This report was prepared under a contract with USDA to analyze the Rural Development Multi-family Housing Program, identify problems, and provide recommendations for changes to address such problems. USDA is in the process of reviewing this report along with other internal reviews to determine what actions, if any, should be taken to modify the current Multi-family Housing Program. Any statements, recommendations, or conclusions made in this report do not represent the views of the Rural Development Mission Area, the Secretary of Agriculture, or the Administration. This is one of a number of options to be considered when contemplating changes to the program.

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Prepared for the U.S. Department of Agriculture
Rural Development

Rural Rental Housing - Comprehensive Property Assessment and Portfolio Analysis

Final Study Report - Appendix: Market Assessment Report

November 2004

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The primary authors of the Market Assessment Report were Charlie Wilkins of The Compass Group, LLC and Rick Samson of AEW Capital Management, L.P.

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The ICF Team
Market Assessment Report
Executive Summary

[Note: This Executive Summary and the full Market Assessment Report refer to the Rural Housing Service (RHS), which is the agency within USDA's Rural Development Mission Area with responsibility for the Section 515 Rural Rental Housing Program.]

The Market Assessment Task: Four Sub-Tasks

In the Market Assessment task, we were charged with estimating the costs to preserve and recapitalize the 333 properties (13,838 units) in the sample portfolio, then using expansion factors (provided by RHS) to expand those estimates to the entire §515 portfolio (15,899 properties and 434,296 units)[1]. These costs take two major forms:

Sub-Task 1: Estimate Costs To Minimize Prepayment[2] – for the relatively small subset of the portfolio for which prepayment (and conversion to a market-rent property) is economically feasible, the cost to RHS of incentives needed to obtain owners' agreement not to prepay[3]. **We estimate that 10% of the properties (and 11% of the units) in the §515 portfolio have an economically viable prepayment option and thus might require these incentives. We did not calculate the cost of these incentives, but we are prepared to do so if requested by RHS[4].** In its May 2002 prepayment report, GAO estimated that as many as 24% of owners might have an economically viable prepayment option. Our analysis suggests that prepayment might be viable for many fewer owners than GAO estimated. We emphasize that prepayment-viability is highly sensitive to the level of market rents, and to assumptions about how many existing residents might relocate[5]. See also the discussion of key findings below

[1] In addition to its §515 Rural Rental Housing portfolio, RHS has two smaller multifamily programs: the §516 "off farm" Farm Labor Housing program, and the §514 "on farm" Farm Labor Housing program. While we did not study either the §516 or §514 portfolios, we understand that §516 properties are largely similar to §515 properties and thus likely face similar issues. RHS should consider addressing the §516 portfolio at the same time it addresses the §515 portfolio.

[2] As noted elsewhere in this report, policymakers may choose to allow prepayment with few if any preconditions, and to protect residents from the resulting rent increases.

[3] Under current law, §515 loans originated before December 15, 1989 can be prepaid, but prepayment can occur only after a potentially lengthy process (pursuant to the Emergency Low Income Housing Preservation Act of 1987 (ELIHPA)) that takes into consideration the potential effect on residents and minorities. This process may result in restrictions on prepayment.

[4] RHS specified that the decision whether to pay any non-prepayment incentives and, if so, how such incentives might be calculated has not been made and, therefore, the policy parameters necessary for estimating the associated costs do not exist. We remain available to assist RHS in the calculation of incentives at such time as these parameters are determined.

[5] All else equal, the more residents who relocate, the less attractive prepayment becomes. If, for example, all residents would relocate, the prepayment transaction would have to finance the costs of making all units rent-ready, and the vacancy losses incurred during a full re-leasing of the property. Additionally, there would be strong political pressure against prepayment, because large numbers of residents would be inconvenienced. Conversely, if all residents can be expected to remain, prepayment becomes less expensive to the owner and less politically objectionable to residents and the community.

and Section 1 of this report. We also believe that owners' actual decisions to prepay or not prepay are sensitive to a wide variety of owner-specific considerations; see the discussion of Ownership Entity Dynamics in Section 4 of this report. Finally, we believe that actual prepayment decisions will be strongly affected by the particular policy responses selected (significantly, the form of economic protection provided to tenants, and the attractiveness of remaining within the RHS program under a new deregulated structure with better economic incentives).

Sub-Task 2: Estimate Costs To Prevent Deterioration – the cost to RHS to provide for adequate ongoing costs of operation, including increased Replacement Reserve funding. **We estimate that 92% of the properties (and 89% of the units) in the §515 portfolio would require increased funding, in order to meet this standard.** Our scope of work requires us to assume that this funding is provided through rent increases; in Section 4 we identify alternative funding approaches that we believe would be more cost-effective. **We estimate that the average rent increase that would be required is 14% ($40 per unit per month). We estimate that the federal cost to provide those rent increases is $210 million annually, and $2.6 billion over 20 years[6].** In its May 2002 prepayment report, GAO reported an RHS estimate ranging from $800 million to $3.2 billion of additional funding, over and above current funding levels, for long-term rehabilitation needs. Our analysis suggests that the portfolio's long-term needs are toward the high end of RHS' estimate. See also the discussion of key findings below, and Section 2 of this report.

It should be noted that properties at risk for prepayment typically will incur both sets of costs. That is, after the owner has agreed not to prepay, and been compensated for that agreement[7], typically it also would be necessary to increase rents to support the property's long-term viability.

Sub-Task 3: Assess The Portfolio For Preservation-Worthiness. We were also charged with assessing the rationale for preservation of the properties in the §515 portfolio. That is, to what extent does the portfolio exhibit characteristics generally associated with preservation-worthiness? **We found that the sample portfolio generally exhibits characteristics consistent with preservation-worthiness.** We also believe that, because the scores are relatively clustered, the crucial factors in actual property-specific preservation decisions are likely to be factors not considered in these scales, such as the opinions of stakeholders, the availability of other affordable housing in the vicinity, and the cost of providing alternative affordable housing**.** See the discussion of key findings below, and Section 3 of this report.

Sub-Task 4: Policy Alternatives for Preservation and Recapitalization. Finally, we were charged with identifying a range of policy alternatives for preservation and recapitalization of the RHS inventory. Evaluating those alternatives, in consultation with RHS, is part of our Scope of Work for future tasks.

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[6] Net present value, using a 5.0% federal long-term discount rate.

[7] The owner's compensation would be reduced by any amounts needed to meet property needs, for example to cure deferred maintenance.

- **We believe that RHS should consider <u>not</u> pursuing incentives (or pursuing incentives only in the most compelling circumstances), but instead allowing prepayment and giving residents economic protection against rent increases[8].**

- **Currently, if §515 loans are prepaid, most residents will lose both their rental assistance and their homes. Accordingly, we believe that providing appropriate economic protections to at-risk residents should be a very high priority for RHS.**

- **We believe that RHS needs a revised methodology for determining comparable market rents and/or property value, for use in prepayment situations.**

- **We identified several alternative funding approaches, to minimize prepayment and to prevent deterioration.**

- **We identified a number of "niche strategies" that RHS should consider pursuing in specific sub-portfolios.**

See the summary of key findings below, and Section 4 of this report.

Why Revitalize?

It is useful to consider what is likely to happen if RHS does not intervene, to preserve and revitalize the §515 portfolio. Although results will vary across the portfolio, our analysis indicates that, in general, these results will occur:

A decline in housing quality and level of maintenance. The rate of decline will accelerate as building systems age past their useful lives. For some properties, the decline will be irreversible. For other properties, the decline will be reversible, though at steadily increasing cost. If not reversed, the eventual result would be housing that is uninhabitable and perhaps not salvageable.

An increase in operating expenses, as building systems age past their useful lives. This increase may be dramatic.

Building systems that reached the end of their useful lives could not be replaced, while continuing to make mortgage payments on the §515 loans.

The §515 loans would go into default.

RHS would be able to realize little if any financial recovery.

[8] Economic protection could take a variety of forms, for example HUD Section 8 "conversion vouchers" that cover the actual market rent at the subject property (as long as the voucher-holder resides there), even if that market rent exceeds the normal Housing Choice Voucher 'payment standard'. Other examples include one-time cash awards, homeownership assistance, and various forms of time-limited rental assistance.

Over time, units – and entire properties – would have to be removed from the housing stock.

This scenario would also have profound implications for how property owners, managers and residents would interact with RHS. Once stakeholders believe that a particular property is not viable, stakeholders may behave in ways that run counter to RHS' public policy interests. For example, owners and managers may focus their attentions elsewhere, which would accelerate the property's decline. Similarly, residents may decide that it is not in their interest to continue to comply with their leases, once it becomes apparent that the owner is no longer able to comply with its requirements under the lease.

It is a generally accepted principle of asset management that if the property is worthy of preservation, in general a strategy of early intervention will be much less costly than allowing the property to decline. In any event, the cost to stabilize a property that is needed and potentially viable will be much less than the cost of replacing it (or providing some other acceptable way of meeting resident and community housing needs).

The HUD Experience: The "Older Assisted" Portfolio

A useful parallel is HUD's experience with its "older assisted" portfolio[9]. These properties typically began as partially assisted, with budget-based rents, and with rents below market. Properties suffered from high inflation of the 1970s and from rapidly escalating capital needs in the 1980s. HUD policies on cost containment for budget-based rents prevented many properties from achieving sufficient revenue to meet their costs. Other properties were made stable only by conversion to fully-assisted properties, in order to support needed rents that sometimes exceeded market levels. The HUD older assisted portfolio ended the 1980s as a nearly fully assisted portfolio, serving a concentrated-poverty clientele, and facing ongoing capital needs that significantly outstripped properties' Reserve funding. In the late 1990s, policymakers addressed the low-value end of the older assisted portfolio by granting debt relief through the Mark-to-Market program, and addressed the high-value end of the portfolio by allowing rent increases up to market levels.

We believe that something similar will be needed in the RHS portfolio, hopefully without repeating the intermediate steps of increasing the level of assistance, and overly concentrating extremely-low-income families. Similarly, we believe that RHS could propose a statutory structure under which it would be possible to revitalize the §515 program and properties more rapidly, at lower administrative cost, and at a lower per-unit cost, than has been possible for HUD under the statutory structure of its Mark-to-Market program.

[9] Section 236 and Section 221(d)(3) properties, developed mostly in the 1966-1978 timeframe.

Other Key Aspects of This Report

This report is based, in part, on the findings from the Capital Needs Assessment task under our scope of work. The findings in this report come from version 20 of the analytical model, utilizing the May 24, 2004 input data set.

Subsequent to delivery of this report, we will provide additional analysis of policy options.

Acknowledgment to HUD and OMHAR

The ICF Team would like to thank HUD's Office of Housing, and HUD's Office of Multifamily Housing Assistance Restructuring (OMHAR), for providing valuable data on more than 400 properties (located outside metropolitan areas) that have been assessed and restructured in HUD's Mark-to-Market program. HUD provided data on market rents, capital needs, restructuring costs, and property size. We reviewed that data in preparing this report. In particular, as discussed in Section 1 and Section 5 of this report, we utilized the market rent data in developing benchmarks for market rents that §515 properties might command in the open market.

HUD also provided a very helpful outline of the Mark-to-Market process, and a CD-ROM containing M2M program information such as the applicable statutes and regulations, the Operating Procedures Guide, template legal (closing) documents, the current Portfolio Restructuring Agreement (between OMHAR and its Participating Administrative Entities who develop restructuring plans for individual properties), and the template Restructuring Commitment (agreement between OMHAR and the property owner, to close a debt restructure transaction). In particular, lessons learned in the Mark-to-Market program are reflected in Section 4 of this report, in which we discuss policy alternatives for RHS.

The ICF Team
Market Assessment Report
Summary of Key Findings

Summary of Key Findings: Minimizing Prepayment

For an expanded discussion of these topics, see Section 1 of this report.

Key Assumption Regarding Right to Prepay. Under current law, owners of §515 properties (with §515 loans originated before December 15, 1989) have a conditional right to prepay their loans[10]. For purposes of this study, however, we assumed that owners with RHS loans originated before December 15, 1989 (and who had not already accepted RHS incentives not to prepay) would have the right to prepay essentially without restrictions[11]. On this basis, in the §515 portfolio, we estimate that 61% of owners (representing 62% of units) would have the right to prepay[12].

Prepayment Without Incentives May Be An Acceptable Outcome. In this study, we were asked to estimate the cost of a non-prepayment incentive. However, if residents were protected against rent increases, prepayment (without any RHS offer of incentives not to prepay) might be an acceptable public-policy outcome. This alternative is discussed in more detail in Section 1 of this report.

Prepayment Requires Market Rents That Are Quite High Relative to Current RHS-Approved Rents. In general, prepayment is economically viable only when rents can be increased significantly after prepayment (on average, the rents needed to support prepayment-viability are 60% and $201 per unit per month above current RHS-approved rents). This magnitude of this increase is driven primarily by the much higher debt service costs that owners would face, after giving up their 1% RHS loans, and secondarily by transition costs.

Methodology Variance Versus GAO. As noted in the Executive Summary, in May 2002 GAO estimated that as many as 24% of owners might have a viable prepayment option, versus the 10% that we estimate. However, our methodology differs significantly from the methodology used by GAO. GAO's methodology assumed that all otherwise prepayment-eligible properties meeting the following criteria would prepay:

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[10] Under current law, §515 loans originated before December 15, 1989 can be prepaid, but prepayment can occur only after a potentially lengthy process (pursuant to in the Emergency Low Income Housing Preservation Act of 1987 (ELIHPA)) that takes into consideration the potential effect on residents and minorities. This process may result in restrictions on prepayment.

[11] Presumably, if current law were to change, there would still be a requirement for RHS approval prior to prepayment, if only so that RHS could verify that the owner did in fact have the right to prepay under the loan documents and applicable law, and so that RHS could implement any available tenant protections.

[12] It should be noted that many §515 properties have multiple §515 loans. Our estimate includes only those owners who would have the right to prepay all §515 loans for a given property.

- The owner is full-profit or limited profit; and
- The property does not have a high percentage of RA; and
- The property is located in a county whose population increased from 1990 to 2000.

In other words, GAO did not attempt a property-by-property assessment of market rents and economic viability of prepayment. We did perform a property-by-property assessment, with the benefit of considerably more data than was available to GAO. We did not differentiate by owner type[13]. We took population growth[14], and percentage of RA, into account in our analysis, but these characteristics can be overcome by other property characteristics, such as a low outstanding balance on the §515 loan(s). In summary, we believe that GAO's methodology was reasonable in light of data available to GAO, and that our results should be seen as an improvement in accuracy based on data not available to GAO.

Snapshot of Typical Prepayment-Viable Property (#45). This is an elderly property, constructed in 1973, with a remaining §515 loan balance of $25,248 per unit. The property is located in an area that had 8.8% population growth from 1990 to 2000. We estimate that the property needs a 10% rent increase in order to be viable long-term as RHS-restricted housing. We estimate that the owner would need market rents at least 54% above current RHS-approved rents, in order for prepayment to be economically viable. We estimate that market rents are 78% above current RHS-approved rents.

Cost of Incentives Not To Prepay. We did not calculate a cost for these incentives. RHS specified that the decision whether to pay any non-prepayment incentives and, if so, how such incentives might be calculated has not been made and, therefore, the policy parameters necessary for estimating the associated costs do not exist. We remain available to assist RHS in the calculation of incentives at such time as these parameters are determined. Our experience in similar contexts indicates that the economic viability of prepayment is quite sensitive to the level of market rents that the property could command after prepayment. Accordingly, we recommend that any actual incentives be determined only after making a suitably robust determination of comparable market rents.

[13] We understand that the prepayment provisions of the loan documents, and applicable law, make no distinctions between owner types. That is, a non-profit or public agency §515 owner has the same prepayment rights (and restrictions) as a full-profit or limited-profit §515 owner. As we point out in Section 1, however, owner mission is a material factor in individual prepayment decisions.

[14] We will measure population growth for the three-mile radius surrounding the property, instead of using county data.

RHS Needs A Revised Process For Determining Comparable Market Rents and/or Value, for Use In Prepayment Situations. Experience in other programs (e.g. HUD preservation, HUD mark-to-market) has shown that determining market rent is difficult even in thickly populated markets, even more difficult in thinner markets, such as rural areas experiencing minimal population growth. Moreover, experience in HUD's Mark-to-Market program indicates that it is not sufficient to make a desk review of an owner's rent comparability study. Instead, RHS should commission its own rent comparability study, from a licensed appraiser, under appropriate guidance. RHS' appraiser should evaluate any information provided by the owner. Where appropriate, an RHS official should also make a site visit.

We understand that RHS is currently in the process of revising its procedures for determining market rents and value.

> NOTE: Our analytical model estimates market rents based on readily available data from the Census Bureau and other national sources. We found that this method can estimate market rents accurately across a portfolio but is not capable of making accurate estimates of market rents on a property-by-property basis. Accordingly, we believe that all property-specific decisions should be based on a property-specific rent comparability study as discussed above.

Public-Policy Importance of Minimizing Prepayment. In simple magnitude, the number of properties at risk for prepayment is overshadowed by the much larger number of properties at risk for deterioration. However, because under current law RHS residents are not entitled to protection against rent increases, prepayment would result in not only displacement of low-income residents, but also loss of their rental assistance. As a result, minimizing prepayment is an issue of pressing importance, out of proportion to the number of properties involved. Similarly, especially so long as residents are not protected, the threat of prepayment typically induces a high level of political concern at the local, state, and national levels.

Summary of Key Findings: Preventing Deterioration

For an expanded discussion of these topics, see Section 2 of this report.

Typically, properties in the sample have current RHS-approved rents that are far too low to support long-term costs of operation while continuing to make mortgage payments on their §515 loans. In Section 2, we discuss several reasons why this has occurred.

Most Reserves Are Under-Funded. In the §515 portfolio, we estimate that 100% of properties have Replacement Reserve funding that, if continued at current levels, would be inadequate to meet their projected 20-year capital needs (as determined by the ICF Team in the Capital Needs Assessment task). For the 100% of properties that need increased Reserve funding, the average Reserve deposit needs to be increased by $43 per unit per month (from the current $31 PUPM average to the needed $74 PUPM).

NOTE: These levels of Reserve funding are somewhat higher than traditional industry rules of thumb. In Section 2, we discuss in some detail why these higher Reserve deposits are in fact needed.

NOTE: For purposes of this analysis, we assume that the shortfall is addressed through a rent increase as needed to cover costs of operation, including a new Reserve deposit based on the Capital Needs Assessment results. Other funding approaches are possible, are identified in Section 4 of this report, and will be investigated further in other parts of our overall consulting engagement.

Under-Funded Reserves Are Not The Only Problem. If RHS supports viability by providing rent increases, we estimate that 92% of properties would require increased rents, for three reasons.

1. 100% of properties would require a higher Reserve deposit[15].

2. Actual vacancy levels (in November 2003) and industry standards suggest that 81% of properties would require a higher allowance for vacancy and collection loss than RHS approved in the 2003 budget. For an expanded discussion of our vacancy and collection loss assumptions, see Section 2, Needed Rent Increases.

3. 18% of properties, under RHS-approved rents, would have an inadequate operating margin. In this report, we use the term "operating margin" to refer to the portion of Net Operating Income that is over and above debt service on the §515 loan(s). Synonyms for operating margin include "debt service coverage" and "operating cash flow"[16].

Measured across all 333 properties, the average increase that would be required is 14% ($40 PUPM). Although virtually all of the aggregate cost is attributable to item 1 above (increased Reserve deposits), significant numbers of properties would also require increased vacancy allowances and/or increased operating margin.

Experience with budget-based rents in other affordable housing programs indicates that, over time, properties tend to have rents that are inadequate to support long-term viability. Accordingly, in Section 4, we discuss potential regulatory changes to the rent-setting and rent-increase-approval processes.

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[15] These properties all have inadequate Reserve deposits. However, a few properties have adequate RHS-approved rents, for example because RHS has included significant amounts of capital expenditures in the approved budget.

[16] We sized the operating margin to be equal to the RHS-approved annual owner return (averaging $154 per unit per year across the §515 portfolio). See the discussion of Operating Margin in Section 4, in which we point out that the RHS-approved owner return may be an insufficient margin to provide protection against reasonably foreseeable income and expense shocks.

Snapshot of Property With Typical Capital Needs (#8). This elderly property has an existing Reserve balance of $2,818 per unit, and a current Reserve deposit of $291 per unit per year. We estimate the property needs a new Reserve deposit of $871 per unit per year. The first two years' needs are within the needed new Reserve deposit. We estimate that this property needs a rent increase of 19% in order to meet its ongoing needs. 86% of the rent increase is needed to fund the increased Reserve deposit.

Federal Cost of the Rent Increases. In the RHS portfolio, rent increases are borne partially by residents and partially by the government. Accordingly, we estimate that the federal costs to provide the rent increases would have the following components:

- Additional Rental Assistance (RA) outlays (for assisted residents, who pay 30% of adjusted income toward rent and utilities, increases in the RHS-approved rent are borne entirely by RHS). In the §515 portfolio 58% of total units have Rental Assistance.

- Additional Section 8 outlays, for the RHS residents who are assisted under HUD's project-based Section 8 program. As with RA, Section 8 bears the full amount of increases in the RHS-approved rent, for assisted units. Our sample suggests that in the §515 portfolio, 7% of total units have project-based Section 8 assistance.

- Additional outlays, for RHS residents who hold Housing Choice Vouchers. For purposes of this study, we assumed that 35,000 residents in §515 properties hold Housing Choice Vouchers[17]. On that basis, voucher holders occupy 9% of total units in the §515 portfolio.

- For the remaining "unassisted" residents (26% of units in the §515 portfolio), any share of the rent increase that policymakers determine should not be borne by residents. For purposes of this task, we assumed that RHS would bear 100% of the cost of a one-time rent increase, to stabilize the property. In making this assumption, we considered a variety of past decisions by policymakers, in which unassisted residents received significant protections against rent increases in preservation and recapitalization transactions.

As we point out elsewhere in this report, providing viability via rent increases is unlikely to be the optimum public-policy outcome. If, conversely, viability were funded via debt

[17] We have not been able to locate good source data. Anecdotally, however, a significant number of rural Housing Choice Vouchers are used in "non-assisted" §515 units. We assumed that roughly 25% of occupied "non-assisted" §515 units are, in fact, occupied by recipients of Housing Choice Vouchers (35% of §515 units do not have either RA or project-based §8, RHS data indicate that 85% of those units are occupied, and 25% of the occupied units is roughly the 35,000 units we assumed).

service relief, or capital advances[18], there would be no need to protect unassisted residents against rent increases. Similarly, there would be no need to "gross up" the needed amounts to make allowance for vacancy loss, collection loss, management fees, and (in some instances) increased local real estate taxes. Moreover, funding viability via rent increases could expose RHS to taxpayer criticism for driving some assisted rents above comparable market rent levels.

Federal Budget Implications. From a federal "budget authority" standpoint, these costs (if funded via rent increases) would be incurred through amendments to existing RA contracts, Section 8 contracts, and voucher Annual Contributions Contracts, from higher budget authority in future RA and Section 8 and voucher renewals, and possibly from new budget authority for assistance to currently unassisted residents. If funded in other ways, the federal budget implications might differ dramatically (for example, grants would require dollar-for-dollar Budget Authority and outlays in the year in which the grants were provided). *In general, we believe that stabilizing the portfolio through rent increases is a relatively cost-inefficient method, when compared to methods that utilize debt restructuring and capital advances / grants. Using more cost-efficient funding approaches likely would reduce both the "budget authority" and "outlay" costs to the federal budget.*

Portfolio-Level Cost to Prevent Deterioration is $210 Million Annually. Expanded to the entire RHS portfolio, we estimate the first year federal cost to prevent deterioration (utilizing rent increases) would be:

$119 million per year in additional RA outlays.

$6 million per year in additional Section 8 outlays.

$28 million per year in additional outlays for Housing Choice Vouchers.

$57 million per year in additional outlays (under new legislative authority and appropriations) for assistance to currently unassisted residents.

Of the costs listed above, the first and last ($176 million total) would be part of the RHS budget, and the Section 8 and voucher costs ($34 million total) would be part of the HUD budget. In subsequent years, these costs would increase by at least the rate of inflation.

It should be noted that the average rent increase varies modestly across the four categories listed above, from a low of $26 PUPM (for units with project-based Section 8) to more than $50 PUPM for unassisted and voucher units. This is because the rent increases are not distributed evenly across properties in the sample portfolio; the sample data indicate that properties with a high percentage of RA would require less of a rent increase than properties with a low percentage of RA.

[18] A capital advance is treated as a grant so long as the owner complies with its affordable housing use agreement.

In the aggregate, the cost to prevent deterioration ($210 million per year and $2.6 billion net present value for 20 years) is certain to far outweigh the cost to prevent prepayment (which we have not yet calculated)[19]. Accordingly, although the prepayment issue is certainly one of concern – from a policy standpoint and from a political standpoint – in economic reality the larger issue for RHS is how to prevent properties from deteriorating over time.

> NOTE: In preserving a prepayment-viable property, RHS typically would incur both sets of costs. First, a non-prepayment incentive compensates the owner for the economic value of the prepayment option (this incentive is reduced by any costs the owner would need to incur, for example to cure deferred maintenance). Second, RHS would incur costs to fund the rent increase that would be required in order to generate adequate reserve funds, and to meet other costs of operation.

Cost Per Unit Varies Considerably. For any given amount of federal expenditure, a varying number of units could be preserved. If RHS followed a policy of prioritizing properties having the lowest per-unit costs, our model indicates that each successive group of roughly 100,000 units would require funding of steeply increasing cost (costs reflect one year of additional annual funding):

- The first group would have a net negative cost[20].
- The second group would cost $38 million per year, averaging $388 per unit in the first year.
- The third group would cost $59 million per year, averaging $582 per unit in the first year.
- The fourth group would cost $82 million per year, averaging $827 per unit in the first year.
- The final $52 million per year would pay for the final roughly 34,000 units, averaging over $1,500 per unit in the first year.

Net Present Value Cost is $2.6 Billion. The net present value cost to prevent deterioration (via rent increases) for 20 years is $2.6 billion[21].

Comparison to May 2002 GAO Report. As discussed in the Executive Summary, GAO reported an RHS estimate ranging from $800 million to $3.2 billion for long-term

[19] In making this statement, we assume that the incentive parameters that might later be provided by RHS will be based on the economic impact of prepayment on tenants, and/or on the economic value of the owner's prepayment option. Our work thus far suggests that these amounts are considerably less than the cost to RHS to prevent deterioration.

[20] This group includes properties whose existing RHS-approved rents are more than adequate. Our model assumes these rents are reduced.

[21] Using a 5.0% federal long-term discount rate, and assuming zero inflation.

rehabilitation needs in the §515 portfolio. Our analysis suggests that the portfolio's long-term needs are toward the high end of RHS' earlier estimate. We have not interviewed RHS staff to determine the source of the earlier estimate. However, we believe that the following aspects of our analysis represent advances from the information available to RHS at the time they made their estimate:

- We had the benefit of property-specific capital needs assessments for the sample portfolio.

- We took into account the extent to which properties' approved budgets fell short of amounts reasonably needed to meet costs other than capital needs.

Finally, it is now roughly two years later, and RHS' earlier estimates should be adjusted for inflation.

Summary of Key Findings: Preservation-Worthiness

See Section 3 of this report for an expanded discussion of these topics.

Introduction. Preservation and recapitalization of the §515 portfolio will involve significant federal costs. When incurring those costs at an individual property, RHS will want to satisfy itself that the property continues to meet important resident and community needs and is otherwise worthy of the government's additional investment. In our scope of work, RHS asked us to develop a ranking methodology for preservation-worthiness. We see this methodology as one component of an eventual process that RHS might use to support property-by-property preservation and recapitalization decisions. For purposes of this study, the ranking methodology provides a birds-eye "macro" view of the sample portfolio and helps to illustrate the public-purpose value of the §515 portfolio.

Two 100 Point Scales. We developed two scales for assessing the 333 properties in the sample portfolio on the following two dimensions:

- Overall quality of the property itself. All else equal, we believe that RHS should prefer to preserve a well-maintained property that has high occupancy rates.
- Overall quality of the property's location. All else equal, we believe that RHS should prefer to preserve a property in an area with rapid population and job growth, and with market rents that are high relative to median incomes.

We also combine both scales to produce a composite scale.

Scales are Based on Objective, Readily Available Data. We selected attributes that could be collected from RHS data and from publicly available data from the Census Bureau and other sources. We designed the scales so that a property with all positive attributes would score 100, and so that a property with no positive attributes would score zero.

Range of Results. The 333 sample properties had scores ranging from:

26 to 85 on the property quality scale.

11 to 88 on the location quality scale.
26 to 80 on the composite scale.

The property quality scale results indicate that properties were much more likely to have a combination of positive attributes than a combination of negative attributes. The location quality scale results indicate that properties are located in market areas exhibiting nearly a full range of attributes. The composite scale results indicate that the sample properties exhibit characteristics broadly consistent with preservation-worthiness, and that the sample portfolio does not include any properties with especially low scores. There are no obvious "cut points" in the various scores; instead, the scores are relatively clustered.

General Conclusion. Our interpretation of the results is that the sample portfolio generally exhibits characteristics consistent with preservation-worthiness[22]. We also believe that, because the scores are relatively clustered, the crucial factors in actual property-specific preservation decisions are likely to be factors not considered in these scales, such as opinions of stakeholders.

Summary of Key Findings: Policy Alternatives

See Section 4 of this report for a more detailed discussion of these topics.

> NOTE: Many of the policy alternatives discussed in this report would require additional statutory authority, additional appropriations, or both.

Prepayment May Be An Acceptable Outcome. If residents are adequately protected (via "conversion vouchers" or otherwise) against rent increases, then allowing owners a relatively unrestricted right to prepay becomes an attractive option, rather than (or in addition to) offering incentives not to prepay. Under current law, the only §515 residents who are adequately protected are the 7% who have project-based §8, and the 9% of residents who already hold Housing Choice Vouchers.

Economic Protections for At-Risk Residents Will Require Legislative Authority And Appropriations. Under current law, most residents of RHS properties that are prepaid will lose both their rental assistance and their homes[23]. This is a serious flaw in the social safety net for low-income rural Americans.

A Revised Comparable Market Rent / Value Protocol Is Needed. Because non-prepayment incentives are so sensitive to the level of market rents, RHS needs a

[22] We understand anecdotally that some properties in the §515 portfolio are not worthy of preservation, for example properties with very high vacancy rates. However, we found no such properties in our sample, suggesting that while those properties may exist, they likely do not exist in large numbers.

[23] We estimate that 9% of residents already hold Housing Choice Vouchers. Another 7% have project-based Section 8 that we assume would be convertible to Housing Choice Vouchers in the event of prepayment. The 58% of residents who receive RHS Rental Assistance stand to lose their rental assistance altogether in the event of prepayment. The remaining unassisted residents are completely unprotected against the large rent increases that would result from prepayment.

suitably robust methodology for determining comparable market rents and fair market value, for purposes of assessing prepayment-viability and for purposes of determining non-prepayment incentives.

Structuring a Non-Prepayment Incentive. If RHS pursues a non-prepayment incentive, there are a variety of possible economic structures. For example, RHS could provide an equity take-out loan, instead of a one-time cash payment. Similarly, the debt service payments on an equity take-out loan could be funded either by payments directly from RHS, or from increased rents.

The form of incentives will affect not only RHS' cost but also the owners' net after-tax benefits. Experience in HUD preservation programs has shown that optimal structuring can improve both parties' results (lower cost to the government, higher owner participation). These very significant issues are beyond the scope of this study but are a logical next step should RHS choose to move forward with a non-prepayment incentive program.

Structuring a Deterioration-Prevention Initiative. There are a variety of possible structures for providing increased funds to meet capital needs and other costs of operation. For example, RHS could reduce the required monthly payments on existing §515 loans, in lieu of approving increased rents. As with non-prepayment incentives, deterioration-prevention programs could be economically structured in a variety of ways with differing budgetary costs, net present value costs, and owner participation.

Maintaining Affordability to Non-Assisted Residents. There are also a variety of possible structures for maintaining affordability to existing non-assisted residents, while allowing property rents to increase to the level that would be required to support long-term viability. For example, the one-time rent increase to achieve long-term viability could be borne disproportionately by the assisted units.

Niche Strategies. With respect to various sub-portfolios within the §515 portfolio, we identify asset management strategies specific to that sub-portfolio. For example, RHS needs strategies for smaller properties, for partially-assisted properties, for properties with Low Income Housing Tax Credits, and for properties with project-based Section 8 contracts (the so-called "515/8" properties).

Cross-Cutting Issues. In addition, there are cross-cutting policy issues, such as the very low levels of income among resident families, the extent to which the Agency should encourage transfers of ownership, and the extent to which the Agency should encourage consolidation of small properties into larger operating structures that can achieve economies of scale.

The ICF Team
Market Assessment Report
The Market Assessment Model

Introduction

Our market assessment model utilizes roughly 400 data elements for each of the 333 properties in the sample, plus global assumptions (for factors such as interest and inflation rates) that we consider realistic. The model produces an output database, containing 140 data elements for the sample portfolio, and an additional 140 data elements representing the expansion of the sample portfolio results so that they represent the entire §515 portfolio. We used the output database to develop the conclusions presented in this report. Additional information on the model is included in this report as follows:

Key calculations are discussed in Sections 1, 2 and 3.

Attachment A contains a summary of key conclusions from the model.

Attachment B contains global variables (assumptions) used in the model.

Individual model pages (worksheets) for a sample property are presented in Attachment C. The worksheet to calculate the non-prepayment incentive will be provided later, based on incentive parameters to be supplied by RHS.

Each page (worksheet) in the model is discussed in the Section 5 of this report.

Market Assessment Methodology

An outline of our methodology is included as Section 6 of this report.

The ICF Team
Market Assessment Report
Limiting Conditions

When considering this report, readers should keep in mind the following conditions that may limit the report's accuracy and applicability:

Sample. The 333-property sample was selected by RHS. We have undertaken no independent review of the sampling methodology. RHS selected the sample so that it would produce results that would be statistically significant at the level of the entire portfolio, and for certain portfolio subsets. Results will not be statistically significant for subsets other than those for which RHS designed the sample. In particular, results are not reliable at the level of individual properties. Accordingly, properties are identified by sample number and not by state, by name, or by RHS property ID number. A description of the sampling methodology, provided by RHS, is included below. We understand that RHS designed the sample so that, when expanded, it would produce results that are statistically reliable at the following levels:

- The entire portfolio.
- Property size subsets (2-11 units, 12-24 units, 25-50 units, 51-100 units and 101+ units).
- Property age subsets (pre 1979, 1979-1989, post-1989)
- The combination of property size and property age.
- Subsets by state.

Conversely, we understand that expanded results are not statistically reliable for other levels (for example, statistically reliable conclusions cannot be drawn for the combination of state and property size).

Expansion Factors. For each property in the sample, we calculated (and RHS economists approved) two expansion factors, by which that property's results were multiplied, to arrive at estimates for the entire portfolio. One factor expands the sample to the number of properties in the §515 portfolio. The second expands the sample to the number of units in the §515 portfolio. These expansion factors may be found at the end of Attachment B.

Market Rent Estimates. In accordance with our Statement of Work, we estimated market rents based on readily available, objective data, but we did not make on-the-ground comparisons to actual comparable rental housing in the local market. We believe that our estimates are reasonable for purposes of this study, but these estimates are not as accurate as could be achieved through property-specific, on-the-ground assessments for each of the 333 sample properties.

NOTE: Pursuant to an amendment to our Statement of Work, we made property-specific, on-the-ground assessments of comparable market rents

for a randomly selected 32 of the 333 sample properties. As a result of these market rent assessments, we adjusted our model's estimate of market rents upward by 5.0%, because the property-specific studies indicated that, on average, our earlier calculations were modestly lower than the property-specific studies indicated.

Market Effect. Our statistical market rent estimates, and our 32 property-specific, on-the-ground market rent estimates, are based on the assumption that the conversion of the subject property to market operations will not affect the supply and demand balance in the local market. However, for small market areas, and for properties that comprise a significant share of rental housing in the local market area, this assumption may not be valid. If, for example, the prepayment and conversion of a §515 property would result in the exodus of many current residents from the local market area, or the inability of many current residents to afford market rents, it could well be the case that local market rents would decline upon prepayment and conversion.

HUD Mark-to-Market Data As Benchmark for Market Rents. Our primary benchmark for estimating the likely range of market rents is information from non-metropolitan properties in HUD's Mark-to-Market program. We believe this represents a good benchmark. However, it is possible that these properties can command materially higher or lower market rents than the sample portfolio of §515 properties. For example, it could be that non-metropolitan properties in the HUD portfolio are more likely to be located in higher-growth rural areas than §515 properties. Indeed, it seems likely that the legislative definition of RHS' service area would result in §515 properties being located in lower-population areas than otherwise comparable HUD properties. This factor indicates that market rents for the HUD portfolio may be higher than those for the §515 portfolio. On the other hand, the Mark-to-Market inventory is drawn exclusively from the portion of the HUD non-metropolitan-area portfolio with §8 rents that are above comparable market levels. This factor might cause the market rents of the non-metropolitan HUD Mark-to-Market portfolio to be below the market rents for the entire non-metropolitan HUD portfolio.

Unit Costs for Capital Needs Assessments. In accordance with our Statement of Work, and by arrangement between RHS and Marshall and Swift, our capital needs assessments utilized standard costs from the Marshall and Swift national database. Based on feedback from owners and managers, and from the capital needs assessment team, we believe that owners' actual unit costs will vary, sometimes materially, from the Marshall and Swift unit costs. Accordingly, we selected four properties and re-estimated capital needs costs using unit costs we thought owners would actually achieve. Total costs per unit for the four properties ranged from 94% to 109% of the total costs per unit calculated using the Marshall and Swift unit costs. Totaling all four properties, total costs per unit almost exactly matched total costs per unit using the Marshall and Swift unit costs.

Accordingly, our market assessment model uses the capital needs costs, as reported to RHS, without adjustment.

Data Timing. Our capital needs data were gathered during October, November and December 2003. RHS loan data are as of December 31, 2002. Our data on actual occupancy levels are as of November 2003. Our comparable market rent determinations (for 32 of 333 sample properties) were performed in January and February 2004.

Data Quality. In the process of building and testing the market assessment model, we performed a number of data validation checks on data elements received from RHS. RHS has been responsive to our requests for clarification and data correction. However, it is possible that some data entry errors were made by RHS that we did not discover. In addition, when data elements were missing, our model substitutes typical data[24]. We believe that our substitutions are reasonable and appropriate, but it is possible that the correct data would produce results that differ from the results discussed in this report. Missing data from RHS include –

- 2003 budgets: no data for 4 properties, no revenue data for 2 properties.
- Unit mix: no data for 5 properties.
- Basic, Note and HUD rents: no data for 5 properties.
- Tenant profile: no data for 4 properties.
- Project Classification Grade (A/B/C/D overall quality and compliance rating): missing for 3 properties.
- Vacancy: explanation for 17 properties with dramatically higher actual vacancy (in November 2003) than budgeted.

Stakeholder Input. We did not consult with residents, communities, owners, or front-line RHS field staff. In particular, we caution that decisions regarding preservation or non-preservation should be made only after consulting with stakeholders.

Preservation-Worthiness Assessments. Our preservation-worthiness assessments would benefit from additional information not available for this analysis. For example, the supply of other affordable rental housing in the local area, the Housing Choice Voucher utilization rate, and local prospects for significant employment increases or decreases.

Ownership Entity Dynamics. Owners do not make prepayment decisions based solely on financial analysis. Perhaps more important are factors that are intrinsic to the ownership structure of the property, and to the individual decision-makers. Accordingly, although we believe that the methodology in our model fairly and accurately assesses the economic dimensions of prepayment risk, our model

[24] The typical data that we substitute for missing data is our judgment of the best available substitute. For example, if the 2001 actual income and expense data are missing for a particular property, we substitute the corresponding data from 2002.

does not take into account the non-economic dimensions. See the more detailed discussion in Section 1 of this report.

Low Income Housing Tax Credit. Anecdotally, we understand that much of the post-1986 §515 portfolio was developed using LIHTCs, and much of the pre-1986 §515 portfolio has been re-syndicated with LIHTCs. It is possible that the introduction of LIHTCs has produced effects on the portfolio that are not captured in our model. For example, it is possible that state LIHTC allocating agencies imposed higher construction standards than RHS normally requires, and thus that the post-1986 §515 portfolio will behave differently over time, when compared to the pre-1986 §515 portfolio.

Non-RHS Funding Sources. This report assumes that all properties are stabilized through rent increases alone. In practice, many will be stabilized through non-RHS funds such as Low Income Housing Tax Credits, the HOME Investment Partnerships Program, the Community Development Block Grant, and various State and local affordable housing trust funds. Accordingly, the actual costs to RHS to stabilize the portfolio may be less than estimated here. We emphasize that RHS has many opportunities to facilitate the use of these non-RHS funds in the §515 portfolio; to the extent that RHS makes it easier for other funders to invest in the §515 portfolio, the amount of non-RHS funds invested in the portfolio could well be a multiple of the amount that is invested currently.

Potential Gains in Efficiency. This report assumes that there are no gains in efficiency from stabilizing the portfolio. However, for example, it is possible that:

- With adequate reserves, operating expenses may decline.
- If property conditions improve, vacancy losses may decrease.
- If improved incentives are put in place, owners may find operating efficiencies that more than pay for the cost of the incentives.

Unit Painting Costs. In accordance with our Statement of Work, the capital needs assessment team included in their analysis estimates of unit interior repainting costs. This includes repainting upon turnover, as well as periodic repainting of units that are occupied for an extended period. We eliminated these costs for purposes of the market assessment task, because we accounted for those costs as part of each property's operating expenses. On average, unit interior repainting costs accounted for roughly $4,000 per unit of the roughly $24,000 per unit of total 20-year capital needs found in our capital needs assessment task.

The ICF Team
Market Assessment Report
RHS Description of Sampling Methodology

The following description was provided by RHS economists.

Sample Size Selection

The design of an experiment is basically a plan for purchasing a quantity of information. And as with other commodities, information is purchased at varying prices depending upon the manner that data is obtained. Some measurements may contain a large amount of information regarding a parameter of interest. Others may contain little or none. In any event, because the sole product of research is information, the idea is to get as much as possible as cheaply as possible.

Random sampling from a relatively large population provides a method of acquiring information not only cheaply but also accurately, provided the sample itself is sufficiently large and representative of the population. The relevant question then is, "How many observations are necessary?" Referring specifically to estimation, the size of the sample is determined largely by how accurate the experimenter desires (or needs) the estimate to be. This accuracy may be precisely stated by specifying a bound on the error of estimation.

To select the sample size for all large-sample estimation procedures, the experimenter first specifies a desired bound on the error of estimation and an associated confidence level, 1-α.

Given the parameter θ, and the desired bound *B,* an efficient sample size may be determined by the expression,

$$z_{\alpha/2}\ \sigma_\theta = B,$$

where: $z_{\alpha/2}$ is the *z* value defined as, $P(Z > z_{\alpha/2}) = \alpha/2$, and σ_θ is the population standard deviation for the parameter θ,

because the variability of the parameter θ depends upon the variability of the population from which the sample is drawn.

To achieve both goals of accuracy and economy, RHS has determined an error of estimation of 0.10 with probability equal to 0.90 sufficient for its purposes.

For confidence coefficient $1-\alpha = 0.90$, α must equal 0.10 and $\alpha/2 = 0.05$. The *z* value corresponding to an area equal to 0.05 in the upper tail of the *z* distribution is $z_{\alpha/2} = 1.645$. For error of estimation, $B = 0.10$, the sample size is determined then by computing,

1.645 σ_θ = 0.10.

From Table 1, σ_θ the population standard deviation for the variable "Number of units per project" is 20.27. The selected sample size is computed therefore as (1.645 * 20.27)/0.10 or **333**.

Table 1. Units per project, Mean, Variance and Standard Deviation, by project class

	Units per project		
Project class	**Mean**	**Variance**	**Std Dev**
<12	6	8.15	**2.86**
12-24	20	20.43	**4.52**
25-50	37	52.45	**7.24**
51-100	64	153.10	**12.37**
>100	147	9,999.31	**100.00**
ALL	27	410.92	**20.27**

Proportional vs. Weighted Sampling

Because we have prior knowledge of the number of housing units per project relative to the population, it would be wise to design the sampling proportions to be representative of the population proportions. This leaves the problem however, of how the sub-sample n_i should be specified. In other words, what proportion of the overall sample should be drawn from each class?

The most obvious way is to choose n_i such that it is proportional to w_i where,

$n_i = w_i n$ and n is the population sample.

Table 2. presents the number of projects in each class and its relative proportion w_i .

Table 2. Number of projects and proportion by class

Project class	Number	Proportion
<12	2,678	0.16
12-24	7,199	0.42
25-50	6,063	0.36
51-100	1,018	0.06
>100	116	0.01
Total	**17,074**	**1.00**

Table 3 presents the number of observations to be drawn from each class given the proportional sampling method.

Table 3. Proportional sampling

90% level of confidence

		Within Class Sample				
Acceptable error of estimation	**Population sample**	**<12**	**12-24**	**25-50**	**51-100**	**>100**
		0.16	0.42	0.36	0.06	0.01
0.10	**333**	**52**	**141**	**118**	**20**	**2**

However, because the population can be stratified in advance and we have an understanding of the amount of variation within each class, an alternative and more efficient sampling method is available,

$$n_i = w_i \sigma_{\theta i}$$

where $\sigma_{\theta i}$ is the standard deviation of parameter θ, within class *i*. This method appeals to us intuitively because n_i grows larger as:

w_i increases - the class is a relatively significant part of the population, or as

$\sigma_{\theta i}$ increases, - the variation within the class is high and requires a larger sample to more accurately capture its varied nature.

In this way also, the smaller $\sigma_{\theta i}$ is, the less variation there is within the class and the less likely it is that we obtain any new information by soliciting an additional observation. So, the smaller the sample, the better.

Therefore, weighted sampling provides a method for allocating our limited number of sample drawings (333 observations) among those classes that return the greatest amount of information from each additional observation.

Table 4. Weighted sampling

90% level of confidence

	Class				
	<12	**12-24**	**25-50**	**51-100**	**>100**
Proportion	0.157	0.422	0.355	0.060	0.007
Std Dev	2.857	4.520	7.242	12.373	99.997
Proportion * Std Dev	0.448	1.906	2.572	0.738	0.679
Weighting factor	0.07	0.30	0.41	0.12	0.11

Acceptable error of estimation	Population Sample	Within Class Sample				
		<12	12-24	25-50	51-100	>100
		0.07	0.30	0.41	0.12	0.11
0.10	**333**	**24**	**100**	**135**	**39**	**35**

Table 5.compares proportional and weighted sampling with respect to the number of observations drawn from each class.

Table 5. Proportional vs. weighted sampling

	<12	12-24	25-50	51-100	>100
Proportional sampling	**52**	**141**	**118**	**20**	**2**
Weighted sampling	**24**	**100**	**135**	**39**	**35**
Difference	**(28)**	**(41)**	**17**	**19**	**33**

The ICF Team
Market Assessment Report
Section 1: Costs to Minimize Prepayment

Structure of this Section

The structure of this section follows the steps in our methodology to estimate the prepayment viability of each project in the sample, and to estimate the cost to RHS of an incentive that we believe a typical owner would accept, in exchange for a long-term commitment to continue affordability under the RHS regulatory structure.

Potential Option To Allow Prepayment – if residents were protected against rent increases, prepayment might be an acceptable public-policy outcome (as compared to the owner's agreement not to prepay, in exchange for incentives).

Financing Necessary to Prepay and Convert – estimating the amount of capital the owner would need to obtain, to finance prepayment of the RHS loan and successful conversion to market-rate operations.

Market Rents – estimating the likely range of market rents that each property might be able to obtain in the local market.

Results of Property-Specific Market Rent Determinations – for a 32-property sub-sample, we performed on-the-ground determinations of comparable market rents.

Recommended Rent Comparability Process – a process that would be adequate to determine comparable market rents accurately, for purposes of determining a property-specific appropriate incentive.

Prepayment Viability Rents – estimating the level of market rents necessary to make prepayment and conversion economically viable.

Ownership Entity Dynamics – the qualitative factors that are most likely to affect whether a prepayment-viable property will actually prepay and convert.

Prepayment-Viability – estimating the likelihood that actual market rents will be high enough to make prepayment and conversion economically viable.

Cost of Prepayment Incentive – estimating the economic value of the owner's prepayment option.

Potential Option To Allow Virtually Unconditional Prepayment

Our scope of work for this assessment includes estimating the cost of a non-prepayment incentive. However, another part of our scope of work asks us to identify policy options. One such policy option is to allow owners to prepay, with only the following preconditions:

Residents will be adequately protected against rent increases.

RHS verifies that the owner has the right to prepay under the loan documents and applicable law.

Indeed, this is the public-policy outcome that policymakers selected for analogous situations within the HUD inventory, through the 1996 partial repeal of the Emergency Low Income Housing Preservation Act of 1987 ("ELIHPA") and partial repeal of the Low Income Housing Preservation and Resident Homeownership Act of 1990 ("LIHPRHA").

Residents of the relatively few §515 properties with project-based §8 contracts may be protected against rent increases[25]. However, residents of other §515 properties are not now entitled to adequate protection[26]. On a case-by-case basis, by working with local Housing Choice Voucher program administrators, RHS staff have been able to obtain Housing Choice Vouchers (not "conversion vouchers") in some §515 prepayment situations, but we understand that there is no statutory entitlement to Housing Choice Vouchers in these situations. Accordingly, resident protection legislation would be required in order to create a viable RHS option to allow prepayment without requiring the current ELIHPA analysis and incentive process.

If residents were adequately protected, RHS could choose whether to offer non-prepayment incentives, and would be under much less pressure to agree to an unreasonable or poorly documented demand from a property owner. This would put RHS in a much better position to make a good public-policy decision.

Financing Necessary to Prepay and Convert

The model calculates the financing that the property owner would need to assemble, in order to pay the costs associated with prepayment and conversion. We estimate those costs as the sum of the following:

- Payoff amount for the RHS loan(s).

[25] As no §515/8 properties have either prepaid or "opted out" (refused §8 contract renewal), it is not entirely clear what would happen under current law. However, it is clear that the §8 contract would continue in force after a prepayment of the §515 loan. If the owner opted out, applicable HUD guidance indicates generally (without any specific discussion of 515/8 properties) that residents would be entitled to Housing Choice Vouchers. We were not able to determine whether residents would be entitled to enhanced vouchers in a combined prepayment / opt out for a 515/8 property.

[26] We understand that RHS and HUD have conferred and have concluded that existing statutory language does not extend "conversion voucher" protection to residents of §515 properties whose owners prepay.

- Immediate repairs (we assume that the lender would require repairs equal to the first two years' capital needs).

- Any increase in the existing Reserve balance, needed to meet future capital needs (similarly, if the current Reserve balance exceeds the amount needed, we treat this excess as an offset to the costs necessary to prepay and convert).

- We considered including an assumed amount of market upgrades, for example improvements to kitchens and bathrooms. However, that would be inconsistent with the "as is" basis on which we estimated market rents. Accordingly, we did not assume that any market upgrades would be required by the lender or made by the owner.

- Lender fees for the prepayment financing. We assumed that the owner would finance the costs of prepayment and conversion with a combination of 70% debt and 30% equity. We further assumed that the owner would incur 2 points in fees and $10,000 in other costs and fees (for example, lender counsel fees, appraisal, and environmental survey) for the debt.

- Transition costs resulting from move-outs by current residents who can no longer afford the rents. We assume that:

    - The owner incurs $2,500 in vacancy losses for each current resident who moves out.

    - 100% of residents now receiving Rental Assistance relocate (because they would lose their rental assistance and be unable to afford the rent).

    - 20% of residents now receiving Section 8 relocate (we assume that these residents would receive "conversion vouchers", and likely most would remain in place).

    - 100% of unassisted residents relocate (because the rent increase necessary to make prepayment and conversion viable is so large, we assume that none of these residents could afford the resulting much higher rents).

      NOTE: These transition cost estimates reflect current law. If residents were entitled to "conversion vouchers", many fewer residents would move, fewer transition costs would be incurred by the typical owner, and (in general) prepayment would become more financially viable for owners.

We made these estimates based on our experience as lenders, owners, managers and asset managers of apartments. We believe these estimates reflect typical business terms for prepayment and conversion transactions for rural properties.

Market Rents

We estimate likely market rents by using a range of proxies that we believe are reasonable. We derive a low benchmark, a moderate benchmark, and a high benchmark.

> NOTE: Our rent calculations reflect appropriate adjustments for resident-paid utilities. For example, when making comparisons to the HUD Fair Market Rents, we subtract resident-paid utilities from the FMRs.

The low benchmark is a composite of the following amounts:

84% of the HUD Fair Market Rents for the county in which the property is located (this represents the 20th percentile in a group of 400 non-metropolitan market rent determinations made by HUD in its Mark-to-Market program).

The 20th percentile gross rent (in dollars) from the same group of 400 Mark-to-Market properties ($367 for a 1BR and $423 for a 2BR[27]).

For properties with at least 5 unassisted units, at least 80% of which are occupied, the actual unassisted rents currently being charged[28].

The moderate benchmark is a composite of the following amounts:

99% of the HUD Fair Market Rents for the county in which the property is located (this represents the median in a group of 400 non-metropolitan market rent determinations made by HUD in its Mark-to-Market program).

The median gross rent (in dollars) from the same group of 400 Mark-to-Market properties ($406 for a 1BR and $466 for a 2BR).

The high benchmark is a composite of the following amounts:

114% of FMRs (this represents the 80th percentile in a group of 400 non-metropolitan market rent determinations made by HUD in its Mark-to-Market program).

The 80th percentile gross rent (in dollars) from the same group of 400 Mark-to-Market properties ($466 for a 1BR and $524 for a 2BR).

For properties with at least 5 unassisted units, no more than 60% of which are occupied, the actual unassisted rents currently being charged[29].

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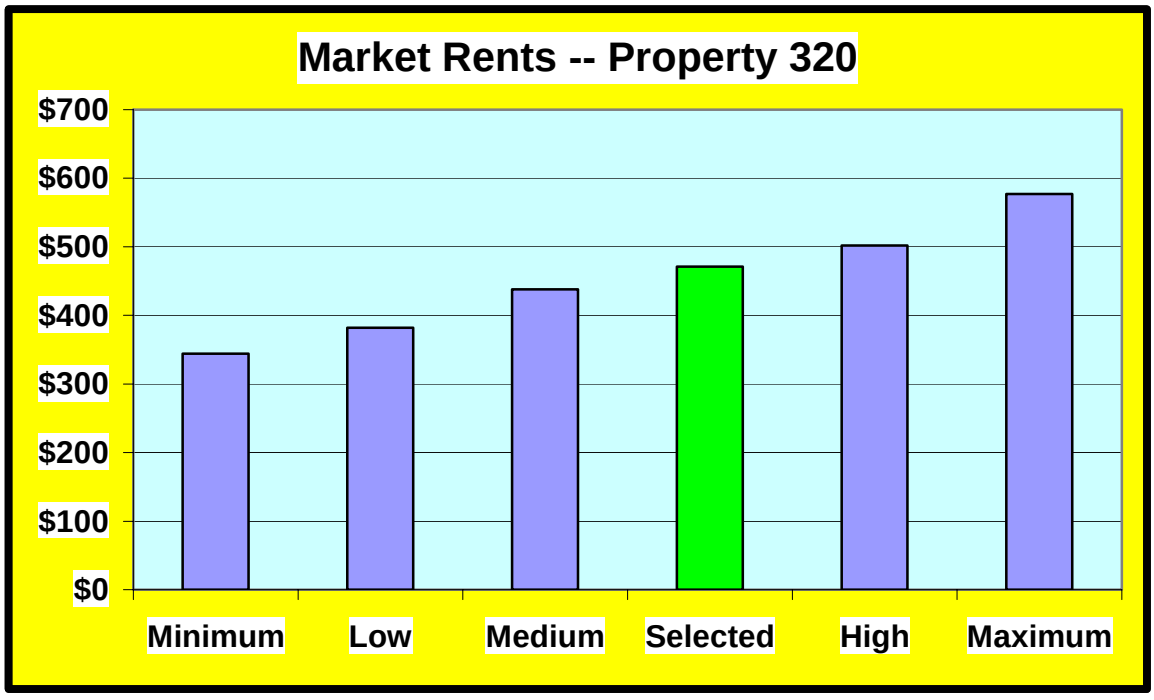
[27] These are gross rents, including resident-paid utilities. Market rent conclusions from the Mark-to-Market program were trended from the time the Mark-to-Market transaction completed to December 31, 2003.

[28] These properties have demonstrated the ability to charge and collect a rent at least this high, from non-assisted residents.

To estimate our concluded market rent, the model constructs a range of possible market rents, from a minimum that is 10% below the low benchmark, to a maximum that is 15% above the high benchmark. We selected those factors based on the distribution of market rents the 400 property sample discussed above, from HUD's Mark-to-Market program. The model selects a point within this range according to the property's percentile ranking on the property quality scale developed for the preservation-worthiness assessment, and then increases the resulting market rent by 5.0% (we made this adjustment to reflect the results of the 32 property-specific market rent studies, which reflected comparable market rents slightly higher than those estimated by the model). This scale is discussed in Section 2 of this report.

The following chart illustrates the results of this methodology for the two bedroom units in sample property 320. This property had Low, Medium and High benchmark market rent levels that were close to the average for the sample portfolio. The Minimum benchmark is 90% of the Low benchmark, and the Maximum benchmark is 115% of the High benchmark, as discussed above. The property had a moderate score on the property quality scale (scoring at the 55th percentile). The Medium benchmark corresponds to the 50th percentile, and the High benchmark corresponds to the 80th percentile, so we selected a preliminary market rent that is at the 55th percentile (i.e., very close to, but slightly above, the Medium benchmark). Then we increased that preliminary market rent by 5.0% to adjust the calculated market rents to the levels indicated by our 32 property-specific market rent studies.

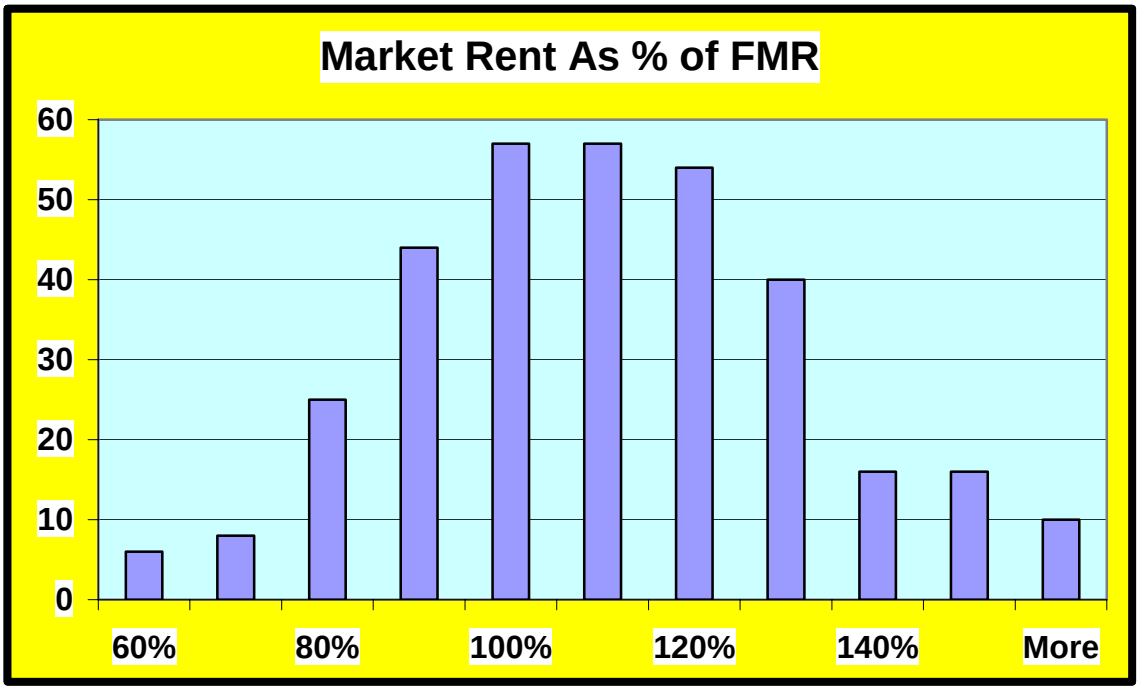


[29] These properties have demonstrated an inability to charge and collect the current RHS-approved rent, from non-assisted residents.

We believe the Mark-to-Market portfolio is the best available benchmark. However, see the more expanded discussion under Limiting Conditions.

Market Rents In Relation to HUD Fair Market Rents

HUD's Fair Market Rents represent the 40th percentile of rents (including tenant-paid utilities) paid by recent movers in the county or MSA. As such, they do not represent the comparable market rent for any particular property. Rather, they are a statistical measure of the level of county-wide (or MSA-wide) prices for moderate cost rental housing. The chart below shows the distribution of our concluded market rents, versus the Fair Market Rents for the county (or, rarely, Metropolitan Statistical Area) in which each sample property is located.



As one would expect, this chart indicates that the concluded market rents range from levels well below FMRs to levels well above FMRs. The average, however, is 106% of FMRs, which tends to confirm that the FMRs are accurately measuring prices for typical modest rental housing. A secondary conclusion from this chart is that, in the event of prepayment, normal Housing Choice Vouchers frequently would not be an adequate form of resident protection, because Housing Choice Vouchers are limited to a 'payment standard' that is usually between 90% and 110% of FMRs.

Results of Property-Specific Comparable Market Rent Determinations

Pursuant to an amendment to our scope of work, we performed on-the-ground, property-specific determinations of comparable market rents for a sub-sample of 32 properties in the sample portfolio. Based on those determinations, we revised the model's estimates of market rents upward by 5.0%.

The property-specific determinations sometimes differed substantially from the market rents estimated by our model. We expected this, because many factors not reflected, or not adequately reflected, in our input data, have a powerful effect on the rents a property might command after prepayment and conversion. For example, if the actual property is especially well-designed, well-constructed, well-located, well-maintained over time, and well-managed, its actual comparable market rents will exceed the rents estimated by our model (and conversely). Those variances are not problematic, for purposes of making an overall portfolio-level estimate (because, at a portfolio level, they would be offset by other properties that have well-below-average values for these same attributes). Of course, factors such as these would clearly be material and important in the context of making a property-specific decision on preservation incentives.

> ***NOTE: Each property in the sample portfolio is not "itself"; rather, it represents a segment of the §515 portfolio. Thus, each property in the 333-property sample is best thought of as a generic property, having physical and financial characteristics that happen to coincide with those of a particular property in the §515 portfolio. Similarly, it is best to think of the location as being not at a particular street address in a particular county and state, but rather in the center of a generic three-mile radius somewhere in rural America, having a particular population density, housing characteristics, population and income growth rates, and so forth. Similarly, the market rents estimated by our model are best thought of as probable market rents that the generic property is likely to command, assuming moderate values for attributes not captured in the model's input database.***

Recommended Rent Comparability / Value Determination Processes

As noted earlier in this report, the economic viability of prepayment is acutely sensitive to the level of market rents that the owner stands to achieve after prepayment.

As a result, the costs that RHS will incur, either to protect tenants against the economic impacts of prepayment or to incentivize owners not to prepay, are also acutely sensitive to the assumed market rents. Using our model of property value, in a 30-unit property, if RHS uses an estimate of market rents that is $25 per unit per month too high, RHS will over-estimate the owner's equity by $83,700[30]. Given the financial stakes to RHS, we believe that prudence dictates the use of a rigorous process for determining comparable market rents, prior to providing financial protections to tenants and/or offering incentives to an owner.

Experience in HUD's Mark-to-Market program suggests that an appropriately rigorous process should include the following elements:

[30] 30 units x $25 x 12 = $9000 error in income, less 7% for rent loss = $8,370 error in NOI, divided by 10.00% capitalization rate = $83,700 error in value.

- Clear and comprehensive guidance to appraisers. Chapter 9 of HUD's Section 8 Renewal Guide is, in our view, a good example of the level of guidance that is needed.

- Opportunity for owners to submit their own rent comparability study, prepared by a licensed appraiser, in accordance with RHS' guidance.

- Procurement by RHS of a rent comparability study, by a licensed appraiser, in accordance with RHS' guidance. We recommend that RHS require its appraiser to make a critical review of any rent comparability study provided by the property owner.

- Where appropriate, a visit to the subject property, and comparable properties, by an appropriate RHS official.

- Reconciliation by RHS of the results of the various studies discussed above, resulting in RHS reaching a conclusion for the market rents on which RHS will base an offer of incentives.

If RHS will offer non-prepayment incentives to some owners, RHS will also need a similarly rigorous process for determining property value.

Prepayment Viability Rents

We estimate the market rents that would be necessary to support prepayment and conversion by summing the following amounts:

The amount of post-conversion Net Operating Income (NOI) that will be needed to provide a market level of return on the total financing needed in order to prepay and convert. We calculate this by multiplying the total amount of financing, by the 10.00% capitalization rate we use later (see Cost of Prepayment Incentive below) for valuation purposes. We arrived at this capitalization rate after consulting several appraisers and lenders with significant experience in valuation of rural rental properties.

The Reserve deposit level that an appraiser would assume, in arriving at the capitalization rate discussed above. We assume $300 per unit per month[31].

Operating expenses (we use budgeted amounts for 2003).

A reasonable allowance for rent loss (we assume 7.0%, a typical market rate apartment assumption).

[31] This is lower than the Reserve deposit level that we calculate is needed to fund 100% of estimated future capital needs. However, for valuation purposes, it is necessary to use a Reserve deposit that reflects appraisal practice.

On this basis, we estimate that the average property requires a rent increase of 60% ($201 per unit per month) in order to make prepayment economically viable. Most of this rent increase is needed in order to cover the higher cost of capital involved in financing the transaction. This is illustrated by the following example:

- Suppose that the owner owes RHS $24,000 per unit (the average in the sample portfolio is $24,441).
    - At 1% and with thirty years remaining, the monthly payment for principal and interest would be $77 per unit.
    - However, in order to produce the 10.00% yield required to make prepayment and conversion viable, the required amount of Net Operating Income would be $200 per unit per month ($24,000 times 10.0% divided by 12).
- Suppose that the aggregate remaining costs of prepayment and conversion (repairs, transition costs, and fees) are $7,000 per unit (the average in the sample portfolio is $7,128). The 10.00% required yield on these additional costs adds a further $58 per unit per month ($7,000 times 10.0% divided by 12).
- Suppose further that existing rents are sufficient to cover current costs of operation (that is, no further rent increase is required in order to make the property viable, under the existing RHS regulatory structure).
- Under this set of assumptions, the owner would have to increase NOI by $181 ($200 plus $58 minus $77) in order to make prepayment and conversion economically viable. Allowing 7% for rent loss, rents would have to increase by $194 per unit per month ($181 divided by 0.93).

Ownership Entity Dynamics

The economic viability of prepayment (and conversion to market operations) is only one of many factors that determine whether a given owner will, in fact, prepay. Most of these additional factors have to do with factors intrinsic to the ownership structure of the property, and intrinsic to the individual decision-makers (partners) in the ownership entity. The following discusses what we believe to be the most significant of these ownership entity dynamics.

Owner sophistication. The typical §515 property is small, and by definition had a rural location when it was constructed. Many of these properties are thus owned by small owner-managers who have only a handful of properties (perhaps as few as one). In our experience, many of these owner-managers have few other business activities and may be outside the flow of information and improvement in best practice that has occurred in the last 20-30 years. Less sophisticated owners may be reluctant to inaugurate transactions, especially those involving (or appearing to involve) either process difficulty or increased risk. Conversely, less sophisticated owners may also be failing to achieve lowest viable operating expenses, best NOI, or a pro-active approach to capital needs.

Partnership Dynamics. Most properties are now held in limited partnerships, which by their nature cannot take an action such as prepayment / conversion unless two things occur. First, the general partner must recommend prepayment and conversion. Second, the required fraction of the limited partners must consent[32].

Transaction complexity. Prepayment-and-conversion is a complicated transaction that normally requires additional third-party costs (including expert professionals). These costs tend to be fixed in dollar terms, making them disproportionately high for smaller (in apartments or equity) properties. Small properties needing complex transactions tend either not to proceed, or to proceed in bulk.

The Larger Transaction. Prepayment and conversion is a high-risk entrepreneurial activity that is highly dependent on real estate judgment. Moreover, typically the financing necessary to fund prepayment and conversion costs will be recourse to the borrower, whereas the existing §515 loan is non-recourse[33]. As a result, typically only a subset of the partners in a limited partnership will want to pursue prepayment and conversion. This situation typically leads to a buy-out of the low-risk-tolerant partners by the high-risk-tolerant partners. Necessarily, income tax and estate tax considerations enter into the decision[34]. Because risk-tolerance, income tax considerations, and estate tax considerations are specific to the individual partner, typically it is impossible to predict whether any given ownership entity will prepay and convert, or when.

Family Issues. Many §515 properties are controlled by members of a family that is (or was) active in the real estate development business. Commonly, the second generation of the family operates the property management company. If prepayment and conversion would also entail selling the property, such families may well conclude that it is more important to maintain the livelihood of the second generation than to realize capital.

Mission. Particular owners may be sufficiently committed to continuing to provide affordable housing that they would refuse to prepay and convert, even though that might be the best option from a purely financial standpoint.

Tenant Mix. Many (perhaps most) owners will think differently about prepaying an elderly property, compared to a family property. For example, the risk of adverse

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[32] The required percentage varies according to the partnership agreement. Typically, the required percentage is somewhat higher than 51%. 67% and 75% consent requirements are common, and some partnership agreements require 100% consent.

[33] In non-recourse debt, the lender cannot look to other assets of the borrower in the event that (a) the loan is not repaid, and (b) the property's value is insufficient to satisfy the indebtedness. When non-recourse debt is refinanced with recourse debt, the borrower faces considerably greater financial risk.

[34] For example, (a) in a recourse refinancing of non-recourse debt, typically the limited partners will be deemed to have received a substantial amount of taxable income; (b) partners with large negative capital accounts (tax deductions taken in excess of capital contributed) will wish to avoid sale unless it yields at least enough cash to pay the tax; and (c) partners who believe they are close to 'activating their estates' may refuse to consent to a sale of the property or a sale of their partnership interests, because typically the estate tax (if they hold their interests until death) will be substantially less than the income tax (if they sell their interests now).

publicity is higher with an elderly property. Similarly, experience in the real estate industry indicates that rents cannot be set as high, or increased as fast, in market-rate elderly properties as in otherwise similar non-elderly market-rate properties.

Risk Tolerance. Prepayment and conversion involve a significant amount of risk. More risk-averse owners may refuse to prepay and convert, even when that is objectively the optimum financial strategy.

"I Want Out". Conversely, some owners might prepay and convert despite unfavorable economics, simply to get out from under the current regulated operating structure.

Window of Opportunity. Some owners, upon gaining a right to prepay without undergoing the ELIHPA process, may prepay out of a concern that the government may attempt to remove or restrict that right in the future, even though prepayment may not appear to be a good financial option at the moment.

Accordingly, a purely economic analysis (such as we include in our model) cannot predict whether a given owner will, in fact, prepay. Some owners, who have a solid prepayment option based solely on financial analysis, will nonetheless not prepay, for a variety of reasons. Similarly, other owners, whose prepayment option appears to be "out of the money" on paper, may nonetheless prepay, for a variety of reasons.

One final possibility deserves mention. Rarely, the highest and best use (economically speaking) of a §515 property may be a use other than residential rental property. In those rare circumstances, an owner may prepay in order to capture the higher value of the property under an alternative use. We would not expect this to be a major factor in the §515 portfolio, but in a large portfolio, this description may fit a handful of properties.

Prepayment-Viability

We test the calculated prepayment-viability rents against our market rent conclusion, and also against alternative market rents that are 10% lower ("low-reasonable market rents"), and 10% higher ("high-reasonable market rents"), than our market rent conclusion. We assign a prepayment likelihood rating to each property as follows:

High – the low-reasonable market rent is sufficient to make prepayment viable.

Medium – the low-reasonable market rent is not sufficient, but our concluded market rents are sufficient, to make prepayment viable.

Low – only the high-reasonable market rent is sufficient to make prepayment viable.

Very Low – even the high-reasonable market rent is insufficient to make prepayment viable.

In the sample portfolio, 8% of properties had a High rating, 7% had a Medium rating, 10% had a Low rating, and the remaining 75% had a Very Low rating.

Cost of Prepayment Incentive

We did not calculate a cost for these incentives. RHS specified that the decision whether to pay any non-prepayment incentives and, if so, how such incentives might be calculated has not been made and, therefore, the policy parameters necessary for estimating the associated costs do not exist. We remain available to assist RHS in the calculation of incentives at such time as these parameters are determined.

In Section 4 of this report, we discuss various ways in which RHS could structure an incentive.

The ICF Team
Market Assessment Report
Section 2: Costs to Prevent Deterioration

Structure of this Section

Note on Reserve Deposit Sizing – explaining why the Reserve deposits recommended in this report are larger than industry rules of thumb would suggest.

Needed Reserves – estimating the ongoing Reserve funding necessary to meet the property's projected 20-year capital needs.

Rent Increase – estimating the rent increase that would be required to cover the required Reserve deposit, plus all other costs of operation, assuming that the property remains under its current regulatory structure.

Cost to Government – estimating the cost to RHS, and to HUD, of the rent increase.

NOTE: For purposes of this analysis, we assume that a one-time rent increase is the method chosen to support viability. As discussed in Section 4, there are other funding alternatives as well.

Note on Reserve Deposit Sizing

In the market-rate apartment business, Reserves are commonly sized well below the amount needed to fully fund estimated future capital needs. This is because market-rate apartments can reasonably be expected to increase their cash flow over time, and can reasonably be expected to be capable of generating significant net refinancing proceeds in the future. Because neither of those expectations can reasonably be extended to §515 properties, in this assessment we sized the Reserves at the amount needed to fund 100% of estimated future capital needs. Accordingly, we recommend Reserve funding levels in the §515 context that are somewhat higher than the industry "rules of thumb" developed in the market-rate context.

Our capital needs assessment team reported the following additional factors that tend to call for higher Reserve deposits:

Relatively large unit sizes, compared to otherwise comparable HUD and State HFA properties.

Predominance of one-story and two-story designs, involving a large amount of exterior surface area per unit.

Predominance of individual (vs. central) mechanical systems, which are more expensive (per unit per year) to replace.

Anecdotal observation that original building systems have achieved surprisingly long useful lives, with the result that §515 properties are more likely to have original systems, and thus to have higher capital needs.

Needed Reserves

Data From Capital Needs Assessment Task. The capital needs assessment task produced property-specific estimates of each property's major repair and replacement needs ("capital needs") for each of the next twenty years. Our market assessment model utilizes the total annual capital needs (adjusted as discussed below), in order to determine an optimum combination of initial Reserve balance and ongoing Reserve deposit. We also considered the actual Reserve balance at 12/31/2002.

Distribution of Capital Needs by Year. Properties vary in the distribution of their capital needs over the twenty-year analysis period. Some properties have heavier needs in the early years ("front-loaded" needs), others have heavier needs in the later years ("back-loaded" needs), and others have relatively level needs over the term. We took these differences into account when determining the optimum combination of initial Reserve balance and ongoing Reserve deposits.

Analysis for Preventing Deterioration. For this purpose, we determined the new Reserve deposit that, in combination with the existing Reserve balance (as of 12/31/02), would meet the property's twenty-year capital needs. That is, we assumed that funds would not be available to supplement the existing Reserve balance. We assumed a minimum new Reserve deposit of $350 unit per annum (PUPA), for properties with very large current Reserve balances[35]. Less than 1% of properties needed the minimum Deposit, because of unusually high existing Reserve balances. 38% of properties needed new Deposits in the $750 to $1000 PUPA range, and 32% of properties needed new Deposits in excess of $1000 PUPA. The remaining 29% of properties needed new Deposits between $350 and $750 PUPA.

> NOTE: These deposit levels are higher than deposit levels determined for HUD's Mark–to-Market program, even though the Mark-to-Market program uses a capital needs assessment protocol very similar to the protocol we used in the capital needs assessment task. Reportedly, the §515 portfolio has received less reinvestment than the HUD portfolio. To the extent this is true, the §515 portfolio will need to replace relatively more of its key building systems over the next 20 years.

Analysis for Minimizing Prepayment. We assumed that, in a prepayment transaction, the owner would treat excess Reserve funds as a source of funds, and would bring an inadequate Reserve balance up to the needed level as a cost of the prepayment

[35] We believe that $350 per unit per year is the lowest ongoing Reserve deposit that is reasonably likely to be sufficient over the long term (that is, after the current excess Reserve balance has been utilized).

transaction. Accordingly, we estimated the optimum combination of initial Reserve balance and ongoing Reserve deposits as follows:

Properties with Front-Loaded Needs. We based the new Reserve deposit on needs for the later years (either years 2-20, 3-20, 4-20, 5-20 or 6-20, whichever produced the lowest ongoing Deposit). We then determined the initial Reserve balance necessary (in combination with the new Deposit) to meet the early year capital needs while maintaining at least a $500 per unit minimum balance. If the existing Reserve balance was larger than the amount needed, we used the excess to offset costs of prepayment; if the existing Reserve balance was lower than the amount needed, we included the difference as a cost of the prepayment transaction.

Other Properties. We assumed an initial Reserve balance of $500 per unit. We then calculated the new Deposit needed to meet the twenty-year needs, consistent with the new starting Reserve balance. Excess Reserves were used to offset costs of prepayment, and Reserve deficits were included as costs of the prepayment transaction.

Adjustments. We made two adjustments to the raw results from the capital needs assessment task:

Unit Interior Painting. In accordance with our Statement of Work, the capital needs assessment team included in their analysis estimates of unit interior repainting costs. This includes repainting upon turnover, as well as periodic repainting of units that are occupied for more than five years. We eliminated these costs for purposes of the market assessment task, because we have already counted those costs as part of each property's operating expenses.

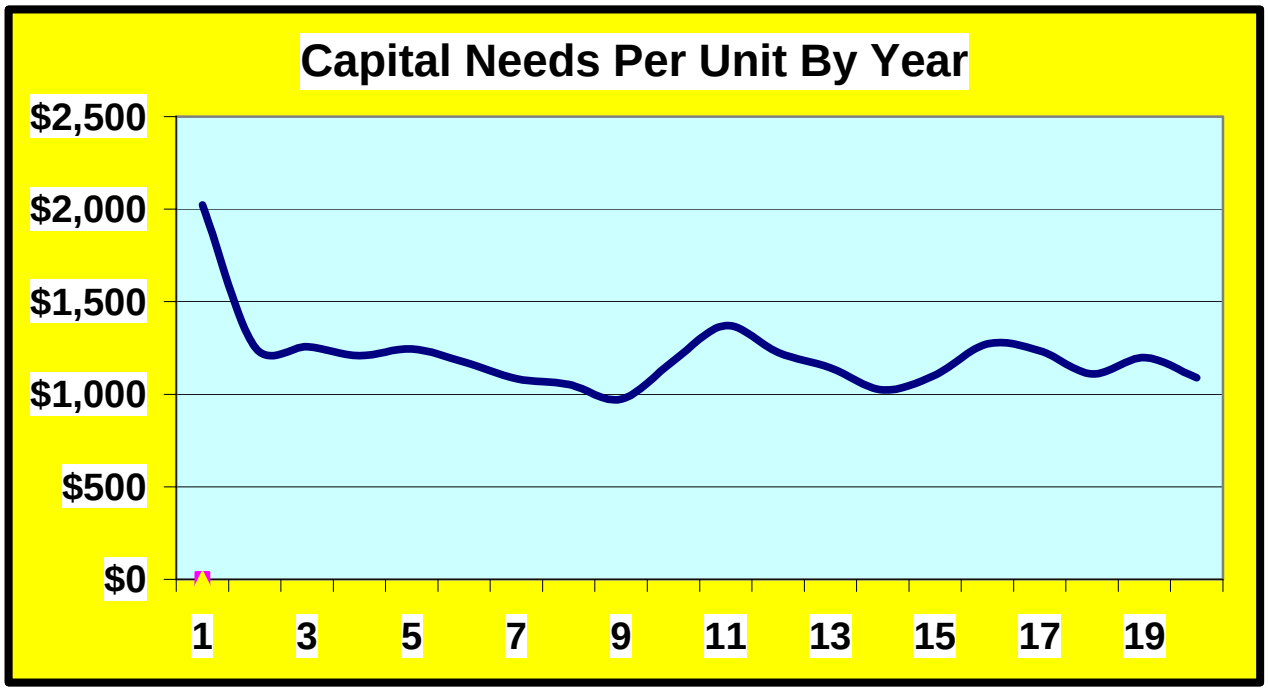
Unit Costs. In accordance with our Statement of Work, and pursuant to an agreement between RHS and Marshall and Swift, the capital needs assessment team used unit costs (i.e., cost per 100 square feet for re-roofing) from the Marshall and Swift national database. We used these unit costs, without adjustment. See the additional discussion under Limiting Conditions. We discuss this in more depth in Section 5 of this report, under Global Assumptions for Capital Needs.

Note Regarding Accounting Treatment of Major Repairs and Replacements. The 2002 and 2001 actual results probably include, as maintenance expenses, some amount of expenditures for items analyzed in the capital needs assessment task. For example, when purchasing one refrigerator, likely the owner treated the cost as a maintenance expense. Conversely, when purchasing twenty refrigerators (or when replacing a roof), likely the owner treated the cost as a capital expenditure. The 2003 budgets, however, exclude all major repair and replacement items from the operating expenses. In part for this reason, when determining the level of operating expenses to include in our

analyses, we ultimately decided to use only the 2003 budgeted expenses, without considering the 2001 and 2002 actual expenses.

Distribution of Capital Needs By Year

The following chart illustrates the distribution of average capital needs, per unit, across the twenty-year analysis period.



This chart indicates that the portfolio has some immediate needs that probably should have been met in prior years, but that otherwise the portfolio faces a relatively constant level of major repair and replacement needs. We believe the logical response to these needs is to dramatically increase the level of Reserve funding on an ongoing basis. Certain properties may, in addition, need a modest amount of up-front capital, to address immediate and pressing needs.

Rent Increase To Meet Full Costs of Operation

We estimated the rents that each property would require, to cover the following costs of operation:

Debt service on the RHS loan(s).

A new Reserve deposit sufficient to meet 100% of long-term capital needs.

2003 budgeted operating expenses (less 2003 budgeted Other Income, such as laundry income).

A reasonable allowance for vacancy and collection loss. We computed this as the greater of a minimum level (discussed below), the 2003 budgeted level, and the actual physical vacancy as reported to us by RHS (but not greater than 25%).

We applied a minimum level of 5% (for properties with at least 90% of units assisted with RA or Section 8) or 7% (for other properties). We believe these are reasonable minimum rent loss levels for these types of properties.

We also applied a maximum level of 15%. We believe that this is the highest reasonable level of vacancy loss that a stable and preservation-worthy property might produce under adequate management and an adequate budget.

In the §515 portfolio, we estimate that 21% of properties would use the 5.0% allowance, 31% would use the 7.0% allowance, and 17% would use the maximum 15% allowance. For the remaining 31% of properties, the rent loss allowance fell between the minimum and maximum levels discussed above.

The current RHS-approved annual owner return. Note: if the indicated return is zero, (i.e., the owner is a nonprofit) we assumed $150 per unit per year in order to provide a reasonable operating margin / margin of safety.

We estimate that 92% of properties would require rents that are higher than the current RHS-approved rents, in order to cover the costs of operation discussed above. Measured across all 333 properties, the average increase would be $40 per unit per month (14%). Measured across the 92% of properties that would require rent increases, the average rent increase would be $57 PUPM (16%). On average essentially the entire rent increase was attributable to the increased Reserve deposit.

NOTE: The inability of current RHS-approved rents to cover the full costs of operation is nearly universal in the §515 portfolio, including the 1,648 properties that we estimated would have an economically viable prepayment option. Of these, 83% would require a rent increase in order to meet the full costs of operation, and the average increase required would be $51 PUPM (19% above current RHS-approved rents).

In the §515 portfolio, the increased rents compare to our estimated market rents as follows:

49% of properties would require rents that are more than 10% below market.

15% would require rents that are up to 10% below market.

12% would require rents that are up to 10% above market.

10% would require rents that are between 10% and 20% above market.

14% would require rents that are more than 20% above market.

Cost to Government

Government Share of the Rent Increase. For purposes of this study, we have assumed that the government bears 100% of the cost of a one-time rent increase, to align each property's revenue stream with its costs of operation as calculated in this assessment.

RHS Rental Assistance. For units assisted through RA, RHS would bear the full cost of any rent increase.

HUD Section 8. For units assisted through project-based Section 8, HUD would bear the full cost of any rent increase[36].

Housing Choice Vouchers. For residents assisted through tenant-based Housing Choice Vouchers, HUD would bear the full cost of any rent increase (up to the 'payment standard' set by the voucher administration agency)[37].

Non-Assisted Residents. For units not assisted through RA or Section 8, the resident would bear the full cost of any rent increase. However, RHS has a public-policy interest in maintaining affordability to low-income rural Americans. Accordingly, for purposes of this study, we assumed that RHS would bear 100% of the cost of these one-time rent increases. Policy alternatives, under which RHS might bear some or all of the cost of these rent increases, are discussed in Section 4 of this report.

Estimates of Annual Cost to Government[38]. We estimate that the annual costs to the Department of Agriculture, to prevent deterioration in the entire §515 portfolio, would be $210 million per year, distributed as follows:

$119 million in additional Rental Assistance outlays, for units currently receiving RA assistance.

$6 million in additional Section 8 outlays, for units currently receiving project-based Section 8 assistance.

$28 million in additional outlays for Housing Choice Vouchers.

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[36] Because the purpose of the rent increases contemplated here would be to improve the viability of RHS-financed properties, for purposes of this study, we assumed that this cost would actually be funded by the Department of Agriculture rather than by HUD. Accordingly, in this study, we attribute all costs of preventing deterioration to Agriculture, even though some units are assisted through HUD's Section 8 program.

[37] For purposes of this study, we have assumed that 35,000 residents of §515 properties have Housing Choice Vouchers, and that the needed rent increases would not cause rents to exceed the 'payment standard'.

[38] We did not attempt to estimate the potential income tax effects of the rent increases. Because the additional rent would be taxable income to the owner, and because some of the additional revenue would be spent on non-deductible items such as Reserve deposits and capital expenditures, it is likely that there would be additional tax revenue to the Treasury to offset a part of the cost to RHS.

$57 million, to maintain affordability to currently non-assisted residents. This amounts to $40 (14%) per unit per month across the entire §515 portfolio (the average is $57 (16%) per unit per month, for the 92% of properties that would require a rent increase).

Net Present Value Cost. The net present value of twenty years' increased subsidies (at a $210 million annual rate), at a 5.0% long-term government discount rate, and assuming zero inflation, is $2.6 billion, or $6,021 per unit in the §515 portfolio.

The ICF Team
Market Assessment Report
Section 3: Preservation - Worthiness

Introduction

Significant federal costs will be incurred in meeting the preservation and recapitalization needs described in this report. When devoting funds to any particular property, RHS should satisfy itself that the property continues to meet important resident and community needs. Doing so will require approaches and methods that can be applied across the portfolio.

As noted in the Summary of Key Findings, RHS asked us to develop a ranking approach for preservation-worthiness. We believe that the approach described below could be a useful component of a comprehensive methodology for assessing the preservation-worthiness of individual properties. Standing alone, this approach provides a useful top-down "macro" view of the §515 portfolio. However, we caution against the use of any simple approach such as this, to make property-specific decisions regarding preservation and recapitalization of individual §515 properties.

Structure of this Section

Caveats – these scales that we developed are insufficient, in and of themselves, to support property-specific decisions.

Range of Results – examples of high-scoring and low-scoring properties, and implications for RHS preservation and recapitalization policy.

Property Quality Scale – factors contributing to our assessment of overall property quality.

Location Quality Scale – factors contributing to our assessment of overall location quality.

Composite Scale – a discussion of the scale that results from combining the property quality and location quality scales.

Interactions Between the Property Quality and Location Quality Scales – distribution of the 333-property sample portfolio according to the combination of the two scales.

Caveats

The result of this analysis is intended as one consideration, among many, that the Agency would consider in deciding whether to preserve any particular property. Other factors that would be worthy of consideration include, without limitation:

Stakeholder views (including at least the following: residents, communities, owners, and RHS field staff).

Availability of other affordable housing opportunities.

Prospects for employment and population change in the local area.

Cost of preserving the housing, in comparison to other available affordable housing strategies.

Our experience in preservation of affordable housing, inside and outside RHS, indicates that there is a plausible preservation rationale for almost every affordable rental housing property. Often, even for below-average properties in below-average markets, an RHS property will be the best rental property available and will be meeting important community and resident needs. Similarly, the fact that a market is not growing does not mean that, if an RHS property were demolished, residents would be able to find replacement affordable housing of similar quality. Accordingly, we caution that property-specific preservation decisions need to be made on a case-by-case basis, considering all of the relevant facts, and in consultation with residents and other community stakeholders. The scales we developed, by contrast, provide a "macro" view of the portfolio but incorporate only a few of the considerations that should be considered in an actual preservation decision.

We believe that the §515 portfolio generally exhibits attributes of preservation-worthiness. Accordingly, the usefulness of RHS' eventual comprehensive methodology will be primarily in identifying properties that perhaps should not be preserved, or situations in which other affordability approaches (such as providing incentives directly to residents, or reconstruction) should be considered. Said differently, we would hope that RHS would preserve all properties that are clearly preservation-worthy. As one advocate said to us, a twenty-unit property in an area where twenty units are needed should be preserved, regardless of whether there is a second twenty-unit property in another area where fifty units are needed.

Range of Results: Property Quality Scale

The following is an illustrative example of a property that achieved a high score on the property quality scale:

> **Snapshot of Very High Property Quality (#270).** This family property has 100% Rental Assistance and is fully occupied. The property has almost no immediate capital needs and has average long-term capital needs of $580 per unit. Current RHS rents need to be increased 3% to meet the property's costs of operation, including a larger Reserve deposit. The RHS overall rating is A. This property scored in the 99th percentile for property quality.

We believe the property described in the preceding snapshot represents an obvious candidate for preservation.

> **Snapshot of Very Low Property Quality (#119).** This family property has no RA and no Section 8. 9% of the units are 3BR or larger. 15% of the units are vacant. The property has immediate capital needs of $3,266 per unit, and average ongoing capital needs of $1,080 per unit per year. Current RHS rents need to be increased 27% to meet the property's costs of operation, including a larger Reserve deposit. The RHS overall rating is A. This property scored in the 2nd percentile for property quality.

The preceding snapshot illustrates a property at the extreme lower end of the property qualify continuum. However, based on our experience with other affordable rental housing portfolios, we would not characterize this property as 'extremely troubled'. Whether this property is worthy of preservation would depend on additional factors not available to us in this study, including the opinions of stakeholders such as residents and the local community. That said, little imagination is required in order to envision stakeholders identifying this property as a priority for preservation. In summary, if this property is typical of the extreme lower end of the property quality continuum, the current level of property quality problems in the §515 portfolio should prove manageable. Of course, if RHS fails to take action to increase Reserves as recommended in this report, it is certain that there will be serious property quality problems within a few years.

Range of Results: Location Quality Scale

> **Snapshot of Very High Location Quality (#83).** This family property is located in an area whose population grew 34% from 1990-2000 and is projected to grow 34% from 2003-2013. The rental vacancy rate in the area is 4.6%. From 1990-2000, area median income grew at a well-above-average rate. The ratio of median rents to median incomes (2000 Census) is in the top quartile for the 333 properties in the sample. This property scored in the 100th percentile for location quality.

The preceding snapshot illustrates a local area in which affordable housing doubtless would be difficult, and expensive, to create. All else equal, we believe that preserving properties in such areas should be a priority for RHS.

Snapshot of Very Low Location Quality (#109). This family property is located in an area whose population declined 4% from 1990-2000 and is projected to decline 13% from 2003-2013. The rental vacancy rate in the area is 13.7%. From 1990-2000, area median income grew at a below-average rate. The ratio of median rents to median incomes (2000 Census) is in the lower third of the 333 properties in the sample. This property scored in the 1st percentile for location quality.

A significant share of the sample is located in areas that experienced, or are projected to experience, population decline. In the sample portfolio, 21% of areas lost population from 1990-2000, and 32% of areas are projected to lose population from 2003-2013. These declining areas present perhaps the most difficult preservation issues in the §515 portfolio.

On the one hand, the §515 properties may well be the best properties in the area, and may well be playing a vital role in the community.

On the other hand, arguably it is not good policy to encourage rural Americans to remain in areas in which there is little or no prospect for economic viability. A complicating factor is that, in declining areas, in all likelihood there will be further declines before there is recovery (if indeed there is recovery).

Said differently, it is more likely that an existing trend will continue than that it will reverse itself. Accordingly, preservation strategies in declining areas should not be premised on the assumption that population, or local market rents, or occupancy rates, are about to turn upward.

Range of Results: Composite Scale

The composite scale is the result of combining the property quality and location quality scales, creating a single measurement that encompasses these two aspects of preservation-worthiness. We have included this scale in our report, but we prefer instead to use the property quality and location quality scales. We came to this decision as a result of discussions with RHS staff and stakeholders, in which it became apparent that different combinations of property quality and location quality call for different approaches:

High Property Quality / High Location Quality – these properties are easily targeted for preservation.

High Property Quality / Low Location Quality – these properties present very difficult preservation decisions. On the one hand, these properties may be the best rental housing in the local market, may be the only source of 3+ bedroom rental housing in the market, or may be the only elderly-designated rental housing in

the market. Similarly, the property may be meeting important community needs, particularly if it encompasses community facilities that are made available to citizens other than residents. Conversely, arguably it is poor public policy to encourage rural Americans to remain in areas with little prospect for economic viability. Similarly, in some negative-growth and low-growth areas, there will be a surfeit of affordable rental housing, of acceptable quality, in the local market, such that the §515 property could be removed from the housing stock with little or no adverse effect upon residents or the community.

Low Property Quality / High Location Quality – stakeholders typically prioritize these properties for preservation, because the cost of replacement is typically high, because there may be a severe shortage of available suitable land for the development of replacement housing, and because it may be politically impossible to develop additional affordable rental housing. That is, despite any flaws in the property, preserving it may be widely seen as the best public strategy.

Low Property Quality / Low Location Quality – on the surface, these situations present the most compelling rationale for pursuing other affordability strategies (such as giving Housing Choice Vouchers to residents). However, when making on-the-ground assessments in such areas, often one finds that though there are high vacancy rates in other rental housing, that housing may be of such low quality that it does not provide a suitable alternative.

Each of the preceding thumbnail sketches suggests the need for situation-specific assessment before making a preservation decision. To us, they also suggest the need to focus on different aspects of the affordability and housing stock problems in different quadrants of the property quality / location quality matrix.

That said, the composite scale is useful for identifying the range of attributes in the sample portfolio. The composite scale, with scores ranging from 26 to 80, indicates that the sample portfolio contains no properties with extremely low or extremely high nominal scores. That is, typical properties had a mix of positive and negative attributes, with no property having all (or even substantially all) positive attributes, and with no property having all (or even substantially all) negative attributes. Accordingly, for snapshots in this section, we selected properties with modestly high and modestly low composite scores.

Snapshot of Typical Property With Relatively High Composite Preservation-Worthiness Score (#18). This elderly property has 30% Rental Assistance. All of the RA units, and 93% of the remaining units, are occupied. The local population increased 24% between 1990 and 2000 and is projected to grow an additional 30% between 2003 and 2013. Area median incomes grew at well-below-average rates. Local market rents are relatively affordable in relation to local median incomes (top third of the distribution). The property has immediate capital needs of $589 per unit and long-term capital needs averaging $753 per unit per year. Current RHS rents need to be increased 12% to meet the property's costs of operation, including a larger Reserve deposit. The property scored at the 81st percentile on the property scale, the 62nd percentile on the location scale, and the 83rd percentile on the composite scale.

This property would appear to be a good candidate for preservation. However if there were a good supply of alternative affordable housing, the cost to preserve were high, and stakeholders indicated that alternatives to preservation should be considered, it might be logical not to preserve this property despite the attributes that led to the relatively high score.

Snapshot of Typical Property With Relatively Low Composite Preservation-Worthiness Score (#60). This family property has 43% Rental Assistance, all of which are occupied. However, 25% of the non-assisted units are vacant. The local population increased 40% between 1990 and 2000 but is projected to increase 24% between 2003 and 2013. Area median incomes grew at a slightly below-average rate from 1990-2000. Local market rents are quite high in relation to local median incomes. The property has immediate capital needs of $3,999 per unit and long-term capital needs averaging $710 per unit per year. Current RHS rents need to be increased 25% to meet the property's costs of operation, including a larger Reserve deposit. The property scored at the 4th percentile on the property scale, the 77th percentile on the location scale, and the 19th percentile on the composite scale.

By comparison to the earlier snapshot, this property would appear to offer a much less powerful rationale for preservation. In particular, the vacancy rate in the non-assisted units, in the face of apparently compelling need for affordable housing, suggests that there are problems with the property itself, ownership, management, or possibly all three. However (assuming that the flaws could be corrected), if there were a lack of

acceptable alternative affordable housing, there were prospects for significant population and employment growth, or stakeholders indicated that the property was an essential local resource, it might be logical to preserve this property despite the attributes that led to the relatively low score.

Property Quality Scale

The factors contributing to property quality are:

- Vacancy rate in the assisted (RA and Section 8) units. All else equal, we believe RHS should prioritize properties with low vacancy rates. We measured this based on the snapshot physical vacancy data provided to us by RHS (data received December 10, 2003, likely reflecting actual tenant population in November).
    - Of the 292 sample properties with assisted units 214 (73%) had assisted vacancy rates below 2%, 25 properties (9%) had assisted vacancy rates between 2% and 5%, 23 properties (8%) had assisted vacancy rates between 5% and 10%. 30 (10%) had assisted vacancy rates above 10%.
- Vacancy rate in the unassisted units.
    - Of the 234 properties with unassisted units, 16 (7%) had unassisted vacancy rates below 5%. 34 (15%) had vacancy rates between 5% and 10%. 184 (88%) had vacancy rates above 10% (of these, 52 (22% of the 234 total) had vacancy rates above 20%).
- Short-term capital needs per unit. All else equal, we believe RHS should prioritize properties needing relatively low amounts of short-term investment. We measured this as the average of the first two years' capital needs.
    - 112 properties (34%) had short-term capital needs between $1000 and $2000 per unit. 32 (10%) had needs below $500 per unit, and 38 (11%) had needs above $3000 per unit.
- Twenty-year capital needs. All else equal, we believe RHS should prioritize properties needing relatively low amounts of long-term investment. We measured this as the average of the remaining eighteen years' capital needs.
    - 136 properties (41%) had short-term capital needs between $700 and $900 per unit per annum (PUPA). 9 (3%) had needs below $500 PUPA, and 39 (12%) had needs above $1100 PUPA.
- Percentage of RA units. We selected this because, under current law, these residents are not entitled to tenant protections of any sort in the event of prepayment.

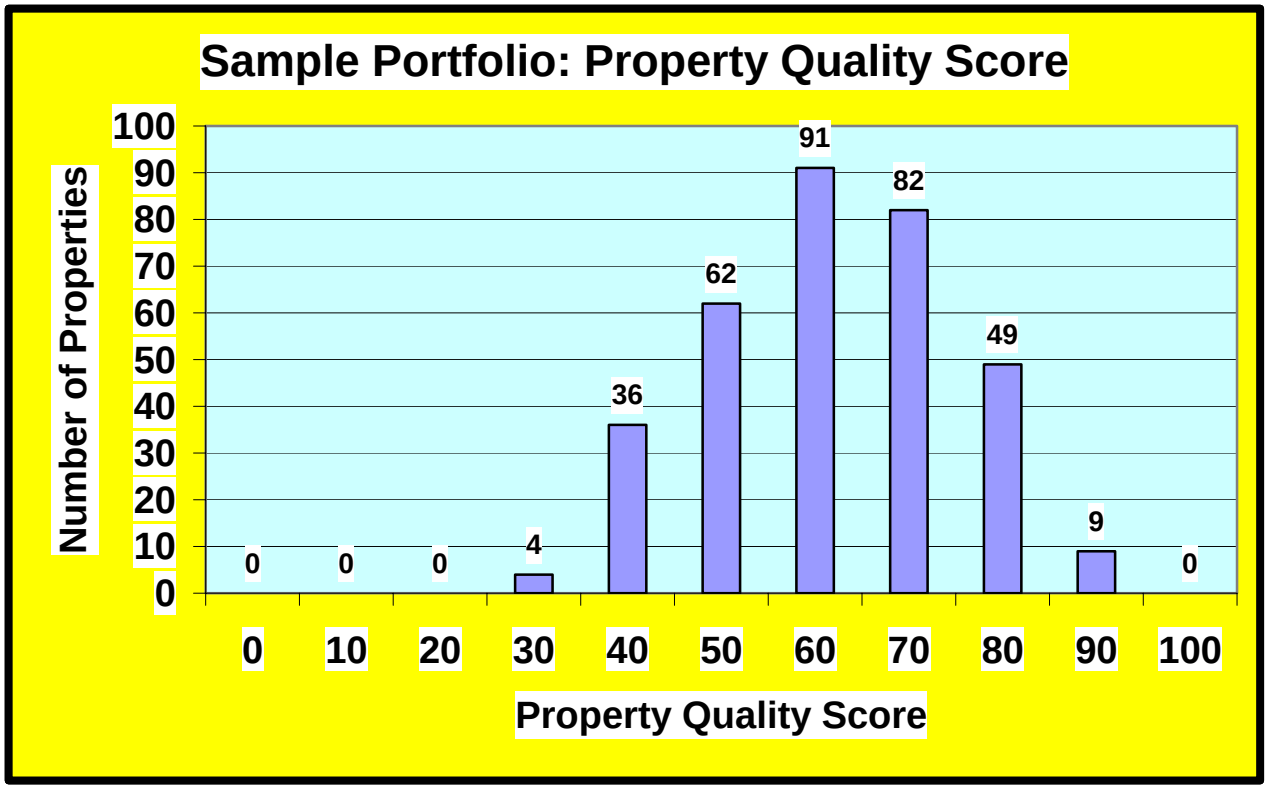
- Of the 271 properties with Rental Assistance, only 16 (6%) have fewer than 20% of the units assisted under RA. 51 (19%) have 20%-50% RA, 60 (22%) have 50%-75% RA, 37 (14%) have 75%-90% RA, and 107 (40%) have more than 90% RA.

- Unit mix. In this category, we included two sub-factors. One sub-factor is elderly-designated properties (because stakeholders generally prioritize elderly properties for preservation). The second is family properties with a relatively high percentage of 3BR and larger units (because larger affordable apartments are in relatively short supply in most markets).
    - 41% of properties are elderly-designated.
    - Of the 195 family-designated properties, 138 (71%) have no large units, 19 (10%) have 10%-20% large units, 24 (12%) have 20%-50% large units, and 5 (3%) had more than 50% large units.

- RHS overall rating. RHS assigns an overall compliance rating of A (highest), B, C or D (lowest) to all its properties.
    - In the sample portfolio, 66% were rated A, 12% were rated B, 21% were rated C, and 1% were rated D.

- Rent increase that would be required to stabilize the property. All else equal, we believe RHS should prioritize properties whose existing rents are adequate.
    - Of the 300 sample properties that would require rent increases, 93 (31%) would require increases up to 10%, 110 (37%) would require rent increases of 10%-20%, 84 (28%) would require rent increases of 20%-40%, and 13 (4%) would require rent increases above 40%.
    - Of the remaining 33 properties, 19 had rents up to 10% higher than would be required, and 14 had rents more than 10% higher than would be required.

The chart below illustrates the distribution along the property-quality scale for the 333 properties in the sample portfolio:



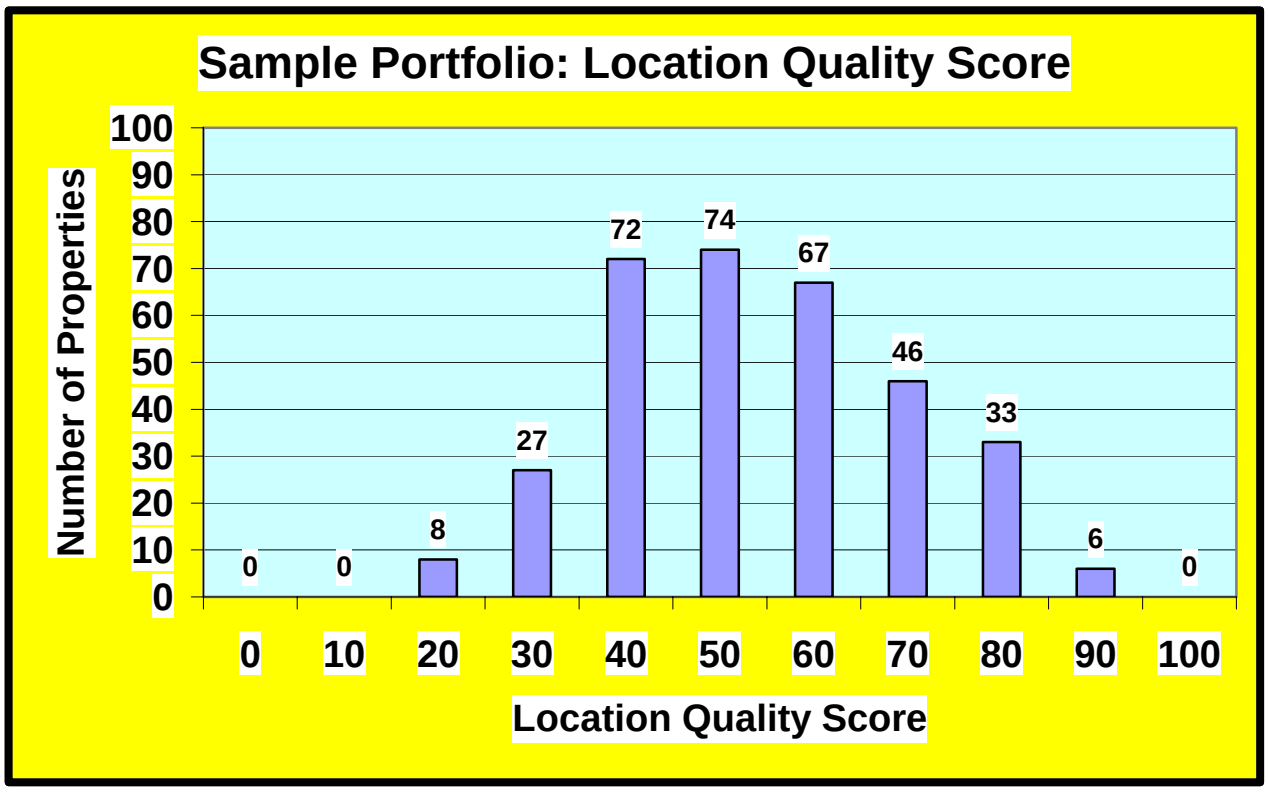
This indicates that the sample portfolio is fairly well clustered, with scores generally consistent with good preservation-worthiness. Said differently, properties that had one or more below-average attributes tended to have offsetting positive attributes.

Location Quality Scale

The factors contributing to location quality are:

- Population growth 1990-2000. All else equal, we believe RHS should prefer to preserve properties in high-growth areas. We measured this from Census data for a three-mile radius surrounding the property.
    - 70 (21%) of the sample properties are located in areas that experienced loss of population. 44 (13%) experienced growth above 30%.
- Population growth 2003-2013. All else equal, we believe RHS should prefer to preserve properties in high-growth areas. We obtained this information from Applied Geographic Solutions (AGS).
    - 107 (32%) of the sample properties are located in areas that are projected to experience loss of population. 15 (5%) are expected to experience growth above 30%.

- Area Rental Vacancy Rate. All else equal, we believe RHS should prefer to preserve properties in low-vacancy areas. We measured this from 2000 Census data.
    - 105 (32%) properties are located in areas that had vacancy rates between 8%-12%. 41 (12%) had vacancy rates of 12%-16%, and 13 (4%) were above 16%. 91 (27%) had vacancy rates below 6%.
- Ratio of Monthly Median Rent to Monthly Median Income. All else equal, we believe RHS should prefer to preserve properties in areas where prevailing rents are high relative to the median income. We measured the relationship between 2000 Census median monthly rent, and 2000 Census median monthly income.
    - The median ratio was 7.3%. 80% of results ranged from 5.5% to 12.6%.
- Area Median Income growth 1990-2000. All else equal, we believe RHS should prefer to preserve properties in high-income-growth areas. We measured the change in four-person AMI (as published by HUD) from 1990 to 2000.
    - The median growth rate was 45%. 80% of results fell between 40% and 59%.

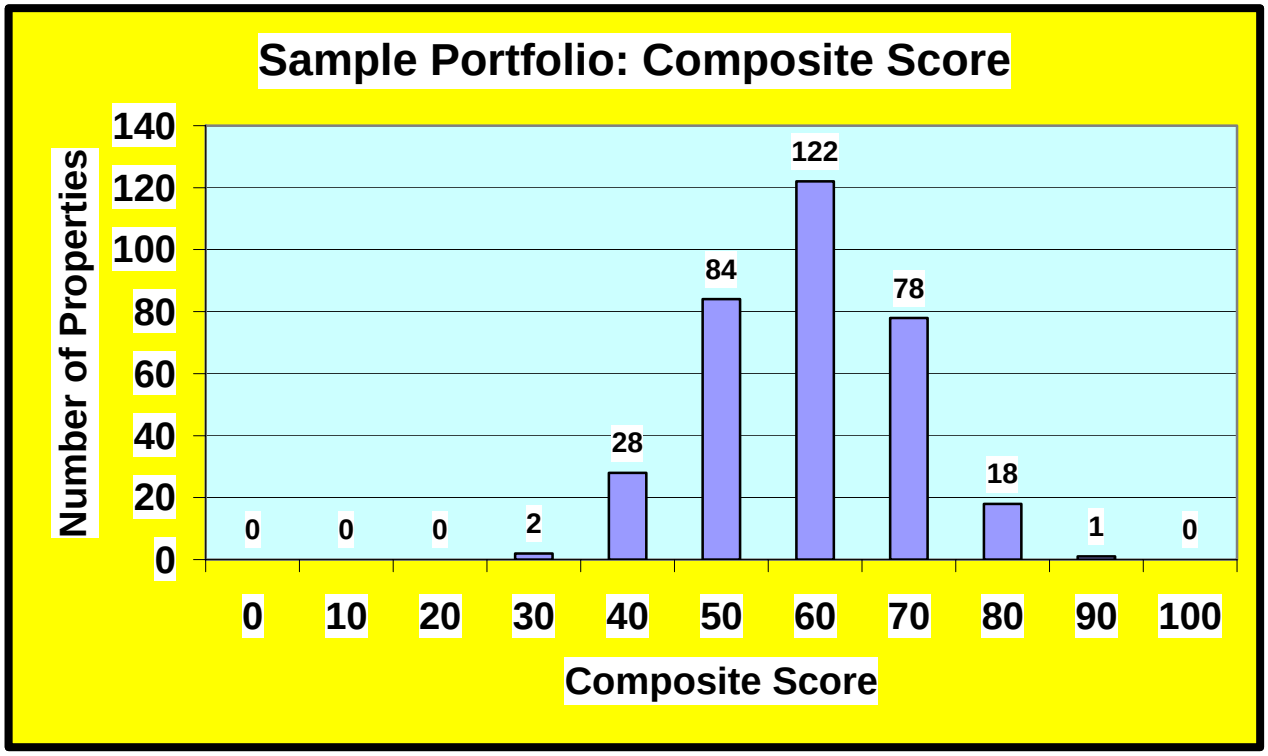


Unlike the property quality scale, where values were more clustered, the location quality scale indicates that the sample portfolio is located in market areas spanning a wide

range of attributes. Some of the market areas are quite troubled, and others are growing quite strongly.

Composite Scale

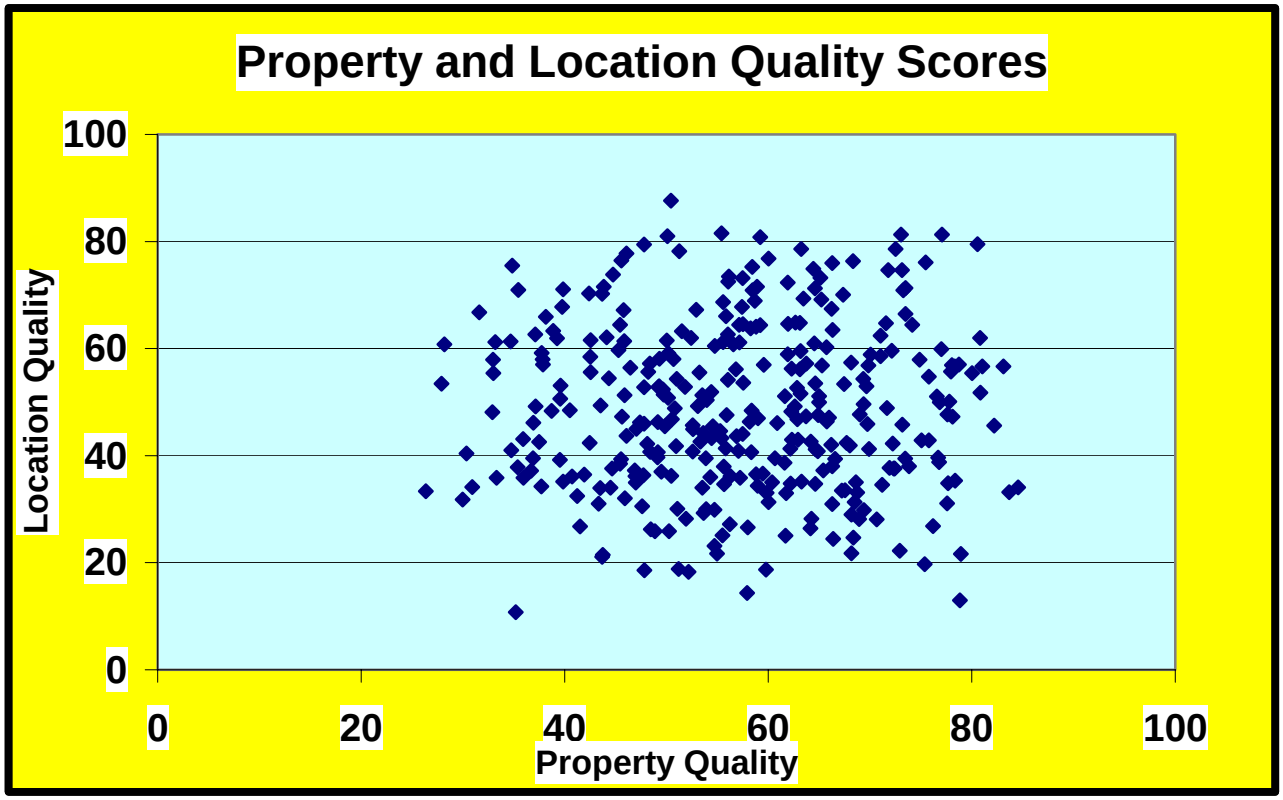
The composite scale consists of all of the factors for the property quality and location scales, at the weights they carry in those scales. As noted above, the composite scale is useful for understanding the overall range of preservation-worthiness in the sample portfolio. The following chart shows the distribution of scores in the sample portfolio:



As this chart indicates, the sample portfolio is strongly clustered in an area generally consistent with preservation-worthiness.

Interaction Between the Property Quality and Location Quality Scales

The following chart shows property quality score on the horizontal axis and location quality score on the vertical axis:



As this chart indicates, the sample portfolio is relatively strongly clustered in a region of the chart that is consistent with preservation-worthiness. Another implication of this chart is that – because the sample portfolio produces a cluster of results -- factors not considered in this assessment likely will (and should) drive actual property-specific preservation decisions.

The ICF Team
Market Assessment Report
Section 4: Policy Alternatives

Structure of this Section

Need for resident protections in the event of prepayment.

Allowing prepayment may be a viable option.

Policy alternatives for a non-prepayment incentive.

Policy alternatives for supporting long-term property viability.

Policy alternatives for maintaining affordability to currently non-assisted residents.

Potential niche strategies.

Cross-cutting policy issues.

Need for Resident Protections In The Event of Prepayment

One consensus conclusion from the "preservation" debates for the HUD-assisted portfolio is that residents need to be protected against rent increases when owners prepay and convert the property to market operations. The relatively few residents in §515 properties who are assisted through project-based Section 8 already have this protection[39].

The mechanism for protecting HUD-assisted tenants is "conversion vouchers" (sometimes also called "tenant protection vouchers"). For so long as the resident chooses to live at the property, these vouchers will cover the actual market rent for the unit, even if that rent is above the normal payment standard for Housing Choice Vouchers.

Other forms of resident protection could be provided. Examples include a one-time cash award (based on a multiple of the monthly rent differential that the family would have to pay after prepayment and conversion), homeownership assistance, and time-limited rental assistance.

[39] If the §515 loan were prepaid, the §8 contract would continue after the prepayment. If the owner "opted out" of the §8 contract (i.e., declined a renewal offer), residents would receive Housing Choice Vouchers. We have not been able to verify whether residents would be entitled to "conversion vouchers" that would cover the full market rent (if the market rent exceeded the normal "payment standard").

Based on past public policy decisions, we assumed that appropriate forms of protection would be extended to both of the following categories of other §515 residents:

- Residents assisted under RA.

- Unassisted residents, with incomes eligible for Section 8 (below 50% AMI), and who would otherwise have a rent and utilities burden exceeding 30% of adjusted income, at the post-prepayment market rents[40].

We emphasize that, if residents were adequately protected, RHS would be under much less pressure to prevent any particular prepayment. Residents would be protected whether the owner prepaid or accepted incentives. RHS likely would prefer that the owner accept incentives, because under that scenario there would be more assurance that the property would continue to house low-income rural Americans over time. However, if the owner refused, residents would not be displaced.

Similarly, if residents were entitled to adequate protection, RHS would be in a much stronger position to insist that incentives be based on reasonable estimates of market rents. With residents not protected (as under current law), RHS is under considerable pressure to agree to the owner's demands for incentives, even if those demands are not objectively reasonable or are not convincingly supported.

It should be noted that the incremental cost of resident protections would be modest, for the following reasons:

- Many (sometimes all) of the affected residents currently receive Rental Assistance. The remaining contract authority in the RA contract should be viewed as an offset to the cost of the protections.

- Prepayment converts a low-value asset (a 1% long-term loan) into cash. For example, a $1 million loan at 1% with 30 years remaining is worth no more than $600,000 to the Treasury (net present value, using a 5% long-term discount factor). Yet, this loan, if prepaid, would generate $1 million in cash. This "windfall" gain to the government ($400,000 in this example) could be an offset against the cost of the tenant protections.

- The alternative is to pay an incentive to the owner (to agree not to prepay). The cost of the incentive that otherwise would be required should be viewed as an offset to the cost of resident protections.

Allowing Unconditional Prepayment May Be A Viable Option

As discussed in Section 1, we believe that, once residents are adequately protected against rent increases, it would be viable (from a public-policy standpoint) to simply allow prepayment with few if any preconditions, if the owner refused RHS' offer of

[40] In analogous situations within the HUD inventory, these non-assisted residents are entitled to conversion vouchers.

incentives, or in lieu of offering incentives. Allowing relatively unconditional prepayment in lieu of offering incentives is, in fact, the solution that policymakers chose, in the analogous situation in the HUD inventory.

One consideration in favor of simply allowing prepayment is that this avoids the "war of appraisers" that HUD found to be so problematic in its preservation programs. We believe, and most observers concur, that when government and private owners conduct a "war of appraisers", the result is that government loses the war and ends up paying too much.

Accordingly, we recommend that RHS consider seeking any legislative authority and any appropriations necessary in order to provide appropriate economic protection to at-risk residents. We also recommend that RHS consider seeking any legislative authority necessary in order to discontinue the potentially lengthy process of analysis and incentives that is now required under ELIHPA.

Policy Alternatives for Structuring a Non-Prepayment Incentive

As noted above, we recommend <u>not</u> providing incentives, and instead protecting residents and allowing prepayment. If, however, RHS provides incentives, a variety of approaches are worthy of consideration, including (in no particular order):

- *Increased owner return.* An incentive could be funded annually, in the form of an increase to the allowable owner return.

- *Equity take-out loan.* RHS could loan the owner an amount equal to some or all of the economic value of the owner's prepayment option. The loan payments could be covered through increased rents, or through direct payments from RHS. If the equity take-out loan is made directly by RHS, it could carry a below-market interest rate.

- *Incentive to wait.* RHS and owners could agree on a modest payment, in exchange for which the owner would agree not to prepay for a limited period of time such as three years. This strategy could be useful if the volume of requests for prepayment were too large to be processed timely.

- *Requirement to sell.* In the roughly analogous situation in the HUD inventory, policymakers decided to prioritize transactions in which owners agree to sell to purchasers who agreed to more or less perpetual use restrictions[41]. Transfers that promote resident homeownership could be prioritized.

[41] Late in the LIHPRHA preservation program, policymakers provided a priority for transactions that involved sales to nonprofits, with at least a 50-year affordability commitment. HUD provided a capital grant to the nonprofit purchaser, to cover the purchase price of the property plus needed repairs. As a result, the typical property did not have to increase rents. This is a useful paradigm if RHS should decide to pursue a non-prepayment incentive strategy.

- *Renewed-affordability opt-in program*. RHS could devise a 'preservation opt-in' program, similar to HUD's Mark Up to Market (MUM) initiative, that would appeal to many owners of economically viable prepayment properties. HUD's MUM initiative proved very effective in preserving properties whose owners who would otherwise surely have gone market.

- *Preservation buyer incentives*. RHS could also provide a defined set of incentives to a defined class of 'preservation entity' buyers, with a view that these entities would attract properties – either by seeking out sellers or having sellers seek *them* out – and then finance a purchase using the RHS non-prepayment incentives.

- *One-time cash payment.* RHS could make a payment to the owner, based on the economic value of the owner's prepayment option.

We believe that any incentive should be coupled with a long-term affordability and use agreement.

For nearly 15 years, HUD has used a variety of preservation programs: ELIHPA, LIHPRHA, Mark-to-Market, Mark Up To Market, and Mark Up to Budget. Significant lessons learned can be extracted from the HUD experience and used as an experience base to inform RHS decision-making.

Policy Alternatives for Supporting Long-Term Property Viability

Our scope of work directs us to assume that rents are increased to the level required to support the property's long-term viability. However, there are a variety of other funding approaches, including:

RHS could make grants to pay for needed capital improvements. Because they do not have to be repaid, grants do not add to the property's ongoing costs of operation, and hence do not require rent increases. Moreover, grants are efficient, because RHS provides the funds directly to the property, without requiring an intermediary such as a private lender. Especially because so many §515 properties are small, and small loans are hard to finance, RHS should consider using grants to meet up-front cash needs of troubled properties.

> NOTE: Grants have the potential to cause adverse income tax consequences for borrower / owners[42]. A form of grant particularly worth considering is a *capital advance* such as HUD uses in its §202 and §811

[42] Generally, grants are treated as taxable income when received. If the grant is spent, in the same tax year, for deductible expenses (such as repainting), then the tax effect is neutral. However, if the grant funds are not spent in the same tax year, or if they are spent for capital items that cannot be expensed when purchased (for example, re-roofing), there can be a material adverse tax impact on property owners who are taxpayers. Generally, nonprofit owners would not have adverse consequences, and for-profit owners would.

programs; a capital advance requires no repayment so long as the owner complies with its affordability and use agreement.

RHS could re-amortize the §515 loan(s). RHS could agree to extend the existing loan term, and recast the existing unpaid principal balance over the new longer term, thereby reducing the required monthly payments.

NOTE: This approach is likely to have adverse income tax consequences for owners[43]. This strategy could be made more powerful by combining it with a reduction in interest rate. For purposes of illustration:

A §515 loan with a $1 million balance, 30-year remaining term, and 1% interest rate would require monthly payments of $3,216.

If the remaining term were extended to 50 years (the original term), the required monthly payments would be reduced to $2,119 (a 34% reduction).

Reducing the interest rate to zero and extending the term to 50 years would drop the required payments further, to $1,667 (a further 21% reduction).

RHS could restructure the §515 loan(s). The required monthly loan payment would be reduced as needed to make room for higher Reserve deposits and other property needs.

NOTE: Like the previous approach, this approach would constitute a 'material modification' of the loan that might produce adverse income tax consequences for the owner / borrower. RHS could modify the interest rate (perhaps reducing it to zero), extend the loan term, and/or make the payments "soft" (that is, provide that the required payment is a percentage of year-end surplus cash, and that no payment need be made if surplus cash is negative)[44].

RHS could allow a new private first mortgage. One useful approach is to use a new first mortgage (probably guaranteed under the RHS §538 program). The existing §515 loan(s) would be subordinated to the new private loan.

NOTE: This subordination would be a 'material modification' of the §515 loan(s). The new first mortgage could fund up-front repairs plus an initial

[43] The Internal Revenue Code provides that, upon a 'material modification' of a debt instrument, a determination must be made whether the modified instrument has a lower value to the lender. If so, the borrower is treated as having received Cancellation of Debt Income, which is taxed at ordinary income rates.

[44] "Surplus Cash" is a HUD concept. Surplus Cash is the property's available cash (from the operating and security deposit accounts, plus any certificates of deposit or other cash equivalents, but not including the Reserve or escrow accounts), minus adjustments including: accounts payable, accrued liabilities, security deposits and interest owed to residents, and any shortages in the tax or insurance escrows. "Surplus cash" is similar to what accountants call a "net current assets" measurement.

deposit to the Reserve account. Under this approach, the §515 loan(s) could be modified as discussed above, to make room for debt service on the new first mortgage loan.

Facilitate use of LIHTCs, HOME and CDBG. RHS could facilitate the recapitalization of §515 properties using resources such as the Low Income Housing Tax Credit, the HOME program, and the CDBG program. These non-RHS resources could fund up-front repairs plus an initial deposit to the Reserve account. RHS could facilitate these transactions in a number of ways, perhaps the most helpful of which would be to agree to subordinate the §515 loan(s), perhaps also modifying the §515 loan(s) as discussed above. As noted above, subordination might trigger adverse income tax consequences for the borrower.

Policy Alternatives for Maintaining Affordability to Non-Assisted Residents

Our model assumes that, for residents not assisted through RA or Section 8, RHS would bear 100% of the one-time rent increase that we calculated (to support the property's long-term viability).

NOTE: Because there is no current RHS program that could provide this sort of partial assistance on behalf of currently unassisted residents, new legislative authority and appropriations likely would be needed before RHS could incur these costs.

We identified the following potential funding approaches:

Rent Skewing. For properties having RA or Section 8 assistance for at least some units, it would be financially feasible for the federal government to bear this cost by increasing the RHS-approved rent for the RA and Section 8 units above the RHS-approved rent for the remaining units. This option would not be available in properties having no RA or Section 8 units. We have not been able to determine the extent to which a 'rent skewing' approach can be pursued under RHS' existing statutory and regulatory structures[45].

Shallow Subsidy. RHS could request authority and funding for a new "shallow subsidy" rental assistance program. For example, in a property whose 2BR rents were increased $50, the new program could provide $50 per unit per month of assistance to currently non-assisted families occupying 2BR apartments, thereby protecting such families against the one-time rent increase.

[45] It appears that, under existing Administrative Notices, the owner could request a rent increase and, simultaneously, permission to offer a "rent incentive" to non-assisted residents, to keep their rents at or below comparable market rent levels. Whether RHS could agree to such a request is unclear. One concern is that this might be viewed as an unauthorized increase to the number of units in the RA contract.

Implementing any such program would also require a mechanism for determining what portion of the rent increase should be borne by RHS. Alternatives include:

- A straight percentage (such as the 100% assumed in our model).

- The portion of the rent increase that would represent a housing cost (rent plus utilities) burden in excess of (say) 30% of adjusted income.

Potential Niche Strategies

The §515 portfolio is actually quite variable. Different policy strategies may be appropriate for different segments of the portfolio, including:

- *"515/8" properties with §515 loans and project-based Section 8.* In general, all residents are assisted, though with a non-RHS subsidy. These §515 loans carry much higher interest rates, as opposed to the 1% rate on other §515 loans. Also, these Section 8 contracts would continue after a prepayment of the §515 loan(s). Similarly, if the owner refused to renew the Section 8 contract ("opted out"), residents would be entitled to vouchers[46]. These material differences suggest the following potential niche strategies for the "515/8" portfolio:

    - If a 515/8 property is troubled, consider using debt relief (reducing the interest rate, extending the term, or otherwise modifying the §515 loan) as the preferred workout vehicle (especially since HUD has no institutional reason to grant a rent increase in order to stabilize an RHS loan).

    - If, generally, the 515/8 portfolio is over-subsidized, consider a legislative strategy to reduce rents, ideally to utilize the savings elsewhere in the §515 portfolio.

    - If, hypothetically, owners of 515/8 properties should regain the right to prepay, because residents would be protected, RHS need not stretch to preserve the property, if the owner's demands are unreasonable or are unconvincingly documented.

- *Properties with Low Income Housing Tax Credits.* A significant portion of the §515 portfolio already has LIHTCs, and significant numbers of properties are recapitalized each year using the LIHTC. RHS should consider the following:

    - As one component of the RHS approval process, for LIHTC transactions, if the §515 loan will continue in force after the LIHTC transaction, RHS should consider requiring the owner's agreement not to prepay.

- *Partially Assisted Properties.* 60% of properties with RA are partially assisted (less than 90% RA). Of the 271 sample properties that have Rental Assistance,

[46] We have not been able to verify whether these would be enhanced vouchers, or normal Housing Choice Vouchers.

6% have less than 20% RA, 19% have between 20% and 50% RA, 22% have between 50% and 75% RA, and 14% have between 75% and 90% RA. For properties with less than, say, 90% Rental Assistance, there is a *de facto* rent restriction on the unassisted units: rents higher than those prevailing in the local market cannot be charged or collected, no matter how desperately those higher rents may be needed in order to meet ongoing operating and capital costs. This suggests the following potential niche strategies:

- When partially assisted properties are troubled, strongly consider debt relief as a primary strategy. This reduces costs of operation, and allows a greater proportion of the existing rental income to be applied to operating expenses and capital needs.

  NOTE: Debt relief carries with it the potential of adverse income tax consequences for the borrower / owner[47].

- If rents have been maximized within comparable market rent levels, and the property is still troubled, RHS should not treat its §515 loans as having significant economic value. Likely those loans are not going to be repaid, and typically it will not be economically sound to make further expenditures in the hope of salvaging those loans. If such a property is preserved, it should be preserved for social reasons, or because (absent preservation) it would be necessary to replace the housing at even higher cost; preservation should not be pursued in the hope of future recovery on the §515 loans.

- When such properties are troubled, consider 'rent skewing' as a secondary strategy. Rents for the unassisted units would be maintained at or below market levels, and rents for the assisted units would be set at the level necessary to generate adequate revenue to support the viability of the property. Necessarily, this will often mean setting the assisted rents above comparable market rent levels in the local market.

- Because there are so many partially assisted properties in the portfolio, RHS should develop an approach to making preservation decisions that is tailored to partially assisted properties. One threshold question is whether RHS believes it is more important to preserve an assisted unit than a non-assisted unit. Similarly, RHS may determine that the public-purpose value of preserving a currently non-assisted unit varies according to how far below market the RHS rent happens to be.

[47] In general, under §1001 of the Internal Revenue Code, when a loan undergoes a 'material modification', the Internal Revenue Code requires an economic evaluation of the old and new loan terms, to determine whether the lender has given up value. If so, generally the borrower is deemed to have received Cancellation of Debt Income, which is taxable at ordinary income rates. Many seemingly modest changes, such as extension of loan term, change in interest rate, or change in payment terms, are considered to be 'material modifications' triggering this loan recalculation for tax purposes.

- *Properties located in areas that are losing population.* In the sample portfolio, 21% of properties are located in areas that lost population from 1990 to 2000, and 32% are located in areas projected to lose population from 2003 to 2013. This suggests the following potential niche strategies:

    - When preserving these properties, RHS should not assume that things will turn around any time soon. Accordingly, strategies that depend on population growth, rent growth, or occupancy growth are likely to fail.

    - When preserving these properties, RHS should not assume that its existing §515 loans have significant economic value. Likely, in such areas, the Net Operating Income available at comparable market rents may not be sufficient even to cover costs of operation before debt service. Accordingly, in such situations, RHS be willing, as a first measure, to forego debt service payments or otherwise restructure its §515 loans, because these concessions probably have little real-world cost.

    - In these types of areas, it may well be necessary to set rents for assisted units above the levels prevailing in the local market, even after reducing or eliminating debt service on the §515 loans.

    - Because such a large proportion of the portfolio is located in declining-population areas, RHS should develop a sophisticated methodology for assessing preservation-worthiness in areas of declining population.

- *Small properties.* In the entire §515 portfolio, 15% of properties (with 3.5% of total units) have less than 12 units, and another 43% of properties (with 31% of total units) have 12-24 units. For such properties, an intensive preservation and recapitalization assessment is probably not cost-effective. This suggests the following potential niche strategies:

    - A practical and accurate method for assessing the preservation-worthiness of small properties. Such an assessment could take into account factors such as the cost of preservation per resident, or per assisted resident, or per Very Low Income resident.

    - A toolkit of easy-to-use spreadsheets, §515 debt relief, small grants, and a long-term affordability and use agreement, that RHS staff can use, to stabilize smaller properties at low administrative cost.

    - A decision not to preserve some or all very small properties that become troubled, or whose owners request permission to prepay. As noted above, this strategy would not be workable until residents became entitled to adequate protection against prepayment-related rent increases.

    - Deregulation strategies, to convert some or all very small properties to a different regulatory structure, such as a LIHTC-like structure in which rents

do not have to be approved by RHS but are subject to a maximum amount based on area median incomes.

- *Larger properties.* In the entire §515 portfolio, almost 1000 properties have 50 units or more (properties with 50+ units account for only 6% of properties but 17% of units). For these properties, RHS could make use of the existing HUD Mark-to-Market analytical approach, which includes a systematic and comprehensive assessment of the property and a property-specific restructuring plan.

- *Elderly properties.* Stakeholders typically prioritize elderly properties for preservation. Reasons include the desirability of properties that provide or facilitate supportive services, the desirability of properties that have elderly-oriented features such as grab bars and alarms, and the plain fact that the elderly generally do not want to relocate. This will probably call for elderly-specific preservation assessment approaches.

Cross-Cutting Policy Issues

We identified the following policy issues that we believe RHS should consider:

- *Low Resident Incomes.* The average adjusted household income in the RHS portfolio was $9452 per year in January 2004 (versus $9365 for January 2003 and $8104 for January 2002)[48]. For purposes of illustration, note that a household with a $9452 annual income can afford to pay no more than $236 for rent and utilities. Yet, the typical §515 property costs more than that to operate, before making any allowance for debt service. This has a powerful implication for the §515 portfolio -- the typical household needs RA (or some equivalent rental assistance) in order to achieve affordability. Said differently, it is not possible to serve this population without rental assistance of some sort.

- *Rental Assistance Growth If Properties Are Stabilized Through Rent Increases.* If RHS supports long-term viability through rent increases, our analysis indicates that rents will need to grow much faster than inflation in order to stabilize the portfolio. Similarly, if the portfolio is stabilized through rent increases, the RA budget is certain to rise at a rate that that will not be sustainable in the current budget climate.

- *Use Agreement.* We recommend that RHS obtain an appropriately long-term commitment to affordability, appropriate maintenance and upkeep, non-discrimination, and other appropriate public-policy objectives, in exchange for any restructuring of rents or debt service to support properties' long-term viability. We recommend that any such use agreement be structured as a covenant running with the land that would survive foreclosure.

[48] Source: RHS Multifamily Fair Housing Annual Occupancy Reports for 2002, 2003 and 2004. The report covers tenants in the §515 portfolio as well as tenants in the much smaller §514 Farm Labor Housing portfolio.

- *Transfers.* RHS may wish to encourage transfers of ownership, whenever existing ownership entities are dysfunctional, or whenever new ownership entities offer significant public-policy advantages such as greater economic efficiency or a longer-term commitment to affordability.

  NOTE: When properties are sold, typically the seller has a very significant income tax liability that often exceeds the net cash proceeds of the sale; as a result, an RHS policy that required or encouraged transfers, and that did not accommodate the negative tax consequences, would be likely to be opposed by owners.

- *Property management fees.* Perhaps the most significant incentive for a long-term owner of §515 properties is the potential that its affiliated property management company can profit from management fees. However, this incentive is effective only if property management is, in fact, profitable. RHS should study this issue and, if fees are too low, make appropriate changes in the way it regulates property management fees. See also the discussion below of incentives; increased performance-based property management fees could be a powerful and effective incentive for RHS.

- *Volatility of Multifamily Real Estate.* Over the course of a business cycle, market rents and market vacancy losses vary over a fairly wide range. Over any extended period of time, various operating expense line items will increase or decrease significantly. Long-lived building systems such as roofs often will need replacement well before the industry-standard "useful life" would suggest; conversely, they may last significantly longer than expected. Prices of essential materials such as paint, carpet and lumber, are also volatile[49]. In a spreadsheet, we can estimate that rents will grow at 3% per year and that expense will grow at 3.5% per year and that vacancy and collection losses will be 7.8% of gross potential rents, but reality (over a period of years) is certain to be significantly different. Accordingly, in order to be stable, properties need internal financial resources that will allow them to survive these sorts of frequently-occurring significant variances. These financial resources include:

  - Adequate cash reserves, so that the property can "borrow" from the reserve during periods of temporary stress and make repayment later.

  - An adequate allowance for vacancy and collection losses, sized so that it will be reasonably adequate in a moderately adverse year; and

  - An adequate operating margin, to protect against moderately adverse swings in operating expenses.

- *Operating margin / debt service coverage.* Historically, §515 properties have been budgeted to have cash flow more or less equal to the allowable limited

[49] For example, in the last sixty days, lumber prices have doubled.

distribution. In the sample portfolio, on average, this produces Debt Service Coverage Ratios in the 1.50:1 range[50]. This appears healthy on the surface. However, because the absolute dollar amount of coverage is small ($10 per unit per month, on average), we believe that this method leaves RHS at high risk for property failure, because commonly occurring variances are far larger than the operating margin. We believe that RHS should investigate alternative methods for measuring the adequacy of the property's operating margin (margin of Net Operating Income over required debt service payments). A useful paradigm comes from the HUD Mark-to-Market program in which the operating margin is generally set at the greater of:

- Debt service coverage required by the loan program (in this context, the RHS-approved limited distribution, about $10 per unit per month on average).
- 3% of collected income (about $12 per unit per month, on average for the sample portfolio).
- 7-10% of operating expenses (about $17 to $25 per unit per month, on average for the sample portfolio.

Under this paradigm, RHS' target level of operating margin falls modestly short of providing an adequate cushion against income shocks, and falls well short of providing an adequate cushion against expense shocks.

- *Incentives.* We believe that current RHS programs are strongly skewed toward front-end incentives such as developer / builder fees. By contrast, there is relatively little incentive for a long-term owner to acquire and maintain RHS properties. The allowable cash distribution is small, and many properties do not generate positive cash flow at all. Property management fees are modest. We believe it is in RHS' interest to create financial incentives for quality long-term ownership and management. In the absence of such incentives, RHS may well find that owners will pay attention to their RHS portfolios only so long as they feel they have an opportunity to earn new up-front fees on new RHS developments. One useful paradigm is the HUD Mark-to-Market incentive structure:
  - *Adequate Property Management Fees.* Regardless of the historical level of property management fees, the property management fee is re-sized to a level that would be adequate to attract a high-quality management firm, taking into account the property-specific property management workload that would be required in order to produce the desired public-purpose outcomes.

[50] Debt service coverage ratio is the ratio between the Net Operating Income and the debt service. Generally, multifamily lenders consider DSCRs above 1.20 to be healthy.

- *Incentive Performance Fee.* Owners whose properties meet performance benchmarks receive an annual fee equal to roughly three percent of collected income.

- *Capital Recovery Payment.* The Mark-to-Market statute requires owners to invest 20% of the cost of up-front repairs. Owners whose properties meet performance benchmarks receive monthly Capital Recovery Payments that provide a return on, and return of, that required investment.

- *Cash Flow Split.* The remaining cash flow is shared between the owner and HUD according to a statutory formula, generally 75% to HUD and 25% to the owner.

- *Enforcement.* Reportedly, enforcement provisions and sanctions available to RHS are not particularly effective in obtaining voluntary compliance, or in enforcing against non-compliant owners and managers. In the context of a recapitalization / preservation program, RHS may wish to develop stronger and clearer regulatory agreements and requirements, with more effective enforcement sanctions.

- *Deregulation in Rent-Setting.* The budget-based approach followed in the §515 program is labor-intensive for government, tends to starve properties for resources over time, and is contentious. Since the 1970s, HUD has been moving steadily away from budget-based rent-setting, and the Low-Income Housing Tax Credit program does not use budget-based rents at all. We believe that RHS should consider proposing a different method of setting and adjusting rents. Candidates include:

    - After the one-time rent increase discussed in this report is implemented, adjust rents in the future by a nation-wide or state-wide formula based on data on changes in rents or changes in prices.

    - A rent maximum, stated in relation to Area Median Income, allowing the owner to charge any rent that does not exceed the maximum. The maximum could be set on a property-specific basis (for example, a modest percentage above the long-term-viability rent resulting from the methodology used in our model), or on a more generalized basis (for example, not to exceed an amount based on Area Median Incomes).

- *Consolidation.* It is well established that small properties, and small portfolios, are less economically efficient than large properties and larger portfolios. Accordingly, RHS may want to facilitate transactions that help aggregate existing small properties into larger portfolios that offer improved economic efficiency. Reasons for encouraging consolidation include, without limitation:

    - More capable ownership. Some existing owners may have lost interest, lost much of their real estate expertise, or both.

- More mission-oriented ownership. The long-term affordability commitment / use agreement discussed elsewhere in this report should be one requirement for RHS approval of a consolidation transaction.

- Lower costs. Consolidated operators can be expected to achieve lower operating and capital costs, thus lower costs for RHS.

- *Exit Tax Relief.* One barrier to transfer, and to recapitalization, is the fact that many §515 properties are "burnt-out tax shelters", created pre-1986 primarily for tax-loss reasons. At this point in the life of such properties, the primary motivation of limited partners is to avoid having to pay the income taxes that would come due if the property were sold, or foreclosed. Instead, limited partners hope to hold the property until death, when typically the estate tax would be much less than the income tax would be if the property were sold before death[51]. Exit tax relief was recommended by the Millennial Housing Commission as a strategy for furthering the preservation and recapitalization of the affordable rental housing stock[52]. We believe that, if exit tax relief were available to investors in §515 properties, RHS would find it much easier to pursue debt-relief strategies, transfer strategies, and consolidation strategies, in the §515 portfolio[53].

- *Benchmarks for Preservation Decisions.* RHS could establish benchmarks for determining when preservation is and is not cost-effective. Candidates include:

  - Replacement cost. Replacement cost could be calculated as the cost to the federal budget for a new §515 unit.

  - A percentage of replacement cost. For example, when considering substantial rehabilitation, the U.S. Army pursues demolition and reconstruction instead, whenever the cost of rehabilitation is more than fifty percent of replacement cost.

  - Cost of a Housing Choice Voucher. This could be calculated as the present value of (for example) twenty years of a voucher subsidy.

- *Closer Collaboration with Non-RHS Financial Institutions.* RHS should establish closer working relationships with Government Sponsored Enterprises (Fannie Mae, Freddie Mac, and the Federal Housing Finance Board) and with state and local Housing Finance Agencies. The objective would be to increase the amount of non-RHS funds that are invested in the §515 portfolio.

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[51] For additional information see the Millennial Housing Commission background paper on Preservation Tax Incentive, authored by a member of the ICF Team, available at www.compassgroup.net (click on Articles and Publications).

[52] See www.mhc.gov.

[53] One exit tax relief approach is contained in the recently introduced "Affordable Housing Preservation Tax Relief Act of 2003", sponsored by Representatives Ramstad (R-MN) and Cardin (D-MD).

The preceding are illustrative examples of policy alternatives that we will investigate further in the remaining segments of our overall scope of work for RHS.

The ICF Team
Market Assessment Report
Section 5: The Market Assessment Model

Structure of this Section

Model Structure

Description of each worksheet

Model Structure

The model has the following major worksheets:

- Global Assumptions – key assumptions, for example loan terms, valuation parameters, minimum vacancy rates and maximum vacancy rates.
- Relative Need For Preservation – deriving the property quality, location quality, and composite scales.
- Capital Needs – estimating the initial Reserve balance and ongoing Reserve deposit levels needed for each property.
- Financing Needed To Prepay – estimating the amount of capital the owner would have to assemble, to finance a prepayment and conversion to market rents.
- Prepayment Viability Rents – estimating the level of market rents that would be necessary in order to support the financing estimated above.
- Likely Market Rents – estimating low, moderate and high benchmarks for market rents each property might command if prepaid. Establishing a range of market rents. Selecting a market rent conclusion from this range.
- Non-Prepayment Incentive – estimating an incentive that owners likely would accept, in order to forego their option to prepay and convert.
- Rent Increase To Stabilize – estimating the level of rent needed to cover an adequate Reserve deposit, and other reasonable costs of operation.
- Input Worksheets
    - This One – all data elements for the property currently being evaluated.
    - Input (Basic), Input (Financial), and Input (Capital Needs) – three components of the input data, for all 333 properties.

- Output Databases – roughly 125 key data elements for each property in the sample portfolio. A corresponding database, expanded to represent the entire §515 portfolio.

Global Assumptions Worksheet

See Attachment B for a listing of all global assumptions. This worksheet has the following sections:

- Property Categories – parameters used in the model for classifying properties, for example by number of units and percentage of Rental Assistance.

- Preservation Need Criteria – weighting for the various components of the property quality and location quality scales.

- Capital Needs – minimum balance, minimum deposit, inflation rate, and unit cost adjustment.

    NOTE regarding the unit cost adjustment: Our scope of work requires us to use standard costs from the Marshall & Swift national database. However, our capital needs assessment team reports that feedback from owners and managers, and the capital needs assessment team's experience in other similar situations outside the RHS portfolio, indicate that the Marshall & Swift costs often differ materially from unit costs that owners typically incur. This is particularly the case for those larger and more sophisticated owners who utilize advanced procurement strategies such as group purchasing plans. For these owners, unit costs may be lower than reported in Marshall & Swift, and geographic variances in costs may be lower than reported in Marshall & Swift. Our capital needs assessment team re-calculated results for four typical properties in the sample portfolio, and determined that, for those four properties in the aggregate, the level of costs likely to be incurred by owners was almost exactly 100% of the costs generated through use of the Marshall & Swift national database. Accordingly, for purposes of this market assessment task, we used the reported capital needs costs without adjustment.

- Prepayment / Conversion Financing Terms – loan terms that we believe are representative for loans that owners might obtain, to finance prepayment and conversion.

    NOTE: Based on our experience, and discussions with practitioners, we believe that the typical financing package will be a mix of owner equity, and "bridge" financing that is recourse to the borrower. After prepayment, conversion and re-leasing, the owner would obtain a permanent mortgage loan in an amount supportable by the property's actual post-conversion Net Operating Income and appraised value.

- Market Rents – factors for the minimum and maximum market rents. Concluded market rent as a percentage of calculated market rent.

- Assumed Ability to Prepay – loan origination dates governing assumed legal ability to prepay (by owner type). Parameters for low and high market rent calculations (as percentages of our market rent conclusion).

- Transition Costs – percentages of residents who would move upon prepayment, and per-unit vacancy and make-ready costs for each move-out.

- Trending – inflation rates for adjusting 2001 and 2002 actuals.

- Prepayment Viability – a variety of economic assumptions for the model's post-prepayment cash flow and value projections.

    Note: In selecting the 10.00% capitalization rate, we interviewed a number of appraisers, lenders, and other real estate experts. This is the lowest capitalization rate that we believe might be achieved, on average, nationwide, for the better properties in the §515 portfolio.

- Incentive Not To Prepay – to be added later, based on incentive parameters to be provided by RHS.

- Rent Increase For Viability – allowances for vacancy and collection losses, and economic assumptions for the cost-to-government analysis.

    NOTE: Our net present value calculations use a 5.0% long-term government discount rate[54], an assumption that subsidies are paid monthly, and an assumed twenty-year analysis period.

- Expansion Factors – pursuant to instructions from RHS economists, we created two sets of expansion factors.

    - The first expands the sample portfolio of units to the entire §515 portfolio of 434,296 units. The typical sample property represents 48 properties in the entire portfolio.

    - The second expands the sample portfolio of properties to the entire §515 portfolio of 15,899 properties. The typical sample unit represents 31 units in the entire portfolio. The expansion factor by units is lower than the

[54] The Office of Management and Budget assumed a 5.1% interest rate on 30-year Treasury securities, when preparing the President's FY 2004 federal budget proposal. Appendix C to OMB Circular A-94, revised January 2003.

expansion factor by properties, because larger properties are more heavily represented in the sample than are smaller properties[55].

When global variables are referenced in the remaining worksheets, they appear in bold dark green font.

Relative Need For Preservation

For each of the 14 criteria, the model calculates a score (from zero to 100) based on the actual distribution of values in the 333-property sample. For example, for area population growth from 1990 to 2000:

- In the sample properties, growth ranged from negative 16.1% to 142.6%. The 20th percentile was negative 0.3%, the 50th (median) was 7.8%, and the 80th was 21.8%.

- In the model, negative population growth in excess of 15% is scored zero, zero growth is scored 20, 8% growth is scored 50, 20% growth is scored 80, and growth in excess of 100% is scored 100. Scores are interpolated between these benchmarks.

Each score is then weighted (weighting factors are global variables), and assigned to either the property quality or location quality scale. A composite score is calculated, using all 14 criteria. Scores are presented in raw numbers and percentiles.

Capital Needs

This worksheet considers the existing Reserve balance (at 12/31/2002), and twenty years of estimated capital needs (from the capital needs assessment task under our Scope of Work). Using this information, we estimate:

A new Reserve deposit (for rent increase purposes), calculated as the deposit necessary (when combined with the existing Reserve balance) to meet 100% of estimated twenty-year capital needs. As discussed at the beginning of Section 2, this results in a Reserve deposit level that exceeds industry rules of thumb developed for market-rate apartments, but that we believe is appropriate (indeed, essential) for §515 properties.

A new Reserve balance and Reserve deposit (for prepayment purposes). This calculation differs from the preceding because, for prepayment purposes, we assume a new (initial) Reserve balance equal to $500 per unit. We then calculate a new Reserve deposit necessary to meet twenty-year capital needs.

[55] RHS selected a larger share of the larger properties, recognizing that (say) 2-11 unit properties are more homogeneous than 101+ unit properties.

Financing Needed To Prepay

This worksheet estimates the amount of financing the owner would have to assemble in order to cover the costs of prepayment and conversion. This worksheet also estimates the transition costs (make-ready and vacancy costs associated with a significant turnover of resident population, assuming – as under current law – residents are not entitled to enhanced vouchers).

This worksheet uses global variables for loan terms, mix of debt and equity, and transition cost parameters.

Prepayment Viability Rents

This worksheet uses the prepayment financing conclusion, plus costs of operation, to derive the market rents that would be necessary in order to make prepayment economically viable. For financing costs, we assume a level of Net Operating Income sufficient to support property value at least equal to the amount of financing needed to support prepayment and conversion. For costs of operation, we assume:

A Reserve deposit that is consistent with appraisal practice (i.e., that is consistent with the 10.00% capitalization rate we selected).

Operating expenses at historical levels, as adjusted. We used the 2003 budgeted expenses, and we assumed an adjustment factor of 100% (global variable).

Likely Market Rents

In this worksheet, we estimate the market rents that each property is likely to be able to command, after prepayment and conversion. See the Market Rents discussion in Section 2 for a discussion of the methodology. We provide the following additional explanation:

- The third Low benchmark (actual unassisted rent) uses the average of the first two Low benchmarks, unless the property meets the following conditions: at least five unassisted units, those units are at least 80% occupied, and the current RHS basic rent is higher than 84% of FMRs (the first Low benchmark). The effect of this is to raise what the model would otherwise conclude, as the low end of the likely range, for properties that have demonstrated an ability to command at least the existing Basic rents in the marketplace. In the sample portfolio, 121 properties (36%) used the actual unassisted rent for this benchmark.

- The third Low benchmark is weighted at 3.0 because it represents property-specific data from the local marketplace; the other two are weighted at 1.0 each.

- The two Medium benchmarks are weighted equally.

- The third High benchmark (actual unassisted rent) uses the average of the first two High benchmarks, unless the property meets the following conditions: at least five unassisted units, those units are at least 40% vacant, and the current

RHS Basic rent is below 114% of FMRs (the first High benchmark). The effect of this is to reduce what the model would otherwise conclude, as the high end of the likely range, for properties that have not been able to command at least the existing Basic rents in the marketplace. However, the conditions noted above did not apply for any of the properties in the sample portfolio.

- The third High benchmark is weighted at 3.0 because it represents property-specific data from the local marketplace; the other two are weighted at 1.0 each.

- Additionally, the model estimates a minimum market rent 10% below the Low benchmark, and a maximum market rent 15% above the High benchmark. These factors are based on the distribution of rents in the Mark-to-Market properties.

- The model then selects a calculated market rent in the range between minimum and maximum, based on the property's percentile score in the property quality scale (discussed in Section 3 above). That is, if the property quality score is at the 20th percentile, the calculated market rent is the Low benchmark; if the property quality score is at the 50th percentile, the calculated market rent is the Medium benchmark; if the property quality score is at the 80th percentile, the calculated market rent is the High benchmark. Intermediate values are interpolated between the appropriate benchmarks.

- The model contains a global assumption allowing the user to assume market rents that are a percentage of the calculated market rent. When calculating the results reported here, we set this global assumption to 100%.

- For purposes of the next computation (prepayment viability), we also derive low-likely and high-likely market rent conclusions. These are 90% and 110% of the market rent conclusion discussed above, respectively.

Non-Prepayment Incentive

To be added later, based on incentive parameters to be supplied by RHS.

Rent Increase To Stabilize

In this worksheet, we estimate the level of RHS-approved rents that would be necessary to support a Reserve deposit sized to meet the twenty-year capital needs identified in the capital needs assessment task under our Scope of Work, and other reasonable costs of operation. See the discussion in Section 2. We provide the following additional comments:

Operating Cash Flow – if the property is not budgeted to produce a full RHS-authorized distribution to the owner, we assume that rents are increased to a level that would allow that level of cash flow.

NOTE: See the discussion above in Section 4 regarding operating margin; a level of operating margin equal to the limited distribution may still be

inadequate to provide reasonable protection against adverse income and expense variances.

Required Reserve Deposit, Capital Expenditures, Reserve Withdrawals – the sum of the 'Variance PUPM' column for these three lines equals the rent increase amount that we attribute to re-sizing the Reserve deposit.

Vacancy and Bad Debt Loss – we assume the higher of the budgeted amount or the physical vacancy shown in the snapshot occupancy data we received from RHS. However, we use a maximum allowance of 15% and a minimum allowance of either 5% (for properties with 90%+ assisted units) or 7% (otherwise).

In this worksheet, we also allocate the cost of the rent increase among RA-assisted, Section 8-assisted, voucher-assisted, and unassisted units. We calculate the governmental share of each (100% for RA and Section 8 and vouchers, 100% for unassisted).

The ICF Team
Market Assessment Report
Section 6: Outline of Market Assessment Methodology

NOTE: This section is based on the original methodology proposed to RHS in November 2003, updated to reflect changes since that time. Detailed discussions of assumptions and calculations have been deleted. Refer to Sections 1 through 5 for in-depth discussions of these aspects of the methodology.

Key Questions to be Answered

The market assessment will provide answers, at a portfolio level, to the following questions:

- To what extent does a need exist to maintain the properties in the RHS inventory? *The market assessment will provide the distribution of the 333 sample properties, along two 100-point scales measuring relative need for preservation.*

- What is the likelihood that mortgages may be prepaid? Do the data support a conclusion that owners/sponsors have an economic motivation to prepay the mortgages? *The market assessment will provide an estimate of the number of properties in the sample for which prepayment and market conversion are economically rational strategies. For purposes of the market assessment, we will assume that owners with loans originated on or before December 15, 1989 are in fact allowed to prepay.*

- What is the estimated cost of keeping the properties in the RHS multifamily inventory? *For those properties that are estimated to be prepayment-viable, the market assessment will provide an estimate of the cost to RHS to provide incentives that likely will be sufficient to obtain owners' agreement to continue providing affordable housing.*

- What are the policy alternatives to preserve the units for affordable housing? *The market assessment will provide a narrative discussion of any policy alternatives, other than the preservation incentive(s) discussed in the preceding bullet, for preserving at-risk properties.*

- What is the estimated cost of keeping the RHS multifamily inventory physically and financially viable? *The market assessment will provide an estimate of the cost to RHS (and, where applicable, HUD) to align properties' rents and other financial resources with their estimated costs of operation, including adequate Reserves.*

The estimates will be useful at a portfolio level but will not be accurate at the level of individual properties, for reasons including but not limited to: the size of the sample, the fact that the market assessment does not include property-specific comparable market rent determinations, and the fact that the market assessment will not include interviews with the owners of each project.

The Model

We will develop an Excel workbook containing several worksheets, including at least the following:

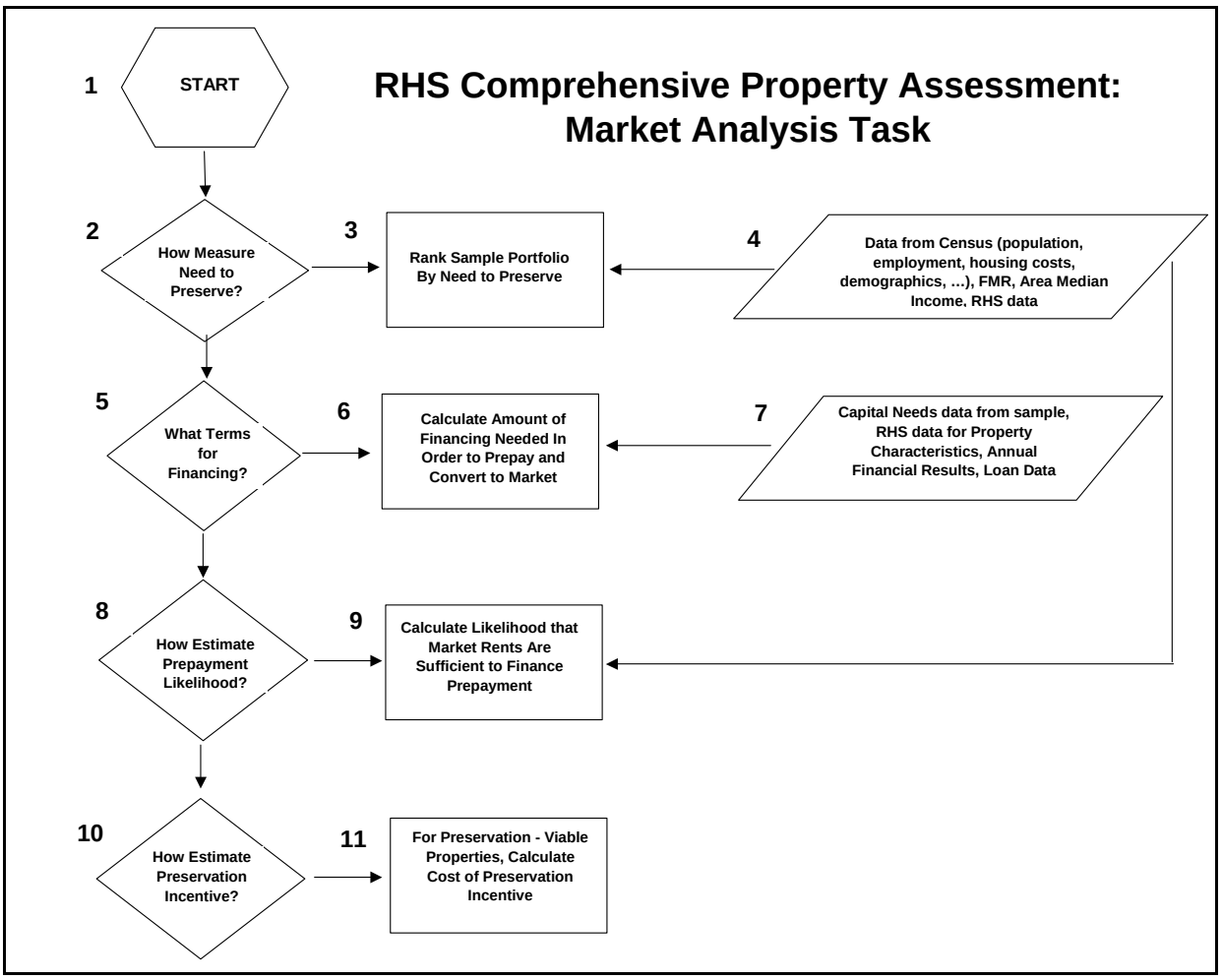
- An input database
- An output database
- Global assumptions / variables (allowing key assumptions to be changed without requiring the model to be re-programmed)
- One or more worksheets that calculate the following (as discussed below):
    - Preservation need
    - Prepayment financing amount
    - Rent level necessary to make prepayment economically viable ("viability rents")
    - Likely market rents
    - Likelihood that the owner will prepay
    - Cost (to RHS) of preservation incentives
    - Federal cost to support long-term viability

Assumptions and Global Variables

In the discussion below, we include illustrative examples for assumptions and global variables. We will spend considerable time, internal to the team, determining the best set of assumptions. The illustrative examples provided below are assumptions that we presently consider reasonable. However, we expect to modify those assumptions during the course of the analysis, as the result of our assessment of various data, and as the result of discussions within the ICF Team.

Flow Chart

This discussion will follow the flow chart distributed at the Multifamily Advisory Council meeting on October 8th. A copy of the flow chart is provided below:



NOTE: The flow chart reflects the methodology originally proposed and does not in every respect agree with the final methodology described below.

1: Start

We will begin the market analysis upon RHS concurrence with the proposed methodology (submitted November 10, 2003) and upon RHS provision of required data (data substantially complete December 23, 2003; final data installment received December 31, 2003).

2: How to Measure Need to Preserve?

We will develop two 100-point scales that will illustrate the relative preservation-worthiness of the 333 sample properties. One scale will measure overall property quality and will use factors such as:

- Project-specific vacancy rate (low vacancy indicates greater need)
- Whether current physical condition is poor (if so, indicates relatively lower need to preserve)
- Percentage of RA / §8 (higher percentage indicates greater need, because assisted households are not entitled to vouchers under current law)
- Whether property size is extremely small (if under 3 units, indicates relatively lower need to preserve)
- Any other factors developed during the course of the analysis, for which data are available, and that (in our judgment) affect the relative need for preservation

The second scale will measure overall location / market quality and will use factors such as ("area", as used below, means a three-mile radius around the property):

- Area-wide population growth (high growth indicates greater preservation need)
- Area-wide vacancy rates (low vacancy indicates greater need)
- Area-wide rents in relation to area median income (high rent to income ratio indicates greater need)
- Project-specific vacancy rate (low vacancy indicates greater need)
- Any other factors developed during the course of the analysis, for which data are available, and that (in our judgment) affect the relative need for preservation

3: Rank the Sample Portfolio By Need to Preserve

Universe: 333 properties.

Using the preservation-worthiness scales discussed above (individually and in combination), we will score each property and rank-order the properties, from lowest to highest.

We will not provide a judgment on whether RHS should seek to preserve particular categories of properties. Instead, we will provide a tool that RHS can use in order to measure the relative value of preserving various properties in its portfolio.

4: Data to be Considered For Preservation Need Measurement

1990 and 2000 Census data for the county in which the property is located:

- Population and households (total, ownership, rental).
- Population by race and ethnicity.
- Employment
- Household and per capita income
- Housing stock (total, ownership, rental)
- Average rent.
- Average home value.
- Rental and ownership vacancy levels.

The 2003 HUD Fair Market Rents for the county in which the property is located

Area Median Income for the county in which the property is located (1990, 2000, and 2003)

Data from RHS databases

Vacancy percentage in 2003 budget
Current RHS-approved rents
Current overall property rating
Percentage of Rental Assistance units
Percentage of Section 8 units
Total number of units

Data from Capital Needs Assessment Task (CLIN #1)

Dollar amount of immediate repair needs, per unit
We may also decide to consider the average level of long-term capital needs (in dollars per unit per year), if we decide that high future repair costs indicate a lower need to preserve

5: What Terms Will Owners Obtain for Prepayment Financing?

Utilizing our industry experience and contacts, we will determine the terms under which typical owners of sample properties might be able to obtain financing for a prepayment and market conversion initiative. Terms will include interest rate, amortization period, loan term, financing fees, minimum required Reserve deposit, and DSCR / LTV.

6: Calculate the Amount of Financing Needed to Prepay and Convert

Universe: 333 properties.

We will calculate the amount the owner of each property would need to assemble, in order to finance a prepayment and market conversion. We will estimate this amount by summing the following components:

- Current balance of the RHS loan
- Immediate repair needs
- An assumed amount of market upgrades (we will use the same amount for all properties). The model will be constructed with this as a global variable.
- Transition costs involved in converting from the current resident profile to the hypothetical future market-rate profile.
    - We will develop standard assumptions regarding whether current households will move, using separate assumptions for RA-assisted, §8-

assisted, and other households. The model will be constructed with these as global variables.

7: Data for Calculating Amount of Financing

RHS loan balance

Immediate and long-term repair needs. NOTE: Long-term repair needs are not relevant to this determination but will come into play in determining viability rents (see 8A below).

8. How to Estimate Prepayment Likelihood?

This involves the following subsidiary determinations.

8A. How to Estimate Viability Rents?

We use the term "viability rents" to mean the minimum market rents necessary to cover the post-conversion vacancy and collection losses, operating expenses, new Reserve deposit, and an amount of Net Operating Income sufficient to support a post-conversion market value at least equal to the costs to prepay and convert.

8B. How to Estimate Likely Market Rents?

We will use a variety of data to estimate the general level of market rents that particular RHS properties might be able to command, after prepayment and market conversion. We will estimate a range of likely market rents for each property, and we will select an estimated market rent within that range. We will use benchmarks such as the following:

2000 Census Average Rents. We will trend 2000 Census average rents (for the county in which the project is located) to the present (probably using the CPI-U).

Area Median Income. We will determine the rent and utilities affordable to a typical low-income household. The following will be included in the model as global variables:

HUD/OMHAR Market Rent Determinations for Rural Properties. We are prepared to work with RHS to request from HUD's Office of Multifamily Housing Assistance Restructuring, comparable market rent data for rural properties assessed under the Mark-to-Market Program. Based on preliminary discussions with OMHAR, we believe that OMHAR would be willing to release these data to the ICF Team for use in this task for RHS. We will measure the market rents for the OMHAR rural properties in relation to the following:

- HUD Fair Market Rents for the county in which the project is located (using FMRs in effect when the market rent determination was made)
- Area Median Incomes for the county in which the project is located (using AMIs in effect when the market rent determination was made)

8C. How to Estimate Economic Viability of Prepayment?

We will compare the viability rents (see 8A above) with the range of low, likely, and high market rents (see 8B above).

8D. Ownership Entity Dynamics Affecting Likelihood of Prepayment

A variety of factors, not available to us for analysis, determine whether any given owner will, in fact, prepay. We will provide a narrative discussion of the various factors involved.

9. Calculate Likelihood That Market Rents Are Sufficient to Finance Prepayment

Universe: 333 properties. We will separately report those prepayment-viable properties with loans originated on or before December 15, 1989.

10. How to Estimate the Cost of an RHS Preservation Program?

The program would involve the following costs:

Cost to obtain the agreement of certain owners not to prepay.

Cost for additional RA outlays, to support needed rent increases.

Cost for additional Section 8 outlays, to support needed rent increases.

Potential cost to support a portion of rent increases that otherwise would be borne by currently unassisted residents.

We will estimate an incentive not to prepay, based on parameters to be provided by RHS, that RHS believes will be sufficient to obtain the agreement of a typical owner to forego prepayment and conversion.

We will also estimate the rent increase necessary to support an adequate Reserve deposit, and each property's other costs of operation, assuming properties continue under their current regulatory structures.

Finally, we will estimate the annual cost to the Federal government (RHS and HUD) associated with funding relevant portions of those rent increases.

11. Calculate Cost to RHS of Preservation Incentive

Universe: 333 properties. Not all cost components will be applicable to each property.

Using the methods described in item 10 above, we will calculate for each property in the applicable universe the cost to RHS to provide the preservation program.

What are the policy alternatives available to preserve the units for affordable housing?

We will provide a report discussing any policy alternatives for preserving the at-risk portion of the pre-December 15, 1989 portfolio (that is, those which have not already received non-prepayment incentives, and for which we estimate that prepayment is economically viable).

ATTACHMENTS

RHS Market Assessment

Attachment A: Summary of Conclusions

	Portfolio Cost ($millions)	Portfolio Cost per Unit	Portfolio # of Properties	Portfolio % of Properties	Portfolio # of Units	Portfolio % of Units
Prepayment Incentive (one time cost)	N/A	N/A	1,648	10.4%	45,933	10.6%
What % of the portfolio is assumed to have the right to prepay?			9,728	61.2%	267,457	61.6%
59.9% average rent increase needed for prepayment-viability		$201 PUPM rent increase needed				
Preventing Deterioration						
What % of the portfolio needs a rent increase?			14,658	92.2%	388,412	89.4%
13.7% rent increase needed , on average		$40 PUPM avg rent increase, composed of:				
100.0% of properties need an increase for this --->		103.7% for increased Reserve funding				
81.1% of properties need an increase for this --->		38.4% for actual vacancy in excess of budgeted vacancy				
17.8% of properties need an increase for this --->		-42.1% for operating margin / limited distribution				
Average rent increase, for properties needing increases		$57 PUPM avg rent increase		16.0%		
100.0% of properties need higher Reserve deposits	$74 PUPM which is	$43 PUPM avg deposit increase needed				
The needed level of Reserve deposit is	138% above the	$31 PUPM current deposit				
What % of the portfolio needs a non-prepayment incentive?			1,648	10.4% of entire portfolio		
Of these, how many need a rent increase as well?			1,368	83.0% of prepayment portfolio		
Average rent increase needed is	$51 PUPM			18.5% above RHS-approved rents		
Preventing Deterioration (Annual)	$209.8	$40 PUPM avg rent increase			434,296	100.0%
Rent Increase for RA units	$118.5	$43 PUPM avg rent increase			253,445	58.4%
Rent Increase for S8 units	$6.3	$26 PUPM avg rent increase			29,446	6.8%
Rent Increase for vouchers	$27.5	$59 PUPM avg rent increase			40,953	9.4%
Rent Increase (unassisted)	$57.5	$47 PUPM avg rent increase			107,110	24.7%
Nonrevenue units	$0.0	$0 PUPM avg rent increase			3,342	0.8%

RHS Market Assessment

Attachment A: Summary of Conclusions

	Portfolio Cost ($millions)	Portfolio Cost per Unit	Portfolio # of Properties	Portfolio % of Properties	Portfolio # of Units	Portfolio % of Units
Preventing Deterioration (NPV of monthly costs; see note 1)	$2,614.9	$6,021				
Rent Increase for RA units	$1,476.5	$5,826				
Rent Increase for S8 units	$78.5	$2,667				
Rent Increase for vouchers	$342.9	$8,373				
Rent Increase (unassisted)	$717.0	$6,694				
Nonrevenue units	$0.0	$0				

Range of values for preservation-worthiness scales	26.3	minimum and	84.6	maximum for property quality scale
	10.8	minimum and	87.6	maximum for location quality scale
	25.8	minimum and	80.2	maximum for composite scale

Market Rent Benchmarks from M2M Portfolio					
Low benchmark (20th percentile)	$367	PUPM 1BR	$423	PUPM 2BR	84% of FMRs
Medium benchmark (50th percentile)	$406	PUPM 1BR	$466	PUPM 2BR	99% of FMRs
High benchmark (80th percentile)	$466	PUPM 1BR	$524	PUPM 2BR	114% of FMRs

Prepayment Financing Needed (sample portfolio)	$31,568	per unit
Average RHS loan balance (12/31/02)	$24,441	per unit
Transition costs and fees	$7,128	per unit

Concluded Reserve Deposit (for preventing deterioration)						
$350 PUPA	68	properties	0.4%	3,570	units	0.8%
$750 to $1000 PUPA	6,147	properties	38.7%	166,801	units	38.4%
$1,000 PUPA or above	5,327	properties	33.5%	138,729	units	31.9%

Rent loss allowance in rent increase calculation						
5.0% Rent loss allowance	3,256	properties	20.5%	99,592	units	22.9%
7.0% Rent loss allowance	4,999	properties	31.4%	154,153	units	35.5%
15.0% Rent loss allowance	2,686	properties	16.9%	58,522	units	13.5%

Needed rents as a percentage of market rents						
Need rents that are 10% of more below market	7,774	properties	48.9%	222,831	units	51.3%
Need rents that are up to 10% below market	2,333	properties	14.7%	58,264	units	13.4%
Need rents that are up to 10% above market	1,966	properties	12.4%	52,548	units	12.1%
Need rents that are between 10% and 20% above n	1,570	properties	9.9%	44,649	units	10.3%

RHS Market Assessment

Attachment A: Summary of Conclusions

	Portfolio Cost ($millions)	Portfolio Cost per Unit	Portfolio # of Properties	Portfolio % of Properties	Portfolio # of Units	Portfolio % of Units
Need rents that are more than 20% above market	2,256	properties	14.2%	56,004	units	12.9%
Population loss in local market area (in sample)						
From 1990-2000	70	properties	21.0%			
From 2003-2013	107	properties	32.1%			
Population loss in local market area (in entire portfolio)						
From 1990-2000	3,912	properties	24.6%	97,165	units	22.4%
From 2003-2013	6,238	properties	39.2%	140,857	units	32.4%
Vacancy rate in assisted units (in sample)						
Total properties with assisted units	292	properties	100.0%	87.7%	of sample	
Assisted vacancy below 2%	214	properties	73.3%	64.3%	of sample	
Assisted vacancy between 2% and 5%	25	properties	8.6%	7.5%	of sample	
Assisted vacancy between 5% and 10%	23	properties	7.9%	6.9%	of sample	
Assisted vacancy above 10%	30	properties	10.3%	9.0%	of sample	
Vacancy rate in unassisted units (in sample)						
Total properties with unassisted units	234	properties	100.0%	70.3%	of sample	
Unassisted vacancy below 5%	16	properties	6.8%	4.8%	of sample	
Unassisted vacancy between 5% and 10%	34	properties	14.5%	10.2%	of sample	
Unassisted vacancy between 10% and 20%	132	properties	56.4%	39.6%	of sample	
Unassisted vacancy above 20%	52	properties	22.2%	15.6%	of sample	
Short term capital needs (in sample)	333	properties		100.0%	of sample	
Short term capital needs under $500 per unit	32	properties		9.6%	of sample	
Short term capital needs $500-$1000 per unit	85	properties		25.5%	of sample	
Short term capital needs $1000-$2000 per unit	112	properties		33.6%	of sample	
Short term capital needs $2000-$3000 per unit	66	properties		19.8%	of sample	
Short term capital needs above $3000 per unit	38	properties		11.4%	of sample	
Long term capital needs (in sample)	333	properties		100.0%	of sample	
Long term capital needs under $500 PUPA	9	properties		2.7%	of sample	
Long term capital needs $500-$700 PUPA	49	properties		14.7%	of sample	
Long term capital needs $700-$900 PUPA	136	properties		40.8%	of sample	
Long term capital needs $900-$1100 PUPA	100	properties		30.0%	of sample	

Attachment A: Summary of Conclusions

	Portfolio Cost ($millions)	Portfolio Cost per Unit	Portfolio # of Properties	Portfolio % of Properties	Portfolio # of Units	Portfolio % of Units
Long term capital needs above $1100 PUPA	39	properties		11.7%	of sample	
Percentage of RA units (in sample)						
Total properties with RA units	271	properties	100.0%	81.4%	of sample	
RA percentage up to 20%	16	properties	5.9%	4.8%	of sample	
RA percentage between 20% and 50%	51	properties	18.8%	15.3%	of sample	
RA percentage between 50% and 75%	60	properties	22.1%	18.0%	of sample	
RA percentage between 75% and 90%	37	properties	13.7%	11.1%	of sample	
RA percentage above 90%	107	properties	39.5%	32.1%	of sample	
Elderly-designated properties	136	properties		40.8%	of sample	
Family-designated properties	195	properties	100.0%	58.6%	of sample	
With no large units (3BR or more)	138	properties	70.8%	41.4%	of sample	
With up to 10% large units (3BR or more)	9	properties	4.6%	2.7%	of sample	
With 10%-20% large units (3BR or more)	19	properties	9.7%	5.7%	of sample	
With 20%-30% large units (3BR or more)	12	properties	6.2%	3.6%	of sample	
With 30%-50% large units (3BR or more)	12	properties	6.2%	3.6%	of sample	
With more than 50% large units (3BR or more)	5	properties	2.6%	1.5%	of sample	

Attachment A: Summary of Conclusions

	Portfolio Cost ($millions)	Portfolio Cost per Unit	Portfolio # of Properties	Portfolio % of Properties	Portfolio # of Units	Portfolio % of Units
RHS Overall Rating	330	properties	100.0%	99.1%	of sample	
A	217	properties	65.8%	65.2%	of sample	
B	40	properties	12.1%	12.0%	of sample	
C	69	properties	20.9%	20.7%	of sample	
D	4	properties	1.2%	1.2%	of sample	
Properties needing a rent increase to be viable long-term	300	properties	100.0%	90.1%	of sample	
Rent increase up to 10%	93	properties	31.0%	27.9%	of sample	
Rent increase 10%-20%	110	properties	36.7%	33.0%	of sample	
Rent increase 20%-40%	84	properties	28.0%	25.2%	of sample	
Rent increase above 40%	13	properties	4.3%	3.9%	of sample	
Properties not needing a rent increase	33	properties	100.0%	9.9%	of sample	
Current rents are up to 10% higher than needed	19	properties	57.6%	5.7%	of sample	
Current rents are more than 10% higher than neede	14	properties	42.4%	4.2%	of sample	
Population growth 1990-2000	333	properties		100.0%	of sample	
Negative growth	70	properties		21.0%	of sample	
Growth up to 10%	127	properties		38.1%	of sample	
Growth between 10%-20%	67	properties		20.1%	of sample	
Growth between 20%-30%	25	properties		7.5%	of sample	
Growth above 30%	44	properties		13.2%	of sample	
Population growth 2003-2013	333	properties		100.0%	of sample	
Negative growth	107	properties		32.1%	of sample	
Growth up to 10%	116	properties		34.8%	of sample	
Growth between 10%-20%	74	properties		22.2%	of sample	
Growth between 20%-30%	21	properties		6.3%	of sample	
Growth above 30%	15	properties		4.5%	of sample	

Attachment A: Summary of Conclusions

	Portfolio Cost ($millions)	Portfolio Cost per Unit	Portfolio # of Properties	Portfolio % of Properties	Portfolio # of Units	Portfolio % of Units
Area rental vacancy rate (2000 Census)	333	properties		100.0%	of sample	
Vacancy rate below 6%	91	properties		27.3%	of sample	
Vacancy rate 6%-8%	68	properties		20.4%	of sample	
Vacancy rate 8%-12%	105	properties		31.5%	of sample	
Vacancy rate 12%-16%	41	properties		12.3%	of sample	
Vacancy rate above 16%	13	properties		3.9%	of sample	
Monthly median rent : monthly median income (2000 Census)						
10th Percentile	5.5%					
20th Percentile	6.0%					
Median	7.3%					
80th Percentile	10.6%					
90th Percentile	12.6%					
Area Median Income growth 1990-2000						
10th Percentile	39.6%					
20th Percentile	41.6%					
Median	45.1%					
80th Percentile	56.4%					
90th Percentile	59.2%					
Entire 515 portfolio by property size category	15,899	properties	100.0%	434,296	units	100.0%
2-11 units	2,326	properties	14.6%	15,201	units	3.5%
12-24 units	6,903	properties	43.4%	135,075	units	31.1%
25-50 units	5,681	properties	35.7%	212,262	units	48.9%
51-100 units	904	properties	5.7%	57,981	units	13.4%
101+ units	85	properties	0.5%	13,777	units	3.2%

Attachment A: Summary of Conclusions

	Portfolio Cost ($millions)	Portfolio Cost per Unit	Portfolio # of Properties	Portfolio % of Properties	Portfolio # of Units	Portfolio % of Units
Third Low Benchmark for market rents affects	121	properties	36.3%	(properties in sample)		
Third High Benchmark for market rents affects	0	properties	0.0%	(properties in sample)		
Note 1: NPV calculations assume monthly cash flows for	**20**	years at a		**5.0%**		discount rate

RHS Market Assessment

Attachment B: Global Variables

Property Categories

Property Size (in units)						
Between	1	and	11	is called	2-11 units
Between	12	and	24	is called	12-24 units
Between	25	and	50	is called	25-50 units
Between	51	and	100	is called	51-100 units
Everything else				is called	101+ units
Amount of Rental Assistance						
Percentage of RA and Section 8 above			85%	is called	High % Asstd
Percentage of RA and Section 8 at			0%	is called	No RA/S8
Percentage of RA and Section 8 below			20%	is called	Low % Asstd
Everything else				is called	Medium % Asstd
Cohort of Latest-Originated 515 Loan						
Loan originated before			1-Jan-1979	is called	Pre-79
Later, but before			15-Dec-1989	is called	1979-89
Latest loan originated after			15-Dec-1989	is called	Post-89
Current Rents vs Market						
Difference between market and current rents less than			10%	is called	At Market
Current rents below market by at least			10%	is called	Below Market
Current rents above market by at least			10%	is called	Above Market
Immediate Capital Needs are total annual needs for first			2 years, in excess of new Reserve deposit		
Immediate capital needs per unit above			$2,000	is called	High Immediate Needs
Immediate capital needs per unit below			$500	is called	Minimal Immediate Needs
Everything else				is called	Modest Immediate Needs
New Reserve Deposit compared to existing Deposit						
No increase needed				is called	None
Increase (per unit per month) below			$15	is called	$1-$15 PUPM
Increase (per unit per month) above			$30	is called	$30+ PUPM
Everything else				is called	$15-$30 PUPM
Rent Increase Needed to Stabilize Property						
No increase needed				is called	None
Increase up to			5%	is called	1% - 5%
Increase up to			10%	is called	6% - 10%
Increase up to			20%	is called	11% - 20%
Increase up to			40%	is called	21% - 40%
Increase above			40%	is called	41% +

RHS Market Assessment

Attachment B: Global Variables

Preservation-worthiness property rating (percentile)			
Property rating below	33	is called	Low
Property rating above	67	is called	High
Everything else		is called	Medium
Preservation-worthiness location rating (percentile)			
Location rating below	33	is called	Low
Location rating above	67	is called	High
Everything else		is called	Medium
Preservation-worthiness overall rating (percentile)			
Overall rating below	33	is called	Low
Overall rating above	67	is called	High
Everything else		is called	Medium

Preservation Need Criteria		**Weights**
Population Growth	1990-2000	1.0
Population Growth	2003-2013	1.0
Rental Vacancy Rate	2000	1.0
Median Rent to Median Income	2000	1.0
Vacancy Rate (S8 / RA Units)	Current	1.0
Vacancy Rate (Unassisted)	Current	1.0
Short Term Capital Needs Per Unit	2004-2005	1.0
Average Annual Capital Needs	2006-2023	1.0
Percentage of RA	Current	1.0
AMI Growth	1990-2000	1.0
Elderly Project		0.5
Family Project, % of 3BR+ Units		0.5
RHS Overall Property Rating		1.0
Rent Increase Needed to Stabilize Property		1.0

Capital Needs

Inflation rate (capital needs)	3.00%	(rate used by ICF Team in cap needs task)
Minimum acceptable balance	$500	per unit
Minimum acceptable new Deposit	$350	PUPA
Adjustment to compensate for high unit costs in the Marshall & Swift database	100%	(based on ICF Team review of a few typical property CNAs)

RHS Market Assessment

Attachment B: Global Variables

Prepayment / Conversion Financing Terms

Percentage of Equity vs. Debt	30%	
First Year Equity Return Required	12.0%	(assumes that nonprofit borrowers will use for-profit equity)
Financing Terms for Debt:		
Interest Rate	7.50%	
Loan Amortization Period	30	years
Loan Term (Maturity)	3	years
Financing / Origination Fees	2.0%	of loan amount
Other Financing Costs	$10,000	(e.g., lender counsel, appraisal, environmental)
Minimum DSCR	1.30	: 1
Maximum LTV	80%	
Minimum Reserve Deposit	$300	PUPA
Market Upgrades Required by Lender	$0	per unit

Market Rents

Very High benchmark as % of High benchmark	115%
Very Low benchmark as % of Low benchmark	90%
Concluded market rent as % of calculated market rent	105%

Assumed Ability to Prepay

Full profit, and loan originated on or before	15-Dec-1989	Full Profit
Limited profit, and loan originated on or before	15-Dec-1989	Limited Profit
Nonprofit, and loan originated on or before	15-Dec-1989	Non Profit

Transition Costs

% of RA residents who will move out	100%
% of S8 residents who will move out	20%
% of other residents who will move out	100%
Transition cost per move-out:	
Make-ready	$750
Vacancy	$2,500

Trending

Prior year expenses trended at	3.0%	per year
Prior year rents trended at	2.5%	per year

RHS Market Assessment — Attachment B: Global Variables

Prepayment Viability and Incentive Not To Prepay (Incentive Parameters to be Added Later)

Rent loss allowance (vacancy / bad debt)	7.0%	
Operating Expenses (if missing)	$3,000	PUPA
Post-prepayment expenses as % of historical	100%	
Capitalization Rate	10.00%	(see discussion in report, Sections 1 and 5)
Replacement Reserve for use with cap rate	$300	PUPA
Operating Expense Weights		
2003 Budgeted operating expenses	1.0	
2002 Actual operating expenses	0.0	
2001 Actual operating expenses	0.0	
Lowest likely market rents	90%	of concluded market
Highest likely market rents	110%	of concluded market
Trending rate (EGI)	3.00%	

Rent Increase For Viability

Minimum Rent Loss Allowance					
If percentage of assisted units exceeds	90.0%	5.0%			
Otherwise		7.0%			
Maximum Rent Loss Alowance		15.0%			
Underwritten operating expenses as % of historic		95%			
Assumed Owner Return allowance if Zero in database		$150	PUPA		
Assumed Existing Reserve Deposit if Zero in database		$250	PUPA	148,000	total non-RA non-S8
Assumed Vacancy / Bad Debt Rate if missing in database		5.0%		85.5%	occupied
% of Unassisted Units Assumed to have Housing Choice Vouchers		27.7%	35,000 out of	126,540	occupied
% of Other Unassisted Rent increase borne by RHS		100%			
Assumed % vacant (Section 8 and RA units)		3.5%			
Assumed % vacant (voucher units)		0.0%			
Assumed % vacant (non-assisted units)		20.0%	14.5%	for voucher & non asstd total	
Number of years to calculate		20			
Governmental long-term discount rate		5.0%	(5.1% used by OMB for President's FY 2004 budget)		

RHS Market Assessment

Attachment B: Global Variables

Expansion Factors (by units)

For property size category	2-11 units	use	81.73	15,201	in population versus	186	in sample
For property size category	12-24 units	use	69.02	135,075		1,957	
For property size category	25-50 units	use	42.70	212,262		4,971	
For property size category	51-100 units	use	23.53	57,981		2,464	
For property size category	101+ units	use	3.23	13,777		4,260	
Average			31.38	434,296		13,838	

Expansion Factors (by properties)

For property size category	2-11 units	use	96.92	2,326	in population versus	24	in sample
For property size category	12-24 units	use	69.03	6,903		100	
For property size category	25-50 units	use	42.08	5,681		135	
For property size category	51-100 units	use	23.18	904		39	
For property size category	101+ units	use	2.43	85		35	
Average			47.74	15,899		333	

Attachment C

RHS Market Assessment
Relative Need for Preservation

Property Number 325
8 Units

Criterion		Value for Selected Property	Score	Weight	Composite Score	Property Score	Location Score
Population Growth	1990-2000	12.7%	61.8	1.0	4.8		12.4
Population Growth	2003-2013	1.2%	37.2	1.0	2.9		7.4
Rental Vacancy Rate	2000	3.5%	89.8	1.0	6.9		18.0
Median Rent to Median Income	2000	5.7%	17.3	1.0	1.3		3.5
Vacancy Rate (S8 / RA Units)	Current	3.0%	50.0	1.0	3.8	6.3	
Vacancy Rate (Unassisted)	Current	0.0%	100.0	1.0	7.7	12.5	
Short Term Capital Needs Per Unit	2004-2005	$974	100.0	1.0	7.7	12.5	
Average Annual Capital Needs	2006-2023	$1,054	14.6	1.0	1.1	1.8	
Percentage of RA	Current	0.0%	0.0	1.0	0.0	0.0	
AMI Growth	1990-2000	54.5%	76.0	1.0	5.8		15.2
Elderly Project	EL	EL	100.0	0.5	3.8	6.3	
Family Project, % of 3BR+ Units	FA	0.0%	0.0	0.5	0.0	0.0	
RHS Overall Property Rating		C	20.0	1.0	1.5	2.5	
Rent Increase Needed to Stabilize Property		21.6%	36.9	1.0	2.8	4.6	
Total			50.3	13.0	50.3	46.4	56.4
Type of Total			average		weighted	weighted	weighted
Percentile Rank					36%	22%	66%

Scoring Parameters		Score = 0 at	Score = 20 at	Score = 50 at	Score = 80 at	Score = 100 at
Population Growth	1990-2000	-15.0%	0.0%	8.0%	20.0%	100.0%
Population Growth	2003-2013	-30.0%	-4.0%	5.0%	15.0%	50.0%
Rental Vacancy Rate	2000	20.0%	12.0%	8.0%	5.0%	2.0%
Median Rent to Median Income	2000	4.0%	6.0%	8.0%	11.0%	20.0%
Vacancy Rate (S8 / RA Units)	Current	20.0%	6.0%	3.0%	1.0%	0.0%
Vacancy Rate (Unassisted)	Current	30.0%	15.0%	12.0%	6.0%	0.0%
Short Term Capital Needs Per Unit	2004-2005	$5,000	$4,000	$3,000	$2,000	$1,000
Average Annual Capital Needs	2006-2023	$1,200	$1,000	$800	$600	$400
Percentage of RA	Current	0.0%	10.0%	70.0%	95.0%	100.0%
AMI Growth	1990-2000	30.0%	42.0%	45.0%	56.0%	64.0%
Elderly Project	EL					
Family Project, % of 3BR+ Units	FA	0.0%	0.0%	12.0%	25.0%	75.0%
RHS Overall Property Rating		D	C	B	A	N/A
Rent Increase Needed to Stabilize Property		45.0%	30.0%	15.0%	7.5%	0.0%

Raw Data From Sample		Minimum	20th Percentile	50th Percentile	80th Percentile	Maximum
Population Growth	1990-2000	-16.1%	-0.3%	7.8%	21.8%	142.6%
Population Growth	2003-2013	-30.2%	-3.9%	4.8%	13.9%	59.6%
Rental Vacancy Rate	2000	41.2%	11.5%	7.9%	5.4%	0.0%
Median Rent to Median Income	2000	3.7%	6.0%	7.3%	10.6%	28.1%
Vacancy Rate (S8 / RA Units)	Current	96.7%	3.6%	0.0%	0.0%	0.0%
Vacancy Rate (Unassisted)	Current	100.0%	14.7%	12.0%	0.0%	0.0%
Short Term Capital Needs Per Unit	2004-2005	$34	$1,515	$1,807	$1,807	$7,081
Average Annual Capital Needs	2006-2023	$262	$845	$847	$847	$1,357
Percentage of RA	Current	0.0%	10.4%	70.0%	100.0%	100.0%
AMI Growth	1990-2000	29.7%	41.6%	45.1%	56.4%	64.0%
Elderly Project	EL		40% of properties are elderly			
Family Project, % of 3BR+ Units	FA	0.0%	0.0%	12.5%	25.7%	81.1%
RHS Overall Property Rating	Percentile	D = 1.2%	C = 22.1%	B = 34.2%	A = 65.8%	
Rent Increase Needed to Stabilize Property		743.0%	31.7%	13.8%	7.7%	-47.7%

Attachment C

RHS Market Assessment
Capital Needs

Property Number 325
8 Units

		Uninflated Per Unit	3.00% Inflation	Inflated Per Unit	(Ignoring current R4R balance) Reserve Deposit Needed Now Thru Year 20	Additional IDRR Needed
Year	1	$1,518	1.0000	$1,518	$1,046	$0
Year	2	430	1.0300	443	$1,052	($6)
Year	3	0	1.0609	0	$1,118	($139)
Year	4	104	1.0927	114	$1,219	($442)
Year	5	2,128	1.1255	2,395	$1,327	($873)
Year	6	1,826	1.1593	2,116	$1,294	($706)
Year	7	3,227	1.1941	3,853	$1,272	($576)
Year	8	1,757	1.2299	2,161	$1,106	$589
Year	9	578	1.2668	732	$1,048	$1,048
Year	10	671	1.3048	875	$1,109	$498
Year	11	1,189	1.3439	1,597		
Year	12	1,174	1.3842	1,625		
Year	13	761	1.4258	1,085		
Year	14	364	1.4685	535		
Year	15	653	1.5126	987		
Year	16	2,639	1.5580	4,112		
Year	17	572	1.6047	918		
Year	18	603	1.6528	996		
Year	19	410	1.7024	698		
Year	20	317	1.7535	556		
Total		$20,919	103.00%	$27,316		

Actual Reserve balance 12/31/02 $5,244 per unit
Excess (Deficit) Reserve vs. $500 per unit minimum $4,744 per unit
Minimum Acceptable new Deposit $350 per unit per year

Approach A: ($4,744) IDRR and $1,046 PUPA Reserve Deposit (right-size IDRR, 20 year Deposit)

Approach B: ($4,744) IDRR and $1,046 PUPA Reserve Deposit (minimum Deposit 1st 5 years)
Occurs in year 1

Approach C: $0 IDRR and $809 PUPA Deposit (no additional IDRR, Deposit to meet needs)

Selected for Rent Incr: $0 IDRR and $809 PUPA Deposit
Approach C is always selected, for rent increase calculations, in this version of this model
(assumes flexibility to re-schedule early year needs to align with funds availability)

Selected for Ppmt: ($4,744) IDRR and $1,046 PUPA Deposit
Approach B is always selected, for prepayment viability, in this version of this model
Note -- negative IDRR means there are excess Reserve funds (used as a source of funds for prepayment, see next worksheet)

Capital Needs First 2 Years is $1,961 per unit (total, inflated)
New Rsv Deposit 1st 2 Years is $1,618 per unit (using deposit selected for rent increase)
Immediate Capital Needs: $343 per unit (over and above the new Reserve deposit)

Reserve Deposit Needed: $809 per unit per year (selected for Rent Increase)
Existing Deposit: $0 per unit per year (selected for Rent Increase)
Adjustment Needed: $809 increase 100.0% increase
$67.40 per unit per month increase $30+ PUPM

Attachment C

RHS Market Assessment
Financing Needed To Prepay

Property Number 325
8 Units

Date of operation	18-Sep-1981				
Date latest loan was originated	18-Sep-1981	18-Sep-2031	minus	50	yrs
Date latest loan reaches 20 year point	18-Sep-2001	18-Sep-2031	minus	30	yrs
Owner type	Non Profit	**15-Dec-1989**	loans after this date cannot prepay		
Latest loan contains prepayment clause?	Yes				
Has owner accepted incentives?	No				
Presume owner is able to prepay?	Yes				
Latest loan is pre-1979?	No	20 year prepayment lockout			
Must owner wait for 20 year point?	No	Prepayment lockout until 18-Sep-2001			

Amount of Financing Needed	**Total**	**Per Unit**			
RHS loan balance	$203,060	$25,383	at 12/31/02		
Immediate repair needs	15,582	1,948	First two years' capital needs		
IDRR increase (decrease)	(37,948)	(4,744)	See Cap Needs worksheet		
Market Upgrades	0	0	(global variable)		
Transition costs	26,000	3,250	See detail below		
Lender fees	10,000	1,250	(global variable)		
Subtotal	$216,694	$27,087			
Origination / financing fees	$3,106	$388	2.0%	70.0%	debt
Total Financing Needed	$219,800	$27,475			
Equity	$65,900	$8,238	30.0%	equity	
Debt	$153,900	$19,238			
Monthly Equity Return	$659	$82	12.0%	annual return	
Monthly Debt Service	$1,076	$135	7.50%	30	years

Transition Costs	**RA Units**	**S8 Units**	**Unassisted**	**Total**
Total Units	0	0	8	8
% expected to move out *	100%	20%	100%	100%
# move-outs expected	0	0	8	8
Make-ready cost per move-out *	$750	$750	$750	
Lost revenue per move-out *	$2,500	$2,500	$2,500	
Make-ready cost	$0	$0	$6,000	$6,000
Lost revenue	$0	$0	$20,000	$20,000
Total Transition Costs	$0	$0	$26,000	$26,000

* Global variables

Attachment C

RHS Market Assessment
Prepayment Viability Rents

Property Number 325
8 Units

Viability Rents	Annual	PUPM			
NOI needed to justify prepayment	$21,980	$229	$220	K times	10.00% cap rate
Capital needs	2,400	25	$300	PUPA (note 1)	
Operating Expenses	17,548	183	See below (note 2)		
Other Income	(2,300)	(24)	2003 budget		
Subtotal	$39,628	$413			
Allowance for rent loss	$2,983	$31	7.0%	(global variable)	
Prepayment-Viability Rents	$42,611	$444	110%	of current RHS basic rents	
		$39	10%	above current RHS basic rents	

Operating Expenses (note 3)	Annual	PUPA	Weight	Data	Use
2003 Budget	$17,548	$2,194	1.0	$17,548	$17,548
2002 Actual (trended one year)	$16,402	$2,050	0.0	$15,924	$15,924
2001 Actual (trended two years)	$15,923	$1,990	0.0	$15,009	$15,009
Weighted Average	$17,548	$2,194			
Adjustment Factor	100% of historical expense level (note 4)				
Use This Amount	$17,548				

Note 1: Here, we use a Reserve deposit that is consistent with the capitalization rate methodology; that is, a Reserve deposit that an appraiser might assume in deriving a market capitalization rate.

Note 2: In this version of the model, we use the 2003 budgeted expenses as the basis for projected operating expenses, without considering the levels of actual expenses in prior years. We made this decision in part because prior year expenses will sometimes include significant amounts of capital items expensed for financial statement purposes.

Note 3: On the assumption that the 2003 budget represents the consensus determination by the owner and RHS of the operating expenses needed for the property, we calculate prepayment-viability rents without considering the 2002 and 2001 actual expenses. Another consideration is that, for tax purposes, owners expense material amounts of major repairs and replacements that we analyze as part of capital needs.

Note 4: This variable allows us to test the effect of higher and lower expense levels.

Attachment C

RHS Market Assessment
Likely Market Rents

Property Number 325
8 Units

Market Rent Benchmarks		0BR	1BR	2BR	3BR	4BR+	
Low	84% of FMR	$256	$299	$387	$485	$547	20th percentile of M2M rents
Low	M2M 20th Percentile	$267	$311	$423	$530	$598	(U/A deducted)
Low	Actual unassisted	$261	$305	$405	$507	$573	(see Note 1 below)
Med	99% of FMR	$302	$352	$456	$571	$645	50th percentile of M2M rents
Med	M2M 50th Percentile	$300	$350	$466	$584	$659	(U/A deducted)
Hi	114% of FMR	$348	$406	$525	$658	$743	80th percentile of M2M rents
Hi	M2M 80th Percentile	$351	$410	$524	$656	$741	(U/A deducted)
Hi	Actual unassisted	$350	$408	$525	$657	$742	(see Note 2 below)

See Section 1 and Section 5 of the report for a discussion of these benchmarks

Weighted Benchmarks	0BR	1BR	2BR	3BR	4BR+
Minimum	$235	$274	$364	$456	$516
Low benchmark	$261	$305	$405	$507	$573
Medium benchmark	$301	$351	$461	$577	$652
High benchmark	$350	$408	$525	$657	$742
Maximum	$402	$469	$603	$755	$853

See Section 1 and Section 5 of the report for a discussion of weighting

Property Quality Rating 46.4 Medium 22% Percentile (see Relative Need for Preservation page)

	0BR	1BR	2BR	3BR	4BR+			
Concluded Market Rent	$278	$324	$430	$538	$608	-20%	-$81	PUPM
Percentage of FMR	91%	108%	93%	93%	93%		108%	Average
		Market is	-20%	below current rents				

2BR Market Rent (+ UA) is 30% of 45.2% of the three person AMI

	0BR	1BR	2BR	3BR	4BR+			
# Units	0	8	0	0	0			
Market Gross Potential	$0	$2,590	$0	$0	$0	$2,590	$324	avg of all units
90% of Market (lowest likely market rents)						$2,331	$291	avg of all units
110% of Market (highest likely market rents)						$2,849	$356	avg of all units
Current RHS Basic Rent	$0	$405	$0	$0	$0			
Current Gross Potential	$0	$3,240	$0	$0	$0	$3,240	$405	avg of all units
						$3,240	$405	2003 Budget

Note 1 -- this benchmark is used only if the property has at least 5 unassisted units, those units are at least 80% occupied, and the current RHS basic rent is higher than 84% of FMRs.

Note 2 -- this benchmark is used only if the property has at least 5 unassisted units, those units are at least 40% vacant, and the current RHS basic rent is lower than 114% of FMRs.

Attachment C

RHS Market Assessment
Non-Prepayment Incentive

Property Number 325
8 Units

Property Value At Market Rents	High Likely	Medium Likely	Low Likely	
Gross Potential Income	$34,189	$31,081	$27,973	
7.0% Rent Loss	(2,393)	(2,176)	(1,958)	
Other Income	$2,300	$2,300	$2,300	At 2003 budget
Effective Gross Income	$34,096	$31,205	$28,315	
Operating Expenses	(17,548)	(17,548)	(17,548)	See ppmt viability rent wksht
Reserve Deposit	(2,400)	(2,400)	(2,400)	$300 PUPA (note 1)
Net Operating Income	$14,148	$11,257	$8,367	
Property Value After Conversion	$141,000	$113,000	$84,000	10.00% cap rate
Less:				
RHS loan balance	203,060	203,060	203,060	At 12/31/02
Immediate repair needs	15,582	15,582	15,582	See Ppmt Financing page
IDRR increase (decrease)	(37,948)	(37,948)	(37,948)	See Ppmt Financing page
Market Upgrades	0	0	0	See Ppmt Financing page
Transition costs	26,000	26,000	26,000	See Ppmt Financing page
Lender fees	13,106	13,106	13,106	See Ppmt Financing page
Imputed Equity	$0	$0	$0	
Per Unit	$0	$0	$0	
Weights	0.0	1.0	0.0	
Weighted Imputed Equity	$0			
Is Prepayment Economically Feasible At This Level of Market Rents?	**No**	**No**	**No**	(is imputed equity >0?)
Prepayment Viability Rents	$42,611	$42,611	$42,611	
Market Rents	$34,189	$31,081	$27,973	
Market Rent Excess (Shortfall)	-19.8%	-27.1%	-34.4%	(can owner finance all the $$?)

Likelihood that Prepayment is Economically Feasible *	**Very Low**	**0 point score**
* Not considering whether the owner has a legal right to prepay		

Note 1 -- here we use an appraisal-style Reserve deposit
Note 2 -- incentive calculation to be added later based on parameters to be supplied by RHS

Attachment C

RHS Market Assessment
Rent Increase To Stabilize

Property Number 325
8 Units

	2002 Actual	2003 Budget	2003 Stabilized	Variance PUPM	
Gross Potential Rental Income		$38,880	$47,265	$87.34	
Vacancy and Bad Debt Loss		($764)	($3,308)	$26.50	7.0% (see below *)
Collected Rental Income	$38,862	$38,116	$43,957	$60.84	
Other Income	$2,224	$2,300	$2,300	$0.00	
Effective Gross Income	$41,086	$40,416	$46,257	$60.84	
Operating Expenses	$15,924	$17,548	$16,671	($9.14)	95% of historic amount
Required Reserve Deposit	$3,821	$0	$6,470	$67.40	$809 See Cap Needs page
Net Operating Income	$21,341	$22,868	$23,116	$2.58	0.94 : 1 DSCR in 2002 1.01 : 1 DSCR budgeted
Debt Service (RHS Loan)	$22,716	$22,716	$22,716	$0.00	
Debt Service (Non-RHS Loan)	$0	$0	$0	$0.00	
Capital Expenditures from cash flow	($4,113)	($6,500)	$0	$67.71	
Reserve Withdrawals	$4,113	$6,500	$0	($67.71)	
Operating Cash Flow	($1,375)	$152	$400	$2.58	$96.48
Authorized Return to Owner	$0	$400	$400		
Excess (deficit) cash flow	($1,375)	($248)	$0		
Rents PUPM (weighted average)		$405	$492		

Rent Increase (Decrease) Needed			$8,385		
Share Absorbed by RA	100%	by RHS	$0	0.0% RA	3.5% vacant
Share Absorbed by Section 8	100%	by HUD	$0	0.0% Section 8	3.5% vacant
Share Absorbed by Vouchers *	100%	by HUD	$2,319	27.7% Vouchers	0.0% vacant
Share for Unassisted Units *	100%	by RHS	$4,850	72.3% Unassisted	20.0% vacant
Attributable to Vacant Units			$1,216		14.5% vacant

NPV Cost of Rent Increase (RHS / RA)	$0	/ year	$0	NPV	5.0%	20 years
NPV Cost of Rent Increase (HUD / PBS8)	$0	/ year	$0	NPV		
NPV Cost of Rent Increase (HUD / Vchrs)	$2,319	/ year	$28,900	NPV		
NPV Cost of Rent Increase (RHS / Other)	$4,850	/ year	$60,442	NPV		

* Uses global assumption for percentage of vouchers in the portfolio (i.e., not rounded to an even number of units) 27.7%

$87.34	PUPM rent increase needed	21.6% increase
$67.40	for Reserves	77.2% for Reserves
$26.50	for Vacancy / Rent Loss	30.3% for Rent Loss
($6.56)	for Cash Flow	-7.5% for Cash Flow

* Vacancy Loss Parameters:

2.0%	budgeted 2003
0.0%	snapshot from tenant data
7.0%	minimum (global variable)
15.0%	maximum (global variable)