## Proposed Rules

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This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

## DEPARTMENT OF AGRICULTURE

## Rural Housing Service

## 7 CFR Part 3550

RIN 0575-AC59

## Single Family Housing Loans, Payment Assistance

agency: Rural Housing Service, USDA. ACTION: Proposed rule.
summary: The Rural Housing Service (RHS) proposes to amend its regulations for Single Family Housing Loans. This action proposes to amend only the amount of payment assistance for which a borrower qualifies. This action is taken to improve distribution of program benefits, simplify the application process, and improve customer service.
DATES: Written or e-mail comments must be received on or before April 18, 2006.

ADDRESSES: You may submit comments to this rule by any of the following methods:

- Agency Web site: http:// www.rurdev.usda.gov/regs/. Follow the instructions for submitting comments on the Web site.
- E-Mail: comments@wdc.usda.gov. Include the RIN number (0575-AC59) in the subject line of the message.
- Federal eRulemaking Portal: http:// www.regulations.gov. Follow the instructions for submitting comments.
- Mail: Submit written comments via the U.S. Postal Service to the Branch Chief, Regulations and Paperwork Management Branch, U.S. Department of Agriculture, STOP 0742, 1400 Independence Avenue SW, Washington, DC 20250-0742.
- Hand Delivery/Courier: Submit written comments via Federal Express Mail or another mail courier service requiring a street address to the Branch Chief, Regulations and Paperwork Management Branch, U.S. Department of Agriculture, 300 7th Street, SW., 7th Floor, Suite 701, Washington, DC 20024.

All written comments will be available for public inspection during regular work hours at the 300 7th Street, SW., address listed above.

## FOR FURTHER INFORMATION CONTACT:

Michael S. Feinberg, Chief, Loan
Origination Branch, Rural Housing Service, USDA, Ag Box 0783, Room 2214, 1400 Independence Avenue, SW. Washington, DC 20250-0783.
Telephone: 202-720-1474.
SUPPLEMENTARY INFORMATION:

## Classification

This rule has been determined to be significant by the Office of Management and Budget (OMB) under Executive Order 12866 and has been reviewed by OMB.

## Regulatory Flexibility Act

In compliance with the Regulatory Flexibility Act (5 U.S.C. 601-602), the undersigned has determined and certified by signature of this document that this rule will not have a significant economic impact on a substantial number of small entities. This rule does not impose any new requirements on Agency applicants and borrowers and the regulatory changes affect only Agency determination of program benefits for individual loans.

## Environmental Impact Statement

This document has been reviewed in accordance with 7 CFR part 1940, subpart G, "Environmental Program." It is the determination of RHS that this proposed action does not constitute a major Federal Action significantly affecting the quality of the human environment, and in accordance with the National Environmental Policy Act of 1969, Public Law 91-190, an Environmental Impact Statement is not required.

## Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, the Agency generally must prepare a written statement, including a costbenefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures to State, local, or tribal governments, in the aggregate, or
to the private sector, of $\$ 100$ million or more in any one year. When such a statement is needed for a rule, section 205 of the UMRA generally requires the Agency to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, more cost-effective or least burdensome alternative that achieves the objectives of the rule.
This rule contains no Federal mandates (under the regulatory provisions of Title II of the UMRA) for State, local, and tribal governments or the private sector. Therefore, this rule is not subject to the requirements of sections 202 and 205 of the UMRA.

## Executive Order 13132

The policies contained in this rule do not have any substantial direct effect on States, on the relationship between the national government and States, or on the distribution of power and responsibilities among the various levels of government. Nor does this rule impose substantial direct compliance costs on State and local governments. Therefore, consultation with the States is not required.

## Programs Affected

This program is listed in the Catalog of Federal Domestic Assistance under No. 10.410, Low Income Housing Loans.

## Intergovernmental Consultation

For the reasons set forth in the final rule related Notice to 7 CFR part 3015, subpart V, this program is excluded from the scope of Executive Order (E.O.) 12372, which requires intergovernmental consultation with State and local officials.

## Civil Justice Reform

This proposed rule has been reviewed under Executive Order 12988, Civil Justice Reform. In accordance with this Executive Order: (1) All State and local laws and regulations that are in conflict with this rule will be preempted, (2) no retroactive effect will be given to this rule, and (3) administrative proceedings in accordance with the regulations of the Agency at 7 CFR part 11 must be exhausted before bringing litigation challenging action taken under this rule.

## Paperwork Reduction Act

The information collection requirements contained in these regulations have been approved by OMB
under the provisions of 44 U.S.C. chapter 35 and have been assigned OMB control numbers 0575-0172 in accordance with the Paperwork Reduction Act. This proposed rule does not revise or impose any new information collection requirements from those mentioned above.

## GPEA Statement

RHS is committed to compliance with the Government Paperwork Elimination Act (GPEA), which requires Government agencies, in general, to provide the public the option of submitting information or transacting business electronically to the maximum extent possible.

## Background

The U.S. Department of Agriculture's (USDA's) Rural Housing Service (RHS) is proposing to revise the regulations for Direct Single Family Housing Loans. This action is being taken to improve distribution of payment assistance subsidies to its section 502 Single Family housing direct loan program borrowers and simplify the formula for determining the level of payment assistance granted to new borrowers.

## Economic Impact Analysis

USDA contracted for a study of its payment assistance formula including the development of alternatives. This study is available for public inspection during working hours at Room 2214, 1400 Independence Avenue, SW., Washington, DC 20250-0783. Telephone: 202-720-1474. In its study of alternatives to the current payment assistance formula, RHS began with the premise that a new payment assistance formula must not increase the cost of the program (be subsidy neutral) and must serve the same target population. These conditions assure that there would be no significant economic impact resulting from a revision of the formula for payment assistance. The program will continue to assist very low- and low-income, rural residents to improve their living conditions and economic situation by building equity through homeownership. Based on an average loan in the range of $\$ 83,000$ per home, for each $\$ 1.0$ billion in program level, RHS provides financing for over 12,000 single-family homes. This
investment is instrumental in creating over 14,000 direct and indirect jobs. Assuming an average salary of $\$ 20,000$ per job created, $\$ 280$ million in purchasing power is generated. Additionally, these jobs also generate additional tax revenue for Federal, State, and local governments, as well as aid in the stabilization or redevelopment of neighborhoods.

However, the proposed change will affect the level of payment assistance received by all new borrowers (in 2003 over 12,500 ) following the effective date of the rule, and for that reason, the proposed action has been determined to be significant. The effect of the proposed rule compared to that of the current formula and the other alternatives considered is discussed in detail below.

## Discussion

During fiscal year 2004, RHS studied its payment assistance formula for the Direct section 502 Single Family Housing program and concluded that changes were needed.

## Current Formula

RHS administers the single-family housing direct loan program authorized in section 502 of the Housing Act of 1949, as amended (42 U.S.C. 1472). The program provides loans to low- and very low-income households to purchase homes in rural areas, generally defined as cities, towns, and unincorporated areas with populations of 20,000 or less. ${ }^{1}$ These loans provide financing at reasonable rates and terms with no down payment required.

Pursuant to section 502, eligible families must be without adequate housing and unable to obtain credit through the private sector ${ }^{2}$ but able to afford the mortgage payments, taxes, and insurance on the houses financed by RHS. The interest rate on the loans can be subsidized to as low as one percent. Typically, the mortgage payments require 24 to 30 percent of an applicant's income. Although a 38 -year term is available, most loans are issued

[^0]with a term of 33-years, and the majority of homes initially financed by RHS are refinanced through conventional mortgages or repaid through property sales within eight to ten years.

For loans made prior to 1995, RHS subsidized using a program called "interest credit." Borrowers made monthly payments that were the greater of (a) 20 percent of adjusted family income; or (b) payments based on the loan amortized at a one percent interest rate. RHS provided interest credit to make up the difference between this amount and the amount of the payment at the note rate.

One drawback of this method was that it provided little incentive for borrowers to shop for an inexpensive home since the borrower's payment did not increase significantly as a result of a higher loan amount. Another criticism was that it was inequitable. For example, families attempting to purchase inexpensive homes were denied assistance if the formula did not indicate principal, interest, taxes, and insurance (PITI) would exceed 20 percent of adjusted income while borrowers who purchased higher cost homes received the maximum level of subsidy allowed.
As a result of these and other limitations, RHS implemented a new subsidy program effective October 27, 1995. Under this program called "payment assistance," the subsidy for each loan is based on the ratio of the household's annual adjusted income (AAI) to the area median income (AMI), a figure that the U.S. Department of Housing and Urban Development (HUD) publishes annually for all U.S. counties. To be eligible for payment assistance, household income must be within the low-income limit, defined as $80 \%$ of AMI. Once payment assistance is granted, the household remains eligible for payment assistance in accordance with the formula below. The payment assistance amount is the difference between the note rate payment and the greater of (a) the payment at an equivalent interest rate and (b) the floor payment.

The equivalent interest rate is derived from a scale based on the ratio of the borrower's AAI to AMI, as described in Exhibit 1 below:

Exhibit 1.-Equivalent Interest Rate Scale


* Or note rate, whichever is less. In no case will the equivalent interest rate be less than 1 percent.

The floor payment is also based on the ratio of the borrower's AAI to the AMI and is scaled to a minimum percentage of income that a borrower must pay for PITI.
Exhibit 2 shows this scale:

Exhibit 2.—Floor Payment Scale

| AAI as a percentage of AMI | Minimum per- <br> centage of AAI <br> that a bor- <br> rower must <br> pay for PITI <br> (percent) |
| :--- | ---: |
| 0.0 percent to 50 percent ..... | 22 |
| 50.01 percent to 65 percent | 24 |
| 65.01 percent to 80 percent | 26 |

The following is the step-by-step process for determining a borrower's eligibility for payment assistance under the current formula, and the amount of
payment assistance for which he or she qualifies, using the assumptions below:

- Borrower Assumptions:
- AAI: \$19,000
- AMI: \$30,000
- Is the borrower eligible? Yes, because AAI is 63 percent of AMI and the eligibility threshold is 80 percent.
- Loan Assumptions:
- Initial Principal Amount: \$60,000
- Loan Term: 33 Years
- Market Rate: 7 percent
- Monthly Taxes and Insurance:
\$90.00 (1.8 percent of Initial Principal/ 12 Months).

Exhibit 3.—Application of the Payment Assistance Formula Using the Above Assumptions

| Explanation | Calculation |
| :---: | :---: |
| How Much Does the Borrower Pay to USDA for Principal and Interest Cost? <br> The borrower pays the higher of the following two calculations: First Calculation: |  |
| Based on the ratio of Borrower AAI to AMI (Exhibit 1), the borrower's interest rate will be 4 percent, which equates to a monthly payment of $\$ 273.00$. | Applicable Interest Rate at 63\% AAI to AMI Ratio yields 4\% equivalent interest rate (from chart). |
| Second Calculation: |  |
| The Floor Payment for principal and Interest (This is the fixed percentage of borrower income or the minimum the borrower is required to pay to USDA). | Initial Principal Amount \$60,000 @ 4\% for 33 years = \$273.00. |
| Applicable floor payment percentage for PITI $=24$ percent ........... | Applicable percentage for 63\% AAI to AMI ratio. |
| Monthly Floor Payment = \$380. |  |
| Monthly Floor Payment for principal and interest $=\$ 290 \ldots \ldots \ldots . . . . .$. | $24 \%$ of $\mathrm{AAI}(\$ 19,000)$ divided by 12 months. |
| The borrower pays at Floor Payment for principal and interest = | PITI of \$380 minus T\&I of \$90. |
| \$290. | The higher of the two calculations. |
| How much would the borrower pay at the Note Rate of 7\%? \$389 | \$389 (\$60,000 amortized @ $7 \%$ for 33 years). |
| Payment Assistance received from USDA = \$99 .......................... | \$389-\$290 = \$99. |

Recently, RHS began to examine anecdotal evidence that suggested the current formula caused anomalies in the distribution of payment assistance to borrowers, was complicated and difficult to explain, and had other unintended consequences, such as encouraging borrowers to purchase
more expensive housing to qualify for increased payment assistance.

RHS engaged a contractor with extensive experience in Federal housing programs and other lending programs to:

- Assess the extent to which the current formula results in unintended treatment of borrowers;
- Examine formulas used in other mortgage assistance programs; and
- Develop a simpler and more equitable alternative that would not result in increased cost to the Government but would continue to serve the same target market.

RHS presented the findings and preliminary alternatives to a panel of
rural housing industry leaders and obtained their feedback. RHS then further analyzed two potential alternatives to the current formula. The results of these analyses follow.

## Assessment Based on Historical and Sensitivity Analyses

The assessment RHS commissioned included a sensitivity analysis of the factors that comprise the payment assistance formula; a historical analysis of 219,218 loans closed between October 26, 1995 and November 5, 2003; and research on other affordable singlefamily housing loan programs.
Affordable single-family programs
researched include programs offered by the Department of Housing and Urban Development, State agencies, and nongovernment entities. The historical analysis summarized borrower and loan characteristics and used the theoretical findings of the sensitivity analysis to evaluate whether borrowers with similar income characteristics received different levels of payment assistance. The results of the historical analysis support the theoretical findings of the sensitivity analysis.
Summary of Loan Characteristics
Of the 219,218 loans, 70 percent (152,830 loans) were non-leveraged
loans, and 151,107 of those were analyzed. Leveraged loans were analyzed and will be discussed separately below because of the way the Agency considers these loans for payment assistance. The balance of the non-leveraged loans were excluded because of missing data. Of the 151,107 observations, 54 percent of the borrowers have housing costs at or below 26 percent of their AAIs.
Exhibit 4 presents loan characteristics of borrowers based on payment calculation methods: Effective interest rate (EIR) and floor payment.

Exhibit 4.-Key Characteristics of RHS 502 Direct Loan Borrowers (Non-Leveraged Loan Agreements)

| Payment calculation method | Count | Percent of total | Average AAI | Average AMI | Average AAl as percent of AMI | Average EIR | Average initial principal | Average borrower contribution | Average payment assistance amt. | Average borrower PI portion | Average borrower PITI cost with assist. as percent of AA |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EIR | 95,248 | 62 | \$14,102 | \$38,348 | 38 | 1.61 | \$77,587 | \$260 | \$236 | 52 | 47 |
| Floor .................................. | 57,582 | 38 | 20,439 | 41,080 | 50 | 2.09 | 70,329 | 310 | 142 | 69 | 25 |
| Total/Avg. ..................... | 152,830 | 100 | 16,489 | 39,377 | 42 | 1.79 | 74,852 | 279 | 201 | 58 | 39 |

The table shows that 62 percent of the borrowers have principal and interest payments based on the EIR. These borrowers have lower annual adjusted incomes, live in areas with lower area median incomes, and have higher initial principal amounts, all of which cause their total housing cost to average 47 percent of their income, as opposed to a portfolio average of 39 percent. Conversely, borrowers with higher incomes pay only 25 percent of their incomes toward housing costs.

## Historical and Sensitivity Analyses

Four factors determine the payment assistance amount that RHS Single Family housing direct loan program borrowers receive: (1) AMI, (2) borrower's AAI, (3) the initial principal amount of the loan, and (4) taxes and insurance cost. The purpose of the sensitivity analysis was to evaluate how changes in each of the four factors affect the borrower's contribution and the
level of payment assistance, holding the other three factors constant. The baseline assumptions for this analysis represent a typical 502 loan and are used as examples in the RHS section 502 servicing handbook. They are as follows:

- Borrower's AAI: \$19,000
- AMI: \$30,000
- Initial Principal Amount: $\$ 60,000$
- Loan Term in Years: 33
- Market Rate: 7 percent
- Monthly Taxes and Insurance: \$90
(1.8 percent of Initial Principal Amount/ 12 months)

The results of the sensitivity analyses are as follows. Where relevant, historical data has also been included.

## Changing AMI, Holding Other Factors Constant

An RHS borrower who decides to buy a home in a county with a lower median income receives less payment assistance than he or she would in a higher income
county, even when the home price, taxes, and insurance are exactly the same in the two counties. Similarly, when an RHS borrower whose income stays constant lives in a county where the AMI increases, he or she receives additional payment assistance; and if the county's economy declines and the AMI drops, he or she receives less payment assistance. This occurs because payment assistance is determined by the ratio of the borrower's AAI to the county's AMI.
The actual examples in Exhibit 5 illustrate the way in which AMI skews the amount of payment assistance a borrower receives, all other factors being equal. The first example shows this dynamic by examining two borrowers in different counties. The second example shows what happens to the amount of payment assistance a borrower receives from one year to the next when income stays constant but county AMI changes.

Exhibit 5.-Impact of Changes in AMI on Payment Assistance, Current Formula

| Example | Borrower | County and state | Initial principal amount | Adjusted annual income | Area median income | AAI as a percent of AMI | Original PITI | Payment assistance amount |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | A ............... | Kingfisher County, OK $\qquad$ Suffolk County, VA $\qquad$ | \$56,000 | \$20,440 | \$31,300 | 65 | \$446 | \$4 |
|  |  |  | 56,000 | 20,440 | 44,400 | 46 | 446 | 70 |
|  | Difference <br> C $\qquad$ <br> D $\qquad$ |  |  |  | 13,100 |  |  | 66 |
|  |  | Tulare County, CA ................. | 54,431 | 19,330 | 38,600 | 50 | 425 | 39 |
|  |  | Tulare County, CA .................. | 54,431 | 19,330 | 39,200 | 49 | 425 | 71 |

Exhibit 5.—Impact of Changes in Ami on Payment Assistance, Current Formula-Continued

| Example | Borrower | County and state | Initial principal amount | Adjusted annual income | Area median income | AAI as a percent of AMI | Original PITI | Payment assistance amount |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Difference | .............................................. | .................. | .................. | 600 | .................. | ................. | 32 |

In addition to showing the discrepancies in payment assistance for similar borrowers under the current formula, these examples highlight the formula's inefficiencies. In Example 1, the borrower in the lower income county receives considerably less payment assistance-in this case, Borrower A receives 17.5 times less assistance than Borrower B, yet their AAI is identical. Example 2 shows how small changes in AMI can lead to significant changes in payment assistance. The AMI in Tulare County increased by 1.5 percent from one year
to the next, yet Borrower C's payment assistance increased by 82 percent. Even if the cost of living increased with the rise in AMI, it is unlikely that Borrower C needed an 82 percent increase in assistance in order to adjust to this change.

The historical analysis found that a difference of $\$ 244$ was the largest difference in the amount of payment assistance two borrowers received who had the same incomes, principal amount, and taxes and insurance. The smallest difference was $\$ 14$.

Changing AAI, Holding Other Factors Constant

Two noteworthy phenomena occur when AAI changes while the other three factors are held constant: First, borrowers who pay the equivalent interest rate (those with very low incomes) receive a fixed amount of payment assistance, regardless of income; while those who pay based on the floor payment receive payment assistance that varies with their income.

Exhibit 6 illustrates this result.

Exhibit 6.-Impact of Changes in Income on Borrower's Payment and Payment Assistance, Current Formula

| AAI | AAI as a percent of AMI | Applied percent of floor payment | Applied EIR (percent) | Original total PITI | Floor payment of P\&I | Payment @ EIR | Borrower's P\&I contribution | Assistance amount | Borrower's PITI contribution portion (percent) | Borrower's PITI cost with assistance as a percent of AAI |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$13,000 ............ | 44 | 22 | 1 | 479 | 148 | 178 | 178 | 211 | 56 | 25 |
| \$13,300 | 45 | 22 | 1 | 479 | 154 | 178 | 178 | 211 | 56 | 24 |
| \$13,600 ............ | 46 | 22 | 1 | 479 | 159 | 178 | 178 | 211 | 56 | 24 |
| \$13,900 ............ | 47 | 22 | 1 | 479 | 165 | 178 | 178 | 211 | 56 | 23 |
| \$14,200 | 48 | 22 | 1 | 479 | 170 | 178 | 178 | 211 | 56 | 23 |
| \$14,500 ............ | 49 | 22 | 1 | 479 | 176 | 178 | 178 | 211 | 56 | 22 |
| \$14,800 | 50 | 22 | 1 | 479 | 181 | 178 | 181 | 208 | 57 | 22 |
| \$15,100 ............ | 51 | 24 | 2 | 479 | 212 | 207 | 212 | 177 | 63 | 24 |
| \$15,400 ............ | 52 | 24 | 2 | 479 | 218 | 207 | 218 | 171 | 64 | 24 |
| \$15,700 ............ | 53 | 24 | 2 | 479 | 224 | 207 | 224 | 165 | 66 | 24 |
| \$16,000 ........... | 54 | 24 | 2 | 479 | 230 | 207 | 230 | 159 | 67 | 24 |
| \$16,300 ............ | 55 | 24 | 2 | 479 | 236 | 207 | 236 | 153 | 68 | 24 |
| \$16,600 ............ | 56 | 24 | 3 | 479 | 242 | 239 | 242 | 147 | 69 | 24 |
| \$16,900 ............ | 57 | 24 | 3 | 479 | 248 | 239 | 248 | 141 | 71 | 24 |
| \$17,200 | 58 | 24 | 3 | 479 | 254 | 239 | 254 | 135 | 72 | 24 |
| \$17,500 | 59 | 24 | 3 | 479 | 260 | 239 | 260 | 129 | 73 | 24 |
| \$17,800 ............ | 60 | 24 | 3 | 479 | 266 | 239 | 266 | 123 | 74 | 24 |
| \$18,100 ........... | 61 | 24 | 4 | 479 | 272 | 273 | 273 | 116 | 76 | 24 |
| \$18,400 ............ | 62 | 24 | 4 | 479 | 278 | 273 | 278 | 111 | 77 | 24 |
| \$18,700 ............ | 63 | 24 | 4 | 479 | 284 | 273 | 284 | 105 | 78 | 24 |
| \$19,000 ... | 64 | 24 | 4 | 479 | 290 | 273 | 290 | 99 | 79 | 24 |
| \$19,300 | 65 | 24 | 4 | 479 | 296 | 273 | 296 | 93 | 81 | 24 |
| \$19,600 ............ | 66 | 26 | 5 | 479 | 335 | 310 | 335 | 54 | 89 | 26 |
| \$19,900 ............ | 67 | 26 | 5 | 479 | 341 | 310 | 341 | 48 | 90 | 26 |
| \$20,200 | 68 | 26 | 5 | 479 | 348 | 310 | 348 | 41 | 91 | 26 |
| \$20,500 ............ | 69 | 26 | 5 | 479 | 354 | 310 | 354 | 35 | 93 | 26 |
| \$20,800 ............ | 70 | 26 | 5 | 479 | 361 | 310 | 361 | 28 | 94 | 26 |
| \$21,100 ............ | 71 | 26 | 6 | 479 | 367 | 348 | 367 | 22 | 95 | 26 |
| \$21,400 ............ | 72 | 26 | 6 | 479 | 374 | 348 | 374 | 15 | 97 | 26 |
| \$21,700 ............ | 73 | 26 | 6 | 479 | 380 | 348 | 380 | 9 | 98 | 26 |
| \$22,000 ............ | 74 | 26 | 6 | 479 | 387 | 348 | 387 | 2 | 100 | 26 |

This outcome is not undesirable: borrowers with higher incomes receive less assistance as their incomes increase, while borrowers at the lower end of the spectrum receive a capped amount of assistance, helping to ensure that the housing needs of low-income families are met at reasonable cost to the taxpayer and the level of assistance
provided decreases as family income increases.

However, the second phenomenon that occurs with certain increases in income is problematic: for borrowers whose payments are based on the floor payment, a small increase in income can lead to a large decrease in payment assistance. This happens because the required floor payment is divided into
three tiers that increase at a much greater rate than income. For example, when a borrower's income increases from 50 percent of AMI to 50.01 percent, the required floor payment jumps from 22 percent of income to 24 percent; when borrower income increases from 65 percent of AMI to 65.01 percent, the floor payment jumps to 26 percent of income. Exhibit 7
illustrates the impact on payment assistance of a $\$ 300$ increase in AAI that
also pushes the borrower into the next
tier of floor payments:

Exhibit 7.—Impact of Marginal Increases in Income on Payment Assistance, Current Formula*

| Example | Adjusted annual income | AAI as a percent of AMI | PITI | PITICost with assistance as a percent of AAI | Payment assistance amount | Annualized payment assistance amount | Net Loss of annual income |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Income | \$14,800 | 50 | \$479 | 22 | \$208 | \$2,496 |  |
| Increase 1 | 15,100 | 51 | 479 | 24 | 177 | 2,124 |  |
| Change | 300 | 1 | .................. | 2 | -31 | -372 | \$72 |
| Income | 19,300 | 65 | 479 | 24 | 93 | 1,116 | ................... |
| Increase 2 | 19,600 | 66 | 479 | 26 | 54 | 648 | $\ldots$ |
| Change | 300 | 1 |  | 2 | -39 | -468 | \$168 |

*Some figures are rounded.

The first income increase of $\$ 300$ gets offset by a loss of $\$ 372$ in payment assistance, while the second income increase of $\$ 300$ gets offset by a loss of $\$ 468$ in payment assistance. The overall trend to decrease payment assistance as income increases is logical; as borrowers' earnings increase, they need less Government assistance. However, the unfortunate consequence of staggering the floor payments in two percent increments is that borrowers
who are already at the lower end of the income scale can suffer a financial setback when they earn a pay increase; sometimes they have more to lose than gain when their AAI rises. A more equitable formula would leave the borrower at least as well off as he or she was before the pay increase.

## Changing the Initial Principal Amount, Holding Other Factors Constant

When only the principal amount varies and all other factors are held constant, payment assistance increases at a faster rate relative to increases in principal when the borrower pays based on the floor payment than when he or she pays based on the equivalent interest rate.
The following exhibit illustrates this dynamic.

Exhibit 8.-Impact of Changes in Principal Amount on Borrower’s Contribution, Current Formula

| Initial principal amount | Payment @ note rate | Original PITI | Floor payment of PITI | Floor payment of PI | Payment @ EIR | Borrower's contribution to PI | Assistance amount | Borrower's PITI portion (percent) | Borrower's PITI cost with assistance as percent of AAI |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$50,000 .... | \$324 | \$414 | \$380 | \$290 | \$228 | \$290 | \$34 | 92 | 24.0 |
| 52,400 ..... | 340 | 430 | 380 | 290 | 239 | 290 | 50 | 88 | 24.0 |
| 54,800 ..... | 355 | 445 | 380 | 290 | 249 | 290 | 65 | 85 | 24.0 |
| 57,200 ..... | 371 | 461 | 380 | 290 | 260 | 290 | 81 | 82 | 24.0 |
| 59,600 ..... | 386 | 476 | 380 | 290 | 271 | 290 | 96 | 80 | 24.0 |
| 62,000 ...... | 402 | 492 | 380 | 290 | 282 | 290 | 112 | 77 | 24.0 |
| 64,400 ..... | 417 | 507 | 380 | 290 | 293 | 293 | 124 | 76 | 24.2 |
| 75,200 ..... | 487 | 577 | 380 | 290 | 342 | 342 | 145 | 75 | 27.3 |
| 86,000 ..... | 557 | 647 | 380 | 290 | 391 | 391 | 166 | 74 | 30.4 |

The exhibit shows that, given the formula inputs used in the sensitivity analysis, when the principal amount is between $\$ 50,000$ and $\$ 62,000$, the borrower's PITI cost with payment assistance equals 24.0 percent. Within this range of principal amounts, the borrower's contribution for principal and interest is fixed at the floor payment of $\$ 290$ per month, while payment assistance increases to make up the difference between the borrower's contribution and the note rate. Thus, the borrower has the strongest incentive to purchase the $\$ 62,000$ house rather than a cheaper one within the 24 percent range. Once the principal is greater than $\$ 62,000$ and the borrower pays based on
the EIR, the borrower's contribution is no longer fixed but increases as principal increases. Payment assistance also increases with principal, but not as quickly as when the borrower pays at the floor rate.

Thus, the current formula provides an incentive to borrowers to purchase the most expensive home within a fixed range of principal amounts'in this example, the $\$ 62,000$ house. It is important to note, however, that the optimal purchase price has nothing to do with the housing market and will vary with each buyer's income, AMI, taxes and insurance, and the market rate on the loan-it is not uniform across RHS borrowers. In addition, while the
inputs to the formula create an economically optimal purchase price for each borrower, this price is not necessarily the one at which a buyer will purchase a house. There are many other important and potentially overriding factors in the borrower's decision-making process, including the availability of appropriate housing at a price he or she can afford, the location of the housing, quality of the neighborhood and schools, and safety, among others. It is possible that a house at the buyer's optimal price is not available and does not meet his or her other criteria. The optimal price is solely based on the four inputs to the
payment assistance formula and does not reflect any market or quality factors.
Changing Tax and Insurance (T\&I) Cost, Holding Other Factors Constant
The analysis indicates that when a borrower's payment is based on the floor payment, the payment assistance amount matches the increase in T\&I dollar-for-dollar. When a borrower's payment is based on EIR, the payment assistance amount is not affected by the change in T\&I. As a result, very lowincome borrowers must bear the burden of increased taxes and insurance without an increase in payment assistance, while low income borrowers receive a dollar-for-dollar match. This formula characteristic makes it difficult not only for very low-income borrowers to adjust to increased tax and insurance costs, but also for RHS to provide servicing assistance to very low-income borrowers who get behind in their
payments as a result of a tax or insurance increase. Sixty-two percent of borrowers in the historic dataset pay based on the EIR and thus do not receive extra payment assistance when their T\&I amount increases.

## Market Research

Included in the assessment of the payment assistance formula was a comparative analysis to identify other affordable housing programs whose features could be compared to and contrasted with the section 502 program. None of the programs reviewed offered the same depth of subsidy available through the section 502 program, although many were similar in other respects. The single most important differentiating factor is the target market served by the section 502 program. The following programs were the primary focus of the comparative analysis:

- HUD Housing Choice Voucher

Programs-Homeownership and Tenant Based

- Minnesota Housing Finance Agency, Minnesota Mortgage Program, Homeownership Assistance Fund
- HUD Home Investment

Partnerships Program (HOME)

- Virginia Department of Housing and Community Development-Share
Homeless Intervention Program
- Habitat for Humanity International
- City of Longmont/Boulder County, Colorado Downpayment Assistance Program
- City of Livermore, California Downpayment Assistance Program
- Illinois Housing Development Authority, First Time Homebuyer Program (Revenue Mortgage Bond Program)

Exhibit 9 shows how key features of these various programs compared to those of the section 502 program.

Exhibit 9.-Program Features of the Section 502 and Comparable Affordable Single Family Housing Programs

| Program feature | Section 502 | Comparative analysis observations |
| :---: | :---: | :---: |
| Use of HUD AMI | HUD AMI is used as an eligibility criterion, for targeting purposes, and as a payment assistance formula factor. | —Eligibility criterion. <br> -Assistance limits. <br> -Financing terms. <br> —Targeting. |
| Use of Housing Cost-PITI-to-Income Ratios ...... | PITI-to-income ratios are used during the underwriting process to determine repayment ability. | -Repayment ability. <br> -Program eligibility. <br> -Assistance eligibility. <br> -Participant contribution. |
| Assistance Calculation .................................. | Payment Assistance is calculated by first determining the borrower's PI contribution. Payment Assistance covers the difference between PI and this contribution. | -Participant need is met up to a limit. <br> -Participant need is met up to a limit after a required participant contribution. |
| Assistance Administration .............................. | Continual Assistance, given that borrowers meet income and occupancy eligibility requirements. | -Continual assistance. <br> -Limited assistance. <br> -Limited, deceasing assistance with eventual cut-off. <br> -One time assistance. |
| Assistance Recapture .................................... | Entire amount of payment assistance is subject to recapture, given that it is less than the adjusted appreciation value. Payment assistance is always subject to recapture. | -Entire amount. <br> -Pro-rated percentage. <br> -Recapture due within a finite timeframe. |

The most noteworthy finding of the market research was that while all of the homeownership and rental subsidy programs used income as a percentage of AMI as an eligibility criterion, none of the programs used the figure as a determinant of the amount of assistance received, as under the section 502 Program.
Other uses of AMI in program administration include:

- Income eligibility, including income floors, to determine repayment capacity and program eligibility;
- Assistance limit/financing term determination; and
- Targeting specific parts of the population for assistance.


## Public Forum

On February 3, 2004, RHS hosted a forum of rural housing industry leaders at which it presented the findings of the sensitivity and historical analyses and market research, proposed preliminary alternatives to the current payment assistance formula, and solicited feedback from the participants to address inequities in the current formula.

## Preliminary Alternatives for Calculating Payment Assistance

RHS directed that alternatives to the current payment assistance formula meet the following criteria:

- Alternatives must provide service to the same target market currently eligible to receive assistance,
- Alternatives must be subsidy neutral, and
- Alternatives must simplify the method of determining the levels of payment assistance received.

Given these criteria and the feedback from the industry forum, five alternatives were developed. Because of the distributional inequities created by
basing payment assistance on AMI, and the lack of precedent for using AMI as a determinant of payment assistance in comparable affordable housing programs, none of the alternatives include AMI in the formula for calculating payment assistance.

The alternatives are as follows:
Alternative 1: Calculate Monthly Payment Assistance based only on the borrower's AAI.
Alternative 2: Calculate Monthly Payment Assistance based on the borrower's AAI (building on Alterative 1) but the borrower's contribution equals the greater of (a) 25 percent of AAI for PITI; and (b) principal and interest payment based on a one percent interest rate, plus taxes and insurance.

Alternative 3: Calculate Monthly
Payment Assistance as the difference between principal and interest at the note rate and principal and interest calculated at a below-market interest rate that is tied to the borrower's AAI. Alternative 4: Calculate Monthly Payment Assistance as the difference between PITI at the note rate and the greater of (a) 24 percent of the borrower's AAI plus utilities and maintenance costs; and (b) principal and interest payment based on a one percent interest rate, plus taxes and insurance.
Alternative 5: Offer an up-front principal reduction that results in a
borrower's payment being 24 percent of AAI, with the up-front principal reduction amount being provided as a zero-interest loan to be repaid in full upon graduation from the section 502 program.

Analyses of the five options eliminated Alternatives 1,4 , and 5. Alternative 4 was found to be very similar to Alternative 2, but difficult to explain because of the utility and maintenance cost component. In addition, an accurate utility and maintenance allowance would be difficult to establish on a nationwide basis. Alternative 1 was eliminated because it would not serve the same target market. This is because alternative 1 is based only on the borrower's income, without regard to loan amount or taxes and insurance. Alternative 5 was not subsidy neutral in any year but the first.

The contractor performed a sensitivity analysis to compare treatment of borrowers by the current formula, Alternative 2, and Alternative 3 along the same dimensions as the sensitivity analysis performed on the current formula. Based on borrower and loan characteristics for FY 2003, the sensitivity analyses were performed under the following assumptions:

- Borrower's AAI: \$21,000
- AMI: \$44,000
- Initial Principal Amount: $\$ 90,000$
- Loan Term in Years: 33
- Market Rate: 7 percent
- Monthly Taxes and Insurance: \$120 (1.6 percent of Initial Principal Amount/ 12 months)
The results are as follows:


## Changing AMI, Holding Other Factors

 ConstantSince Alternatives 2 and 3 both eliminate AMI by design, there is no variability in the amount of payment assistance borrowers receive based on AMI under either of these alternatives. Under the current payment assistance formula, the amount of payment assistance varies with AMI.

## Changing AAI, Holding Other Factors

 ConstantUnder the current formula and the two alternatives, there is a maximum payment assistance amount. The current formula and Alternative 2 provide fairly similar amounts of payment assistance while Alternative 3 provides a greater amount of payment assistance to almost all borrowers whose incomes are above the cap.

Exhibit 10 shows this effect.
Exhibit 10.-Impact of Changes in Income on Payment Assistance, Current Formula and Alternatives

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Assumptions for Exhibit 10:
(1) Loan amount $=\$ 90,000$
(2) $\mathrm{T} \& \mathrm{I}=1.6$ percent of loan amount
(3) Note rate $=7$ percent
(4) $\mathrm{AMI}=\$ 44,000$

Under the current formula, the cap is determined by the ratio of AAI to AMI. When the ratio increases, the amount of payment assistance drops by more than the increase in income. This effect does not occur under either Alternative 2 or

Alternative 3. The table below shows a borrower's monthly payments when income equals $\$ 21,000, \$ 22,000$, and $\$ 23,000$, with tax and insurance payments ranging from 0.5 percent to 3.5 percent of the loan. Borrower
payments that are not bolded are based on 25 percent of income. In this example, the borrower pays 25 percent when T\&I is relatively low. The borrower payments that are BOLDED are based on a one percent interest rate.

## Exhibit 11.—Impact of Change in Income on Borrower Payment and Payment Assistance, Alternative 2



Thus, when the borrower's payment is based on 25 percent of income, and the borrower's annual income goes from $\$ 21,000$ to $\$ 22,000$, the monthly payments increase by $\$ 20$, for an annual increase of $\$ 240$ and a net gain in income of $\$ 760$. When the borrower's payment is based on the one percent interest rate, the amount of the payment does not change. Similarly, when the borrower's payment is based on 25
percent of income and income goes from $\$ 21,000$ to $\$ 23,000$, the monthly payment increases by $\$ 40$, for an annual increase of $\$ 480$ and a net gain in income of $\$ 1,520$. When the borrower's payment is based on the one percent rate, his or her payment does not change.

Under Alternative 3, the EIR scale increases so gradually relative to increases in income that the borrower
will not face a situation in which a loss in payment assistance exceeds an increase in earnings. Exhibit 12 shows how borrower payments increase with income, assuming the loan and borrower characteristics described at the beginning of this section. The payments do not change with taxes and interest, unlike under Alternative 2.

Exhibit 12.—Impact of Change in Income on Borrower Payment and Payment Assistance, Alternative 3

|  | Income | Borrower payment for PITI | Payment assistance | PITI |
| :---: | :---: | :---: | :---: | :---: |
| \$21,000 |  | \$408 | \$295 | \$703 |
| \$22,000 |  | 419 | 284 | 703 |
| \$23,000 |  | 431 | 273 | 703 |

As Exhibit 12 shows, a borrower who earns $\$ 21,000$ and receives a $\$ 1,000$ raise must pay an additional $\$ 11$ per month for housing, or $\$ 132$ per year. If the borrower who earns $\$ 21,000$ receives a $\$ 2,000$ pay raise, the payment
increases by $\$ 23$ per month, or $\$ 276$ per year.
Changing the Initial Principal Amount, Holding Other Factors Constant

Under the current formula the borrower has an incentive to purchase a
house at the upper end of a certain price range. The same phenomenon occurs under Alternative 2, as shown in Exhibit 14 below.

Exhibit 14.-Impact of Changes in Principal on Borrower Payment and Payment Assistance

|  | Number | Principal | T\&I | Borrower payment PITI | Payment assistance |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  | \$40,000 | \$53 | \$313 | \$0 |
| 2 | ......................................... | 50,000 | 67 | 391 | 0 |
| 3 |  | 60,000 | 80 | 438 | 31 |
| 4 | ......... | 70,000 | 93 | 438 | 110 |

Exhibit 14.—Impact of Changes in Principal on Borrower Payment and Payment Assistance—Continued


As Exhibit 14 shows, the borrower's payment is the same when the principal ranges between $\$ 40,000$ and $\$ 90,000$, so
the borrower has an incentive to purchase the \$90,000 house.

Under Alternative 3, however, this
effect does not occur because both the
borrower's payment and the payment assistance increase with the principal amount. The following exhibit illustrates this dynamic.

## Exhibit 15.-Impact of Change in Principal on Borrower Payment and Payment Assistance, Alternative 3

|  | Principal | T\&I at 1.6\% | Borrower payment for PITI | Payment assistance |
| :---: | :---: | :---: | :---: | :---: |
| \$40,000 |  | \$53 | \$181 | \$131 |
| \$50,000 . | .......................................................... | 67 | 227 | 164 |
| \$60,000 | ............................................................ | 80 | 272 | 197 |
| \$70,000. | $\ldots$ | 93 | 318 | 229 |
| \$80,000. | ............................ | 107 | 363 | 262 |
| \$90,000 |  | 120 | 408 | 295 |
| \$100,000 |  | 133 | 454 | 328 |
| \$110,000 |  | 147 | 499 | 361 |
| \$120,000 |  | 160 | 544 | 393 |
| \$130,000 | ............................................................... | 173 | 590 | 426 |

In addition, under the current formula and Alternative 2, borrowers with higher loan amounts receive more payment assistance than under Alternative 3, while borrowers with
lower initial principal amounts receive more payment assistance under Alternative 3 than under either the current formula or Alternative 2. Exhibit 16 shows this effect.

Exhibit 16.-Impact of Changes in Principal on Payment Assistance, Current Formula and Alternatives

Assumptions for Exhibit 16: (1) $\mathrm{AAI}=\$ 21,000$
(2) $\mathrm{T} \& \mathrm{I}=1.6 \%$ of loan amount
$(4) \mathrm{AMI}=\$ 44,000$

Changing Tax and Insurance Cost, Holding Other Factors Constant

Under the current formula and Alternative 2, payment assistance sometimes covers increases in taxes and insurance. Under the current formula, when the borrower pays at the EIR, payment assistance does not change with changes in taxes and insurance, but when the borrower pays the floor payment, payment assistance increases to cover increases in taxes and insurance. Thus, borrowers whose incomes are very low relative to their

AMI receive a capped amount of payment assistance.

Under Alternative 2, payment assistance increases relative to increases in taxes and insurance as long as the borrower is paying 25 percent of income. Borrowers pay 25 percent of income when their income is high relative to their PITI. When the borrower's payment equals one percent plus T\&I, the payment assistance amount is capped, which means that as taxes rise, payment assistance does not. This means borrowers in high tax areas receive proportionately less payment
assistance relative to their payment than borrowers in low tax areas, all other
factors being equal.
Under Alternative 3, payment assistance is the same regardless of T\&I amount. Thus, borrowers with the same principal but different tax and insurance rates receive the same amount of payment assistance.

Exhibit 17 below illustrates this dynamic:

Exhibit 17.-Impact of Changes in Taxes and Insurance on Payment Assistance, Current Formula and Alternatives
PA to Borrowers with Different T\&I Costs
$(\mathrm{AAI}=\$ 21,000, \mathrm{AMI}=\$ 44,000, \mathrm{~T} \& \mathrm{I}=1.6 \%$ of Original Amount $)$


Impact of the Alternatives on the Current Market
In addition to these analyses, the contractor also studied the question of how both alternatives would impact the market that the current formula serves. To assess whether each alternative formula will serve the same target market, three states were selected to represent high, medium, and low cost states. Average borrowers' AAI, Initial Principal Amount, and T\&I were calculated for the counties that had at least 10 new borrowers in 2002 and 2003. The counties with the highest
average borrower's AAI were selected to represent the high-income borrower's profile in each state. The same methodology applies to both median and low-income borrower profiles in each state. The contractor assessed how much payment assistance borrowers with low, median, and high incomes would receive, as well as the proportion of their income that would go toward housing under each alternative.

Under the current formula and Alternative 2, borrowers receive similar payment assistance and pay a similar percentage of their income to housing.

Under Alternative 3, borrowers with high incomes in California and Illinois receive significantly less payment assistance than under the current formula, and many of them would also pay more than 29 percent of their income toward housing, thus disqualifying them from receiving a section 502 loan.
Exhibits 18 and 19 below illustrate these results:

Exhibit 18.-Payment Assistance Amounts in High-, Medium-, and LowCost States, Current Formula and Alternatives
Payment Assistance in High and Low Cost States


Exhibit 19.—Adjusted PITI-to-Income Ratios in High-, Medium-, and Low-Cost States, Current Formula and Alternatives


In addition, applying the three formulas to the new borrowers in FY $2003^{3}$, the analysis showed that the average ratio of borrower PITI with assistance to income was nearly identical for each formula, with Alternative 3 the lowest ( 26.7 percent) and the current formula the highest (27.4 percent). ${ }^{4}$ The ratio of payment
assistance to total payment for principal, interest, taxes, and insurance was also fairly uniform across the three alternatives, with Alternative 3 the lowest at ( 38.3 percent) and the current formula the highest at 39.8 percent. ${ }^{5}$ More noteworthy was the number of current borrowers each formula would exclude from the program. Applying the
requirements of each formula to the new borrowers in FY 2003, it was found that under Alternative 3 a sizeable number would have payments that exceed the maximum payment to income ratio of 29 percent for very low-income borrowers and 33 percent for lowincome borrowers.

ExHIbIT 19

| Scenario | Average ad- <br> justed PITI <br> to income <br> (percent) | Average <br> PITI to <br> income (ex- <br> clude 17 <br> outliers)* <br> (percent) | Number of <br> borrowers <br> $>29 \%$ | Percent of <br> total | Number of <br> borrowers <br> $>33 \%$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Percent of |  |  |  |  |  |
| total |  |  |  |  |  |

*Notes: 1. Exclude the 17 outliers with the percentage exceeding $100 \%$.
2. Based on 5,954 new non-leveraged loan borrowers' information in fiscal year 2003.

## Revision of the Payment Assistance Calculation

RHS proposes to revise the payment assistance formula by implementing Alternative 2. Payment assistance will be calculated by taking the difference between the total cost of PITI minus the borrower's contribution, which will be the higher of 25 percent of AAI or P\&I calculated at a 1 percent interest rate plus the cost of taxes and insurance.

## Formula

## Payment Assistance $=$ PITI-Borrower's PITI Contribution

Borrower's contribution is the higher of the following calculations:

- $25 \%$ of AAI
- P\&I calculated at $1 \%$ Interest Rate $+T \notin I$
Alternative 2 improves upon the current formula in that it is a more simplified approach and is easier to explain to borrowers and others interested in the program. Alternative 2 does not rely on AMI, which was the main factor in unintended consequences of the current formula. In addition, Alternative 2 provides for consideration of property taxes and insurance cost which is very important in some segments of the RHS market. Under alternative 2, borrowers may be encouraged to buy the most expensive home possible in order to get the maximum amount of payment assistance. This is similar to the current formula. The Agency believes that this issue is mitigated by loan underwriting

[^1]criteria, such as repayment ratios and Area Loan Limits. Borrowers in high tax areas will receive proportionately less payment assistance than borrowers in low tax areas. This is also similar to the current formula.

Alternative 3, on the other hand, provides more generous payment assistance to higher income borrowers in many cases, is a more complex formula requiring periodic adjustments, and would exclude more borrowers with PITI costs in excess of $33 \%$ of income than would Alternative 2 or the current formula.

The impact of implementation of Alternative 2 is the removal of AMI as part of the calculation. This will result in a more consistent and fair distribution of subsidy, especially in neighboring counties.

## Leveraged Loans

Leveraged loans, under the current regulation, are not subject to the floor rate portion of the payment assistance formula. Payment assistance for a leveraged loan is determined using only the EIR. This provision has influenced the payment assistance calculation as well as the amount of funds available for borrowers in rural areas. To assess the impact of leveraged loans, RHS included a review of the leveraging policy in its overall assessment of the payment assistance formula.

In the mid-1990s, RHS adopted a policy of encouraging borrowers to obtain a portion of their financing from commercial lenders. The rationale

[^2]behind this policy was, in part, to increase the amount of funds available for rural borrowers by utilizing private lenders to supply a portion of the financing. For example, if RHS has authority to lend $\$ 1$ billion for section 502 direct loans and borrowers collectively secure 20 percent of their financing from private lenders, then RHS has effectively increased its available funding to $\$ 1.2$ billion and is able to assist 2,500 more families than otherwise would have been possible (assuming an average principal amount of $\$ 80,000$ ). However, the results of the payment assistance assessment demonstrate that the actual effect of leveraging decreases the amount of funds available.

## Effects of Leveraging Policy on Program Level

The following exhibits demonstrate the effects of the current leveraging policy on the amount of funds available to finance housing in rural areas. The Payment Assistance to Principal and Interest payment at the note rate (PA/PI Ratio) represents the most significant factor that determines the subsidy rate for the program. For the purposes of this illustration, it is assumed that the other four inputs to calculate subsidy rate remain constant. Thus, the same percentage change in the PA/PI ratio will be carried over to the subsidy rate. Further, to demonstrate the effects, it is necessary to assume the level of budget authority remains the same.

Definitions:

[^3]- Program level is the amount of financing available to finance single family homes.
- Budget Authority is the actual cost of providing the financing.
- Subsidy Rate is the factor used to determine budget authority. It includes interest subsidy, a factor of loan losses, maintenance, and other costs associated directly with the loan.

The program level is determined by dividing available budget authority by the subsidy rate. For example, under the current formula, $\$ 201$ million in budget authority divided by .194 subsidy rate (the program subsidy rate for FY 2003) equals $\$ 1,038$ million in program level. There is only one subsidy rate for the entire section 502 direct loan program,
which includes both leveraged, and non-leveraged loans. The following rates are for illustrative purposes to show the difference in cost for the leveraging provision of the payment assistance formula (i.e. leveraged loans under the current formula are not subject to the payment assistance floor rate.)
Exhibit 20.

Current Formula Including Leveraging Provision

| Program level | Budget authority | Subsidy rate | PA/PI ratio |
| :---: | :---: | :---: | :---: |
| \$1,038 million ...................................................... | \$201 million ......................................................... | 19.40\% | 39.75 |

## Alternative 2 Without Leveraging Provision

| Program level | Budget authority | Estimated subsidy rate | PA/PI ratio |
| :---: | :---: | :---: | :---: |
| \$1,100 million ...................................................... | \$201 million .......................................................... | 18.27\% | 37.43 |

Alternative 2 With 30\% Leveraging Requirement

| Program level | Budget authority | Estimated subsidy rate | PA/PI ratio |
| :---: | :---: | :---: | :---: |
| \$838 million ......................................................... | \$201 million ......................................................... | 23.99\% | 49.16 |

Comparing the first two formulas, the 5.8 percent decrease in the PA/PI ratio occurs with the elimination of the leveraging provision. Applying the same percentage decrease to the subsidy rate and dividing the budget authority by that result produces a $\$ 62$ million (or 6 percent) increase in the program level.
Conversely, with the inclusion of a requirement of obtaining 30 percent of each loan from commercial lenders, the PA/PI ratio increases by 24 percent. Applying the same percentage increase
to the subsidy rate raises it to 23.99 percent, which causes the program level to decrease 19 percent to $\$ 838$ million.

Of the 219,281 payment assistance agreements analyzed as part of this assessment, 66,451 (30 percent) were for leveraged loans, meaning that a portion of the original principal amount was obtained from a private lender. ${ }^{6}$

Even though 30 percent of the 219,281 payment assistance agreements made between 1996 and 2003 were associated with leveraged loans, the leveraged
portion of the amount of principal financed by borrowers was relatively insignificant. Of the 10,502 new borrowers in fiscal year 2003, 4,548 (43 percent) were leveraged loans, but the leveraged portion of the principal accounted for only 8.16 percent of the total loan level. ${ }^{7}$ The effect of leveraging at different thresholds (e.g., 30 percent and 40 percent), on the total loan volume is demonstrated in the following exhibits:

Exhibit 21.-Details of Fiscal Year 2003 New Borrowers' Leverage Information

| Current formula | PA/P\&I @ note rate year 1 | Number of non leveraged loans | Number of leveraged loans | Total loans | \$ Leveraged Ioan amount | \$ Total loan amount | Leveraged loans/total amount (percent) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Actual Payment Assistance ................... | 39.75\% | 5,954 | 4,548 | 10,502 | \$77.4 M | \$948 M | 8.16 |

Payment Assistance Ratio of Alternative 2 in Year 1

| Scenario | Provision \& threshold | PA/P\&I @ note rate in year 1 (percent) | Leveraged loans | Total | \$ Leveraged amount | \$ Total Ioan amount | \$ Leveraged/\$ total (percent) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 ............ | Without Leverage | 37.43 | 0 | 10,502 | \$0.00 | \$948,343.39 | 0.00 |
| 2 ............. | With Provision 30\% Threshold ................. | 49.16 | 3,850 | 10,502 | 96,999.33 | 948,343.39 | 10.23 |
| 3 .............. | With Provision 20\% Threshold ................ | 19.15 | 4,646 | 10,502 | 79,169.39 | 948,343.39 | 8.35 |

[^4][^5]Note: In evaluating the effects of requiring borrowers to obtain 30 percent of the principal from commercial lenders, it was apparent that leveraging would benefit only 3,850 of the 10,502 borrowers, and the remainder would obtain a non-leveraged loan. Some elect to pay 25 percent of AAI toward PITI, and some are paying at 1 percent interest rate under a non-leveraged scenario. The equivalent amount of leveraged principal for the 3,850 borrowers is $\$ 97$ million, equaling 10.23 percent of the total lending. The same logic would hold true if the leveraging threshold was set at 20 percent.

Because leveraging did not appear to be achieving the policy objective of increasing the funding available for rural homeowners, the assessment also analyzed the results of raising the leveraging threshold to minimum levels of 20 percent and 30 percent. Not only did establishing a minimum level not materially affect the total amount of funding available, 8.35 percent and 10.23 percent respectively, the minimum levels significantly increased the amount of payment assistance required.

Hence, the policy of using the payment assistance formula to encourage leveraging actually decreases available funding. The effect, with two different market interest rates, is demonstrated in the following exhibits:

## Assumptions

(1) $\mathrm{AAI}=\$ 24,000$
(2) Note Rate $=$ Market Rate
(3) Annual T\&I $=1.8$ percent of principal

Exhibit 22.—Market Interest Rate 6 Percent

| No. | Scenario | Total original amount | USDA Ioan amount | PA | PA ratio (PA/USDA P\&I) (percent) | Borrower's total P\&I | Adjusted PITI-to-income ratio (percent) | Weighted average interest rate (percent) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 ................ | Non-Leveraged .............. | \$90,000 | \$90,000 | \$142 | \$27 | \$380 | 25.00 |  |
| 2 | Leveraged (20\%) ........... | 90,000 | 72,000 | 204 | 49 | 318 | 21.90 | 2.0 |
| 3 ................. | Leveraged (30\%) ........... | 90,000 | 63,000 | 179 | 49 | 344 | 23.18 | 2.5 |

Exhibit 23.—Market Interest Rate 8 Percent

| No. | Scenario | Total original amount | USDA loan amount | PA | PA ratio (PA/USDA P\&I (percent) | Borrower's total P\&I | Adjusted PITI-to-income ratio (percent) | Weighted average interest rate (percent) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Non-Leveraged | \$90,000 | \$90,000 | \$267 | 41 | \$380 | 25.00 |  |
| 2. | Leveraged (20\%) | 90,000 | 72,000 | 304 | 59 | 343 | 23.14 | 2.40 |
| 3 .......... | Leveraged (30\%) | 90,000 | 63,000 | 266 | 59 | 381 | 25.04 | 3.10 |

Based on the results demonstrated by this analysis, RHS proposes not to provide additional payment assistance or use the payment assistance formula as a means of encouraging the use of leveraged funding. It is simpler to have a single calculation. So, in conclusion, RHS proposes to adopt Alternative 2, under which payment assistance will be based on a borrower contribution of $25 \%$ of AAI towards PITI, however in no case will the amount of payment assistance exceed the amount needed to repay the loan if it were amortized at a one percent rate.

## List of Subjects in 7 CFR Part 3550

Accounting, Housing, Loan programs-Housing and community development, Low and Moderate income housing, Manufactured homes, Reporting and recordkeeping requirements, Rural areas, Subsidies.

Therefore, Chapter XXXV, title 7, Code of Federal Regulations is proposed to be amended to read as follows:

## PART 3550—DIRECT SINGLE FAMILY HOUSING LOANS AND GRANTS

1. The authority citation for part 3550 continues to read as follows:

Authority: 5 U.S.C. 301; 42 U.S.C. 1480.

## Subpart B—Section 502 Origination

2. Section 3550.68 is revised to read as follows:

## §3550.68 Payment subsidies.

RHS administers three types of payment subsidies: interest credit, payment assistance method 1, and payment assistance method 2. Payment subsidies are subject to recapture when the borrower transfers title or ceases to occupy the property.
(a) Eligibility for payment subsidy. (1) Applicants or borrowers who receive loans on program terms are eligible to receive payment subsidy if they personally occupy the property and have adjusted income at or below the applicable moderate-income limit.
(2) Borrowers with loans approved before August 1, 1968, are not eligible for payment assistance, even if they assumed the loan after that date.
(3) Payment subsidy may be granted for initial loans or subsequent loans made in conjunction with an assumption only if the term of the loan is at least 25 years or more.
(4) Payment subsidy may be granted for subsequent loans not made in
conjunction with an assumption if the initial loan was for a term of 25 years or more.
(b) Determining type of payment subsidy. (1) A borrower currently receiving interest credit will continue to receive it for the initial loan and for any subsequent loan for as long as the borrower is eligible for and remains on interest credit.
(2) A borrower currently receiving payment assistance using payment assistance method 1 will continue to receive it for the initial loan and for any subsequent loan for as long as the borrower is eligible for and remains on payment assistance method 1.
(3) A borrower who has never received payment subsidy, or who has stopped receiving interest credit or payment assistance method 1, and at a later date again qualifies for a payment subsidy, will receive payment assistance method 2.
(c) Calculation of payment assistance. Regardless of the method used, payment assistance may not exceed the amount necessary if the loan were amortized at an interest rate of one percent.
(1) Payment assistance method 2. The amount of payment assistance granted is the lesser of the difference between:
(i) The annualized promissory note installment plus the cost of taxes and insurance less twenty-five percent of the borrower's adjusted income; or
(ii) The annualized promissory note installment less amount the borrower would pay if the loan were amortized at an interest rate of one percent.
(2) Payment assistance method 1. The amount of payment assistance granted is the difference between the annualized note rate installment as prescribed on the promissory note and the lesser of:
(i) The floor payment, which is defined as a minimum percentage of adjusted income that the borrower must pay for PITI: 22 percent for very lowincome borrowers, 24 percent for lowincome borrowers with adjusted income below 65 percent of area adjusted median, and 26 percent for low-income borrowers with adjusted incomes between 65 and 80 percent of area adjusted median; or
(ii) The annualized note rate installment and the payment at the
equivalent interest rate, which is determined by a comparison of the borrower's adjusted income to the adjusted median income for the area in which the security property is located. The following chart is used to determine the equivalent interest rate.

Percentage of Median Income and the Equivalent Interest Rate

When the applicant's adjusted income is:

| Equal to or more than: (percent) | BUT less than: | THEN the equivalent interest rate is ${ }^{1}$ (percent) |
| :---: | :---: | :---: |
| 00 | 50.01 of adjusted median income | 1 |
| 50.01 | 55 of adjusted median income | 2 |
| 55 | 60 of adjusted median income ............................................................... | 3 |
| 60 | 65 of adjusted median income | 4 |
| 65 | 70 of adjusted median income | 5 |
| 70 | 75 of adjusted median income | 6 |
| 75 | 80.01 of adjusted median income ........................................................... | 6.5 |
| 80.01 | 90 of adjusted median income ............................................................... | 7.5 |
| 90 | 100 of adjusted median income | 8.5 |
| 100 | 110 of adjusted median income ............................................................. | 9 |
| 110 | Or more than adjusted median income ................................................... | 9.5 |

${ }^{1}$ Or note rate, whichever is less; in no case will the equivalent interest rate be less than one percent.
(d) Calculation of interest credit. The amount of interest credit granted is the difference between the note rate installment as prescribed on the promissory note and the greater of:
(1) Twenty percent of the borrower's adjusted income less the cost of real estate taxes and insurance, or
(2) The amount the borrower would pay if the loan were amortized at an interest rate of one percent.
(e) Annual review. The borrower's income will be reviewed annually to determine whether the borrower is eligible for continued payment subsidy. The borrower must notify RHS whenever an adult member of the household changes or obtains employment, there is a change in household composition, or if income increases by at least 10 percent so that RHS can determine whether a review of the borrower's circumstances is required.
Dated: February 3, 2006.
Thomas C. Dorr,
Under Secretary, Rural Development. [FR Doc. 06-1349 Filed 2-16-06; 8:45 am] BILLING CODE $3410-\mathrm{XV}-\mathrm{P}$

DEPARTMENT OF TRANSPORTATION

## Federal Aviation Administration

## 14 CFR Part 23

[Docket No. CE239; Notice No. 23-06-01SC]

Special Conditions: Societe de Motorisation Aeronautiques (SMA) Engines, Inc., Cessna Models 182Q and 182R; Diesel Cycle Engine Using Turbine (Jet) Fuel
agency: Federal Aviation Administration (FAA), DOT.
ACTION: Notice of proposed special conditions.

SUMMARY: This notice proposes special conditions for the Cessna Models 182Q and 182R airplanes with a Societe de Motorisation Aeronautiques (SMA) Model SR305-230 aircraft diesel engine (ADE). This airplane will have a novel or unusual design feature(s) associated with the installation of a diesel cycle engine utilizing turbine (jet) fuel. The applicable airworthiness regulations do not contain adequate or appropriate safety standards for installation of this new technology engine. These proposed special conditions contain the additional safety standards that the Administrator considers necessary to establish a level of safety equivalent to that established by the existing airworthiness standards.

DATES: Comments must be received on or before June 19, 2006.
ADDRESSES: Comments on this proposal may be mailed in duplicate to: Federal Aviation Administration, Regional Counsel, ACE-7, Attention: Rules Docket, Docket No. CE239, 901 Locust, Room 506, Kansas City, Missouri 64106, or delivered in duplicate to the Regional Counsel at the above address.
Comments must be marked: CE239. Comments may be inspected in the Rules Docket weekdays, except Federal holidays, between 7:30 a.m. and 4 p.m.

## FOR FURTHER INFORMATION CONTACT:

Peter L. Rouse, Federal Aviation Administration, Aircraft Certification Service, Small Airplane Directorate, ACE-111, 901 Locust, Kansas City, Missouri, 816-329-4135, fax 816-3294090.

## SUPPLEMENTARY INFORMATION:

## Comments Invited

Interested persons are invited to participate in the making of these proposed special conditions by submitting such written data, views, or arguments, as they may desire. Communications should identify the regulatory docket or notice number and be submitted in duplicate to the address specified above. All communications received on or before the closing date for comments will be considered by the Administrator. The proposals described in this notice may be changed in light


[^0]:    ${ }^{1}$ For the purposes of the section 502 program, rural areas are statutorily defined in section 520 of the Housing Act of 1949, 42 U.S.C. 1490 and its implementing regulation, 7 CFR 3550.9.
    ${ }^{2}$ Section 501(c) (42 U.S.C. 1471(c)).

[^1]:    ${ }^{3}$ New Non-Leveraged Loan borrowers who have loan origination dates within fiscal year 2003 (10/ $1 / 02$ to $9 / 30 / 03$ ) and have the first payment

[^2]:    assistance agreement records in the provided dataset.
    ${ }^{4}$ Average borrowers' adjusted PITI-to-Income ratio was calculated using a simple average.

[^3]:    ${ }^{5}$ Average ratio of payment assistance to PITI was calculated using a weighted average of original loan amounts.

[^4]:    ${ }^{6}$ Included in the definition of leveraged loans are situations in which non-profit organizations provide a grant to buy down the original principal amount.

[^5]:    ${ }^{7}$ The assessment was performed on the borrowers who have a loan origination date within fiscal year 2003 and have the first payment assistance agreement in the provided dataset.

