

## **Promoting Homeownership among Low-Income Households**

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### **Abstract**

This paper documents the anti-homeownership bias of the current system of low-income assistance. It then proposes simple reforms of the system that would induce many additional low-income families to become homeowners. These reforms would not require additional spending or reduce the effectiveness of the system in achieving its primary goals such as improved housing. Indeed, they would improve the performance of low-income housing programs in achieving these goals. The paper documents the two biggest mistakes in past attempts to subsidize homeownership, and the proposals avoid these mistakes.

## Introduction

The strongest arguments for government involvement in housing imply that programs that provide housing assistance should focus on low-income households and encourage homeownership among these households. This would lead to better housing and a higher homeownership rate for them. The case for any type of housing assistance to richer households is much weaker.

The current system of housing assistance differs enormously from an ideal system based on valid arguments for government action. The bulk of housing subsidies are provided to middle- and upper-income households through the favorable tax treatment of homeownership under the federal individual income tax [Ling and McGill, 1992, Table 3; Carasso and others, 2005, pp. 4-6]. These tax provisions induce more middle- and upper-income households to be homeowners than would choose this tenure if the homeownership preferences were eliminated and tax rates were reduced proportionally so as to raise the same tax revenue, and they induce homeowners in these income categories to occupy better housing than under this alternative tax system [Rosen, 1979].

In contrast to these tax provisions, the current system of low-income housing assistance is strongly biased against homeownership for the poorest families. About a third of the households in the lowest quintile of real income are homeowners, but the programs that subsidize homeownership account for only 10 percent of total spending on the housing programs that have upper income limits for eligibility (hereafter low-income housing programs).<sup>1</sup> Homeownership programs of this type provide little assistance to the poorest households. Based on calculations from the 2003 National American Housing Survey, the average per-capita income of the households served by low-income homeownership programs is about three times as large as the average for households served by low-income rental programs.

This paper does not address the fundamental question of whether governments should encourage low-income households to become homeowners. However, since it is

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<sup>1</sup> This result is based on outlays on HUD's tenant-based voucher program, public housing program, programs of private subsidized projects, and its major block grants that provide housing assistance (HOME, CDBG, and Native American), USDA's programs that subsidize privately owned rental projects and its single family direct loan program for homeowners, and the tax expenditures under the low-income housing tax credit, mortgage revenue bonds, and multifamily housing bonds.

rare for anyone to argue that governments should actively discourage homeownership for these households and some have argued that governments should encourage it, the paper proposes reforms of the current system of low-income housing assistance that would eliminate its discouragement of homeownership and one reform that would actively encourage it.

Fortunately, promoting homeownership among low-income families does not require additional spending or reform of the tax preferences for homeownership in the federal individual income tax. The current system of low-income housing assistance can be easily modified to promote low-income homeownership without spending more money. Specifically, HUD's Section 8 Housing Voucher Program could easily be converted to a program that is neutral with respect to homeownership. This step alone would increase the homeownership rate among low-income households. With modest additional modifications, the voucher program could provide positive inducements to homeownership. Shifting public funds from programs that subsidize rental housing projects to the revised voucher program would further promote homeownership among low-income households. Finally, the Low-Income Housing Tax Credit for project-based rental assistance could be converted gradually to a refundable tax credit for homeownership for low-income households.

The proposed reforms would not reduce the effectiveness of the current system in achieving its primary goals such as getting people into better housing. Indeed, they would improve the performance of the system in achieving these goals.

This paper documents the anti-homeownership bias of the current system of low-income housing assistance, describes the proposed reforms in more detail and addresses some likely objections to them. It also discusses the implications of the evidence on the performance of past housing programs for the design of efficient low-income homeownership programs.

### **Anti-Homeownership Bias of Current System of Low-Income Housing Assistance**

Table 1 provides evidence of the bias of the current system of low-income housing assistance against homeownership for the poorest households. This table is based on data

from the 2003 National American Housing Survey. It presents homeownership rates for households with different incomes and sizes. Unlike previous tables of this sort, the results account for the differences in the economic circumstances of homeowners and renters with the same reported income and differences in the cost of living in different locations. For purposes of this analysis, a ten-percent return on home equity is added to the income of each homeowner and the ACCRA geographical consumer price index is used to express all incomes in terms of the prices that prevail in one locality.<sup>2</sup> Table 1 divides households of each size into quintiles based on their real income. Therefore, the income limits for each quintile are different for different household sizes. For each quintile of the distribution of real income, the first row gives the homeownership rate for all households of a particular size, the second the homeownership rate of all unsubsidized households, and the third the homeownership rate of all subsidized households. For example, the homeownership rate of unsubsidized four-person households in the first quintile of real income of four-person households is 36.0 percent and the homeownership rate of subsidized households in this group is 18.6 percent.

In interpreting the results in this table, it is important to realize that many households that would like to receive low-income housing assistance are not offered it and the system consists of many individual programs – some subsidizing homeownership and others subsidizing renting. The number of households that receive assistance to be a homeowner or a renter depends primarily on congressional appropriations for individual programs rather than the choices that eligible households would make if all were offered the same assistance whether they chose to be a renter or a homeowner.<sup>3</sup>

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<sup>2</sup> Rates of return on home equity are not routinely reported. However, they surely vary greatly from time to time and place to place. Since the return on home equity is untaxed, the relevant rate of return is the after-tax return on a taxed investment of the same risk. Index funds based on the S&P 500 and the Wilshire 4500 are plausible candidates. The returns on both indices vary greatly from year to year. Between 1996 and 2005, the return on the S&P index fund varied from a high of 33.17 percent in 1997 to a low of negative 22.05 percent in 2002. The before-tax rate of return on the stocks in the S&P 500 averaged about 9.01 percent over this period and the rate of return on the stocks in the Wilshire 4500 averaged about 9.75 percent. So a 10 percent return for home equity is arguably a reasonable estimate of the return on home equity for the poorest households because their marginal tax rate is zero. For richer households, it is perhaps too high.

<sup>3</sup> The decisions of state and local governmental bodies play a small role in this outcome. Under the HOME, CDBG, and Native American block grant programs, recipient governments have discretion concerning how much of the federal grant to allocate to subsidizing renters and homeowners. However, these block grants account for only 8 percent of the budget for low-income housing assistance.

The results in table 1 indicate that the current system of low-income housing assistance discourages homeownership among the poorest households. Comparing the second and third row for the first quintile reveals that the homeownership rate for households that receive low-income housing assistance is much lower than the rate for unsubsidized households with the same real income and household size.<sup>4</sup> This reflects the dearth of housing assistance for homeownership available to these households. The results also indicate that the system discourages homeownership for the smallest households in the second quintile and encourages it for the largest households in this quintile and for households of all sizes in the third and fourth quintiles.

Table 2 reveals the same pattern. The first row for each quintile indicates the fraction of all households in a category that receive any type of housing assistance, the second row the fraction of all homeowners that are assisted, and the third row the fraction of all renters that receive housing assistance. Among the poorest twenty percent of households, renters are much more likely to receive assistance than homeowners. The same is true for the smallest households in the second quintile, and the opposite is true for the largest households in the second quintile and households of all sizes in the third and fourth quintiles.<sup>5</sup>

### **Making HUD's Housing Voucher Program Neutral with Respect to Homeownership**

The Section 8 Housing Voucher Program is the federal government's largest low-income housing program. It currently serves more than two million households. Until recently, it provided subsidies exclusively for rental housing.

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<sup>4</sup> A similar pattern emerges when income is not adjusted for home equity or geographical price differences, but the homeownership rates in the first quintile are higher. For example, without the adjustments, 52.3 rather than 36.2 percent of unsubsidized households in the first income quintile are homeowners and 13.7 rather than 11.0 percent of subsidized households are homeowners.

<sup>5</sup> It may seem surprising that some households in the highest quintile of real incomes receive assistance from low-income housing programs. One important explanation is that the income limits under most low-income housing programs are nationally uniform fractions of the local median. So in a locality where median real income is extremely high, households with a high real income can receive assistance under these programs. Another explanation is that (1) income limits restrict entry into programs but not continued receipt of assistance under many programs and (2) the subsidy is positive at incomes greater than the upper income limit.

The Housing and Community Development Act of 1992 authorized the provision of homeownership assistance to first-time homebuyers under this program. However, HUD did not issue regulations for a homeownership option within the voucher program until after the Quality Housing and Work Responsibility Act of 1998 revised the earlier legislation. The final regulations were issued in September 2000 and became effective in October 2000. This legislation allows, but does not require, local public housing authorities to offer the homeownership option to voucher recipients.

To date, few housing authorities have offered the homeownership option, and these authorities have offered it to few recipients. Only about 450 of the 3500 housing authorities had offered the homeownership option as of December 2005, and they provided it to only about 4,000 families [Locke et al. (2006, p. iii)].

The limited use of the homeownership option is not because few low-income families want to be homeowners. Table 1 indicates that 36 percent of all unsubsidized households in the first real income quintile are homeowners. Furthermore, when the Rand Corporation operated tenure-neutral entitlement housing assistance programs in two metropolitan areas in the 1970s as a part of HUD's Experimental Housing Allowance Program (EHAP), about 42 percent of recipients were homeowners, even though only the poorest 16 and 21 percent of all households in the two sites were eligible for assistance.<sup>6</sup>

The primary reason for the limited adoption of the homeownership option within the Section 8 Voucher Program prior to 2005 was surely that local public housing authorities did not receive additional administrative fees to defray the additional cost of creating and operating such a program.<sup>7</sup> Therefore, only those housing authorities whose directors and boards felt most strongly about the desirability of this option have

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<sup>6</sup> The two sites were Brown County, Wisconsin that contains Green Bay and St. Joseph County, Indiana that contains South Bend. To say that a housing program is tenure-neutral is to say that each recipient is offered the same subsidy on the same terms whether it owns or rents its dwelling unit. Olsen (2003, pp. 424-427) provides an overview of the Housing Assistance Supply Experiment (HASE) and the other components of EHAP. Lowry (1983) gives a more detailed account of the HASE results.

<sup>7</sup> Beyond the administrative resources needed to establish the procedures for the new program, the major administrative burden of the voucher option is to provide homeownership counseling to prospective homeowners. HUD regulations give local housing authorities considerable discretion concerning the details of the counseling. To date, much of this counseling has been done by agencies that receive their funding from other government programs. However, 15 percent of local public housing agencies use their own staff to provide all of the counseling and 34 percent use their staff to provide some of it. About 53 percent of these agencies use their general voucher administrative fees to fund these activities [Locke et al., 2006, pp. 17-23].

implemented it. In 2005, HUD began to provide \$5,000 to any housing authority that established a homeownership option in its voucher program and \$1,000 in administrative fees for each voucher recipient that became a homeowner under this program (Notice PIH 2005-14 (HA)). In 2006, enough money has been allocated to provide \$1,000 in administrative fees for 2,000 additional homeowners, but the one-time financial incentive for additional local housing authorities to establish a homeownership program was not funded (Notice PIH 2006-5 (HA)).

In short, the current homeownership option in the voucher program is extremely limited in its scope, and it is unlikely to expand greatly as long as its size is left to the discretion of local housing authorities and the additional administrative fees to defray the extra costs of the homeownership option are limited to such a small number of households.

If promoting homeownership among low-income families is a national goal, it should not be left to the discretion of local housing authorities. Local housing agencies should be required to offer this option to all eligible families who reach the top of the waiting list. Furthermore, the homeownership option should not be limited to first-time homebuyers. Each year, some low-income homeowners give up their homes and move to rental units in response to financial reversals. Since voucher assistance increases when income falls, it would cushion such financial reversals and allow some of these households to remain in their homes. In addition, one could question whether taxpayers really want to deny assistance to existing homeowners who are as poor as assisted renters. Although most homeowners do not have very low incomes, table 1 reveals that there are many homeowners who have low incomes even after accounting for the equity in their homes.

Offering the homeownership option in the voucher program to all voucher recipients requires additional administrative resources, and local public housing agencies should be provided with additional administrative fees that are commensurate with the additional work involved. Setting up a local homeownership program within the voucher program requires some administrative resources even if the program is designed primarily at the federal level. Furthermore, some homeownership counseling for the low-income first-time homebuyers is surely desirable from the viewpoint of inducing families

to become homeowners and helping them make wise initial decisions. It is also beneficial for helping them retain their homes, an aspect of homeownership policy that has been often overlooked.<sup>8</sup> The cost of providing the most important counseling for first-time homebuyers would surely be a small part of the budget of the revised voucher program, and it could be funded easily by providing slightly smaller subsidies to all voucher recipients. For existing homeowners, the only additional administrative burden involves determining the equity in their houses. A return on this equity would be added to the household's income used to determine its subsidy. This is necessary to describe accurately the relative economic circumstances of renters and homeowners. The Supply Experiment developed simple procedures for dealing with this issue, and no problems with them were reported [Lowry, 1980, pp.40-41]. In essence, recipients who were homeowners had to document the assessed value of their house and the outstanding balance on each mortgage, and program staff adjusted assessed values for the average difference between assessed and market value in each site and applied a uniform rate of return to the estimated equity on each house [Katagiri and Kingsley, 1980, 2.03(3); Rizer, 1982, p. 174].

How many additional families would be induced to become homeowners as a result of making the voucher program tenure-neutral? The evidence from the Housing Assistance Supply Experiment strongly suggests that operating the Section 8 Voucher Program in a way that does not explicitly discriminate against homeowners would result in many homeowners participating in the program. However, it does not show that the reform would induce many additional households to become homeowners. In the Supply Experiment, the overwhelming majority of participating homeowners were homeowners prior to receipt of housing assistance [Lowry, 1983, p. 24].<sup>9</sup>

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<sup>8</sup> Haurin and Rosenthal (2004) show that the differences between the homeownership rates of whites, blacks, and Hispanics at a point in time are much greater than the differences in the percentage of the members of these groups who are homeowners sometime during their lives. This is not simply due to delayed onset of homeownership. It is far from true that once a homeowner, always a homeowner. Minorities have shorter homeownership spells followed by longer rental spells.

<sup>9</sup> Evidence from the Supply Experiment is not a perfect guide to the outcome of the proposed reform of the Section 8 Voucher Program because the programs differ in important respects. The voucher program has higher real income limits, and it is not an entitlement housing assistance program. The families offered assistance under the voucher program are determined by federal income targeting rules and local preference systems. The income targeting rules require local public housing authorities to offer at least 75 percent of new vouchers to recipients with incomes below limits based on 30 percent of the local median. Within this

Nevertheless, there can be little doubt that making the voucher program tenure-neutral would increase the homeownership rate. At present, many low-income households are homeowners and many others are renters. Without question, some are roughly indifferent between these alternative tenure choices. The reform would make the homeownership option more attractive by offering the possibility of a housing subsidy to households that make this choice. The magnitude of the subsidy would be substantial for many of these families. The U.S. average subsidy to the poorest families eligible for a two-bedroom unit was about \$750 a month between April 2004 and April 2005. For a family with an adjusted income of \$1,000 a month, the subsidy would be \$450 a month. Subsidies of these magnitudes will surely affect the tenure choice of some households offered housing vouchers. They would induce some current recipients to become homeowners, some renters who are offered vouchers to buy a home, and some unassisted eligible renters who are particularly eager to be homeowners to get on the voucher waiting list.

The most common objection to providing assistance to homeowners under the voucher program is that this will lead to providing assistance to eligible families with higher incomes at the expense of poorer households. This concern is understandable but easy to address.

It is certainly true that the average income of eligible homeowners exceeds that of eligible renters. So if households were selected at random from all eligible households to receive assistance, a tenure-neutral voucher program would serve households with a higher average income than a program that selected households at random from renters. The voucher program, however, does not select households at random. Federal income targeting rules require housing authorities to provide at least 75 percent of new vouchers to extremely low income households in HUD's terminology (that is, households with incomes less than limits based on 30 percent of the local median). Therefore, the current rules restrict the bulk of voucher assistance to the poorest households. Modifying the income limits and percentage involved in the targeting rule can counteract the effect of

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constraint, the preference systems of local public housing authorities determine which families participate in Section 8 Voucher Program. Furthermore, HASE provided little homeownership counseling to potential recipients. Only a part of one voluntary counseling session dealt with homeownership [Rand, 1978, p. 175].

the proposed reform on the extent to which voucher assistance is focused on the poorest households. Better yet, the voucher program could be converted gradually into an entitlement housing assistance program for the poorest families by providing smaller subsidies to new recipients and serving more families with the current budget. This would insure that all of the poorest households are offered housing assistance.

### **Encouraging Homeownership in the Housing Voucher Program**

The Section 8 Voucher Program could be further modified to induce additional homeownership among low-income households by providing an upfront subsidy to voucher recipients who want to become first-time homebuyers. The money to provide these subsidies could come from additional appropriations or tax subsidies for housing assistance. However, it is not necessary to await additional appropriations to promote homeownership in the voucher program. The money currently devoted to low-income housing assistance can be reallocated to promote this goal. For example, as voucher recipients leave the program, the money that is available for reallocation could be used to provide less generous monthly subsidies to all new recipients and downpayment subsidies to those who want to become first-time homebuyers.

The proposed downpayment subsidy would be easy to administer. The subsidy itself would be some multiple of the monthly subsidy for which the recipient is initially eligible. Public housing agencies would not involve themselves in negotiations with mortgage lenders or real estate brokers beyond certifying the amount and nature of assistance that would be provided to recipients, that is, a payment of X towards closing costs and downpayment and Y per month for the first year. The certification would also state how the monthly payment from the government in each later year would vary with the household's income. From the viewpoint of lenders, the increase in subsidy when the recipient's income falls reduces the risk associated with the loan.

Some will object to this proposal on the grounds that recipients who rent will be unable to find housing meeting the program's minimum housing standards with lower subsidies. However, research has shown that the voucher program provides subsidies that are much larger than necessary to occupy units meeting the program's housing

standards [Olsen and Reeder (1983), Cutts and Olsen (2002)], and the long waiting lists for vouchers guarantee that housing authorities will have no difficulty using their vouchers despite a modest reduction in subsidy.<sup>10</sup> Since about 12 percent of recipients leave the program every year, this reform would lead to an orderly transition to a program that would better achieve the goals of low-income housing policy.

### **Expanding the Reformed Housing Voucher Program**

The voucher program currently accounts for less than 25 percent of all households that receive low-income housing assistance. This limits the impact that the preceding modifications of its structure could have on the homeownership rate of low-income households. A few simple changes in other low-income housing programs can overcome this limitation.

The largest part of the system of low-income housing assistance consists of rental programs that provide assistance in public and private subsidized projects. Evidence on the performance of housing programs indicates that project-based assistance has enormously excessive cost for the housing provided compared with recipient-based vouchers.<sup>11</sup> Project-based assistance also needlessly restricts recipient choice. Recipient-based assistance allows families to use their subsidy to rent (or in some cases buy) from any supplier who provides housing meeting the program's standards. If the subsidy is attached to a housing project, the family must accept the particular unit offered in order to receive assistance and loses the subsidy when it moves. As a result of the choice afforded by the voucher program, voucher recipients in the 50 largest metropolitan areas have found housing in more than 80 percent of their census tracts. In contrast, privately owned HUD-subsidized projects are found in only 17 percent of the census tracts in these metropolitan areas and public housing projects in only 8 percent [Devine et al., 2003, pp. 10-12]. The choice afforded by the voucher program also enables voucher recipients to live in better neighborhoods than those of residents of public and private subsidized

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<sup>10</sup> Olsen, Davis, and Carrillo (2005) have estimated that a \$100 decrease in the monthly subsidy at each income level due a reduction in the program's payment standard would increase attrition in the voucher program by only 3 percent. Replacing these households with the poorest households on the waiting lists would be no problem.

<sup>11</sup> Olsen (2004, pp. 9-17) summarizes this evidence.

projects. Only 5 percent of voucher recipients live in census tracts with a poverty rate in excess of 40 percent, while 10 percent of the occupants of private subsidized projects and 36 percent of occupants of public housing live in such census tracts [Newman and Schare, 1997, Table 3].

Both cost-effectiveness and the virtues of choice argue strongly for shifting the budget for low-income housing assistance from project-based to recipient-based housing assistance as soon as current contractual commitments permit. This involves offering all public housing tenants housing vouchers using the money currently provided to housing authorities as operating and modernization subsidies for their projects and giving occupants of private subsidized projects portable vouchers at the end of their project's use agreement rather than extending the agreement. Neither of these policy initiatives requires additional resources. Both shift existing resources from one use to another. These two simple changes in low-income housing policy will lead to the gradual, but ultimately massive, expansion of a reformed voucher program that will provide incentives for homeownership.

The proposal to voucher out private projects at the end of their use agreements does not require any new administrative procedures. Each year, some owners of private subsidized projects remove their projects from the programs involved at the end of their use agreements, and procedures for continuing to subsidize the households living in these projects have been developed. Ultimately, these households receive portable housing vouchers. The proposal simplifies this process. Administrative resources would no longer be devoted to determining what incentive to offer the owner to remain in the program and negotiating a new use agreement.

The public housing reform requires elaboration. Under this proposal, Congress would require every local public housing agency to offer each current public housing tenant the option of a portable housing voucher or remaining in its current unit on the previous terms. The latter option insures that no public housing tenant is harmed by the legislation. Families that accept a voucher would benefit because they would move to housing, neighborhoods, or locations that they prefer to their public housing units. Some would surely choose to buy a house under the reformed voucher program. Housing agencies would be required to pay for the vouchers from their current public housing

operating and modernization subsidies. This insures that each housing agency receives the same amount of federal money as it would have received under the current system. The proposal would not require housing agencies to sell their projects beyond current requirements. However, it would allow them to sell any of their projects to the highest bidder. Requiring sale to the highest bidder will produce the most money to operate and modernize the housing agency's remaining projects. Many housing agencies would surely choose to sell their worst projects. These are the projects that would be abandoned to the greatest extent by public housing families that are offered vouchers, and they are the projects that would be the most expensive to renovate. When a project is sold, the remaining tenants in that project would be offered the choice between vacant units in other public housing projects or a housing voucher.<sup>12</sup> When public housing units are vacated for whatever reason, the housing agency would be allowed to charge whatever rent the market will bear for them. This will provide additional revenue to housing agencies without additional federal subsidies. More importantly, it would make their revenues depend in part on the desirability of the housing provided. The absence of this connection is the primary source of the excessive cost of the public housing program. When a current public tenant either gives up its voucher or leaves its unit without a voucher, the housing agency would be required to offer a housing voucher to a family from its public housing waiting list using its existing preference system. This insures that the housing agency will continue to provide housing assistance to the same number of families and indeed the same types of families.

Implementing public housing reform would require little additional administrative work. Under the proposed reform, families in public housing would not be offered regular Section 8 vouchers. Instead, they would be offered vouchers sufficiently generous that the entire budget for operating and modernization subsidies would be used for these vouchers if all public housing tenants accepted the vouchers. This is necessary

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<sup>12</sup> This is a possible exception to the assertion that no tenants would be hurt by the proposal. Some tenants might want to remain in the projects that the housing authority decides to sell, even if the housing authority sells its worst projects. In practice, it is impossible to design reforms that hurt no one. The losses to these tenants must be weighed against the gains to other tenants. It might be mentioned that it is difficult to justify renovation of structures that reach a certain level of obsolescence and dilapidation and the Congress has made a policy decision to tear down the worst public housing projects even if some tenants would like to remain in them. About 80,000 distressed, public housing units have been torn down under the HOPE VI Program, and others were torn down earlier.

to ensure that the public housing authority could provide vouchers to all public housing tenants who want them without exceeding its budget.

Calculating payment standards that satisfy the preceding criterion is a simple matter. The standard formula for the voucher subsidy involves a program parameter called the payment standard. Specifically, the standard subsidy is the payment minus thirty percent of adjusted income. So the payment standard is the subsidy to a household with zero adjusted income. A set of payment standards for a public housing authority involving the same percentage differences between the payment standards for families of different compositions as in its Section 8 Voucher Program and yielding subsidies that satisfy the budget constraint could be calculated in a few hours using the administrative records of families in its public housing projects. HUD's Office of Policy Development and Research could easily perform this task for all housing authorities.

Administering voucher programs with different payment standards creates no new problems. Local public housing authorities already maintain separate waiting lists for public housing and housing vouchers, and these programs provide different subsidies to identical households. Furthermore, the regular Section 8 Voucher Program has a long history of applying different payment standards to subsets of voucher recipients. For example, a certain fraction of families have been given more generous subsidies to allow them to live in more expensive neighborhoods. Other than the use of different payment standards, the voucher program offered to public housing tenants would be administered exactly as the regular voucher program.

Under the proposal, public housing authorities would charge market rents for their vacated public housing units. Estimating these market rents is not a new activity for housing authorities. Since the implementation of the 1998 Housing Act, housing authorities have been required to estimate the market rents of their units [65FR16692]. Since that time, each public housing tenant has been offered the option of paying a rent determined by the traditional formula or paying the market rent of the unit.

To promote economic integration in public housing projects, Congress may want to eliminate the income limits on families that move into vacated public housing units. Under the proposal, the new occupants will receive little or no public subsidy, and so

income targeting would serve little or no public purpose. This would also reduce the administrative workload of the public housing authority.

### **Creating a Refundable Tax Credit to Promote Homeownership**

Modifying the Low-Income Housing Tax Credit (LIHTC) provides another excellent opportunity to promote homeownership within the current budget for low-income housing assistance. This program subsidizes the construction and substantial rehabilitation of rental housing for low-income households and has accounted for about half of additional households subsidized under all low-income rental housing programs over the past decade. In 2000, Congress increased new commitments of these tax credits by 40 percent and tied future tax expenditures to the consumer price index. Shortly thereafter, the GAO completed the first independent analysis of the cost-effectiveness of the LIHTC [GAO, 2001, 2002].<sup>13</sup> This research indicates that the tax credit program has excessive costs for the housing provided compared with housing vouchers. These findings provide a good reason to revisit the tax credit's future. They suggest that the current program should be replaced with a more cost-effective approach to delivering housing assistance.

A minimal response to the GAO study would be to freeze the amount of credits allocated to state agencies under the current program while a new and better independent cost-effectiveness analysis is undertaken. If the analysis confirms the GAO findings, additional production under the program should be halted altogether. In the meantime, the reduced tax expenditures on the LIHTC could be diverted to a refundable tax credit for low-income first-time homebuyers. Like the Earned Income Tax Credit, this tax credit for homeownership would be available to all low-income households. It would not be funneled through builders. It would be largest for the poorest households and decline to zero for households at some income level below the median.

In its first year, only modest tax credits would be available. So the tax credit available to the poorest households would be modest and the upper income limit for eligibility would be low. However, additional money would be available each year in

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<sup>13</sup> Olsen (2004, pp. 11-15) summarizes this evidence.

real terms, and the homeownership tax credit would become more generous and serve more households with the passage of time. When the money available became sufficiently large, the tax credit might be offered to all low-income homeowners. These tax credits would enable many low-income homeowners who lose their homes each year due to a decline in their income and inability to make mortgage and property tax payments to retain their homes.

### **Avoiding Past Mistakes**

The preceding proposals avoid the most important mistakes in the design of homeownership programs, namely, subsidizing the construction of new units and requiring intended beneficiaries to buy from selected sellers. Evidence on the performance of current and past programs indicates that programs of this type have excessive cost for the housing provided. A consequence of relying on these programs has been that many fewer families were served with money appropriated.

This section briefly describes the major low-income homeownership programs, presents the meager evidence on the cost-effectiveness of these programs, and summarizes the more abundant evidence on the cost-effectiveness of similar rental programs. It also explains why programs that subsidize the construction of new units or require intended beneficiaries to buy from selected sellers should be expected to have excessive cost and why subsidized construction is not necessary to increase the supply of adequate housing even in the tightest housing markets.

#### *Major Low-Income Homeownership Programs*

The Housing Act of 1949 established the USDA's Section 502 Single Family Direct Loan Program.<sup>14</sup> This program provides subsidies directly to eligible families that are free to use them to buy a new or existing house of their choosing. Until 1968, the magnitude of the subsidy was modest and did not depend on the household's income. The subsidy consisted of lending at the federal borrowing rate to farmers and others

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<sup>14</sup> See Carliner (1998, pp. 314-315) for a brief history of the development of the program and Mikesell and others (1999) for descriptive statistics and the first analysis of this program based on a nationally representative survey.

living in rural areas. (Farmers now account for a small share of all borrowers.) The Housing Act of 1968 authorized the USDA to pay a portion of the loan repayments for low-income households. For the poorest households, the USDA paid the difference between principal and interest payments at the government's borrowing rate and at an interest rate of 1 percent. For eligible households with higher incomes, the USDA paid the difference between property taxes, homeowners insurance, operating expenses and principal and interest payments at the government's borrowing rate and 20 percent of the household's adjusted income. During its first fifty years, Section 502 Single Family Direct Loan Program has provided over \$51 billion in homeownership loans to about 1.9 million households. The program currently provides subsidies to about 550,000 households.

The Housing Act of 1968 established Section 235, a HUD program that had a subsidy similar to the USDA's Section 502 but differed from this program in important respects. The larger component of Section 235 authorized selected developers to build units and sell them to eligible families. The smaller existing housing component provided subsidies to low-income buyers of existing houses on a first-come, first-served basis. Section 235 was unique among low-income housing programs in that the major responsibility for informing the public of its existence fell upon members of the real estate industry. Local Federal Housing Administration Insuring Offices did not advertise the program nor did they seek out potential eligible buyers. [U.S. Commission on Civil Rights, p.45]. Unlike Section 502, this program suffered from scandals and high default rates [Carliner, 1998, p.313-314]. It was suspended in 1973, reactivated in 1975, severely limited in geographical scope in 1983, and terminated in 1987. Over this period, it provided subsidies to more 500,000 low-income households. However, only about 5,000 households continue to receive subsidies.

The HOME Investment Partnerships Program enacted in 1990 is a block grant for housing assistance. It allocates federal funds by formula to state and local governments to spend on many types of housing assistance subject to certain limits on the incomes of the households served, the cost to acquire and develop units, and the rents that may be charged for rental units. In 2002, state and local governments devoted about 48 percent of their HOME budgets to homeownership assistance. About 35 percent of

homeownership assistance was in the form of grants and below-market rate loans to low-income homeowners to rehabilitate their houses [Turnham, 2003, Exhibit 2-6]. The remaining 65 percent was allocated to homebuyers. Local housing agencies are authorized to provide direct assistance to homebuyers or allocate it to selected developers who build units and sell them to eligible families. Data on the share of homebuyer assistance allocated to these two types of program has not been collected. However, 44 percent of homebuyer programs provide direct assistance to homebuyers who are free to choose their units and 56 percent tie assistance to the purchase of particular units [Turnham, 2003, p. vii].<sup>15</sup> The median of the per-unit subsidies under the direct assistance programs is much smaller than under the programs of unit-based assistance -- \$8,000 versus more than \$20,000 [Turnham, 2003, Exhibit 5-3]. Through 2002, this program subsidized about 270,000 homebuyers and 143,000 existing homeowners [Turnham, 2003, Exhibit A-2].

The Mortgage Revenue Bond Program uses the tax system to subsidize homeownership. Since its inception in 1913, the federal income tax has excluded the interest on state and local bonds from taxation. For decades, state and local housing agencies have issued mortgage revenue bonds and used the proceeds to provide below-market rate loans to homebuyers. The Mortgage Subsidy Bond Tax Act of 1980 and the Tax Reform Act of 1986 placed upper limits on the amount of mortgage revenue bonds that each political jurisdiction could issue, the income of the borrower, and the purchase price of the house. The Mortgage Revenue Bond Program currently provides about 100,000 loans at below-market interest rates to low-income, first-time homebuyers each year. Over its history, this program has subsidized about 2.4 million loans. In some cases, the loans have been allocated to selected builders. In others, they have been allocated to homebuyers who are free to choose any unit. The division of this tax expenditure between these two types of assistance is not known. However, a 1988 GAO report indicates that new housing loans accounted for about 40 percent of the loans and much of these funds were set aside for developers [GAO, 1988, p. 55].

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<sup>15</sup> Individual participating jurisdictions often have more than one homebuyer program [Turnham, 2003, Exhibit 4-1]. The result in the text is based on these individual programs. Each individual program is in only one of the two categories.

The Community Development Block Grant Program enacted in 1974 provides block grants for community development to state and local agencies. About a fourth of these grants are used to provide housing assistance to low- and moderate-income households. Homeowners receive about half of this money in the form of grants and loans at below-market interest rates to rehabilitate their homes. In 2004, about 112,000 homeowners received such grants or loans, and another 14,000 households received other homeownership subsidies.<sup>16</sup> Subsidizing new construction is severely restricted by statute, and almost none of the block grant budget is used for this purpose.

In summary, all of the major homeownership programs that have upper income limits for eligibility have provided recipient-based homeownership assistance. Section 235, HOME, and the Mortgage Revenue Bond Program have also provided subsidies to selected developers to build housing for eligible families. Many proposed programs would do the same, for example, the Bush Administration's proposed Single Family Affordable Housing Tax Credit and the Millennial Housing Commission's similar proposal (2002, pp. 29-31).

There are good theoretical reasons for expecting excessive costs from programs that subsidize new construction and allocate subsidies to selected developers. The modest evidence available on homeownership programs and the more abundant evidence dealing with the same issue for rental programs support these theoretical predictions. The remainder of the paper presents the theoretical arguments and empirical evidence, and it addresses the argument that subsidized construction is needed to increase the supply of adequate housing.

### *Subsidizing Construction Results in Excessive Cost for Achieving Housing Goals*

The least costly way to increase the homeownership rate is to convert existing rental units to owner-occupied units. Some resources are involved in the financial transactions needed to bring about a change in ownership of existing rental units. However, these same costs are associated with each unit built under a homeownership

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<sup>16</sup> For data on this program, see [http://www.hud.gov/offices/cpd/communitydevelopment/library/accomplishments/CDBGAccomplishment\\_sl\\_National.xls](http://www.hud.gov/offices/cpd/communitydevelopment/library/accomplishments/CDBGAccomplishment_sl_National.xls) and [http://www.hud.gov/offices/cpd/communitydevelopment/budget/disbursementreports/disbursements\\_all.xls](http://www.hud.gov/offices/cpd/communitydevelopment/budget/disbursementreports/disbursements_all.xls)

construction program, and they are miniscule compared with the cost of the resources involved in building new housing. In 2003, more than 7 million single-family detached units were rented. These are prime candidates for conversion. Millions of duplexes that are currently rented are almost as easy to convert to homeownership. Households that would live in one unit and rent the other could buy individual duplexes. Finally, entire townhouse projects and apartment buildings could be converted to condominiums. In recent years, the real estate sections of newspapers have been filled with stories about such conversions [Cho, 2005].

Subsidizing construction is an extremely costly way to promote homeownership in any market conditions. It is especially difficult to justify in the current situation when the vacancy rate is at a historic high. The national rental vacancy rate varied between 6.9 and 8.2 percent in the quarters from 1986 through 2000, it began rising in 2001, peaked at 10.4 percent in first quarter of 2004, and was still at a historically high level of 9.6 percent in the fourth quarter of 2005.

Why should we subsidize the construction of new units when such a large fraction of rental units are vacant? One tempting answer to this question is that the vacancy rate varies enormously across geographical areas and subsidized construction is necessary to provide housing for low-income households in markets with the lowest vacancy rates. Among the 75 largest metropolitan areas in 2005, the rental vacancy rate varied from 3.1 percent in Albany to 18.3 percent in Cleveland. So if this argument were correct, it would argue for subsidized construction in some areas during some times.<sup>17</sup>

Increased construction is unquestionably desirable when vacancy rates are unusually low. However, subsidized construction is not necessary to achieve this outcome. The argument for subsidized construction fails to recognize the self-corrective nature of the housing market. When vacancy rates are unusually low in an area, housing prices are unusually high relative to the cost of building housing. The unusually low vacancy rates and high prices of existing units induce high levels of unsubsidized

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<sup>17</sup> Although the argument that subsidized construction is necessary to provide housing assistance for renting or owning to low-income households in markets with the lowest vacancy rates has been influential in housing policy debates over the creation and funding of housing programs, it has had no effect on policy design. No subsidized construction program has ever been limited to tight housing markets, and funding for these programs has never been routinely reduced in response to rising vacancy rates. The Low Income Housing Tax Credit has subsidized an increasing number of units since 2000 despite the soaring rental vacancy rate.

construction. This construction is typically in the middle and at the top of the housing market. However, the movement of middle-income families out of existing into new units leads to the filtering of these existing units into the lower part of the market if the vacancy rate is unusually low and rents are unusually high in this segment of the market.

The view that recipient-based housing assistance cannot be used in tight housing markets and hence new construction must be subsidized in order to serve additional low-income households in these areas is inconsistent with evidence on the performance of rental housing programs. Data on utilization rates in the Section 8 Housing Voucher Program collected by HUD's Office of Policy Development and Research in 2002 and rental vacancy rates in the 75 largest metropolitan areas from the U.S. Bureau of the Census indicates that the voucher utilization rate does not depend on market tightness. Since the Census Bureau does not produce vacancy rates for smaller areas between the decennial censuses and HUD did not collect data on voucher utilization rates for four of the largest 75 metropolitan areas, the results are for the largest public housing agencies in 71 of the 75 largest metropolitan areas. The average voucher utilization rate is 85.8 percent for housing agencies in metropolitan areas with higher than average vacancy rates and 87.9 percent for housing agencies in metropolitan areas with lower than average vacancy rates. That is, the voucher utilization rate is actually higher in the tightest housing markets and hence tighter housing markets do not necessitate supply-side programs.

In discussing the ability to use vouchers in tight housing markets, it is important to realize that public housing agencies have over-issued vouchers for many years and thereby achieved high usage rates despite voucher success rates well below 100 percent.<sup>18</sup> They have a reserve fund for this purpose, and current regulations call for penalties on agencies with usage rates below 97 percent.<sup>19</sup> The voucher utilization rate depends on the aggressiveness of housing agencies in over-issuing vouchers. Although it is true that

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<sup>18</sup> The success rate in the voucher program is the fraction of families offered vouchers that find a unit meeting the program's housing standards within the time allowed.

<sup>19</sup> In recent years, Congress has placed restrictions on the ability of housing authorities to over-issue vouchers. Further modifications that will achieve the purposes of these restrictions but make it easier for housing authorities to use their entire voucher budgets may be desirable. However, HUD's Office of Policy Development and Research has developed a user-friendly, web-based computer program to help housing authorities adjust their issuance of vouchers during the year so as to exhaust their voucher budget for the year.

some families who are offered vouchers do not find housing that suits them and meets the program's standards within their housing authority's time limits, other eligible families in the same locality are able to use these vouchers. This indicates that the problem is not that there are no vacant apartments that meet program standards and are affordable to voucher recipients or apartments whose landlords are willing to upgrade them to meet program standards. In the tightest housing markets, these apartments are more difficult to locate. Unsubsidized families also have trouble locating apartments in tight housing markets.

The reason for the success of the recipient-based housing assistance in the tightest housing markets is easy to understand. Many families offered housing vouchers already occupy apartments meeting the program's minimum housing standards. Vacant apartments are not needed for these families. They can participate without moving. Other families that are offered vouchers live in housing that does not meet minimum standards. However, their apartments can be repaired to meet the standards. Similarly, vacant apartments that do not initially meet the minimum standards can be upgraded to meet them. That is, housing vouchers can induce an increase in the number of units meeting minimum housing standards even if they have no effect on new construction.

In short, subsidizing construction is an extremely costly way to promote homeownership in any market conditions, and new construction is not necessary to increase the number of housing units meeting minimum housing standards.

#### *Allocating Subsidies to Selected Sellers Leads to Excessive Cost*

Programs that allocate subsidies to selected sellers have consistently led to excessive cost for the housing provided. They have also led to corruption. This is well documented for low-income rental housing programs. Evidence on homeownership programs is more modest.

The reasons to expect these outcomes for homeownership programs are easy to understand. Under past homeownership programs of this type, selected builders were authorized to build and sell a specified number of houses to eligible families. The number of houses authorized has always been a small fraction of the number of eligible families. The subsidy has usually been in the form of downpayment assistance or

reduced mortgage payments. Due to the subsidy, the number of eligible families that would want to participate in the program if the houses were sold for market prices greatly exceeded the number of houses authorized. As a result, the selected developers who were authorized to build and sell units under the program were able to sell their units even if they charged above-market prices. In the absence of administrative mechanisms to keep sales prices in line with market prices, the excess of sales price over market price will rise to the point that all eligible families that want to participate are able to do it. That is, there will be no waiting lists beyond what exists in the unsubsidized sector. The primary mechanism used in past homeownership programs to prevent these excessive prices has been placing upper limits on the sales price. However, these programs were not able to prevent inferior materials and workmanship. These reduce the developer's cost and the market value of the house. The result has been excessive cost for the housing provided.

Since developers can earn more for their investment of money and time on subsidized than unsubsidized construction under programs of this type, they have applied for many more units than could be funded with the money appropriated. This situation not only leads to excessive cost for the housing provided but also creates an incentive to provide bribes or use political influence to get allocations of program units. This has happened under all programs of this type. In some of these programs, FHA has insured the mortgages. To protect its interest as a mortgage insurer, FHA sent its appraisers to the houses involved. Their job was to certify that the houses involved were not significantly overpriced. Some of these appraisers were convicted of accepting bribes to provide this certification when the house was greatly overpriced. Other appraisers who accepted bribes surely went undetected.

Direct evidence on the extent of overpricing of units under past homeownership programs is meager. Sa-Aadu, Benjamin, and Sirmans (1992) find that mean sales price exceeds mean market price by about 93 percent of the subsidy under the Mortgage Revenue Bond Program. However, their data is limited to sales of condominiums in seven projects located in Baton Rouge. Twenty-four of the condominiums were financed with the help of a MRB subsidy and 102 financed conventionally. Sellers controlled the distribution of the MRB subsidy in all cases. Using data on home purchases financed with conventional loans and mortgage revenue bond loans that were

not allocated to builders or brokers and not restricted to a small area, McClure (1992) finds no evidence of the capitalization of mortgage revenue bond benefits, that is, sales prices in excess of market prices. These results are also based on small samples – 126 sales financed with MRB loans and 159 financed with conventional loans in Kansas City and Independence, Missouri.

HUD (1974, pp. 109-110) reports no difference between the sales price and market value of units built under Section 235. However, the underlying analysis did not account for differences between subsidized and unsubsidized houses in the quality of the materials and workmanship. Skimping on these aspects of construction is the primary mechanism through which developers earn excess profits under programs of this type.

The evidence on the cost-effectiveness of different types of rental housing programs buttresses the evidence on different types of homeownership programs. Substantial empirical evidence on the effects of different rental housing programs shows that recipient-based housing assistance has provided equally good housing at a much lower cost than any type of unit-based assistance.

Four major studies [HUD, 1974, Chapter 4; Mayo and others, 1980; Wallace and others, 1981; Olsen and Barton, 1983, pp. 299-332] have estimated both the total cost per unit and the mean market rent of apartments provided by housing vouchers and the largest older production programs, namely Public Housing, Section 236, and Section 8 New Construction.<sup>20</sup> These studies are based on data from a wide variety of housing markets and for projects built in many different years. Two were expensive studies conducted for HUD by a respected research firm during the Nixon, Ford, Carter, and Reagan administrations. They are unanimous in finding that housing vouchers provide equally desirable housing at a much lower total cost than any of these production programs.

The studies with the most detailed information about the characteristics of the housing provided by the programs found the largest excess costs for the production programs. Specifically, Mayo and others (1980) estimated the excessive cost of public housing compared to housing vouchers for providing equally desirable housing to be 64%

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<sup>20</sup> Olsen (2000) provides a description and critical appraisal of the data and methods used in these studies as well as a summary of their results.

and 91% in the two cities studied and the excessive cost of Section 236 to be 35% and 75% in these cities. Another study with excellent data on housing characteristics estimated the excessive cost of Section 8 New Construction compared to recipient-based Section 8 Certificates to be between 44% and 78%.<sup>21</sup> Thus, the best studies of HUD's largest supply-side programs find that these programs incur much larger costs than housing vouchers to provide equally good housing.

Recent GAO studies [GAO, 2001, 2002] produced similar results for the major active construction programs – LIHTC, HOPE VI, Section 202, Section 515, and Section 811.<sup>22</sup> The excess total cost estimates based on the conceptually preferable life cycle approach range from 12% for Section 811 to 27% for HOPE VI [GAO, 2001, p. 3]. These estimates are lower bounds on the excessive cost because some costs of the production programs were omitted. Most notably, the market value of the land and the cost of preparing the site were omitted from the cost of HOPE VI projects. These are real costs to society of HOPE VI redevelopment. Furthermore, some costs of each production program were omitted. For example, some projects under each program receive local property tax abatements. The preceding results ignore this cost to local taxpayers.

## **Conclusions**

This paper proposes simple reforms of current low-income housing programs that would induce many additional low-income families to become homeowners. These reforms would not require additional spending or reduce the effectiveness of these programs in achieving their primary goals such as improved housing. Indeed, the proposals would improve the performance of the programs in achieving these goals.

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<sup>21</sup> Wallace and others (1981) made predictions of the market rents of subsidized units based on two different data sets containing information on the rent and characteristics of unsubsidized units. The study did not collect information on the indirect costs of the Section 8 New Construction Program. These indirect subsidies include GNMA Tandem Plan interest subsidies for FHA insured projects and the forgone tax revenue due to the tax-exempt status of interest on the bonds used to finance state housing finance agency projects. Based on previous studies, the authors argue that these indirect costs would add 20 to 30 percent to the total cost of the Section 8 New Construction Program. The range of estimates reported in the text is based on the four combinations of the two predictions of market rent and the lower and upper limits on the indirect costs.

<sup>22</sup> Active construction programs are programs that continue to produce additional units. HOPE VI is an initiative within the public housing program to demolish its worst units and rebuild at lower densities.

The proposals are to require local public housing authorities to offer the homeownership option to each family that reaches the top of its voucher waiting list, create a downpayment subsidy for first-time homebuyers within this program, expand the reformed voucher program by offering portable vouchers to all families living in public housing projects using the money currently spent on operating and modernization subsidies for public housing projects and to all families living in private subsidized projects at the end of their use agreements, and gradually converting the Low Income Housing Tax Credit for developers of rental housing into a refundable homeownership tax credit for low-income families. These proposals avoid the two biggest mistakes in past attempts to subsidize homeownership, namely, subsidizing the construction of new units and requiring intended beneficiaries to buy from selected sellers.

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**Table 1****Homeownership Rates by Real Income and Household Size**

Income quintile	Number of persons in household					Total
	1	2	3	4	5	
1	.206	.430	.302	.334	.293	.322
	.257	.463	.334	.360	.322	.362
	.024	.168	.133	.186	.148	.110
2	.491	.683	.583	.665	.607	.605
	.515	.684	.577	.657	.602	.610
	.176	.656	.660	.777	.674	.532
3	.570	.772	.772	.852	.826	.736
	.573	.770	.764	.847	.823	.732
	.502	.839	.893	.923	.863	.806
4	.671	.872	.898	.931	.914	.836
	.668	.868	.897	.931	.909	.832
	.759	.989	.914	.936	.984	.911
5	.803	.942	.957	.975	.961	.914
	.800	.942	.956	.975	.964	.914
	.882	.918	.978	1.000	.868	.922
Total	.548	.740	.702	.752	.720	.682
	.575	.750	.716	.764	.734	.699
	.242	.556	.534	.603	.571	.465

Source: 2003 National American Housing Survey

Notes: A ten-percent return on home equity is added to the income of each homeowner and a geographical consumer price index is used to express all incomes in the prices of a single locality. Except for home equity loans, the AHS does not report outstanding balances on mortgages. For households with fixed-rate first and (if applicable) second mortgages, outstanding balances on all mortgages are calculated using the procedures recommended by the Bureau of the Census. These outstanding balances are added to the reported outstanding balances on home equity loans and the result is subtracted from the owner's estimate of the market value of the house to obtain an estimate of the owner's home equity. For the small minority of households that do not have fixed-rate first and (if applicable) second mortgages, home equity is predicted based on a nonlinear regression of home equity on market value and date of purchase that is estimated using data from for the preceding group. The ACCRA geographical price index is used for metropolitan areas identified in the 2003 National AHS and regional metropolitan or nonmetropolitan averages of the ACCRA index are used for other observations. For each quintile of the distribution of real income, the first row gives the homeownership rate for all households of a particular size, the second the homeownership rate of all unsubsidized households, and the third the homeownership rate of all subsidized households.

**Table 2****Fraction Subsidized by Real Income and Household Size**

Income quintile	Number of persons in household					Total
	1	2	3	4	5	
1	.210	.105	.16	.146	.150	.153
	.026	.041	.084	.077	.065	.052
	.282	.167	.200	.188	.186	.214
2	.074	.048	.069	.085	.096	.068
	.023	.045	.072	.098	.099	.058
	.138	.055	.063	.052	.090	.087
3	.043	.040	.062	.062	.090	.052
	.038	.042	.065	.070	.101	.057
	.049	.031	.050	.026	.039	.042
4	.035	.034	.054	.051	.051	.042
	.041	.037	.060	.050	.050	.046
	.023	.014	.013	.063	.060	.024
5	.037	.033	.027	.027	.039	.033
	.039	.033	.027	.027	.037	.033
	.029	.036	.028	.029	.097	.033
Total	.080	.052	.074	.074	.085	.070
	.035	.039	.057	.060	.067	.048
	.141	.091	.118	.121	.130	.121

Source: 2003 National American Housing Survey

Note: Procedures for calculating real income are described in the note to table 1. The first row for each quintile in this table indicates the fraction of all households in a category that receive any type of housing assistance, the second row the fraction of all homeowners that are assisted, and the third row the fraction of all renters that receive housing assistance.