million to $29 million in

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2. These estimates are based on actual FmHA data on the proportion of borrowers that leave the Section 502 program--due both to foreclosures and prepayments--and on data provided by the Department of Housing and Urban Development on the distribution of withdrawals between foreclosures and prepayments in the Federal Housing Administration Section 203 mortgage insurance program. See the Appendix for details.

3. Borrowers are supposed to notify the FmHA of any changes in income between certification periods.

1983 dollars, or from $9,700 to $12,200 per unit assisted (see Table 1). The interest subsidy cost would range from $33 million to $41 million, and the losses due to borrower default would raise costs by less than 1 percent. Offsetting these costs would be the income from the subsidy recapture provisions, which would range from $10 million to $13 million and would reduce total costs by about one-third.

Long-Term Cost of Section 515 Interest-Credit Loans

The major cost of the Section 515 interest-credit program is also the difference between interest income and interest expense, but in this program the borrower's effective interest rates generally remain fixed at 1 percent for the term of the agreement.[4] If the FmHA's cost of financing remained at the most recent rate of 14 percent, then a $35,700 unit--the estimated average for 1983--financed at one percent would require a federal interest subsidy of $126,000 over the 50-year term of the mortgage. Losses due to foreclosures are much smaller in the Section 515 program than in the Section 502 program because developers are required to make a minimum investment in their projects and so will generally sell a project, and thus protect their equity, rather than allow the FmHA to foreclose.

Offsetting the interest subsidy costs of the Section 515 program is the "overage" provision, whereby tenants must pay the higher of 25 percent of their incomes and the minimum project rent. In cases where 25 percent of income is higher than the minimum rent, the developer receives the minimum rent and the FmHA collects the balance, which is treated as additional interest income and offsets the agency's interest expenses. Based on projected unit costs and rent levels, the FmHA could expect to receive overage payments in 1983 from tenants who have incomes over $14,000. The FmHA does not have information, however, on the amount of overage collected in the past or on the income of new Section 515 tenants, making estimates of future overage collections particularly uncertain.

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4. Section 515 mortgages written in conjunction with HUD's Section 8 program, discussed in Chapter II, carry interest rates one to two percentage points below the FmHA note rate. Thus, they require a much smaller interest subsidy than Section 515 mortgages in general but a much larger supplementary rental assistance subsidy through Section 8.

TABLE 1. LONG-TERM COSTS OF AUTHORIZING $100 MILLION IN SECTION 502 INTEREST-CREDIT ASSISTANCE IN 1983 UNDER A RANGE OF ASSUMPTIONS (In millions of 1983 dollars)

	Low Real Interest Rates, Low Inflation	Low Real Interest Rates, High Inflation	High Real Interest Rates, Low Inflation	High Real Interest Rates, High Inflation
Net Costs	27	23	29	24
Interest Subsidies	39	33	41	34
Foreclosure Losses	a	a	a	a
Collections from Subsidy Recapture[b]	-13	-10	-13	-10

SOURCE: Congressional Budget Office. See Appendix for further details on the assumptions underlying each alternative.

NOTE: Columns may not add because of rounding.

a. Less than 0.5.

b. Net income to the FmHA.

Under a range of assumptions about future interest rates, tenant incomes, and rent levels, the net cost per $100 million of Section 515 mortgages provided in 1983 would range from $54 million to $100 million in 1983 dollars (see Table 2), or from $19,300 to $35,700 per unit assisted. The interest subsidy is estimated at $89 million to $130 million, which is greater than Section 502 interest costs since Section 515 borrower interest rates are assumed to be fixed at 1 percent and since Section 515 mortgages are written for longer terms. Overage collections could offset these costs by $19 million to $58 million, or 20 to 50 percent, depending on the tenant incomes and the rent levels over time.

OPTIONS FOR REDUCING THE LONG-TERM COST OF INTEREST-CREDIT ASSISTANCE

If the Congress chose to continue providing interest-credit rural housing loans, program costs could be reduced either by providing a smaller volume of additional assistance than in the past or by requiring assisted households to pay a larger share of program costs.

Providing less assistance would produce long-term savings in proportion to the reduction in loan volume. In 1982 the Congress has authorized $2.3 billion in Section 502 interest-credit loans and $940 million in Section 515 aid (see Table 3). Providing the same volume of interest-credit assistance in 1983 would result in Section 502 costs ranging from $530 million to $670 million and Section 515 costs ranging from $510 million to $940 million. Any percentage reduction in these levels would yield the same percentage savings in long-term costs. For example, the Administration has proposed reducing Section 502 interest-credit aid by 60 percent, which would lower costs to a range of $210 million to $260 million, and reducing Section 515 aid by nearly 80 percent, lowering long-term costs to $110 million to $200 million.

The savings realized from requiring households to bear a larger share of program costs would depend on how such increases were structured. Specific options include:

- Increasing the share of income that Section 502 borrowers pay for housing;

- Requiring a larger repayment of subsidy when a Section 502-financed home is sold; and

- Raising the rent levels in section 515 projects.

TABLE 2. LONG-TERM COSTS OF AUTHORIZING $100 MILLION IN SECTION 515 INTEREST-CREDIT ASSISTANCE IN 1983 UNDER A RANGE OF ASSUMPTIONS (In millions of 1983 dollars)

	Low Real Interest Rates, Low Inflation[a]	Low Real Interest Rates, High Inflation[a]	High Real Interest Rates, Low Inflation[a]	High Real Interest Rates, High Inflation[a]
Net Costs	54	70	100	76
Interest Subsidies	112	89	130	95
Overage Collections[b]	-58	-19	-29	-19

SOURCE: Congressional Budget Office. See Appendix for further details on the assumptions underlying each alternative.

NOTE: Columns may not add because of rounding.

a. Initial tenant income levels also vary in each alternative.

b. Net income to the FmHA.

TABLE 3. LONG-TERM COST OF ALTERNATIVE 1983 FUNDING LEVELS FOR RURAL HOUSING INTEREST-CREDIT LOANS (In millions of 1983 dollars)

Program	Repetition of 1982 Loan Volume		Administration's Proposed 1983 Loan Volume	
	Total Lending	Long-Term Cost	Total Lending	Long-Term Cost
Section 502	2,300	530 - 670	900	210 - 260
Section 515	940	510 - 940	200	110 - 200
Total	3,240	1,040 - 1,610	1,100	320 - 460

SOURCE: Congressional Budget Office.

Increasing the Share of Income That Households Pay For Section 502 Interest-Credit Mortgages

One way to lower Section 502 interest-credit program costs would be to increase the share of their adjusted income that households pay, thereby decreasing federal interest subsidies. Currently, participating low-income households are required to spend 20 percent of their income on mortgage principal and interest payments, property taxes, and insurance. By contrast, low-income households with privately written mortgages spend an average of 45 percent of their income on housing expenses, including utilities.[5] If assisted households were required to pay 25

5. This estimate is for households living outside standard metropolitan statistical areas with 1980 incomes below $10,000. At that time the income limit for Section 502 interest-credit borrowers was $11,200. See: U.S. Department of Commerce, Bureau of the Census, Current Housing Reports, Series H-150-80, Financial Characteristics of the Housing Inventory for the United States and Regions: 1980, Annual Housing Survey: 1980, Part C, Table A-1, p. 32.

percent of their income, the long-term real cost of providing $100 million worth of Section 502 interest-credit mortgages in 1983 would fall by 30 to 50 percent--from a 1983 dollar range of $23 million to $29 million to a range of $13 million to $17 million (see Table 4). If such households paid 30 percent of their income, then constant-dollar costs would decline by up to 80 percent below otherwise expected levels, ranging from $4 million to $11 million per $100 million of 1983 assistance provided.

Although raising borrower payments would reduce program costs, it could have at least two drawbacks--the full savings might not be realized, and an increase could introduce disparities among programs in their treatment of similar households. First, if borrowers found that paying an increased amount for each month for mortgage, taxes, and insurance costs--in addition to the other costs of homeownership such as utilities, maintenance, and repairs--was too great a financial burden to bear, then defaults might increase. The possibility that some of the increase in revenue might be offset by an increase in foreclosures is not reflected in these estimates. Second, borrowers under the HUD-administered Section 235 program currently pay 20 percent of their income for principal and interest payments, taxes, and insurance.[6] If the amount paid by Section 235 recipients was not also changed, then disparities would be introduced in the treatment of similar program participants.

Increasing the Amount of Subsidy Recaptured When Section 502 Interest-Credit Mortgages Are Terminated

The long-run costs for Section 502 interest-credit assistance could also be lowered by increasing the share of its subsidy that the federal government recaptures when a Section 502 interest-credit mortgage is terminated. Under current provisions, a home-owner must pay the lesser of the amount of the subsidy received and a percentage of the property's net appreciation ranging from 9 to 78 percent. Under Congressional Budget Office assumptions about average borrower income levels and interest rates paid,

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6. The Section 235 program makes interest payments to private mortgage lenders on behalf of low-income households. Generally, participants in the Section 235 program have higher incomes and must pay higher interest rates than Section 502 interest-credit borrowers.

TABLE 4. LONG-TERM COSTS OF AUTHORIZING $100 MILLION IN INTEREST-CREDIT RURAL HOUSING ASSISTANCE IN 1983 UNDER A RANGE OF OPTIONS TO LOWER COSTS (In millions of 1983 dollars)

Program	Low Real Interest Rates, Low Inflation	Low Real Interest Rates, High Inflation	High Real Interest Rates, Low Inflation	High Real Interest Rates, High Inflation
Section 502				
Net Costs Under Current Program[a]	27	23	29	24
Net Costs Resulting from:				
Requiring borrowers to pay 25 percent, rather than 20 percent, of income for principal, interest, taxes and insurance	13	15	16	17
Recapturing 50 percent of net property appreciation, instead of a variable percentage	18	20	21	21
Requiring borrowers to pay 25 percent of income for principal, interest, taxes, and insurance and recapturing 50 percent of net property appreciation	6	13	9	14
Section 515				
Net Costs Under Current Program[b]	54	70	100	76
Net Costs Resulting from:				
Requiring tenants to pay the lesser of 30 percent of income, rather than 25 percent, and the minimum project rent	7	50	54	55

SOURCE: Congressional Budget Office. See Appendix for further details on the assumptions underlying each alternative.

a. See Table 1 for details.

b. See Table 2 for details.

borrowers in 1983 would generally be required to pay less than 50 percent of the net property appreciation when the property is sold.

One option for increasing the recapture share would be to require that recipents pay the lesser of the amount of assistance received or 50 percent of the net property appreciation, as is the case in the Section 235 homeownership program. Changing the recapture provision in this way would increase the amount of subsidy recaptured by up to two-thirds and would reduce the net cost per $100 million of assistance from a range of $23 million to $29 million in 1983 dollars to a range of $18 million to $21 million. Increasing the amount of subsidy recaptured by the federal government would reduce the costs of the program but could reduce the incentives for recipents to maintain their properties. This could limit property value appreciation and thus the amount of its subsidy the federal government would recapture.

If the amount of recapture was increased to 50 percent and borrowers were also required to contribute 25 percent of income for principal, interest, insurance, and taxes, then net program costs would decline to a range of $6 million to $14 million per $100 million lent--40 to 80 percent below the costs that would otherwise be incurred.

Increasing the Rent Levels Paid by Occupants of Section 515 Projects

The FmHA currently requires that Section 515 project tenants pay 25 percent of their incomes as rent. Low-income households in general pay an average of over 40 percent of their incomes for rent,[7] and renter households assisted by HUD housing programs will be required to pay 30 percent by 1986. If the Congress required that occupants of Section 515 projects pay the greater of the minimum rent level or 30 percent of their income, rather than 25 percent of income, then the cost in 1983 dollars per $100 million

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7. This estimate is based on households living outside Standard Metropolitan Statistical Areas with 1980 incomes below $10,000. See: The U.S. Department of Commerce, Bureau of the Census, Current Housing Report, Series H-150-80, Financial Characteristics of the Housing Inventory for the United States and Regions: 1980, Annual Housing Survey: 1980, Part C, Table A-1, p. 35.

of aid would decline anywhere from 30 to 90 percent--from a range of $54 million to $100 million to a range of $7 million to $55 million.

Increasing the share of income paid would decrease program costs and would increase uniformity of treatment among federal housing programs. On the other hand, increasing rent levels for low-income households woud reduce the funds they would have available for other necessities and could increase their economic hardship.

CHAPTER IV. THE BUDGETARY TREATMENT OF RURAL HOUSING PROGRAMS AND OPTIONS FOR MAKING COSTS MORE APPARENT

The Section 502 and the Section 515 programs, along with three much smaller loan programs, are financed through the Rural Housing Insurance Fund (RHIF), a revolving loan fund administered by the FmHA.[1] In a revolving fund, program costs can be obscured because of the budgetary treatment of the fund's activities. This chapter first describes the budget treatment of the RHIF. It then discusses how the current treatment obscures program costs and suggests alternative ways of making costs more apparent.

THE OPERATION OF THE RHIF

Each year, the Congress establishes the total volume of loan activity that may be generated from the RHIF and sets the distribution between interest-credit and non-interest-credit loans. This activity is then financed through the four sources of funding available to the RHIF. The FmHA's annual budget submission lists proposed funding levels, the one-year cost of all outstanding loans, and budget authority and outlay levels. None of these, however, is a measure of the full federal expense for rural housing activity or of the total costs that would result from new rural housing lending.

RHIF Funding Sources

To finance the rural housing activity authorized by the Congress, the RHIF relies on four sources: asset sales to the Federal Financing Bank (FFB), borrowing from the U.S. Treasury, borrower repayments, and Congressional appropriations.

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1. The Section 504 very-low-income housing repair, Section 514 farm labor housing, and Section 524 rural housing site loan programs are also financed through the Rural Housing Insurance Fund (RHIF). These programs currently represent about 1 percent of annual RHIF activity.

Federal Financing Bank Transactions. FFB--an offbudget agency within the Treasury Department that coordinates federal agency borrowing--is the primary source of RHIF financing.[2] The RHIF obtains long-term financing for its activities by packaging the mortgages it makes into securities called certificates of beneficial ownership (CBOs) and selling them to the FFB. This, in effect, allows the RHIF to redeem the principal value of the mortgages backing the CBOs at the time of the sale, rather than waiting for borrowers to repay the principal. The term of CBOs is currently 15 years, which represents the expected average life of the mortgages backing them. The interest rate that the RHIF pays on a CBO is set at the previous day's Treasury borrowing rate for securities with comparable maturity, plus 0.125 percent for administrative costs. In May 1982, the RHIF paid 14.0 percent on a CBO sale to the FFB.

Although the transactions between the RHIF and the FFB are treated by law as asset sales, they may be viewed more accurately as borrowing.[3] When the FmHA "sells" a CBO to the FFB, the FFB does not take possession of the mortgages backing the security. Instead, the FmHA continues to own the mortgages and to service them. In addition, the FmHA guarantees the timely payment of interest and the redemption of the CBO at its maturity, which means that the FFB is not purchasing a pool of mortgages that carries some risk but, rather, is lending to the FmHA based on the agency's guarantee.

Treasury Borrowing. A second source of RHIF funding is direct borrowing from the U.S. Treasury. The RHIF has permanent, indefinite authority to borrow from the Treasury, which means that it may borrow on an unsecured basis any amount needed to finance Congressionally-authorized program activity. The interest rate paid by the RHIF on its short-term Treasury borrowing is set by law at the average interest on all outstanding long-term Treasury securities. This rate, established at the start of each fiscal

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2. For a further description of the Federal Financing Bank's activities see: Congressional Budget Office, The Federal Financing Bank and the Budgetary Treatment of Federal Credit Activities (January 1982).

3. The treatment of this transaction as the sale of assets is authorized by P.L. 81-171 and by P.L. 87-128, as amended.

year, was 8.6 percent in 1981 and is 9.4 percent in 1982.[4] By setting the rate charged the RHIF on short-term borrowing at the rate paid on outstanding long-term securities, however, the cost to the Treasury is underestimated whenever short-term rates are above average outstanding long-term rates--as they currently are. If short-term rates declined sharply and were below average outstanding long-term rates, then the rate paid by the RHIF would overestimate the cost to the Treasury.

Borrower Payments. The third source of funding for the RHIF is borrower principal and interest payments. Borrowers are required to make periodic payments on their mortgages, and FmHA uses these collections to offset the current expenses of the fund.

Appropriations. The final source of RHIF funding is Congressional appropriations. Each year, the FmHA reports its interest-subsidy and foreclosure costs for the entire loan portfolio for the most recent year for which these are known--generally two years previous. The Congress then provides an appropriation to reimburse the RHIF for these costs. Thus FmHA's 1983 budget submission reported that the RHIF interest subsidies and foreclosure losses for 1981 totaled $1.0 billion. In addition, the FmHA also provides estimates of the costs for the current and coming years. Current estimates are that RHIF losses will total $1.5 billion in 1982 and $1.7 billion in 1983.

The Budgetary Treatment of the RHIF

Each year, the budget for the RHIF includes three measures of program activity: the loan volume financed through the RHIF for the year ended, the current year, and the coming year; the annual cost of the loan portfolio for each year; and budget authority and outlay levels. Each of these measures reflects a different aspect of RHIF activity, but none is a complete measure of program costs.

The loan volume and the annual loan portfolio costs are both straightforward measures of program activity. The loan volume,

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4. The budgetary treatment of the RHIF's CBO sales differs from the treatment of its Treasury borrowing. Thus it may be more advantageous--in terms of resulting budget authority and outlay totals--for the RHIF to finance activity through CBO sales, despite their higher interest rates, than through Treasury borrowing. This is discussed in more detail below.

established annually by the Congress, is the measure of the new commitments that the FmHA may make during the year. The reported annual program cost--which is the basis for the appropriation to the RHIF--is the sum of interest subsidies and foreclosure losses incurred during the year for all outstanding RHIF commitments.

Budget authority and outlay levels are more difficult to estimate and interpret. For a revolving fund such as the RHIF, budget authority and outlays in any given year are the net results of the fund's operation.

The RHIF requires budget authority for all activities that commit the federal government to an expenditure of funds, but other activities offset its budget authority needs. Budget authority is needed to obligate loan funds, to borrow from the Treasury, to pay interest on CBOs and on Treasury borrowing, and to redeem expiring CBOs (see Table 5). The fund's budget authority requirements are offset by borrower principal and interest payments and by CBO sales to the FFB. It is the RHIF's net budget authority needs--that is, total requirements offset by borrower payments and CBO sales--that are reported as the RHIF budget authority in the FmHA budget submission. These net budget authority needs are met through the RHIF's other two funding sources. The past-loss appropriations, while determined by the size of losses two years earlier, is used to meet current-year budget authority needs. To the extent that the RHIF has remaining budget authority requirements, it then exercises the fund's permanent, indefinite authority to borrow from the Treasury.

Outlays for any year are the net result of collections and expenditures. The RHIF spends money, or records outlays, when it disburses loan funds, when it makes interest payments, and when it redeems outstanding CBOs. The fund makes collections when it sells CBOs to the FFB and when it receives interest from program participants on their outstanding mortgages.[5] In any one year, total RHIF outlays may be positive, signifying more expenditures than collections by the fund, or negative, signifying more collections than expenditures.

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5. Borrower principal repayments do not directly affect outlay levels. All borrower repayments reduce the value of mortgages securing outstanding CBOs. So borrower principal payments are used, in effect, to maintain the fully-secured status of the CBOs.

TABLE 5. COMPONENTS OF BUDGET AUTHORITY AND OUTLAYS IN THE RURAL HOUSING INSURANCE FUND

	Budget Authority		Outlays	
	Activities That Require Budget Authority	Activities That Offset Budget Authority Requirements	Expenditures from the RHIF (Positive Outlays)	Collections That Offset Expenditures (Negative Outlays)
Program Activities				
Loan obligations	X			
Loan disbursements			X	
Borrower principal payments[a]		X		
Borrower interest payments		X		X
Financing Activities				
Sale of CBOs to the Federal Financing Bank (FFB)		X		X
Interest payments on CBOs held by the FFB	X		X	
Repurchase of CBOs at maturity	X		X	
Interest payments on Treasury debt[b]	X		X	

SOURCE: The Congressional Budget Office.

a. Borrower principal repayments do not directly affect outlay levels. Because CBO sales are secured by mortgages, repayments of principal act to maintain the security of the outstanding CBOs.

b. The RHIF's borrowing from the Treasury does not affect fund outlays. The RHIF must exercise its permanent indefinite borrowing authority to borrow from the Treasury, but it records neither positive or negative outlays for the transaction.

Because budget authority and outlay levels for the RHIF are the net result of fund transactions, they are difficult to predict from year to year. The major discretionary factor affecting these budget totals is the sale of CBOs to the FFB. Loans disbursed during a year may be packaged into CBOs and sold to the FFB, thus offsetting budget authority requirements and outlay levels. The RHIF is not required, though, to finance its activity through CBO sales to the FFB and may choose, instead, to finance through Treasury borrowing.[6] But because CBO sales offset budget authority requirements and outlays and Treasury borrowing does not,[7] the decision has a large impact on RHIF budget totals. In addition, predicting the net interest expenses of the fund and the patterns of borrower defaults can be difficult, especially in times of rapidly fluctuating interest rates or during a recession. This also makes the budget estimates for the RHIF difficult to generate.

DIFFICULTIES WITH THE CURRENT BUDGETARY TREATMENT AND OPTIONS FOR MODIFYING IT

While the Congress has available three measures of RHIF activity, none of these represent program costs that can be compared to the reported costs of other programs. Under the current budgetary treatment, the unified budget does not include all federal expenditures associated with rural housing programs. Also, the annual costs attributed to outstanding loans do not include all federal costs. Finally, estimates of the expected long-term cost of new commitments are not available at the time they are made.

The budgetary treatment of rural housing programs could be modified in several ways to provide estimates that are comparable to other programs' costs. Treating the RHIF transactions with the FFB as borrowing, rather than as asset sales, would include in the unified budget all federal expenditures associated with rural

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6. If the fund managers believed, for example, that CBO rates would fall in the next year they might elect to borrow on a short-term basis from the Treasury, rather than to sell long-term CBOs to the FFB.

7. The RHIF must exercise its permanent, indefinite authority to borrow from the Treasury, but it records neither positive nor negative outlays for the transaction.

housing loans. Changing the interest rate paid by the RHIF on its Treasury borrowing to equal the short-term borrowing rate would include the total annual cost of RHIF programs in FmHA estimates. Fully funding rural housing loans at the time commitments are made, rather than on a pay-as-you-go basis, would enable the Congress to consider the long-term costs of the loans, as would requiring the FmHA to include estimates of the long-term costs in its proposals for new funding levels.

Treating RHIF Transactions with the FFB as Borrowing

Treating the RHIF's transactions with the FFB as asset sales reduces the on-budget expenditures of rural housing programs by transferring expenditures to the off-budget FFB.[8] When the RHIF sells a CBO to the FFB, RHIF budget authority requirements and outlays decrease by the amount of the sale, while the FFB's budget authority and outlays increase by the same amount. Although the FFB is also a federal agency, its budget totals are not included in the unified budget, and hence this federal expenditure for rural housing assistance is missing from unified budget totals.

If RHIF transactions with the FFB were treated as borrowing rather than as asset sales, the actual expenditures for rural housing programs would not change, but totals included in the unified budget would increase. In 1981, CBO sales from the RHIF totaled $6 billion. Had the sales been treated as borrowing, RHIF budget authority requirements would have totaled $6.6 billion, instead of $0.6 billion, and outlays would have gone from -$0.1 billion to $5.9 billion. Similarly, federal expenditures in the unified budget and the unified budget deficit would have increased by $6.0 billion. Thus, treating CBO sales as borrowing, instead of as asset sales, would include the total expenditures for rural housing loan programs in the budget but would also raise unified budget spending totals.[9]

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8. Treating RHIF transactions with the FFB as asset sales, rather than as borrowing, does not, however, affect program costs. Because the RHIF pays an interest rate based on the government cost of borrowing, the full interest-subsidy cost of the transaction is included in the budget.

9. The Senate Banking Committee has proposed treating RHIF transactions with the FFB as borrowing instead of as sales. See S. 2607 and accompanying report 97-463.

Changing the Interest Rates Charged by the Treasury

The interest rate paid by the RHIF on short-term Treasury borrowing does not reflect the Treasury's cost of lending, which at times leads to underestimated program costs. When the FmHA reports the interest-subsidy costs of the portfolio for the most recent year known, the costs include the interest paid by the RHIF to the Treasury. But because the RHIF's borrowing rate is based by law on the average rate of outstanding long-term securities, rather than of short-term securities, the rate that the Treasury must charge does not reflect its actual costs of providing short-term funds to the RHIF. Under current circumstances, the Treasury rate charged the RHIF underestimates actual costs; if short-term rates were lower than outstanding security rates, costs would be overestimated.

If the RHIF paid interest rates on its short-term borrowing equivalent to short-term Treasury borrowing rates, the total federal costs of rural housing programs would not change but the costs allocated to rural housing programs would--under current interest rate patterns--increase. In fiscal year 1981, the RHIF had an average of about $1.7 billion in short-term debt outstanding with the Treasury. The interest costs for this borrowing totaled $140 million. Had the Treasury charged the RHIF the average rate paid on three-month Treasury securities, rather than the average rate on outstanding long-term securities, the cost to the RHIF would have been $240 million, an increase of 70 percent. Thus, the total reported cost of outstanding rural housing assistance in 1981 would have gone from $1,030 million to $1,130 million.[10]

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10. If RHIF transactions with the FFB were no longer treated as asset sales, then the differential between Treasury borrowing rates and CBO rates would become particularly important. Currently, because CBO sales reduce outlays, the FMHA may choose to finance RHIF activities through the FFB, rather than directly through the Treasury, despite the higher interest rates charged on CBOs. But if neither form of financing reduced fund outlays and if Treasury interest rates were considerably below the FFB's, then the FmHA could choose to fund RHIF activities entirely through the Treasury. But since the Treasury interest rate does not reflect the full cost of the federal financing provided, the improvement in budget estimates gained by converting CBO sales to CBO borrowing would be partially offset by the underestimate of Treasury borrowing costs.

Providing Full Funding in Advance for Rural Housing Programs

Under current budget practices, the Congress does not consider the long-term cost of rural housing commitments at the time they are made. The Congress authorizes a volume of loans each year but specifies no ceiling it expects to be maintained on long-term costs. The FmHA reports the annual cost of outstanding loans only after the costs have been incurred.[11] If the Congress authorized the total long-term cost of the commitments at the time they were made, then it would be able to compare these costs to the costs of other federal programs.

Fully funding the entire 33- or 50-year costs of rural housing programs could be done in several ways. One approach would be to include in the annual authorization sufficient funding to cover all anticipated interest-subsidy costs and losses due to default for the new commitments. To the extent that borrowers prepaid their mortgages before the term ended and that recapture and overage collections offset these costs, however, FmHA would have unused authority, which could revert to the Treasury. Another approach would be to include in the budget the expected net costs of the program, including expected prepayments and anticipated collections from recapture and overage payments. If these estimates proved too low, however, it could be necessary to provide further funding authority for the commitments.

Funding the full costs of rural housing loan programs in advance would make the costs easier to compare to other program costs and would allow the Congress to consider the long-term cost implications of new assistance commitments. It would, on the other hand, require large increases in budget authority, with the exact amount required dependent on the provisions made for offsetting collections. In addition, the FmHA could require additional resources to produce such estimates on an annual basis.

Requiring FmHA to Provide Long-term Cost Estimates

As an alternative to funding rural housing loan programs in advance, the Congress could request that the FmHA provide long-term cost estimates as part of its annual budget submission. Like

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11. As previously described, however, the costs reported by the FmHA are currently underestimates because of the low interest rates paid on Treasury borrowing.

the estimates provided in this paper, these estimates could outline the interest rate that borrowers would be expected to pay on their loans both initially and over time, the interest rate that the RHIF would expect to pay on its financing, the anticipated patterns of mortgage foreclosures and prepayments, and the effects of offsetting collections from recapture and overage payments. The FmHA could also be required to report on the relationship between past estimates of program costs and actual expenditures, allowing the Congress to judge whether spending was increasing or decreasing from anticipated levels. Such estimates could assist the Congress in determining both the overall funding for rural housing programs and the distribution of funding among individual programs. They would, however, require that FmHA devote additional resources to the development of these estimates and could therefore increase the agency's administrative costs.

APPENDIX. ASSUMPTIONS USED TO DEVELOP LONG-TERM COST ESTIMATES

This appendix describes the assumptions used to develop the long-term cost estimates presented in Chapter III. The near-term economic assumptions used are consistent with the Congressional Budget Office winter 1982 forecast.[1] The long-term economic assumptions have been selected to display program costs under a wide range of future economic conditions. As such, no one long-term scenario represents a forecast of likely future conditions. Instead, the four scenarios--taken together--encompass a range of possible economic outcomes. As shown in Chapter III, however, a wide range of economic assumptions produces a relatively narrow range of cost outcomes when costs are all converted to constant-value dollars.

SECTION 502 ASSUMPTIONS

As described in Chapter III, the costs of Section 502 interest-credit mortgages are the interest subsidies and the losses due to mortgage foreclosures, which are offset by the program's subsidy recapture provisions. (The assumptions used to develop Section 502 estimates are summarized in Table A-1, at the end of this appendix.)

Interest-Subsidy Costs

The interest-subsidy cost of Section 502 interest-credit lending is the difference between the interest rates paid by borrowers and the interest rate paid by the RHIF on funds used to finance the program. Both borrower and RHIF interest rates may vary over time.

Borrower Interest Rates. Although all interest-credit mortgages are written at the current FmHA note rate, the effective interest rate charged borrowers is set so that borrowers spend 20

1. For more information on the economic forecast, see Congressional Budget Office, The Prospects for Economic Recovery (February 1982).

percent of their adjusted annual income on principal, interest, tax, and insurance payments. Borrower incomes are recertified every two years, at which time the effective interest rate is increased, decreased, or left unchanged to preserve the housing-cost-to-income ratio of 20 percent.

Section 502 commitments are written at the current note rate, but, if the note rate has fallen between the time of commitment and actual disbursement of loan funds, the note rate is adjusted downward. In these estimates, 88 percent of 1983 obligations are assumed to be disbursed in 1983, with the FmHA note rate averaging 11.8 percent. The remaining 12 percent of 1983 obligations are assumed to be disbursed in early 1984, when note rates are assumed to have fallen to 11.4 percent.

The effective interest rate assumed to be paid initially on commitments is determined by unit costs and borrower income levels. The average unit financed by 1983 obligations is assumed to cost $42,000. Adjusted borrower incomes are assumed to average $15,000, or the current average income ceiling for low-income borrowers. Taxes and insurance are assumed to be 2.1 percent of property value. Under these assumptions, borrowers are assumed to pay an effective interest rate of 3.4 percent, which would enable them to spend 20 percent of their incomes for principal, interest, tax, and insurance payments.[2]

The income of Section 502 interest-credit borrowers is assumed to be recertified every two years, as is current practice. Borrower incomes are assumed to increase in the long run by 1.5 percent a year in real terms, or 4.5 to 10.5 percent in nominal terms. Property values are assumed to increase at the same rate as prices in general, or 3 to 9 percent in nominal terms, and tax and insurance payments to remain a constant 2.1 percent of property value. Under these assumptions, borrower interest rates are expected to grow continually and to reach the note rate within 11 to 17 years, depending on the scenario examined.

Borrower interest payments are also affected by borrowers who pay off their debts before the end of the 33-year term. Estimates of the percent of borrowers that leave the program each year dur-

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2. Initial borrower interest rates are assumed to average 4.0 percent for 1983 obligations disbursed in 1984, reflecting the assumed increase in borrower incomes and tax and insurance costs.

ing the first ten years--due either to prepayment or to foreclosure--are based on estimates from the FmHA. The estimates of mortgages closed during years 11 and 33, and all estimates of the distribution of closed mortgages between prepayments and foreclosures, are based on estimates from the Federal Housing Admin-istration for the Section 203 single-family mortgage insurance program, with adjustments to convert 30-year data to 33-year estimates (see Table A-2).[3] In general, about 45 percent of borrowers prepay their mortgages by year 15, and 83 percent are assumed to prepay by year 32. Because the FmHA does not have to continue financing mortgages that are prepaid, the effect of prepayments is, in general, to lower federal interest costs.

Federal Interest Rates. The interest rates that the FmHA pays on program financing determine the gross interest costs of rural housing loans. In these estimates, the FmHA is assumed to sell 15-year certificates of beneficial ownership (CBOs) to the Federal Financing Bank to finance the disbursements made in 1983 and 1984. The interest on these securities is expected to be 12.4 percent in 1983 and 12.0 percent in 1984. To display a range of possible program costs over the long term, subsequent CBO interest rates are assumed to vary from 1 to 4 percent in real terms, or from 4 to 13 percent in nominal terms.

Net Interest Subsidies. The assumptions described above may overstate program costs. Borrower interest rates are assumed to start at 3.4 percent and to increase at two-year intervals until they reach the note rate of either 11.8 percent or 11.4 percent, depending on the year of disbursement. Federal interest costs are assumed to begin at 12.4 percent for mortgages financed in 1983 and at 12.0 percent for those financed in 1984 and then to range from 4 to 13 percent over the long term. This means that some borrowers would be expected to continue paying note rates above prevailing market rates. Although borrower prepayments would probably increase if market rates were below note rates for an extended period of time, these estimates do not reflect such responses.

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3. See: U.S. Department of Housing and Urban Development, Office of Financial Management, Actuarial Division, Survivorship and Decrement Tables for HUD/FHA Mortgage Insurance Programs as of December 31, 1980 (July 1981).

Foreclosure Losses

The second cost of Section 502 interest-credit mortgages is borrower defaults leading to foreclosure.[4] As described earlier, estimates of borrower defaults leading to foreclosure are based in part on FmHA data about Section 502 program experience and in part on Federal Housing Administration data (see Table A-2). Over the term of the commitments, the FmHA is assumed to acquire about 6.8 percent of all mortgages, with virtually all foreclosures coming within the first ten years. The FmHA is assumed to sell foreclosed properties and to recoup 91 percent of the principal and interest due.

Cost Offsets from Subsidy Recapture

Offsetting the interest subsidies and foreclosure losses of Section 502 interest-credit loans is the recapture provision. Under this provision, Section 502 interest-credit borrowers repay at least a portion of the subsidy received at the time they sell their properties, provided the homes have appreciated in value.

The Section 502 recapture provisions specify that borrowers repay the lesser of the interest subsidy received and some percentage of net property appreciation. The subsidy received is defined by the FmHA as the difference in interest actually paid by the borrower and interest that would have been paid if the borrower had paid the note rate.[5] Net appreciation is defined by the FmHA as the property sales price less: the amount of principal outstanding, any down payment made by the borrower, the borrower's equity acquired through principal repayments,[6] and selling costs, if any. Borrowers may not deduct the value of any improvements

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4. In actuality, some borrowers who are in default voluntarily convey their properties to the FmHA. In these estimates, voluntary conveyances are grouped with foreclosed mortgages.

5. This definition does not always include the full federal interest cost, however. At the present time, CBO rates are 14.0 percent while the FmHA note rates at which mortgages are written are 13.5 percent. Thus the note rate does not represent the full federal interest cost.

6. The principal repayment due to the reduced interest rate paid by the borrower may not be deducted and is paid to FmHA.

made to the property. The balance after these deductions is the amount subject to recapture. FmHA receives the lesser of the full amount of the subsidy or a fixed percent of appreciation that ranges from 9 to 78 percent, depending on the average interest rate paid by the borrower and the number of months the mortgage was outstanding (see Table A-3).[7]

The assumptions used to estimate the effect of the recapture provisions are that: property value appreciates at the rate of prices in general; borrowers make no downpayments on their mortgages; and selling costs are 3.4 percent of sales price. Under these assumptions, the fixed share of net appreciation is always smaller than the total subsidy provided, so that is the amount collected by the FmHA.

Fiscal Year 1983 Cost Estimates

All costs and collections were estimated in current dollars and then converted to 1983 dollars using the assumed annual increase in consumer prices. Prices in general were assumed to move upward over the long run by 3 to 9 percent a year, depending on the scenario examined. Costs were converted to 1983 dollars by reducing each current dollar estimate by the assumed percentage increase in prices over the period between 1983 and the year in which a cost was incurred.

SECTION 515 ASSUMPTIONS

As with Section 502 interest-credit mortgages, the major cost of Section 515 interest-credit loans is the interest subsidy required. Offsetting this cost is the overage provision, whereby tenant rents above minimum required levels are paid to the FmHA and are treated as additional interest income. (The assumptions used to develop Section 515 costs are summarized in Table A-4.)

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7. If a borrower carries a mortgage for the full term, the amount subject to recapture is calculated at the time the mortgage is closed but is not due until the property is sold or the borrower ceases to use the home as a principal residence.

Interest Subsidy Costs

In the Section 515 interest-credit program, all loans are written at the current FmHA note rate, but borrowers receive interest-credit agreements reducing the effective interest rates to 1 percent. Section 515 note rates are set at the time commitments are made, but--as with Section 502 commitments--if interest rates decline between the time of obligation and disbursement, then note rates are set at the rates prevailing at the time of disbursement. Section 515 funds obligated in one year are generally disbursed over four years. Twenty percent of 1983 commitments would be disbursed in 1983; 55 percent in 1984; 20 percent in 1985, and the remaining 5 percent in 1986. FmHA note rates are set at 11.8 percent in 1983 and vary from 9.2 to 12.8 percent by 1986.

No loans are assumed to be prepaid in these estimates. The Congress has stipulated that Section 515 borrowers may not prepay their mortgages during the first 20 years of the term if the area in which the project is located has any unmet need for low- and moderate-income housing.[8] This effectively limits prepayments during this period, and there is no program experience on which to speculate about prepayment patterns in the later 30 years.

The federal cost of financing Section 515 activity is assumed to follow patterns similar to those assumed for Section 502 estimates. The FmHA is expected to sell CBOs at rates averaging 12.4 percent in 1983 and ranging over the long run from 1 to 4 percent in real terms, or 4 to 13 percent in nominal terms.

Foreclosure Losses

In the Section 515 program, the FmHA forecloses on few properties, so no losses due to default or foreclosure are assumed. Section 515 borrowers are required to invest in their projects. If a project develops problems, the owner is more likely to sell the project to protect his equity than to default and allow the FmHA to foreclose. In 1981, the FmHA had four multifamily projects in its inventory of acquired projects out of a portfolio of about 7,900 loans.

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8. Section 502(c) of the Housing Act of 1949, P.L. 81-171, as amended.

Cost Offsets from Overage Collections

Although the overage provisions of the Section 515 program are designed to reduce program costs, the FMHA has little information on the effects of this provision. Consequently, the assumptions used to estimate the effects of the overage provision have a greater range of uncertainty than other assumptions.

Since a tenant must pay the higher of 25 percent of his income or the minimum project rent, the overage collected by the FmHA depends on tenant income and rent levels. Starting tenant incomes are assumed to range from $10,000 to $14,000, depending on the scenario, and to increase by 0.5 percent a year in real terms, or by 3.5 to 9.5 percent in nominal terms. These estimates assume that tenant incomes will increase at slower rates than Section 502 homeowner incomes. While the FmHA does not have information to support this, Annual Housing Survey data suggest that tenants' incomes in rural areas increase more slowly than rural homeowners' incomes.[9]

Rent levels for projects committed in 1983 would average $300 in 1983, though few, if any, projects would be ready for occupancy that soon. Annual rent estimates have five components: principal and interest payments, operating and maintenance expenses, reserves, return on investment, and utilities. Principal and interest payments and the return on investment are assumed to be fixed over time, while operating and maintenance expenses, reserve requirements, and utility costs are assumed to increase at the same rate as prices in general.

Under these assumptions, tenants would initially pay 25 to 36 percent of their incomes to cover the minimum rent. By anywhere from year 2 to year 30, depending on the scenario, tenant incomes would have grown sufficiently so that the minimum rent level would be below 25 percent of income, and the FmHA would begin collecting overage.

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9. According to the U.S. Department of Commerce, U.S. Bureau of the Census, Current Housing Reports, Series H-150, Urban and Rural Housing Characteristics for the United States and Regions, Annual Housing Survey: Part E, 1974 and 1977, Table A-1. Between 1974 and 1977, median nonfarm renter income in rural areas increased by 16 percent, while median nonfarm homeowner income increased by 25 percent.

Fiscal Year 1983 Cost Estimates

As with the Section 502 cost assumptions, Section 515 program costs are converted to 1983 costs using the assumed annual increase in consumer prices, set at 3 to 9 percent over the long run.

TABLE A-1. ASSUMPTIONS USED TO DEVELOP LONG-TERM COST ESTIMATES FOR SECTION 502 INTEREST-CREDIT MORTGAGES

	Low Real Interest Rates, Low Inflation	Low Real Interest Rates, High Inflation	High Real Interest Rates, Low Inflation	High Real Interest Rates, High Inflation
<u>Assumptions That Determine Interest Subsidies</u>				
Interest Rates Paid by the FmHA (percent)				
1983	12.4	12.4	12.4	12.4
1984	12.0	12.0	12.0	12.0
Subsequent sales	4.0	10.0	7.0	13.0
Note Rates Charged by the FmHA (percent)				
1983	11.8	11.8	11.8	11.8
1984	11.4	11.4	11.4	11.4
Initial Interest Rate Paid by Borrower (percent)				
1983	3.4	3.4	3.4	3.4
1984	4.0	4.0	4.0	4.0
Income Growth Rate (percent change from the previous year)				
1984	7.5	7.5	7.5	7.5
1985	7.0	8.5	7.0	8.5
1986	7.1	10.0	7.1	10.0
1987	6.8	10.0	6.8	10.0
1988	6.1	10.5	6.1	10.5
Subsequent years	4.5	10.5	4.5	10.5
Taxes and Insurance (as percent of current property values)	2.1	2.1	2.1	2.1
Percentage of Borrowers That Prepay Before the 33d Year[a]	83.2	83.2	83.2	83.2

(Continued)

TABLE A-1. (Continued)

	Low Real Interest Rates, Low Inflation	Low Real Interest Rates, High Inflation	High Real Interest Rates, Low Inflation	High Real Interest Rates, High Inflation
	Assumptions That Determine Default Losses[a]			
Percent of Borrowers that Default on Mortgages[a]	6.8	6.8	6.8	6.8
FmHA Loss on Acquired Properties (as percent of balance due)	9.1	9.1	9.1	9.1
	Assumptions That Determine Offsetting Collections Due to Recapture Provisions			
Property Appreciation Rate (percent change from previous year)				
1984	7.0	7.0	7.0	7.0
1985	6.5	8.0	6.5	8.0
1986	6.1	9.0	6.1	9.0
1987	5.8	9.0	5.8	9.0
1988	4.6	9.0	4.6	9.0
Subsequent years	3.0	9.0	3.0	9.0
Selling Costs (as percent of sales price)	3.4	3.4	3.4	3.4

(Continued)

TABLE A-1. (Continued)

	Low Real Interest Rates, Low Inflation	Low Real Interest Rates, High Inflation	High Real Interest Rates, Low Inflation	High Real Interest Rates, High Inflation
Assumptions Used to Convert Current Dollars to 1983 Dollars				
Inflation Rate (percent change in consumer prices from previous year)				
1984	7.0	7.0	7.0	7.0
1985	6.5	8.0	6.5	8.0
1986	6.1	9.0	6.1	9.0
1987	5.8	9.0	5.8	9.0
1988	4.6	9.0	4.6	9.0
Subsequent years	3.0	9.0	3.0	9.0

SOURCE: Congressional Budget Office. Assumptions illustrate potential economic conditions and program operation but are not forecasts.

a. Further detail about borrowers' prepayment and default patterns is contained in Table A-2.

TABLE A-2. ASSUMPTIONS AS TO THE PERCENT OF SECTION 502 MORTGAGES MADE IN 1983 THAT WILL BE CLOSED ANNUALLY, EITHER BY FmHA ACQUISITION OR BY BORROWER PREPAYMENT[a]

Year	Cumulative Percentage of Closed Mortgages	Annual Percentage of Mortgages Acquired by FmHA[b]	Annual Percentage of Mortgages Prepaid
1	1.1000	0.4131	0.6869
2	4.6000	1.4452	2.0548
3	9.9000	1.3523	3.9477
4	14.5000	1.0423	3.5577
5	18.6000	0.7766	3.3234
6	22.4000	0.5679	3.2321
7	25.0000	0.4154	2.1846
8	30.0000	0.2824	4.7176
9	34.0000	0.1830	3.8170
10	38.2000	0.1193	4.0807
11	41.7000	0.0737	3.4263
12	44.9000	0.0449	3.1551
13	47.9000	0.0268	2.9732
14	50.7000	0.0157	2.7843
15	53.4000	0.0091	2.6909
16	56.1000	0.0052	2.6948
17	58.8000	0.0029	2.6971
18	61.5000	0.0016	2.6984
19	64.2000	0.0008	2.6992
20	66.8000	0.0005	2.5995
21	69.3000	0.0003	2.4997
22	71.7000	0.0002	2.3998
23	74.0000	0.0001	2.2999
24	76.2000	0.0001	2.1999
25	78.3000	---	2.1000
26	80.2000	---	1.9000
27	82.0000	---	1.8000
28	83.6000	---	1.6000
29	85.2000	---	1.6000
30	86.8000	---	1.6000
31	88.4000	---	1.6000
32	90.0000	---	1.6000
33	100.0000	---	10.0000
TOTAL	100.0000	6.7794	93.2206

(Continued)

TABLE A-2. (Continued)

SOURCES: Totals for years 1-10 are based on estimates from the Farmers Home Administration. Totals for years 11-33 and the annual distribution of closed mortgages between acquisitions and prepayments are based on Federal Housing Administration estimates for the Section 203 single-family mortgage insurance program, with adjustments to convert 30-year data to 33-year estimates.

a. These estimates are based on FmHA data that include interest-credit and non-interest-credit mortgages.

b. Acquisitions include both mortgages that the FmHA must foreclose because of delinquency and those that borrowers voluntarily convey to the FmHA because of delinquency.

TABLE A-3. PERCENTAGE OF PROPERTY APPRECIATION THAT SECTION 502 INTEREST-CREDIT BORROWERS MAY BE REQUIRED TO PAY WHEN THE MORTGAGE IS TERMINATED[a]

Number of Months the Loan Was Outstanding	Average Interest Rate Paid By Borrower Over Life of Mortgage (In percent)							
	1 or less	1.1 to 2	2.1 to 3	3.1 to 4	4.1 to 5	5.1 to 6	6.1 to 7	7.1 or greater
0 to 59	78	68	60	51	44	32	22	11
60 to 119	75	66	58	49	42	31	21	11
120 to 179	73	63	56	48	40	30	20	10
180 to 239	65	56	49	42	36	26	18	9
240 to 299	59	51	46	38	33	24	17	9
300 to 359	53	45	40	34	29	21	14	9
360 to 396	47	40	36	31	26	19	13	9

SOURCE: *Code of Federal Regulations*, Title 7, Part 1951, Subpart I, Exhibit A.

a. A borrower would pay the lower of the total subsidy received or the net property appreciation multiplied by the appropriate percentage from this table. In the case of borrowers who hold the mortgage for the full 33-year term, the amount subject to recapture is calculated at the time the mortgage debt is retired, but it is not due until the borrower ceases to use the dwelling as a principal residence or sells the property.

TABLE A-4. ASSUMPTIONS USED TO DEVELOP LONG-TERM COST ESTIMATES FOR SECTION 515 INTEREST-CREDIT MORTGAGES

	Low Real Interest Rates, Low Inflation	Low Real Interest Rates, High Inflation	High Real Interest Rates, Low Inflation	High Real Interest Rates, High Inflation
Assumptions That Determine Interest Subsidies				
Interest Rates Paid by the FmHA (percent)				
1983	12.4	12.4	12.4	12.4
1984	12.0	12.0	12.0	12.0
1985	10.2	11.7	10.5	12.0
1986	9.4	12.3	10.1	13.0
Subsequent years	4.0	10.0	7.0	13.0
Note Rates Charged by the FmHA (percent)				
1983	11.8	11.8	11.8	11.8
1984	11.4	11.4	11.4	11.4
1985	9.9	11.4	10.2	11.7
1986	9.2	12.1	9.9	12.8
Effective Interest Rates Paid by Borrowers (percent)	1.0	1.0	1.0	1.0
Assumptions That Determine Overage Collections				
Initial Tenant Incomes				
Percent at 10,000	33.3	50.0	66.7	50.0
Percent at 12,000	33.3	50.0	33.3	50.0
Percent at 14,000	33.3	0.0	0.0	0.0

(Continued)

TABLE A-4. (Continued)

	Low Real Interest Rates, Low Inflation	Low Real Interest Rates, High Inflation	High Real Interest Rates, Low Inflation	High Real Interest Rates, High Inflation
Income Growth Rates (percent change from previous year)				
1984	7.0	7.0	7.0	7.0
1985	6.5	8.0	6.5	8.0
1986	6.6	9.5	6.6	9.5
1987	6.3	9.5	6.3	9.5
1988	5.6	9.5	5.6	9.5
Subsequent years	3.5	9.5	3.5	9.5
Average Unit Cost (dollars)	35,700	35,700	35,700	35,700
Initial Minimum Rent Levels per Unit (dollars per month)[a]	297	297	297	297
Principal and interest	76	76	76	76
Operating and maintenance	117	117	117	117
Utilities	64	64	64	64
Reserve requirements	28	28	28	28
Return on investment	12	12	12	12
Rates of Increase in Operating and Maintenance Costs, Reserve Levels, and Utilities (percent)				
1984	7.0	7.0	7.0	7.0
1985	6.5	8.0	6.5	8.0
1986	6.1	9.0	6.1	9.0
1987	5.8	9.0	5.8	9.0
1988	4.6	9.0	4.6	9.0
Subsequent years	3.0	9.0	3.0	9.0

SOURCE: Congressional Budget Office. Assumptions illustrate potential economic conditions and program operation but are not forecasts of future conditions.

a. The minimum rent includes the principal and interest payment associated with a 1 percent mortgage.