

**MILLENNIAL HOUSING COMMISSION
PRODUCTION AND PRESERVATION TASK FORCES
BACKGROUND PAPER:
PRE-LIHTC AFFORDABLE HOUSING -- HISTORICAL CONTEXT**

OVERVIEW

This paper summarizes how the HUD and RHS privately owned, federally assisted stock was created and financed, how policy was implemented, the policy shifts that occurred along the way, how successful the properties are today, and what lessons can be learned. This paper does not cover either public housing or the Low Income Housing Tax Credit (LIHTC) program. A list of specific programs, with brief descriptions, is included as Appendix 3.

Affordable housing is a hybrid between private market-rate housing and a host of (largely non-economic) public purpose objectives. Harmonizing these fundamentally conflicting objectives has been challenging, as this paper clearly shows. Yet, it is feasible, provided we pay attention to the lessons learned over time. Indeed, most of the properties developed over the past thirty years are still viable and still affordable today, despite programmatic flaws that we are unlikely to repeat in future programs.

We have been quite successful in producing affordable housing. We have been somewhat successful in seeing it through its first twenty years in viable condition. However, it is clear that relatively few properties will be viable through their second twenty years absent significant help (the others will need a large infusion of government funds, or will remain viable only by terminating their affordability). Accordingly, the most fundamental challenges in affordable housing revolve around how to keep properties physically, financially, and managerially sound, and affordable to residents, over the long term.

To some extent this is a reflection of an overall tendency -- among developers, lenders, and government -- to be relatively accurate in estimating the costs of development but to underestimate the costs of ongoing operations. Those properties that had (or were able to secure) adequate funds for ongoing operations are, for the most part, doing just fine. The remaining properties faced difficulties, sometimes quite painful difficulties.

The following discussion starts at the beginning and follows the pre-LIHTC stock up to the present day. Each policy initiative or decision is briefly evaluated. By noticing where previous programs ran into difficulty maintaining properties in viable and affordable condition, we can design successful policies for the future. Specific lessons learned are discussed at the end of this paper.

CREATION AND FINANCING OF THE PRE-LIHTC STOCK

The pre-LIHTC stock was created and financed under a wide variety of governmental subsidy programs that had the following features in common:

- **Governmental Siting and Design Decisions.** Properties were developed in

locations, and with unit mixes, that were requested by the federal, state and local governments, based on government's assessment of the need for affordable housing. Most of these decisions turned out reasonably well. However, some decisions, although appearing reasonable at the time, do not match up well with today's market realities. Some properties are located in neighborhoods that are not viable. There is little or no actual market demand for some unit types and mixes. Some properties have scale and/or density that are not appropriate to the neighborhood's needs today.

- **Design Standards and Development Cost Limits.** Each program included minimum design requirements and limitations on original development cost. Development costs were effectively limited, sometimes with adverse implications for ongoing operating costs. One example is plywood siding that had low initial cost but needed frequent repainting and often required replacement in twenty years or less; a life-cycle cost approach might have indicated the superiority of a 'zero maintenance' exterior with higher initial cost. Another example is manual-defrost refrigerators that were less expensive initially but that often failed very early due to damage by residents trying to accelerate the defrosting process. Another is electric resistance heat, which had an initial cost advantage versus much more efficient natural gas heat. The design standards generally produced acceptable quality but also produced some properties that most contemporary experts regard as having inadequate quality, inadequate unit size, or both.
- **Developer Cost Certification Audit.** Actual development costs were audited by an independent accountant, to verify that the government loan was not higher than was appropriate. This generally achieved its objective, with relatively few adverse side effects.
- **High Debt to Cost Ratio.** Mortgage debt was the primary source of capital to support development. In general, debt was sized to cover 90% to 100% of total development cost (including developer profit¹). It should be noted that the riskiness of these mortgage loans was increased further by other aggressive underwriting practices discussed below.
- **Government Assumption of Some or All Debt Risk.** Generally, mortgage debt involved some form of governmental risk assumption::
 - Loans provided directly by the federal government (RHS §515, early HUD §202).
 - Loans financed with tax exempt bonds (some §8 NC/SR properties, a few §236 properties). Generally these loans were not guaranteed by the federal government).
 - Loans guaranteed by the federal government (HUD §221d, §236 and some NC/SR properties).
- **Inadequate Reserve Deposits.** Typically, the allowable deposit to the Reserve for Replacements was set by formula, generally at a level that was adequate to cover only

¹ Until recently, Rural Housing Service §515 loan amounts were based on total development cost not including developer profit. Recently, §515 underwriting has adopted subsidy layering principles and accordingly now includes developer profit.

a fraction of ongoing capital needs. Perhaps paradoxically, the lack of a formula often produced even worse results, when developers and regulators alike yielded to the temptation to reduce the reserve deposit below the traditional (already inadequate) level in order to “make the numbers work..”

- **Justification for Small Reserve Deposits.** It was envisioned that the remainder of the capital needs would be financed by future tax-shelter resyndication², or by conversion to market-rate use at the end of the regulated use period³. However, neither approach is appropriate today. Tax-shelter resyndication was eliminated by the Tax Reform Act of 1986. Reliance on conversion to market-rate use more or less guarantees a medium-term ‘preservation crisis’ for each property and, accordingly, is increasingly regarded as a bad approach. For that matter, reliance on a future sale of any sort is increasingly regarded as an inappropriate approach for funding predictable capital needs.
- **Cost Based Initial Rents.** The initially approved rents were “built up” based on the projected cost to operate: debt service, allowance for cash flow, Reserve deposit, estimated operating expenses, and an allowance for vacancy losses. The cost based rents were generally asserted to be reasonable based on local market rent levels but, in reality, were largely disconnected from market reality, as discussed later in this paper⁴.
- **Aggressive Underwriting.** Developers were very interested in earning developer fees. Lenders were very interested in making loans. Government (which provided the subsidy funds to facilitate development and often guaranteed the mortgage loans as well) was under great pressure to produce affordable housing. As a result, all three parties were institutionally biased toward optimism. The result was underwriting that tended to be more aggressive than was strictly appropriate. Vacancy allowances were based on the often unfounded assumption that rents would represent an attractive bargain. Operating expense estimates often were unrealistically low⁵. Target debt service coverage ratios were generally 1.10 or less (1.05 or less for nonprofit borrowers). There was generally no loan-to-value standard; instead, a loan-to-cost standard was used, generally with target ratios of 90% or higher (as high as 100% for nonprofit borrowers).

² Before 1986, tax shelter resyndication was generally assumed to be a viable recapitalization strategy after 5-10 years of ownership. The resyndication would sell tax shelter benefits to a new set of investors, with the syndication proceeds applied partially as sales price to the previous investors, partially invested in the property to meet capital needs, and partially as fees and costs of the syndicator.

³ Properties with below-market rents would then have the opportunity to increase rents to market and thereby generate additional cash flow that could support additional debt. Some portion of the additional debt would be available to meet capital needs. However, such conversion had the distinct disadvantage of terminating the property’s status as affordable housing.

⁴ Cost based rents were, by definition, the rents necessary to make the project feasible. Accordingly, it was only accidental if the cost based rents happened to be at or near comparable market rent levels.

⁵ As David Smith points out, understated operating expenses are an inherent risk in programs that are driven by mortgage financing. “Sponsors had a powerful incentive to show low operating expenses, hence higher supportable mortgage amounts. Good sponsors knew they were doing this and made sure they made enough money to be able to support the property later. Bad sponsors didn’t. Unfortunately, early-stage HUD underwriters usually did not see this. When fibbers win, winners fib.”

- **Rents Versus Market.** For the most part, government either did not determine property-specific comparable market rent levels, or claimed to do so but used a process that would not be judged adequate by today's standards. One such process was HUD's county-wide / MSA-wide Fair Market Rents, which (regardless of what one thinks of the methodology by which the FMRs were determined) had little or nothing to say about property-specific comparable market rent levels⁶. That said, there were two basic fact patterns:
 - **Below-Market-Interest-Rate Debt = Rents At or Below Market.** Some programs (notably, HUD §221d BMIR, HUD §236, and RHS §515) utilized mortgage interest rates between 1% and 3%, to reduce debt service costs and thereby reduce the breakeven rent level. These rents were intended to be at or below local market levels, thereby assuring high ongoing occupancy. However, some properties (notably, many §515 properties in rural areas) needed below market interest rate debt plus deep subsidy (§8 or RHS Rental Assistance) in order to achieve rents that were affordable to the target market. Other properties failed soon after completion when it was discovered that the cost-based rents were actually above the level the property could achieve. Others failed later, as a result of some combination of local market weakness, operating expenses in excess of underwritten levels, and capital needs in excess of the funding level in the reserve for replacements.
 - **Market-Interest-Rate Debt = Rents Above Market.** Many properties combined market interest rate debt and project-based rental subsidies. Because of the high debt service cost, almost all of these properties required initial rents above (usually well above) local market rents. See Appendix 1 for additional discussion of why these initial rents were above market.
- **Rents Versus Income Eligibility Ceiling.** Programs typically were targeted at households earning up to 80% or 95% of area median income (adjusted for household size). Generally, initial rents appeared "affordable." However, many properties needed significant rent increases to overcome optimistic underwriting or to overcome adverse events, and often these rent increases outstripped the rent-paying ability of the target population.
- **Tax Shelter Syndication.** Under prevailing (pre-1986) tax law, syndication of tax-shelter benefits was the primary vehicle for funding the portion of development cost not funded by mortgage debt⁷. For certain nonprofit developers, both HUD and RHS provided for mortgage debt at 100% of total development cost, recognizing that tax-shelter syndication was not an option for these developers. The tax-shelter strategy

⁶ The FMR is primarily a housing cost index. As such, it has some usefulness for analysis at a metropolitan-area (or county-area) level. However, the FMR has often been used as a rent-setting device for specific properties, and for that purpose it is highly inaccurate and inappropriate. The term "fair market rent" itself is unfortunate because it appears to advertise a property specific measure of comparable market rents.

⁷ Tax shelter syndication began in 1972, with IRS revenue procedure 72-13 which allowed the inclusion of non-recourse debt in taxpayer basis. Tax shelter syndication became markedly more attractive after the 1981 tax bill dramatically accelerated depreciation deductions and then was ended by the 1986 tax bill.

had disadvantages that caused a series of problems, some immediate and some whose effects did not become apparent until later:

- **Focus on tax losses.** Investors derived the great bulk of their economic return from tax losses. As a consequence investors, who in normal real estate transactions are aggressive monitors of financial performance, had few operational concerns other than that the property continue to make its mortgage payments.
- **Sensitivity to marginal tax rates.** The amount an investor was willing to pay varied directly with the investor's marginal income tax bracket. Thus, expected and actual investor returns dwindled as marginal tax rates were progressively reduced after the 1970s.
- **Exit tax problems⁸.** An integral feature of the tax-shelter approach was that investors recognized losses that were a multiple of their original cash investment⁹. The excess took the form of a 'negative capital account' that generated taxable income when the property was sold (or foreclosed, or otherwise transferred). This 'exit tax' liability proved later to be a powerful force against later sale of the property, even when a sale was in the best interest of the property, the residents, and the government. Because the exit tax evaporated upon death, many owners would say to themselves "I just hope the property makes it longer than I do."
- **Affordable Housing Use Period.** Use of the property was restricted to regulated affordable housing generally for 20 years, less commonly for 40 years, and sometimes in perpetuity.

These approaches were spectacularly successful in creating affordable housing, by combining workable development programs and sufficient funds to get the properties built in the first place. Indeed, close to two million affordable apartments were developed that, unlike any other form of privately owned housing, serve large numbers of extremely low income households (those earning less than 30% of area median income). Inasmuch as the need for affordable housing is so heavily concentrated in those households, the privately owned HUD and RHS portfolio plays a primary role in meeting America's affordable housing needs.

That being said, each of the programs encountered more or less serious problems maintaining the housing in good physical and financial condition, largely because there were neither sufficient funds nor sufficient governmental expertise to cure properties that suffered from poor underwriting, poor design, or simple bad luck. Before investigating why these problems occurred, it is first important to understand three important policy dimensions: lack of real estate

⁸ See the Commission's background paper on Preservation Tax Incentive.

⁹ Because marginal tax rates are somewhat less than 100%, each dollar of losses generates somewhat less than one dollar of tax savings, thus investors will pay somewhat less than one dollar for each dollar of expected losses. A rule of thumb in the 1970s was that investors would pay – in installments over a three to four year period -- an amount equal to the first five years' projected losses times 50%. This "two to one" structure implied that, at the end of five years, the investor would have a negative capital account equal in size to his or her total investment (x dollars invested minus 2x dollars of losses equals negative x dollars in the investor's capital account at the end of five years).

equity, rent increase approach, and distribution limitation.

LACK OF REAL ESTATE EQUITY

In general, and as demonstrated below, the financing approaches outlined above guaranteed that the principal amount of the mortgage debt exceeded the economic value of the property. This deliberate over-leverage was offset (also deliberately) by below-market interest rates, Section 8 subsidy, above market rents, or a combination.

The following is a simplified illustration of the gap between economic value and total development cost, for subsidized rental housing:

Figure 1: Economic Value vs. Development Cost			
Calculation of Value	Market	Affordable	Social Asset
Gross Potential Rent PUPM	\$860	\$600	\$300
7% Rent Loss	(60)	(42)	(21)
Operating Expenses	(250)	(250)	(300)
Replacement Reserve	(25)	(25)	(25)
Net Operating Income	\$525	\$283	(\$46)
Capitalization Rate	9.00%	9.00%	9.00%
Economic Value Per Unit	\$70,000	\$37,700	(\$6,100)
Total Development Cost Per Unit	\$70,000	\$70,000	\$70,000
Subsidy Needed Per Unit	\$0	\$32,300	\$76,100

In the ‘Market’ example shown above, \$860 rents are required in order to support development of a new market-rate apartment property. If achievable rents are below this level, development does not occur.

The ‘Affordable’ example shows an otherwise similar affordable property, with rents at \$600. This property has an economic value that supports just over half of total development cost. The other half has to be supported by subsidies – grants, below market interest rate debt, and/or §8 at above market rents. In affordable housing programs that are based on debt, owners would borrow \$65,000 or more of the \$70,000 per unit total development cost, necessitating either a below market interest rate loan (e.g., HUD §221 BMIR and §236, and RHS §515), or §8 at above market rents (e.g., NC/SR, which set the initial rents at the level needed to support new construction, in this example \$860 but required residents to pay only 20%, later 30%, of income). It is actually misleading to call the sponsor of such a property the ‘owner’, when the sponsor has an asset worth \$37,700 per unit with \$65,000 per unit (or more) of debt. The sponsor is the ‘owner’ only so long as the property remains financially viable. The moment the property runs into trouble, the true owner (that is, the owner of the problem) is whomever made or guaranteed the over-sized and under-collateralized mortgage loan.

The ‘Social Asset’ example above illustrates an extreme case: an affordable property in an extremely low-market-rent area combined with higher than normal operating expenses (for example, for security costs). Not only can this property not support any debt, it requires subsidy even to cover its operating costs. Such properties were viable only to the extent that they came with subsidies attached. Only recently¹⁰ has policy begun to treat these “social asset” properties as a separate class of properties needing special regulatory structures.

Moreover, properties typically were underwritten with small rent loss allowances, thin operating expenses, and minimal debt service coverage ratios. Accordingly, properties had very thin operating cash flow margins, and consequently very high levels of operational risk. To compound the problem, most programs limited owners’ distributable cash flow (as discussed in more detail later), which gave owners little reason to take the risks and do the hard work necessary to improve the thin cash flow margins.

When properties failed, that risk fell squarely on the shoulders of government. The nominal owner of the property had no equity and, absent a very large write-down of the debt, no economic motivation to make additional investments. Typically, government followed pre-1986 workout approaches: pressuring owners to make additional investments, partial or full debt service deferrals for limited periods of time, and governmental injection of additional resources (particularly, Section 8 LMSA and above market rents, as discussed below). Generally, these approaches stabilized the property for a short period of time without curing the underlying problems, making the eventual cure that much more expensive and painful.

In hindsight, a post-1986 approach -- cutting the mortgage debt down to size – would have been a much better idea¹¹. In fact, the Rural Housing Service has implemented this approach selectively over the years, writing down its direct \$515 loans to supportable levels, in connection with transfers of troubled properties.

A key insight is that, unless mortgage debt is kept well within each property’s actual economic value, when a property fails, not only is government ‘holding the bag’, but the debt overhang prevents any other party from solving the problem.

RENT INCREASE APPROACH

There were three approaches in the pre-LIHTC stock:

- **Cost-based rent increases.** The original policy provided that owners would submit their actual audited financial statements, and the original cost-based rents would be recomputed by substituting the recent actual operating expenses. This was rightly criticized as being designed to produce rents that were at least 18 months out of date and proved to be particularly disastrous during the energy-cost-driven inflation of the

¹⁰ The Mark – to – Market program’s “exception rent” category is designed for these properties, recognizing that they have social value despite having no economic value.

¹¹ In the wake of the real estate recession of the late 1980s, lenders discovered that the new low-inflation environment required that workouts be based on cutting the debt down to size. By contrast, in the previous high-inflation times, debt service deferral and other short-term patches were popular workout approaches.

early and mid 1970s. This approach affected the HUD “older assisted” stock and the early RHS stock.

- **Budget-based rent increases.** In response to the failure of the cost-based system, informal practice shifted to actual cost plus an inflation factor, and later to a fully budget based system in which owners could propose costs that were higher than historical plus inflation. HUD formally ratified the fully budget-based approach in 1986 (for its “older assisted” stock and for the §202 and §811 programs). This approach is reasonable in concept, and has the distinct advantage of maximum flexibility, but is fraught with problems in practice. The problems include:
 - Government workload, to review rent increase requests.
 - Difficulty of making sound and consistent judgments in an expertise-intensive and substantially subjective process.
 - Incentive for owners to over-budget and over-spend, because the year-by-year budget-based rent increase system removes many incentives for efficiency.
 - Severe tension between the twin governmental objectives of affordability (calling for low rents) and property viability (calling for high rents). As a generalization, in practice, government broke ties in favor of lower rents, with the consequence that many properties were progressively resource-starved over time.
 - Many owners and regulators found themselves in a game, the rules of which required the regulator to approve lower rents than the owner requested, which in turn required the owner to propose higher rents than were needed. This game, once begun, was counterproductive for the property and usually resulted in lack of effective communication between owner and regulator.
- **Factor-based rent increases.** When Congress was contemplating creation of the Section 8 program in 1973 and 1974, developers were unwilling to support a new production program with cost-based rent increases (or any similar approach). In response, Congress created the factor-based rent increase approach as part of the §8 New Construction / Substantial Rehabilitation (NC/SR) program, under which rents would be adjusted annually by an inflation factor without considering actual expenses or actual cash flow. This approach was much more successful (although not universally successful) in generating rents that were adequate to meet properties’ operating needs but was roundly criticized for producing rents that in many cases were well in excess of rents needed to support operations.

In short, the cost-based approach was criticized (correctly) for producing inadequate rents, and the factor-based formula was criticized (not always correctly) for producing excessive rents. The various criticisms of the factor-based approach are discussed in Appendix 2.

DISTRIBUTION LIMITATION

Each program included significant features designed to limit the cost to government by limiting the owner’s operating profit, generally along these lines:

- **Zero distribution for nonprofit owners.** A universal feature of pre-LIHTC

programs, this is now being called into question from two standpoints. First, some nonprofits have concluded that 100% financing and zero profit allowance is an inferior bargain, by comparison to approaches available to other owners. Second, a zero-profit approach fails to take into account the legitimate asset management costs of being the owner.

- **Limited distribution based on imputed equity.** Both HUD and RHS calculated the ‘total development cost’ – including a formula allowance for developer profit -- against which the maximum loan amount was calculated. HUD and RHS then imputed ‘original equity’ equal to the difference between ‘total development cost’ and the mortgage loan¹². With one significant exception (discussed later in this paper), the owner was then allowed an annual maximum cash flow distribution equal to a percentage (generally, between 6% and 10%) of ‘original equity’. Expert opinion is mixed on the wisdom of limited distribution structures in general, and on the particular approaches used by HUD and RHS.
- **No distribution except from excess cash.** Both HUD and RHS require that accounts payable and other immediate financial obligations be satisfied, before any cash is distributed to the owner. This initiative is generally regarded as effective and appropriate. However, neither HUD nor RHS have yet taken the next logical step, requiring evidence of adequate reserves before allowing cash distributions to the owner.
- **Cumulative limited distributions.** Limited distributions that cannot be made in one year can be carried forward. If a future year generates distributable cash over and above that year’s limited distributions, the excess can be applied toward these ‘accrued and unpaid’ distributions. This feature seems only fair (allowing owners to ‘catch up’ for distributions missed) but had the effect of creating very different incentives for owners of seemingly similar properties, depending on whether the owners had received full distributions in previous years.
- **Residual Receipts accounts.** Excess distributable cash, after all accrued and unpaid distributions have been made, are placed in a restricted account. Allowable uses of residual receipts funds, and ownership of the funds, vary from program to program (and sometimes from property to property). It is clear that the combination of high potential cash flow and limited distributions (thus high potential for creating residual receipts) leads to significant distortions in owner and manager behavior; at a minimum, owners and managers have little or no economic reason to keep operating costs low in such situations. It is also clear that the presence of large residual receipts balances creates “use it or lose it” pressures on owners and managers (and, sometimes, on regulators as well).

On balance, the weight of the evidence seems to indicate that limited distribution provisions gain little for government, involve significant workload for regulatory oversight, and at a minimum

¹² This imputed equity had no relationship either to the tax-shelter syndication proceeds (which typically was higher than the imputed equity), or to true real estate equity (which, as noted elsewhere in this paper, was generally negative).

dilute the normal incentive for owners and managers to operate properties efficiently. In the worst cases, limited distribution structures remove owner incentive entirely (e.g., zero distribution for nonprofit owners) or create highly artificial incentives (e.g., high cash flow / limited distribution situations).

THE EXCEPTIONAL CASE: “UNLIMITED” DISTRIBUTIONS

Owners of early (“old reg”) Section 8 NC/SR properties were allowed to distribute all “surplus cash” (basically, cash in excess of accounts payable and other short term needs). This was consistent with the advertised market orientation of the program, which was claimed (incorrectly) to include market rents and (generally correctly) market-based rent increases. The fact that actual cash distributions were frequently dramatically higher than in other programs became a political embarrassment (despite being utterly predictable, see Appendices 1 and 2). As a result, HUD imposed distribution limitations in later (“new reg”) Section 8 NC/SR properties, via regulations published in November 1979.

As discussed in more detail in Appendices 1 and 2, the combination of above-market rents, factor-based rent increases, and unlimited distributions was politically volatile and is now regarded as a thoroughly bad idea. By contrast, the combination of market rents (or modestly below-market rents), factor-based rent increases, and unlimited distributions has been a feature of the LIHTC for many years now, without political repercussions.

When considered together with the various problems inherent in limited distribution structures, this indicates that distribution limitations should be strongly considered for elimination as existing affordable housing is restructured and preserved.

OPERATIONAL PROBLEMS

The inflation and recession of the 1970s. The cost-based and budget-based rent-setting approaches resulted in widespread property failure during the high inflation of the 1970s. Operating expenses (led by energy-related costs) escalated very rapidly, and – for a variety of reasons – rents did not escalate fast enough in response. At the same time, many local real estate markets experienced recessions or worse in the 1973-75 period, driven in part by overbuilding in the early 1970s. Market rate properties reduced their rents, and the subsidized properties suddenly faced direct competition from market rate properties. Either of these two problems would have been sufficient to cause many properties to fail. The combination of both problems caused large numbers of property to fail.

The 1970s: inflexibility of aggressively-underwritten properties. Faced with cash flow problems, some owners were successful in obtaining governmental approval to increase rents. However, this introduced a different set of problems – residents found themselves unable to pay the increased rents without severe financial strain. If the property survived, it did so either by sacrificing its affordability mission (serving a higher income clientele) or by converting to full – deep – subsidy status (eventually, serving a much lower income clientele).

Failure of amateur owners and managers. Property failures in the early and mid 1970s were heavily concentrated in properties with inexperienced owners and inexperienced managers. Two

fact patterns were common. The first was owners with development capacity but no management capacity. The second was weak nonprofits. Fortunately, today, both types of weak owner are much less common than 30 years ago (although by no means extinct). In response, HUD encouraged inexperienced owners to sell to experienced owners. HUD instituted policies prohibiting self-management by small nonprofit owners. HUD and the industry also took steps to create and sustain a professional property management specialty in subsidized housing. These steps, especially the latter, were quite successful.

Inadequate reserve funding. As discussed above, the formula-based reserve deposits were known to be inadequate to fully fund properties' ongoing capital needs, and the remaining needs were assumed to be funded from sources that are either not available (tax-shelter resyndication) or counterproductive (market conversion). As the first wave of properties hit their first heavy capital needs cycle (starting about 10-15 years after development), HUD began to allow increased reserve deposits in its budget-based rent increase formula. By contrast, if a factor-based property faced cash flow problems, there were few if any potential remedies. To this day, inadequate reserves are a central problem for subsidized rental housing. As a rule of thumb, the reserve deposit that would be adequate to fully fund a property's ongoing capital needs is at least twice, and often three times, the formula-based deposits that are still used in underwriting affordable housing.

The cash flow "scandal" of the late 1970s. As discussed above, HUD concluded (not entirely correctly) that Section 8 NC/SR owners were receiving very large cash flows. HUD instituted distribution limitations for future NC/SR properties, and concluded (largely incorrectly) that the factor-based rent increase approach was unwise and inappropriate. HUD also concluded that above-market NC/SR rents should be reduced (the "comparability" initiative discussed in Appendix 2)¹³. Owners saw this as a more or less shameless bashing of owners, with respect to outcomes that were completely predictable and – indeed – were built into the program deliberately, because of the failure of the cost-based and budget-based rent-setting approaches. No doubt a number of observers within government privately agreed but felt that the large cash flows – whether foreseeable or not – constituted a threat to the political viability of the program and thus had to be reined in. The debate whether the governmental responses were lawful and appropriate became very acrimonious, with repercussions that are still being felt today.

The mid 1980s: "a rising tide lifts all boats." Many properties that were not economically viable at the time they were developed had become so, by virtue of being located in a dynamic neighborhood or simply by surviving long enough for the cumulative effect of many years of high inflation to work its wonders. Unfortunately, in some cases viability was available only by terminating affordability and raising rents to their higher market levels.

The late 1980s: Crack Cocaine. A new phenomenon appeared, often beginning in the very neighborhoods where the pre-LIHTC portfolio was located – extremely high levels of drug-related violence and drug trafficking, centered around a new drug called 'crack', a low-priced and highly potent form of cocaine. It soon became apparent that eradicating a drug-related crime

¹³ The NC/SR statute provided that rents could be above market, but only to the extent that the original rents were above market. However, there were no good data on comparable market rents at the time of original development, and no good data were offered or developed. This led to a particularly acrimonious and ultimately inconclusive "debate."

problem was quite difficult, uncertain of success, and quite expensive. HUD was understandably reluctant to fund the needed levels of intervention and only began doing so several years after the problem became apparent. In the meantime, many affordable housing properties suffered serious declines. Some observers see a connection between drug-related crime and the concentration of “the poorest of the poor” that occurred as a result of the “federal preferences” that are discussed below, in that the concentrated extremely low income households were particularly vulnerable to the onset of drug-related crime.

POLICY SHIFTS ALONG THE WAY

1970s: Shift From Cost-Based to Budget-Based Rent Increases. As discussed above, the disaster of the 1970s caused HUD and RHS to shift to a fully budget-based rent setting mechanism.

1974: Section 8. For purposes of newly developed properties, §8 replaced HUD’s earlier deep subsidy programs (Rent Supplement and RAP)¹⁴. In addition, most existing owners chose to convert their Rent Supplement and RAP contracts to §8 within a few years after introduction of the §8 program. The §8 program featured an original rent-to-income ratio of 25% (subsequently increased to 30%). Section 8 could be either project based or tenant based. When project based, Section 8 featured factor-based rent increases, in response to developer / owner complaints about the failure of cost based rent increases. Early project-based Section 8 also featured no limitation on cash flow distributions (HUD imposed distribution limitations on later projects beginning in 1979).

Mid 1970s: §8 Loan Management Set-Aside (“LMSA”). Properties that were FHA-insured and that were unable to afford their mortgage payments were often propped up via project-based §8 contracts covering units that were vacant or that were occupied by low-income households with high rent burdens¹⁵. LMSA cured both vacancy and high rent-burden (at least in the short run) by offering eligible households good housing in exchange for rent and utility payments equal to 25% of household income. Generally, however, the vacancy problem re-appeared in the remaining non-§8 units. Thus, typically the first LMSA contract had to be followed by additional LMSA contracts until the property was 100% §8 (or virtually 100%). In many cases substantial rent increases were required as well. From today’s vantage point, it seems obvious that the only robust way to use LMSA was to make the property 100% §8 and to award a large rent increase. Yet at the time, small LMSA contracts were awarded, generally without rent increases. Moreover, from today’s vantage point, it seems obvious to address the original problems by restructuring the property’s excessive mortgage debt, while reducing rents to market levels or below. At a minimum, such an approach would have preserved a mix of incomes, would have avoided a concentration of “the poorest of the poor,” would have retained market discipline, and would have avoided the political problems inherent in above-market rents.

Later 1970s: HUD Response to High Interest Rates. As interest rates rose in the late 1970s, it

¹⁴ §8 was also used in conjunction with some RHS §515 loans. RHS also continued to provide Rental Assistance contracts with §515 loans that did not have §8 contracts.

¹⁵ A factor not widely appreciated today is that, due to the slow rate of acceptance of tenant based Section 8, one of the policy reasons for the creation of LMSA was to utilize the very large backlog of appropriated but unused Section 8 funding.

became increasingly difficult to process, underwrite, finance, and develop new Section 8 properties.

- **“Tandem” Program.** One response was the “Tandem” program, in which the interest rate was arbitrarily set at 7.50%¹⁶. Ginnie Mae committed to purchase the loans at 98% of par value, and Ginnie Mae then immediately re-sold the loans at market value (generally, at a large loss in the range of forty to fifty cents on the dollar).
- **“FAF” Program.** Another response was the “Financing Adjustment Factor (FAF)” program, in which the property was processed at an arbitrary 8.00% interest rate, and the loan was financed with tax-exempt bonds. At the time the bonds were sold and the loan was originated, a FAF adjustment was added to the approved rents, to cover the additional debt service. Because the FAF adjustment was often quite large, these properties’ rents were almost always very visibly above market, rendering it impossible for government and developers to continue to pretend that Section 8 NC/SR rents were in some reasonable relationship to market rents.
- **Problems With FAF Refinancing.** Under FAF, owners agreed to refinance when feasible. Many later disagreements arose. Because bondholders preferred continuing with their original high yields, they (through their trustees and issuers) were less than enthusiastic about refinancing once interest rates dropped. When owners came forward to refinance, HUD generally refused to recognize owners’ transaction costs, and generally refused to allow any proceeds to be applied to properties’ needs. Accordingly, owners generally refused to refinance. The eventual solution (under the McKinney Act) was for HUD and the bond issuing agency to refund the bonds with or (more typically) without the property owner’s consent, with HUD and the issuing agency splitting the bond debt service savings under a “FAF agreement” in which the issuing agency and HUD agreed to prevent future prepayment of the bonds (a feature that later caused problems when properties needed to be restructured under HUD’s Mark-to-Market program).

Early 1980s: Concentrating the poorest of the poor: “Federal Preferences”. In the early 1980s, private Section 8 housing was serving a clientele with incomes averaging around 35% of area median (adjusted for household size). Fifteen years later, the average income dropped to half that level, as a result of “federal preferences” for admission sponsored by an unusual coalition of left-wing advocates (arguing for more help to the very poor) and right-wing advocates (arguing for more accurate targeting of scarce funding). The averages for public housing were very similar. This initiative is now universally regarded as having been a bad idea, because it resulted in socially isolated communities of families who did not work, were unlikely to encounter anyone who did work, and were thus very unlikely to find work and pull themselves out of poverty.

Mid-1980s: Preservation. The early HUD programs (§221d3 BMIR and §236) featured a twenty-year affordable housing use period, after which the owner could prepay the below market

¹⁶ In addition to the relatively well-known 7.50% tandem program for NC/SR properties, there was also a “targeted tandem” program for market rate properties, with a 9.75% interest rate. Many of these targeted tandem loans were held by Ginnie Mae for several years instead of being sold immediately.

interest rate FHA-insured loan and convert the property to market rate use. Early RHS §515 loans (originated before December 21, 1979) were prepayable at any time (at which time the owner could convert the property to market rate use)¹⁷.

- **The Preservation Debate.** As the twenty-year mark approached, the country found itself in a generally vibrant real estate market, in which residents had few options for relocation, and in which there was little potential for new affordable housing development (the Section 8 NC/SR program having been repealed in the early 1980s). Advocates were worried that large numbers of properties would terminate their affordability. In both the HUD and RHS portfolios, a few properties did prepay and terminate affordability. There followed a vigorous and ultimately inconclusive debate as to how many others would follow suit. It was clear that in a few cities with high market rents and tight housing markets (e.g., Boston and San Francisco), owners had a very viable market-conversion option, and absent intervention of some sort¹⁸ residents would have faced significant rent increases. It was less clear whether there was a problem of national scope, or whether – regardless of how the problem was defined -- the right solution was to prevent owners from converting to market rate use¹⁹.
- **Preservation Statutes.** Congress responded with a 1986 moratorium on prepayments (thereby mooting the debate about how many owners would in fact prepay). Congress then enacted two laws (ELIHPA in 1987 and LIHPRHA in 1990) under which properties would be re-valued based on their market-conversion potential. Both laws provided that owners could receive an FHA-insured equity take-out loan based on that value (the “stay-in owner” option) or could sell at that value (in which case the nonprofit purchaser could receive 95% financing through FHA).
- **Preservation Results.** Roughly 650 properties were “preserved” under the two laws. Interestingly, the cost at which the properties were preserved appeared high to many observers at the time but appears reasonable in light of property values today.
 - **Capital Grant Approach.** Roughly half were preserved through sales to preserving entities using capital grants which, because they required no additional debt service payments, allowed rents to be maintained at well below market levels.
 - **Second Mortgage Approach.** The remaining 300+ properties were preserved with FHA-insured second mortgages, rents increased to market levels, and traditional (aggressive) underwriting approaches. Unpublished analysis of 1999 audited financial statements indicates that over 40% of these 300+ properties are operating at negative cash flow today.

¹⁷ §515 loans originated between December 21, 1979 and December 15, 1989 had a twenty-year affordable housing use period. §515 loans originated after December 15, 1989 cannot be prepaid.

¹⁸ The Preservation program approach was one such intervention, in effect buying the owner’s conversion option at fair market value. Alternative interventions include allowing the property to convert and giving residents what are now called “enhanced vouchers” that are designed to cover actual market rent instead of being subject to the normal voucher maximum rent (“payment standard”).

¹⁹ Current law deals with this situation by allowing the owner to prepay and convert, but protects residents with “enhanced vouchers” designed to allow residents to remain in place at the higher market rents.

- **Problems and Repeal.** Ultimately, the cost of the program became problematic (several hundred million dollars per year). A few properties with especially high costs received intense scrutiny. A consensus emerged that owners generally had succeeded in persuading HUD to accept property valuations that were higher than appropriate. A similar consensus emerged that some nonprofit purchasers used the program to over-rehab properties that they purchased. The combination of all of these forces resulted in the repeal of the Preservation laws, and reinstatement of the owners' right to prepay.
- **Policy Conclusions From Preservation.** The Preservation programs also cast a number of long-term shadows. First, policy makers vowed never again to engage in a 'war of the appraisers' with owners. Second, policy makers vowed never again to design a program with a 'blank check for rehab'. Finally, policy makers developed a general level of distrust of claims (whether by owners or advocates) that disaster would result if particular affordable housing properties were allowed to convert to market rate use. It is not clear that these conclusions are fully accurate or warranted, but they affect national policy to this day.

1986: Tax Reform, and The End of Tax Shelter Syndication. The 1981 tax bill, with its rapid accelerated depreciation, availability of uncapped tax exempt bond financing, and other real estate incentives, shoved the real estate development throttle wide open. Just as dramatic was the 1986 tax bill, which had exactly the opposite effect. Depreciation rates were dramatically decreased, but more profound was the elimination of investors' ability to offset salary and business income with tax losses from investment real estate. The loss of tax-shelter syndication was expected to hit affordable housing particularly hard.

1986: Discontent Among Private Investors. It should be pointed out that the 1986 tax bill was the "final nail in the coffin" for private investors in heavily-regulated affordable housing. By eliminating tax-shelter benefits – even for existing investments – Congress more or less insured that private investors would never again approach affordable housing investments except with extreme skepticism about the willingness and ability of government to respect investors' needs. Earlier events that discouraged investors included:

- Government's unwillingness to allow rent increases that were obviously needed, especially in the high-inflation 1970s.
- Rent increase factors believed by many investors to have been manipulated by HUD so as to be materially less than the actual rate of inflation.
- The "comparability" initiative.
- HUD's re-imposition of distribution limitations in the NC/SR program.
- The prepayment moratorium, essentially abrogating owners' contractual rights.

It should also be noted that, even today, relationships are extremely strained between HUD (in particular) and private investors and owners. It is an open question whether these relationships could be repaired so as to facilitate new approaches to affordable housing in which private equity capital would play a significant role.

1986: The Low Income Housing Tax Credit. For affordable housing, the 1986 tax bill, otherwise a seemingly unmitigated disaster, had a silver lining: enactment of the Low Income Housing Tax Credit, which has since proved to be the best affordable housing production vehicle yet devised. The LIHTC is discussed in detail in a separate paper prepared for the Commission

by David Smith of Recapitalization Advisors. Readers interested in the LIHTC are referred to that paper. With respect to the experience of the pre-LIHTC portfolio, the LIHTC is noteworthy for at least the following policy features:

- **Competition.** Although pre-LIHTC programs featured competition, the level of competition (and thus efficiency) achieved by the LIHTC exceeds anything achieved by pre-LIHTC programs.
- **Accountability.** Because the annual LIHTCs can be claimed only so long as the property remains in compliance, the risk of future noncompliance is borne primarily by the private sector (in the event of noncompliance, government recaptures LIHTCs).
- **Outcome-Based Compliance.** The LIHTCs can be claimed based primarily on two simple objective outcomes: (a) units occupied by eligible households and (b) at rents within program limits. This contrasts sharply with the highly complex process-oriented compliance requirements of pre-LIHTC programs²⁰.
- **Private Debt and Equity.** All LIHTC properties have private investors who have purchased the LIHTCs and stand to lose them if the property falls out of compliance. Most first mortgage debt for LIHTC properties is also private, with no government guarantee. As a result, properties have one or two additional stakeholders who are knowledgeable and who have a financial stake in the property's success.
- **Devolution.** The program is delivered and overseen through state-level allocators acting under broad federal guidelines.
- **Deregulation.** The program is less heavily regulated than the pre-LIHTC programs.
- **Innovation.** Because allocators have great flexibility in designing their Qualified Allocation Plans, fifty-plus allocators are trying new approaches each year. There are few barriers to innovation, and communication among allocators is good. Accordingly, worthy ideas spread quickly. For example, some allocators determined early on that the minimum 15-year compliance period was inadequate and changed their QAPs accordingly. No statutory change was required, and other allocators followed suit when and as they agreed, adding their own innovations. Another advantage is that LIHTC innovation proceeds on a one year QAP cycle rather than on the four to six year cycle generally required to achieve statutory changes through Congress.
- **Legislative Structure.** The LIHTC has permanent status and resides in the Internal Revenue Code. Because the Code is not subject to annual appropriations, is difficult to change, and is in the custody of Congressional committees other than those normally concerned with housing issues, the LIHTC does not experience the year to year fluctuations characteristic of other affordable housing programs. An ancillary benefit is that the LIHTC does not face annual competition with other housing programs.
- **Ability to Combine With Other Programs.** The LIHTC is routinely and relatively easily used in combination with other programs such as RHS §515 loans, HOME and CDBG funding, and state affordable housing programs.
- **Automatic Rent Adjustment.** The maximum allowable rents rise in step with area median income. In effect, this is a factor-based rent increase mechanism, allowing owners to increase rents modestly each year without the need for property-specific government approval.
- **Cost Transparency.** Hidden and/or deferred federal costs are largely absent from the LIHTC program. The program's cost is easily measured and controlled.

²⁰ It is possible that the LIHTC will become over-regulated in the future.

- **No Longer Term Tax Side Effects.** Contrary to tax-shelter syndication, which created the exit-tax and phantom-income problems, LIHTC investors typically can (and plan to) walk away after 15 years with no economic consequences. This facilitates the property's future recapitalization.

The 1989-1992 Real Estate Recession. During the 1981-1985 heyday, the demand for real estate tax shelters stimulated the development of a huge amount of investment real estate. Some of these properties were developed in anticipation of later tax shelter syndication (a high risk strategy that was spectacularly unsuccessful when employed just prior to the 1986 tax reform bill). This new supply of apartments, office buildings, shopping centers and industrial buildings outstripped growth in demand. New properties failed to lease up as planned, older properties suffered reduced occupancy, and rents ceased to grow. In some markets rents declined, sometimes dramatically. Investment real estate went into the deepest recession in recent memory. The recession was exacerbated by significantly tougher banking regulations that were implemented in the midst of the recession, causing banks and thrifts to dramatically contract their lending to already-strapped real estate developers. The combination of poor economic fundamentals and reduced availability of capital produced dramatic reductions in apartment prices and values. In the resulting shakeout, casualties included much of the savings and loan industry, many of the largest owners of apartments, and a host of other businesses in real estate or dependent upon real estate. Most developer / owners who were active in the early 1980s either went bankrupt or stopped supporting their failing properties – leverage worked its wonders in developers' favor when times were good, but was equally powerful in reverse. In the world of affordable housing, many properties suddenly found themselves competing directly with newer market rate properties with superior amenities that had reduced their rents. As a result, RHS and HUD, along with all other lenders, faced record-breaking levels of loan defaults.

Consolidation. Prior to 1986, the historically fragmented apartment industry was in the process of consolidation, as were other types of investment real estate. The 1986 tax changes, and the subsequent recession, accelerated the process of consolidation. The largest owners and managers substantially increased in size, sometimes only to be swallowed by even more aggressive and innovative companies. Today, fifteen years after 1986, very few large owners of affordable housing even exist, and those who do exist are quite likely to have acquired their portfolios since 1986.

1991: Reforms to §202. Congress shifted the §202 program (for nonprofit developers of housing for the elderly and/or persons with disabilities) from a direct-loan program (with above-market rents) to a capital-grant program (100% of development cost supported by a grant, requiring no debt service payments and, accordingly, permitting much lower rents). Reserve deposits are still set at inadequate levels, however, and there are a few additional problems²¹. Still, whenever owners, managers and regulators have been successful in increasing reserve deposits to adequate levels, without exceeding market rent levels, these “new §202” properties (and similarly-financed §811 properties for persons with disabilities) are viable over the long

²¹ Some properties had development cost overruns, requiring additional capital grants. Properties are generally small and thus are inefficient from an operating cost standpoint. There is a risk that operating costs will escalate dramatically as residents “age in place”. Accordingly, it is likely that some number of §202 and §811 properties have (or will soon need) rents that exceed comparable market rents, even though there are no required debt service payments.

term – the first affordable housing properties to have achieved that status.

1994: HOPE VI. Although HOPE VI is a public housing program, for the redevelopment of extremely distressed properties, it was a watershed event for affordable housing generally. A number of the early HOPE VI properties demonstrated convincingly that some affordable housing had to be started over, from scratch. Locations that were seemingly hopeless havens for crime, despair and deterioration did not have to stay that way – provided we were willing to redesign the housing. It should also be noted that HOPE VI made these results possible by making unprecedented levels of funding available – funding sufficient for comprehensive community planning, demolition, relocation of residents, construction of new infrastructure, and development of new dwelling units. An additional important feature of HOPE VI – at least, as implemented – is the use of mixed-finance (i.e., using LIHTCs and private debt) and mixed-income (i.e., with only some units occupied by traditional public housing residents, and other units occupied by LIHTC and market rate renters) models. These approaches are important for several reasons: they leverage the government HOPE VI funds, they bring additional financial stakeholders to the transaction, and they engage market forces much more powerfully than in traditional public housing. However, HOPE VI is not a panacea. Units demolished are generally not replaced on a one-for-one basis. It is possible that the early properties that appear successful are atypical and thus do not provide an adequate basis for evaluating whether the HOPE VI approach is appropriate on a larger scale. It is likely that a more competitive and less heavily regulated approach would produce better results at lower cost. Finally, it is possible that some HOPE VI properties have repeated some of the errors discussed earlier in this paper, successfully producing good quality housing, but with financing that is not sufficiently robust to support the property's long term viability.

1997: Rent Setting At Market. In 1997, Congress ratified a general presumption that rents will be set at market levels. Then, annually, using a hybrid approach called 'operating cost adjustment factor', rents will be adjusted by an inflation factor, except that the portion of rents that covers debt service will not be adjusted (because debt service does not vary). When combined with periodic 're-sets' to market, this approach appears likely to produce better results than the earlier and less sophisticated approaches discussed above²².

1997: The Mark-to-Market Program ("M2M"). In the same legislation that enshrined rent-setting at comparable market levels, Congress also provided a 'soft landing' for FHA-insured properties that would not be viable at market rents.

- **M2M Restructuring Approach.** M2M reduced the properties' first mortgage debt service to a level that was supportable, based on an in-depth re-underwriting of the properties' long-term needs. The re-underwriting included re-setting the Reserve deposit to an adequate level (generally doubling or tripling the pre-M2M deposit level). The non-supportable debt was refinanced with a below market interest rate loan (generally at 1% simple interest), payable from a percentage (generally 75%) of future cash flow. In exchange for the 'soft landing', owners were required to enter into a thirty-year affordable housing use agreement. The M2M program would not be

²² Unless, however, the inflation factor is relatively generous, this approach runs the risk of under-funding a substantial portion of properties between market rent re-sets. If the inflation factor is exactly equal to the average inflation in operating costs, by definition half the properties will be under-funded.

implemented by HUD but by public and private contractors, under HUD oversight.

- **Policy Innovations in M2M.** For the first time ever, HUD had a program that was designed to support properties' long-term financial, physical, and managerial soundness. In implementing the program, HUD set a minimum debt service coverage ratio of 1.20:1, well above the level to which the properties were originally underwritten. HUD also took strong stands in favor of accurate market rent determinations, conservative rent loss estimates (7% minimum), and sound underwriting generally. Later, in response to reasonable complaints from owners and purchasers, HUD added performance-based incentives designed to recognize legitimate ownership costs and to reward owners and purchasers for operating the property in a physically, financially, and managerially sound manner.
- **Unfinished Business in M2M.** Owner participation in the 'soft landing' was voluntary. Many owners elected to forego restructuring in the belief that their properties could succeed at market rents, without the need to restructure the mortgage debt (and without the need to accept the long term use agreement). It remains to be seen how many of these properties will face future viability problems.

HOW SUCCESSFUL ARE THE PROPERTIES TODAY?

Some properties – typically, located in the most favorable neighborhoods -- have converted to market rate use and can be presumed to be successful in that environment (although having achieved that success at the cost of terminating affordability). According to the Harvard Joint Center's latest analysis²³ ("The State of the Nation's Housing: 2001", page 24):

Significant numbers of project-based affordable housing units have also been lost in recent years with the expiration of long-term contracts. As owners have "opted out" of programs or prepaid their FHA mortgage insurance, about 120,000 assisted units have been converted to market-rate housing. The threat of further losses looms as contracts on more than one million units of project-based housing come up for renewal by the year 2004.

Some remaining properties have had far-sighted owners, managers, and regulators who found ways to keep the properties viable. The remaining properties are likely to face one or more of the following ailments:

- **Inadequate rents.** Existing rents, although nominally based on cost to operate, have been held down by statute or agency practice, to levels below those necessary to operate the property adequately. Even properties with below-market rents (but needing rent increases) are facing the inability, and sometimes the unwillingness, of government to recognize the full cost of operations through increased rents.
- **Impending rent reduction.** Most properties with above-market rents are facing a

²³ Available at www.gsd.harvard.edu/center/publications/son2001/index.html

reduction to market levels²⁴.

- **Inability to fund capital needs.** With capital needs that are accruing at two to three times the typical Reserve deposit rate, properties are having trouble keeping up with their major repair and replacement needs.
- **Neighborhood problems.** An affordable housing property can be the best property in a declining neighborhood and still be in serious trouble.
- **Obsolescence.** A few properties were built with obsolete unit types (for example: efficiency units, in senior properties; family properties may include 3BR and 4BR units with only one bath and with inadequate kitchen, eating and living room space). Other properties have obsolete systems (for example: electric resistance heat, master-metered utilities, or innovative construction approaches later discovered to have simply been bad ideas). Still others have obsolete architectural design (for example: non-crime-resistant design in high-crime neighborhoods, high rise properties for families, and properties with excessive density).

In the HUD portfolio, the Mark – to – Market program has proven to be a very effective method for stabilizing properties. So far, the Mark – to – Market program has given roughly 800 properties a clean bill of health while bringing their above-market rents down to market levels. Over 150 of those properties received expensive FHA debt write-downs. Another 1000 to 2000 properties with above market rents remain to be restructured. Upon completion of the Mark – to – Market program, the HUD assisted housing portfolio likely will be in the best shape ever

Thus, although it is possible to look at these properties today and see problems – our widespread failure (at least initially) to ensure long-term viability – it is perhaps more appropriate to see successes and solutions. Many owners, managers and regulators succeeded under the original programs, despite their flaws. Still more owners, managers and regulators are succeeding as the pre-LIHTC portfolio receives the benefit of more recent programs such as LIHTC and Mark – to – Market. Similarly, it is clear that we can stabilize the remaining properties if we simply apply lessons learned.

LESSONS LEARNED AND CONCLUSION

This paper began by noting that, although we have been quite successful in producing affordable housing, we have been much less successful in keeping it viable through its first twenty years, to say nothing of preserving viability for any longer period. Yet, from the history of this housing, it is apparent that affordable housing can be viable, for forty years or more, provided we pay attention to the lessons learned from that experience, the most vital of which are:

- **Quality ownership.** It is a truism that excellent owners are essential. Yet, most affordable housing programs produce properties that are worth developing, worth managing, but not worth owning – because the properties are designed to self-destruct

²⁴ The 1997 legislation shifting most HUD properties to a market rent setting approach was not applicable to RHS properties, which therefore are not facing any immediate threat of rent reduction.

(at least financially) after fifteen to twenty years. Corollaries include:

- **Adequate Financial Compensation to Owners.** It costs something to be the owner on a day-to-day basis – to hire and oversee property management, approve budgets and extraordinary expenditures, resolve major issues, and interact with regulatory agencies. Owners should be paid, based on performance, an amount that is adequate to cover those costs.
- **Sustainability.** Structuring properties so that they will not self-destruct after fifteen to twenty years is clearly worth considering. Alternatively, at a minimum we should refrain from routinely blaming the owner when poorly structured properties do fail after fifteen or twenty years.
- **Ability to Require Transfer of Control When Properties Fail.** Experience has shown that it is very difficult to determine the degree to which a property’s failure is attributable to the owner. It is also clear that, sometimes, properties cannot be cured while the existing owner remains in control. In an ideal world, knowledgeable professionals would make these determinations and would rapidly and consistently come to the right answer. In the real world, no one has succeeded in approaching the ideal. This suggests the need to develop mechanisms for the more or less automatic transfer of control (not necessarily the same as a transfer of title) when a property has failed, perhaps on a “no fault” basis, and as a precondition to the injection of new governmental subsidies.
- **Ability to Transfer Control When The Owner Is “Tired”.** Some originally excellent owners may cease to be excellent, for a variety of reasons. It is in the public interest for those owners to be able to transfer control and/or ownership readily, whenever continuing to own the property is not their preferred alternative. Unfortunately, as a side effect of tax-shelter syndication, most existing owners would face large ‘exit taxes’ upon sale and, accordingly, are reluctant to sell, even when they would like to do so.
- **Quality property management.** Excellent property managers are perhaps even more essential than excellent owners. Fortunately, we have a strong affordable housing property management industry today. However, we often take it for granted, forgetting that its creation required strong and deliberate support by HUD and other governmental agencies. It is also worth emphasizing that the property management of affordable properties is qualitatively different from management of market rate properties²⁵. Thus it is important to encourage the development of management firms that specialize in affordable housing. Corollaries include:
 - **Adequate Property Management Fees.** Setting the property management fee too low is a classic “penny wise, pound foolish” practice. That said, determining an adequate fee is quite a challenge, because traditional rules of thumb (developed for market rate apartments) are not readily applicable to affordable apartments, and because affordable properties vary more widely in their “degree of difficulty” than do market rate properties.

²⁵ Most knowledgeable observers believe that managing affordable housing is more difficult than managing market rate housing. There are also ‘degrees of difficulty’ within affordable housing. Difficulty factors include (without limitation) location, resident profile, degree of service-enrichment, level of crime, age of the property and degree of regulatory complexity.

- **Ability to Require Transfer of Management When Properties Fail.** As a parallel to the preceding discussion of troubled properties and their owners, experience has shown that having the right property management firm is even more essential to a troubled property's recovery than having the right owner. Similarly, determining whether the existing management is at fault is even more difficult. This suggests the need to develop mechanisms for the more or less automatic transfer of property management when a property has failed, perhaps on a "no fault" basis, and as a precondition to the injection of new governmental subsidies.
- **Robust financing in general.** Our crystal balls are simply not good enough to forecast more than a fraction of the adverse events that a typical property will face. Yet, we can predict with near certainty that each property will face some number of adverse events over its life, some of them serious. Moreover, years of experience have demonstrated that governmental funding systems – even if given adequate resources -- will never be responsive enough or agile enough or perceptive enough to deliver new funds to properties that are in trouble, in just the right amount, and at just the right time. Instead, the property's financial structure must be robust enough to take these adverse events in stride. This means:
 - Cash flow that is adequate to withstand moderate adverse events.
 - Ability to increase rents while maintaining affordability.
 - Ability to self-finance long-term capital needs, without needing new government subsidies.
 - Financing that is robust enough to survive the expected combination of operating costs (and reserves) that grow faster than inflation, plus market rents that grow slower than inflation.
- **Adequate reserves in particular.** We now know how to forecast properties' long-term major repair and replacement needs, with enough accuracy to know that our traditional rule-of-thumb reserves are wholly inadequate. In effect, we deliberately size reserves to cover no more than one-half of long term capital needs, and we then simply pretend the other half of those needs will be:
 - someone else's problem; or
 - funded from cash flow that we can hope for but are not willing to build into the property; or
 - a sale that we can hope for but – because of the way the property is financed – is unlikely to occur.
- **Debt well below economic value.** Experience has shown that, no matter how sensible and attractive they appear on paper, strategies that call for mortgage debt close to or exceeding the property's economic value are an invitation to disaster. In particular, such mortgage loans will have to be provided by or guaranteed by government, and government will be left 'holding the bag' if the property should fail. Thus, these strategies are viable only if everything goes well, a poor assumption in affordable rental housing.
- **Rents at or below market.** In 1997, Congress required that much of affordable

- housing would have its rents benchmarked to comparable market rent levels for similar properties in the same neighborhood market area. Subsequently, HUD extended the market benchmark to other situations. These events capped a long experiment in alternative rent setting approaches by concluding that approaches other than setting rents at market were hopelessly flawed. There is by no means a consensus that market rents are, in fact, the only viable benchmark, but most observers agree with the market benchmark for most situations. It is worthwhile to briefly recount how the other potential benchmarks have produced poor results:
- **Above Market Rents.** In theory, it is possible to develop properties with project based §8 and above market rents so that the properties are viable and affordable over the long term. However, this has proven politically impossible, partly because of the expense of the necessary very long-term §8 contract, and partly because of the political difficulty of explaining above-market rents to voters.
 - **Below Market Rents.** It is also possible in theory to develop affordable housing with rents that are materially below market over the long term, but in practice the rents (over time) tend to creep upward and eventually reach market levels. This suggests the wisdom of benchmarking rents to comparable market levels. It also suggests that we should regard initial below-market rents primarily as another source of financial robustness, rather than assuming that the increment below market will remain over time.
 - **FMRs.** Finally, it is possible in theory to use a metropolitan – area - wide statistic such as HUD’s “Fair Market Rents” as the benchmark for rents, but in practice this has tended to lead to efforts to push the statistic up or down by altering its definition, with the result that over time the statistic becomes more and more disconnected from market reality and thus from person – in – the – street credibility. Use of area-wide statistics also tends to result in development in neighborhoods with very low actual market rents, with the result that the properties thus developed have no ability to stand on their own without ongoing governmental subsidies.
- **Small, predictable annual rent increases.** Structures that allow rents to increase more or less automatically, based on an inflation index, have proven to be much more successful than structures that require property-specific governmental permission to increase rents. Experts differ as to whether the inflation index should be based on market rents, general inflation, inflation in operating costs, or changes in household income; each of these methods has its advantages and drawbacks. Perhaps the best approach is to re-set the rent to comparable market levels periodically (e.g., every five years), in which case the choice of inflation index becomes less momentous. It should be noted, however, that many (perhaps most) affordable properties will experience increases in operating costs that exceed the rate at which market rents increase. Accordingly, the automatic rent increases (and, for that matter, the financing itself) should be designed on the assumption that expenses will increase at least as rapidly as inflation.
 - **Avoid concentrating “the poorest of the poor.”** Experts disagree about how much “income mixing” is appropriate, but there is widespread agreement that a 100%

extremely low income (under 30% of AMI) resident profile is a bad idea.

- **Avoid “changing the deal.”** When particular program features produce unanticipated (or uncomfortable) results, government is sorely tempted to change the program retroactively in response. Whenever these changes affect owner and investor economics, trust is eroded, and the cost of future public – private housing activities increases. The cost increase occurs for two reasons. First, some investors withdraw entirely from affordable housing, and the smaller supply of potential investors drives up prices. Second, those investors who remain may feel they have to charge a premium in future investments, in anticipation of government actions that will reduce their economic benefits. There are also larger political costs in the form of resentment of the agency in particular and government in general.
- **Minimum regulation.** There is abundant evidence that complicated regulatory structures are particularly prone to problems. Accordingly, complicated regulatory structures should be employed only when there is no better approach. Less intensive approaches include:
 - Automatic formulas instead of judgment-intensive decisions (for example, inflation adjustments to rents instead of budget-based adjustments).
 - Reliance on economic incentives and disincentives, by aligning the economic interest of the owner and manager with the public policy objectives of the programs. To the extent that achieving the public policy objectives is more profitable for owners and managers than the alternative, there is less need for regulatory oversight. Conversely, when the economic incentives of owners and managers are not aligned with public policy objectives, experience shows that no regulatory approach is likely to succeed.
 - Reliance on market mechanisms whenever possible (for example, with rents at or near market, residents will punish an owner’s failure to maintain by moving, and thus there is little or no need for regulatory systems to measure and enforce housing quality).
 - Outcome compliance instead of process compliance (for example, measure housing quality instead of the manager’s maintenance work order system).
 - Owner self-certification followed by post-audit targeted at properties especially likely to have violations.
 - As noted earlier, “unlimited” distribution structures appear to be superior to limited distribution structures.

Every affordable housing expert would add other lessons to the preceding list. Some would mention the need to pay closer attention to the neighborhood and its underlying dynamics (population, jobs, income, schools, transportation, ...). Others would point to the growing evidence that many low-income populations need non-housing services that are delivered at or through the property. Others would point out particular refinements that are appropriate for affordable housing serving various special populations.

Yet, there is a broad (though not universal) consensus on the key points noted above. Taken together, the point the way toward the successful long-term operation of affordable housing.

It is time to put these lessons into practice.

AUTHOR

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APPENDIX 1: WHY NC/SR RENTS WERE ABOVE MARKET FROM THE BEGINNING

Properties developed under HUD's Section 8 New Construction / Substantial Rehabilitation ("NC/SR") program were claimed by HUD to have rents no more than 20% above prevailing market rent levels, on the largely specious theory that the area-wide Fair Market Rents represented prevailing market rent levels.

FAIR MARKET RENTS TODAY

Today's FMRs are published for MSAs and for non-metropolitan counties. The FMR represents the 40th percentile of rents and utilities paid by recent movers throughout the MSA (or county). If one hundred typical rents were arranged from lowest to highest, the 40th percentile would be the 40th rent from the bottom. Thus, the FMR is a benchmark for low-end rents across the entire market area but is not useful for judging the actual market rent that any particular property should command.

Market rent studies for 20-25 year old assisted housing properties average between 110% and 120% of FMRs, but with a very wide range from below 70% of FMR to above 140% of FMR.

Today, FMRs are primarily used for setting the "payment standard" for tenant based Section 8 assistance. The normal payment standard ranges from 90% to 110% of FMRs. This implies that holders of Section 8 tenant based assistance are expected to find housing that, on average, is of somewhat lower quality / desirability than the typical pre-LIHTC assisted apartment property. Perhaps in recognition that unduly low payment standards are at least part of the reason for low tenant based utilization rates, HUD recently raised the FMR administratively to the 50th percentile for certain areas.

FAIR MARKET RENTS IN THE 1970S AND EARLY 1980S

When the NC/SR properties were being developed, what we now call FMRs were called "existing housing FMRs" and were set at the 50th (not 40th) percentile. NC/SR properties, however, were benchmarked against the higher "new construction FMRs" which were much higher than the existing housing FMRs. Initial rents for NC/SR properties were between 100% and 120% of the new construction FMRs. Initial rents for NC/SR properties were thus dramatically higher than what we now call FMRs.

WERE NC/SR INITIAL RENTS ABOVE TRUE MARKET LEVELS?

The true answer depended on the vibrancy of the area-wide rental market (that is, the gap between actual market rents and the rents needed to support new construction), and the relative desirability of the property (as to location, design, ...) within the area-wide market. Only in the most favorable circumstances (hot local market, very desirable and well located affordable housing property) was it likely that NC/SR rents were close to local market rents.

However, at any given time, few markets had rents that approached the levels needed to justify new construction. Similarly, few affordable housing properties were located in the neighborhoods in which new construction was taking place.

Accordingly, although a few such properties likely had initial rents only modestly above local market rent levels, the others had initial rents that dramatically exceeded local comparable market rents. Initial NC/SR rents at twice the prevailing market rents cannot have been a rarity.

DID ABOVE-MARKET RENTS INDICATE FRAUD, WASTE OR ABUSE?

The NC/SR program was highly competitive, and most HUD offices were able to judge fairly closely whether developer proposals were or were not reasonable. Thus, the initial NC/SR rents were -- almost by definition -- the rents necessary to support new construction. So, despite later rhetoric, developers did nothing wrong. They proposed the sizes and types of properties that HUD and local governments desired, in the specified locations, and at the initial rents that were necessary to support development and operation.

Certainly, the governmental decision to fund new construction and substantial rehabilitation in a series of very weak markets seems at least questionable, by today's standards. We tend to assume that weak markets have an excess supply of adequate quality housing and thus should be addressed with tenant-based assistance rather than with housing production. However valid this may be as a general proposition, there are exceptions: depressed areas that have a shortage of adequate quality housing. Moreover, during much of the time the pre-LIHTC stock was being developed, tenant-based assistance either did not exist or was regarded as an intriguing but unproven approach. Finally, Congress made a clear decision to develop NC/SR properties throughout the country. In summary, it would be inappropriate to criticize HUD's actions on the grounds that today's Congress sees things differently.

Similarly, it seems evident today that these properties should have been structured at true market rents, with a reduced amount of debt that was supportable at market rents, and with a capital grant to cover most or all of the remaining development costs. However, it would not be fair to criticize Congress for not knowing then what we know now.

Perhaps, then, it is time to see the NC/SR program for what it was: the most successful affordable housing program in HUD's history, producing better quality housing than previous programs, and producing fewer failed properties, despite a financial structure that we now consider ill-advised.

APPENDIX 2: CRITICISMS OF THE FACTOR-BASED RENT INCREASE APPROACH

Windfall profits. Stereotypically, the owner of a Section 8 NC/SR property is receiving windfall profits. The reality is more complicated. Unpublished data from 1999 audited financial statements indicates that the Section 8 NC/SR portfolio's cash flow breaks down roughly as follows:

- 15% of properties have very high cash flow (2.00 debt service coverage ratio or higher).
- 15% have strong cash flow (1.41 to 1.99 debt service coverage ratio).
- 30% have normal positive cash flow (1.11 to 1.40 DSCR).
- 25% have marginal cash flow (0.91 to 1.10 DSCR)
- 15% have significantly negative cash flow and are at risk of financial failure.

Rents above market. Factor-based rent increases were also blamed for the observed fact that most Section 8 NC/SR properties had rents above market in the early to mid 1980s. As a matter of simple arithmetic, this criticism was largely misplaced: if rents start out well above market, and are increased by a market-based inflation factor, of course they will be above market a few years later. Conversely, given that the actual rent increase factors reflected market reality, the fact that NC/SR rents were above market in the early 1980s clearly implied that NC/SR rents were above market from the beginning. The stereotype did, however, contain kernels of wisdom. The formula provided that rents could never go down, and some local markets did suffer rent declines, with the result that rents that were already above market became more so. On a more subtle level, the formula was economically unsound: if average rents in a community are increasing at a 4% rate, that average is made up of new properties entering the stock at much higher rents, very old properties with very low rents leaving the stock, and existing properties whose rents are almost certainly growing at a rate that is modestly below 4%. Most likely, the fact that rents were above market in the early to mid 1990s was due primarily to the rents having started out above market, but also to a small extent because of flaws in the factor-based formula.

High cash flow. The factor-based approach was blamed for the growing levels of cash flow in the NC/SR portfolio. This was accurate: because the factor increase applied to the entire rent (including the portion for debt service), naturally the cash flow expanded. The following simplified illustration shows the effect of annual 4% increases in rents, expenses, and reserves on a property matching the characteristics of the 'Affordable' example shown earlier in this paper. As the illustration shows, the cash flow expands dramatically.

Figure 2: Cash Flow and Factor-Based Rent Increases

	Original	10 Years Later	
Gross Potential Rent	\$600	\$888	4% annual increase
7% Rent Loss	(42)	(62)	
Operating Expenses	(250)	(370)	4% annual increase
Reserves	(25)	(37)	4% annual increase
Net Operating Income	\$283	\$419	48% greater
Debt Service	(257)	(257)	
Cash Flow	\$26	\$162	523% greater

As the illustration shows, those who claimed to be shocked at the increased cash flow were either disingenuous (for those who had taken the time to do the arithmetic) or naïve. In practice, much of this increased cash flow was applied to supplement inadequate operating expense budgets and to supplement inadequate reserves for replacement. Thus, on a property-by-property basis, whether the formula actually resulted in high cash flow varied considerably (see also the windfall profits discussion above).

“Comparability.” As noted above, expansion of cash flow was an obvious and inevitable outcome of the NC/SR program design. Nonetheless, the governmental path of least resistance was to pretend that the increasing cash flow was an unintended consequence. Beginning in the mid-1980s, HUD decided to measure the extent to which NC/SR rents exceeded market levels, and to reduce that margin whenever it was deemed unreasonable by HUD. This “comparability” initiative was defended on two grounds, both of which were wrong: (a) the original rents were in line with market; and (b) the subsequent factor-based adjustments caused the increased rents to become dramatically out of line. The ensuing saga featured very uneven implementation, class action lawsuits, a Congressionally imposed settlement that pleased neither HUD nor owners, and a legacy of mutual distrust (often rising to outright hostility) between owners and HUD. On a portfolio level, however, and regardless of its substantive merit, the comparability initiative did reduce the gap between NC/SR rents and market.

The Legacy of “Comparability.” From the point of view of owners, Congress and HUD then set out to use any available excuse, no matter how flimsy, to hold future rent increases to the lowest possible level, without regard to the actual rate of increase in rents or expenses, and without regard to the actual needs of NC/SR properties. Through a variety of statutory and regulatory approaches, government was successful in holding rents constant for many properties over a period of years. When rent increases were granted, for the most part the rate of increase was no more than one or two percent per year. In effect, government was telling owners “unless you can demonstrate that your rents – after the rent increase you want – will be at or below comparable market levels, we will not approve the increase.” With the benefit of hindsight, we can look back to this experience and see the beginning of government’s decision to use

comparable market rents as the basis for regulating the rents of subsidized rental housing – ten years or more before the 1997 legislation that officially enshrined the market rent principle.

APPENDIX 3: LIST OF PRE-LIHTC AFFORDABLE HOUSING PROGRAMS

HUD PROGRAMS

- **HUD “Older Assisted” Portfolio.** Collectively, the §221d BMIR, §221d3 MIR with Rent Supplement, and §236 programs are termed “older assisted”; in 1999, some 4200 properties and 450,000 units remained in the older assisted portfolio with FHA insured or HUD Held loans.
 - **§221(d) BMIR.** Produced affordability through a below market interest rate (BMIR) 40 year FHA insured mortgage loan, generally at 3.0% interest and with no FHA mortgage insurance premium (3% / 40 years / no MIP = a 4.3% debt service constant). Active from roughly 1966 to 1970.
 - **§221(d)(3) MIR with Rent Supplement.** Other similar properties had market interest rates (MIRs) but generally with all units covered under the Rent Supplement program, a predecessor to §8. Most Rent Supplement contracts were converted to §8 in the 1970s. Active from roughly 1966 to 1978 (the 1973 repeal allowed pipeline projects to be processed and completed).
 - **§236 with and without Rental Assistance Payments (RAP).** Produced affordability through Interest Reduction Payments (IRPs) paid directly by HUD to the private FHA-insured lender, covering the difference between debt service at 1% / 40 years and the actual debt service (including the FHA mortgage insurance premium) at the note rate (often but not always 7.0%). 7% / 40 years / MIP = an 8.0% debt service constant, 1% / 40 / no MIP = a 3.0% debt service constant, thus the IRP was roughly 500 basis points annually. Usually, 20% (family projects) to 100% (elderly projects) of units had deep subsidy through the RAP program, another §8 predecessor; however, some §236 projects had no deep subsidy. Most RAP contracts were converted to §8 in the 1970s. A few §236 projects were financed by State HFAs, using non-FHA-insured tax-exempt bonds; those projects continued with their original RAP contracts. Active from roughly 1970 to 1978 (1973 repeal with subsequent completion of pipeline projects).
- **HUD “Newer Assisted” §8 New Construction / Substantial Rehabilitation (NC/SR) Portfolio.** Produce affordability through 100% project based §8 contracts, generally for 20 years with FHA-insured mortgage loans. §8 contracts were for the term of the mortgage financing when tax-exempt bonds were used. Active from roughly 1976 to 1984. In 1999, roughly 3500 properties with 320,000 units remained in the newer assisted portfolio with FHA insured or HUD Held mortgage loans. The NC/SR portfolio with tax-exempt bond financing is believed to be of similar size. Collectively, these NC/SR properties are often termed “newer assisted.”
- **§202 and §811 Portfolio.** These programs support nonprofit development, ownership and operation of housing for the elderly and for persons with disabilities. A variety of

financing approaches have been used:

- **Early §202 with and without Rent Supplement.** §202 development was open to nonprofit sponsors only, for housing for the elderly and for persons with disabilities (later for elderly only, see below). From 1959 to 1974, HUD made direct loans to sponsors, generally at market interest rates. Some or all units received deep subsidies under Rent Supplement, a predecessor to §8. Roughly 200 properties and 50,000 units remained in 1999.
- **§202 With §8.** From 1974 to 1991, §202 continued with direct loans from HUD to nonprofit sponsors, generally at market interest rates. All units received deep subsidies under project based §8 contracts. In 1999, roughly 3700 properties and 175,000 units were in this portion of the §202 portfolio.
- **Post-1991 §202.** Beginning in October 1991, the §202 program was targeted to elderly only, and development was financed with a capital grant from HUD (instead of a direct loan). As a result, the rents necessary to operate the property were much lower, because no debt service payments were required. All units received deep subsidy through §8 variants (acronyms PAC and PRAC) created specifically for §202 and §811 properties. As of 1999, roughly 650 properties and 30,000 units of post-1991 §202 had been produced.
- **§811.** Beginning in October 1991, the §811 program was created, for nonprofit sponsorship of housing for persons with disabilities. Development was financed with a capital grant from HUD. All units received deep subsidy through PAC or PRAC. As of 1999, roughly 100 properties and 1200 units of §811 housing had been produced.

RHS PROGRAMS

- **The §515 Portfolio.** Direct loans from the Department of Agriculture's Rural Housing Service (formerly called the Farmers Home Administration), sometimes at market interest rates but more often at below market interest rates (generally 1%). Loans were for a 50 year term²⁶. The total §515 portfolio is roughly 16,700 properties and 450,000 units. Roughly 45,000 units have §8 NC/SR and roughly 250,000 units have RHS RA.
 - **§515 with and without Rental Assistance.** Produced affordability through below market interest rates (generally at 1%). Some to all units received deep subsidy through the RHS Rental Assistance (RA) program, similar to §8.
 - **§515 with §8 NC/SR.** Roughly 1500 §515 properties (45,000 units) had project based §8 NC/SR contracts, generally for 100% of the units. These §515 loans were usually at market (or close to market) interest rates.
- **§514 Farm Labor Housing Loans / §516 Farm Labor Housing Grants.** Roughly 1,000 properties and 10,000 units.

²⁶ Currently, §515 loans are originated with 30 year terms and 50 year amortization.

THE HUD AND RHS ASSISTED HOUSING PORTFOLIOS TODAY (APPROXIMATE)²⁷

HUD Older Assisted	4,200 properties	450,000 units
HUD Newer Assisted	7,000 properties	650,000 units
HUD §202 and §811	4,600 properties	250,000 units
RHS §515	16,700 properties	450,000 units
RHS Farm Labor Housing	1,000 properties	10,000 units
Total	33,500 properties	1,810,000 units

²⁷ Source for HUD portfolio size estimates: Compass Group analysis of FHA data for 1999. Source for RHS portfolio size estimate: Rural Housing Service.