HOUSING ASSISTANCE AND THE EFFECTS OF WELFARE REFORM

EVIDENCE FROM CONNECTICUT AND MINNESOTA

U.S. Department of Housing and Urban Development
Office of Policy Development and Research

Housing Assistance and the Effects of Welfare Reform

Evidence from Connecticut and Minnesota

Prepared for
U.S. Department of Housing and Urban Development
Office of Policy Development and Research

Prepared by
Nandita Verma
James A. Riccio
with
Gilda L. Azurdia

MDRC
New York, NY

September 2003

Acknowledgments

The contributions of many people helped to make this report possible. From the U.S. Department of Housing and Urban Development, Mark Shroder was instrumental in shaping the report's scope and provided thoughtful comments all along the way.

At MDRC, Cynthia Miller helped resolve tricky data and analytical issues. Electra Small provided crucial support in setting up the HUD administrative records used for this study. Diane Singer produced all the tables and figures. Howard Bloom and Gordon Berlin offered invaluable feedback and guidance as reviewers of successive drafts. Robert Weber edited the final document, and Stephanie Cowell prepared it for publication.

Funding for this report was provided by the U.S. Department of Housing and Urban Development pursuant to contract number C-CHI-00655.

Table of Contents

List of Tables and Figures

Table

Figure

Figure

Executive Summary

The fact that many of the people living in public or other government-subsidized housing are also welfare recipients means that the progress that those tenants make toward self-sufficiency may be substantially influenced by the performance of mainstream (that is, non-housing) welfare-to-work programs and policies. Conversely, the fact that many welfare recipients receive government housing assistance (over 30 percent nationally, but much higher in some cities) means that the responses of subsidized tenants may influence the overall accomplishments of welfare reform initiatives. Only recently, however, have studies begun to explore the relationship between housing status and the effectiveness of welfare policies. A better understanding of this relationship may be important to continued efforts to increase economic self-sufficiency in both the assisted housing and the welfare policy arenas.

This study, sponsored by the U.S. Department of Housing and Urban Development (HUD), adds to a small but growing body of literature on this topic. It focuses on the following key questions:

- Are the welfare recipients who receive housing assistance a harder-to-employ group than the recipients who do not receive housing subsidies?
- Are the welfare reform initiatives any more effective or less effective for welfare recipients who receive housing assistance than for those who do not?
- Does the effectiveness of the welfare reform initiatives vary for recipients who receive different types of housing subsidies?
- Is there a statistical relationship between receipt of housing assistance for welfare recipients and subsequent success in the labor market?

To answer these and other questions, the study uses data from two random assignment welfare reform experiments for which reasonably complete housing data are available: the Connecticut Jobs First program (Jobs First) and the Minnesota Family Investment Program (MFIP). These initiatives sought to increase self-sufficiency among recipients of cash assistance under the federal Temporary Assistance for Needy Families (TANF) program, which in 1996 replaced Aid to Families with Dependent Children (AFDC). Although the two initiatives differ in important ways, together they encompass a broad array of policy-relevant innovations, including employment services, participation mandates, financial incentives to work, and welfare time limits. This study combines self-reported information provided by individuals when they entered these studies with data from HUD's own administrative records in order to classify the sample members according to their housing status.

Key Findings

Are Welfare Recipients Who Receive Housing Assistance Less Job-Ready to Begin with Than Those Who Do Not Receive Housing Assistance?

A common perception is that welfare recipients who live in public housing or receive Section 8 rent vouchers are among the most disadvantaged and difficult-to-employ people on welfare. If this were true, it would be one reason to suspect that recipients with housing assistance might respond differently to welfare reform than those without assistance. The findings from this study suggest:

- **The housing subgroups did not differ consistently or by large margins on measures of prior employment and educational attainment.**

For example, across both the Jobs First and the MFIP samples, almost 55 percent of those with and those without housing assistance had worked at some time before random assignment for at least six months for one employer on a full-time basis; similarly, nearly 60 percent of each subgroup had a high school diploma or General Educational Development (GED) certificate.

- **The subgroup with housing subsidies included a higher proportion of long-term welfare recipients.**

In the Jobs First sample, 62 percent of assisted recipients received welfare for five years or more, compared with 21 percent of the unassisted group. The differences are smaller among the MFIP assisted and unassisted recipients (68 percent versus 51 percent), perhaps in part because the original Minnesota sample includes only welfare recipients who received AFDC for at least two years by the time of random assignment.

- **The racial/ethnic distributions of the assisted and unassisted recipients tend to vary by location.**

For example, the Jobs First subgroup with housing assistance includes a substantially smaller proportion of white, non-Hispanic recipients than the unassisted subgroup (27 percent versus 47 percent). No such differences are noted between the assisted and the unassisted subgroups in the MFIP sample.

Thus, at least in the Jobs First and MFIP samples, assisted housing recipients were not consistently more disadvantaged than their unassisted counterparts across a range of background indicators measured at program entry, although there were some noteworthy differences.

Does the Success of Welfare Reform Vary with Recipients' Housing Status?

There are a number of reasons to suspect that welfare recipients who receive housing subsidies may respond differently to the mandates, services, financial incentives, time limits, and other provisions of welfare reform. For example, they may have different personal circumstances that may help or hinder them in the labor market; the rent rules associated with housing assistance (whereby rent increases as income grows) may affect recipients' perceptions about the advantages of working (or increasing their hours); and, the location, social environment, and offer of stable housing may also impinge — positively or negatively — on recipients' access to and perspectives toward employment.

This study measures the effects, or "impacts," of welfare reform for each housing subgroup on four economic outcomes: employment, earnings, welfare receipt, and total income. It compares the differences in outcomes between the program and control group members in the assisted housing subgroup with the differences in outcomes between the program and control group members in the subgroup with no housing assistance. (Within each subgroup, the control group's experiences represent what the program group would have achieved in the absence of the reforms.)

- **The impacts of welfare reform on employment and earnings were consistently larger for recipients with housing assistance than for those with no assistance.**

In Connecticut, the $3,965 impact on average four-year earnings for the assisted housing subgroup was more than twice as big as the impact for the unassisted subgroup ($1,658). In Minnesota, over the three-year follow-up period, the MFIP impact was $5,473 for the assisted group, versus only $603 for the unassisted subgroup — a difference of $4,870.

- **Only the Minnesota program had an impact on welfare payments: It caused those payments to increase, due to MFIP's provisions allowing recipients to keep more of their welfare grant while working. However, this increase was smaller among recipients with housing assistance.**

MFIP caused welfare payments (which included a cash-out of Food Stamps) to increase for the program group relative to the control group by $1,739 (statistically significant) among recipients with no housing assistance but only by $939 (not statistically significant) for those with housing assistance. Jobs First's impacts on welfare payments were small and not statistically significant for either housing subgroup.

- **Both the Connecticut and the Minnesota initiatives produced larger gains in income for recipients with housing assistance than for recipients with no housing assistance.**

On a composite measure of total income from earnings, welfare, and Food Stamps, Jobs First produced a cumulative increase in income for the assisted housing subgroup that was more than twice the size of the gain produced for the subgroup with no housing assistance ($4,703 versus $2,321 over the four years of follow-up). Similarly, MFIP produced an even larger increase in measured income for the assisted housing subgroup than for the unassisted subgroup ($6,412 versus $2,342) over nearly three years of follow-up.

- **Where it was possible to distinguish between types of housing assistance, the impacts did not differ much for recipients living in public housing compared with those using rent vouchers for private housing.**

For the Jobs First sample, the impact on four-year average earnings was $3,564 for the public housing subgroup and $3,368 for the voucher subgroup — a difference of only $196 over the entire follow-up period. This analysis was not conducted for MFIP because of the small number of sample members who lived in public housing.

- **Measured differences in the characteristics of people who had housing assistance compared with those who did not do not account for the differences in impacts.**

When the impacts for the two housing subgroups were estimated after statistically controlling for variations across those subgroups in employment and welfare receipt prior to entering the study, in race and ethnicity, and in other background variables, the overall pattern of findings remained the same. Thus, the differences in impacts by housing status are not explained by differences in the types of people who do or do not receive government housing subsidies — at least in terms of commonly measured characteristics.

Do the Noneconomic Effects of Welfare Reform Vary with Recipients' Housing Status?

The Jobs First client survey offers an opportunity to look at program impacts on a range of noneconomic outcomes. A number of small but noteworthy effects were observed. (This analysis could not be replicated for the Minnesota survey sample due to its smaller size.)

- **For the assisted housing subgroup, Jobs First increased by about 5 percentage points the likelihood that sample members would live in their own home rather than in someone else's. It had the opposite effect for the unassisted households.**

This difference in impacts may derive, at least in part, from the somewhat larger income gains that Jobs First produced for the assisted housing subgroup, giving them more resources with which to maintain their own homes.

- **The program's impacts on several material hardship measures were more favorable for the assisted housing subgroup than for the unassisted subgroup.**

For example, Jobs First caused a relatively larger reduction for the assisted housing subgroup in the number of reported problems with housing quality and neighborhood quality, the likelihood of unmet health needs, and the reliance on social service agencies for food or clothing.

- **Jobs First had no impacts for either housing subgroup on a range of indicators of housing distress.**

For example, the program caused little change for members of either subgroup on measures of rent burden, rent arrears, or homelessness. However, it is worth noting that some of the absolute levels on the housing distress measures for the program and control groups are relatively high, especially for those with no housing assistance.

- **Jobs First did not change sample members' reliance on housing assistance.**

Among recipients who were already receiving housing assistance at the beginning of the study, those in the Jobs First group were not any less likely to be receiving it than their counterparts in the control group by the time of the three-year follow-up survey. Similarly, among recipients who started without any housing subsidies, Jobs First did not contribute to any increase in the use of subsidies.

Is There a Relationship Between Receipt of Housing Assistance for Welfare Recipients and Subsequent Success in the Labor Market?

As another way to look at the interaction between housing assistance and economic outcomes for welfare recipients, this study undertakes a series of nonexperimental analyses to estimate the relationship between housing status at the time of random assignment and subsequent employment, earnings, and income, while controlling statistically for various background characteristics. Separate analyses conducted for the program and control groups in the Connecticut and Minnesota studies provide evidence consistent with the experimental impact findings presented above.

- **There is some evidence that receipt of housing assistance is associated with better economic outcomes. However, this relationship appears to hold only in the context of welfare reform.**

A positive relationship between housing assistance at the time of random assignment and subsequent economic outcomes was observed for the program groups in both the Connecticut and the Minnesota evaluations, but not for the control groups. Among members of the Minnesota program group, the employment rate over the three-year follow-up period of those with housing assistance was 12 percentage points higher than the rate for those with no housing assistance. Moreover, their average earnings were $3,637 higher, and their average total measured income was greater by $3,167. (All these estimates are statistically significant.) For the Jobs First program group, the rate of employment during the four-year follow-up period was nearly 7 percentage points higher for the assisted housing subgroup than for the unassisted subgroup (a statistically significant difference). Housing assistance was also associated with substantially higher earnings and total measured income (though not by a statistically significant amount).

In contrast, these relationships were smaller and not statistically significant for the control groups in the Minnesota and Connecticut evaluations, who were treated according to the traditional AFDC welfare policies. This overall pattern of results thus suggests that the hypothesized link between housing assistance and labor market success may exist for welfare recipients only when special work-related assistance and inducements are also in place.

Conclusions

The findings of this study are largely consistent with other recent studies showing that welfare reforms are more effective in improving many self-sufficiency outcomes for welfare recipients with housing assistance than for those without it. Of 10 different analyses across a range of states and reform initiatives, 8 found a similar pattern. It is important to consider this distinctive pattern in future efforts — in both the welfare and the housing policy arenas — to improve labor market outcomes for low-income populations.

Why this pattern exists remains unclear, however. It does not result from commonly measured differences in background characteristics of people with and without housing assistance (for example, prior employment, welfare receipt, or education levels). Perhaps some unmeasured differences in the types of people are contributing to the differences in impacts. Another reason may have to do with factors associated with the policies of housing assistance itself. For example, if, as many believe, housing assistance depresses work effort because of a rent policy that raises rent when income rises, it may be that participation mandates, work encouragement, and employment assistance that come with welfare policies counteract the disincentive effects of those rent rules. This counteracting influence might thus result in a bigger change in employment and earnings among those facing a housing-based financial disincentive to work than among those who do not face such a disincentive. (At the same time, it is important to recognize that the evidence suggesting that housing assistance actually depresses work effort is far from certain.)

Another possible explanation concerns the role that housing assistance might play in fostering conditions that encourage or help people take advantage of the employment services and incentives offered by welfare reforms. For example, some experts believe that the greater housing stability that can result from housing assistance — and the lower likelihood of household crowding and its associated stresses on families — might make it easier for people who are not working regularly to take advantage of programs designed to help them prepare for and hold a job. If so, the welfare recipients with assisted housing may be better poised to benefit from a welfare-to-work intervention than those without housing assistance.

While the pattern of findings of this and other studies suggests that welfare innovations are more effective when combined with housing subsidies, it does not mean that welfare reforms cannot work at all for recipients without housing assistance. Indeed, there are a number of examples of welfare-to-work programs that produced statistically significant earnings impacts for recipients with no housing assistance, even if these are smaller than the effects for those with housing assistance. Furthermore, two nationally recognized initiatives — the Greater Avenues for Independence (GAIN) program operated by Riverside County, California, and a Portland, Oregon, program conducted as part of the National Evaluation of Welfare-to-Work Strategies (NEWWS) — which did not have very many recipients with housing subsidies in their client populations, were found to be among the most effective programs of their type.

Chapter 1

Introduction

Over the past two decades, public policies in both the assisted housing and the welfare arenas have sought to increase employment and promote self-sufficiency among the recipients of those safety net benefits. Welfare reforms have expanded welfare-to-work programs, tightened the requirements for participation in those programs, and introduced time limits on welfare receipt. On a more limited scale, a number government housing policies and initiatives have sought to increase assisted housing residents' access to employment-related services and have changed rent policies for certain groups of tenants to encourage greater efforts to increase household earnings.

These two domains of public policy often function as separate worlds. However, they naturally come together by virtue of the fact that many low-income people participate in both systems. Nationally, almost half of all families with children who receive housing assistance also receive some income from welfare in any given year. Moreover, nationally approximately 30 percent of welfare families also receive federal housing assistance.[1] (This proportion is not higher because unlike other major means-tested income transfer programs, low-income housing assistance is not an entitlement available to all eligible households that qualify.[2] In some cities, many who are eligible end up on long waiting lists for months or years.)

The fact that many subsidized tenants are also welfare recipients means that these tenants are the target of mainstream (that is, nonhousing) welfare policies operating in any given locality. Yet there is no guarantee that they will respond to or be affected by those policies in the same way as recipients without housing subsidies. Indeed, some emerging evidence has begun to suggest that the effectiveness of those policies can vary substantially for assisted and unassisted tenants on welfare.

For these reasons, it is important to try to understand better the connections between work-promoting welfare policies and welfare recipients' housing status. This study, sponsored by the U.S. Department of Housing and Urban Development (HUD), adds to a small but growing body of literature on this issue. It focuses on receipts of cash assistance under the federal Temporary Assistance for Needy Families (TANF) program, which replaced Aid to Families with Dependent Children (AFDC) in 1996. It uses data from two random assignment welfare reform experiments — the Connecticut Jobs First program and the Minnesota Family Invest-

[1] Sard (2003).

[2] Somewhere between one-fifth and one-third of those eligible for housing subsidies are assisted (Shroder, 2002).

ment Program (MFIP) — along with data from HUD, on sample members' housing status, to address the following questions:

1. According to their pre-program background characteristics, are the welfare recipients who receive housing assistance a harder-to-employ group than those who do not receive housing subsidies?

2. Are the welfare reform initiatives any more or less effective in improving labor market, welfare, and quality-of-life outcomes for welfare recipients who receive housing assistance, compared with those who do not?

3. Does the effectiveness of the welfare reform initiatives vary for recipients who have different types of housing subsidies — that is, public housing and other project-based assistance versus housing vouchers?

4. Do the welfare reform initiatives cause any change in the rate of exiting housing assistance or in the duration of reliance on it?

5. In general, is there a statistical relationship between receipt of housing assistance by welfare recipients and their subsequent success in the labor market?

The report examines each of these questions in subsequent chapters, after briefly reviewing past relevant research and describing the Minnesota and Connecticut welfare reform initiatives and evaluations.

Prior Research

Several prior studies have taken advantage of data from random assignment evaluations of welfare reform initiatives to examine the relationship among employment, welfare, and housing among welfare recipients. Typically, these studies begin by assessing whether recipients living in assisted housing are more disadvantaged and perhaps harder-to-employ than those living in unsubsidized prior housing. For example, using data from the National Evaluation of Welfare-to-Work Strategies (NEWWS), Riccio and Orenstein found that an Atlanta, Georgia, sample of AFDC recipients who were living in public housing had individual characteristics, personal circumstances, and attitudes that could be expected to make it more difficult for them to secure and to retain employment, compared with recipients living in unsubsidized, private-market housing.[3] Recipients with Section 8 assistance generally fell in between these two groups on these indicators. At the same time, these researchers found that in a sample from

[3]Riccio and Orenstein (2003). 3

Columbus, Ohio, those with Section 8 housing assistance were the most disadvantaged on a number of background indicators. Miller, examining a sample of longer-term welfare recipients in the Minnesota Family Investment Program (MFIP) evaluation, found inconsistent variation in background characteristics, circumstances, and attitudes between recipients with or without housing assistance.[4] In sum, whether welfare recipients with housing subsidies — or with particular types of housing subsidies — are harder or easier to employ in the absence of a welfare-to-work intervention can differ substantially by locality.

One limitation of these studies is that they rely primarily on self-reported information from sample members to identify the housing status of those individuals. Although the Atlanta study included a quality-control assessment that offered some assurance that these self-reports were reliable, the accuracy of such self-reports is known generally to be problematic.[5] Another problem with the self-reported housing indicators is that they make no distinction between Section 8 vouchers (portable subsidies that recipients can offer to any private landlord willing to accept them) and project-based Section 8 subsidies (where the subsidies are paid directly to the private landlords, such as owners of apartment buildings, who agree to accept a below-market rent from the tenant and additional, contracted payments from HUD). This makes it impossible to determine whether people living in those two different types of Section 8 housing (one of which is more like public housing) differ in important ways.

A recent study avoids these limitations by using HUD administrative records on sample members' receipt of housing assistance.[6] In this study, housing data were combined with background characteristics data from recent welfare reform evaluations in Delaware and Indiana to create four housing subgroups: recipients living in public housing, recipients living in Section 8 projects, recipients with housing vouchers, and recipients with no housing assistance. The researchers did not find a generally consistent pattern of differences in common background characteristics measured across the four housing subgroups, with one exception: Recipients without housing assistance were more likely to be white than were those with housing assistance. In addition, in the Delaware study, which included a measure of welfare history prior to random assignment, recipients without housing assistance were much less likely to be longer-term users of welfare.

[4]Miller (1998). Another way to gauge earnings capacity is to compare average post-random assignment earnings outcomes by housing status for members of the control group (which was not assigned to the welfare-to-work intervention). Earnings were substantially lower for the public housing subgroup than for the unassisted subgroups in Atlanta, with the Section 8 group again falling in between. However, the differences in earnings across housing subgroups were much smaller for the Columbus and Minnesota samples.

[5]See Shroder (2002) for a more in-depth review of evidence on this issue.

[6]Lee, Beecroft, Khadduri, and Patterson (2003).

In addition to providing descriptive characteristics, the same studies also examine whether the effects, or "impacts," of various welfare reform initiatives vary according to recipients' housing status. For example, using the self-reported information gathered at program entry to define the housing subgroups, analyses of MFIP data revealed that employment and earnings gains were highly concentrated among residents of public and Section 8 housing.[7] For example, within almost two years after random assignment, MFIP had caused the assisted housing subgroup's average earnings to increase by a statistically significant $2,041 over what those earnings would have been in the absence of the program; the impact on earnings for recipients in the unsubsidized group was $426 and is not statistically significant.[8] A large disparity between the two groups also continued into the third year of follow-up.[9]

The analyses of the Atlanta and Columbus welfare-to-work programs support the hypothesis that employment and earnings gains from welfare-to-work programs are larger for recipients in public or subsidized housing than for recipients in unsubsidized private housing.[10] In the Atlanta study, public housing residents gained the most from two different versions of a welfare-to-work program operating there (one stressing quick employment and the other stressing the development of human capital through education and training), while the impacts were weakest for the unsubsidized households. In Columbus, where the larger evaluation tested the effects of two different case management strategies, the largest impacts were generally found for recipients living in public housing, regardless of how case management was structured.

The same pattern is not consistently observed in the Delaware and Indiana experiments.[11] In both cases, welfare reform caused some gains in employment and earnings and reductions in TANF and Food Stamp payments for recipients in all three housing subgroups. However, it is important to note that there were no positive impacts on employment and earnings in the Delaware sample for either subgroup after the first year of follow-up and that the cumulative two-year impacts are not statistically significant, suggesting that the program was generally not very effective in improving employment outcomes. It is perhaps not surprising, then, that there was little difference in impacts between the assisted and unassisted housing subgroups on these measures. For an early cohort in the Indiana study for which five years of follow-up data are available, and for whom the overall effects of the program were larger and longer-lasting than in Delaware, the impacts on employment-related outcomes and public assistance did not differ significantly for the assisted and unassisted subgroups. However, differ-

[7]In this study according to these self-reports, 40 percent of the sample reported receiving some form of housing assistance, and about 80 percent of this group reported that they were living in other subsidized housing (that is, were receiving a Section 8 subsidy).

[8]Miller (1998).

[9]Miller et al. (2000).

[10]Riccio and Orenstein (2003).

[11]Lee et al. (2003).

ences across these groups were observed for a later cohort (consisting primarily of welfare applicants in a smaller portion of the state). In that cohort — as in the earlier Minnesota, Atlanta, and Columbus studies — welfare reform produced larger impacts on employment and earnings for the assisted housing subgroup than for those without housing assistance. The reasons for these different patterns in Indiana are unclear.

In addition to the question of whether the effects of welfare reform efforts differ according to recipients' housing status, there has been considerable policy interest in whether housing assistance per se (with or without a welfare reform initiative) helps promotes increased employment and self-sufficiency. However, opinions differ on the likely direction of any causal relationship. For example, some observers believe that housing assistance can help improve recipients' ability to get and keep jobs by helping to stabilize the lives of low-income families and by freeing up resources (rent payments) that can be used for other work-related expenses, such as child care and transportation.[12] Assistance in the form of Section 8 vouchers even allows families to use their subsidies to move to better-quality housing and to experience a lower rent burden than similar, unassisted households. The mobility choice inherent in tenant-based assistance also provides tenants more opportunity to escape highly impoverished neighborhoods and to increase their access to employment opportunities.[13] Others, however, argue that policies and rules governing federal housing assistance tend to suppress tenants' work activity. Traditionally, recipients of housing assistance have paid 30 percent of their income (after certain adjustments) on rent. Thus, as income goes up, so does rent.[14] This direct penalty — or implicit tax — on additional income is believed to deter residents from working or from finding better or higher-paying jobs. A detailed review of various studies that address this question finds, overall, that the available evidence is too limited and too inconsistent to conclude that housing assistance has either a substantial positive or a substantial negative effect on employment.[15]

The Welfare Reform Initiatives

This report presents findings from a secondary analysis of data that were collected for two random assignment evaluations of welfare reform initiatives recently completed by MDRC. These two initiatives differ in important ways, but, between them, they encompass a broad array

[12]Sard (2000b).

[13]Those receiving tenant-based assistance are also less likely than public housing residents to be clustered in highly impoverished neighborhoods. National analysis has found that 15 percent of certificate and voucher recipients live in high-poverty neighborhoods (those that exceed a 30 percent poverty rate), compared with 54 percent of public housing residents (Newman and Schnare, 1997).

[14]Changes in the federal rent rules for public housing under the 1998 housing law include several provisions that sever the tie between earned income and rent. For details, see Sard (2000a) and Devine, Rubin, and Gray (1999).

[15]Shroder (2002).

of policy-relevant innovations, including special employment services and participation mandates, enhanced financial incentives to work, and time limits on welfare receipt. In addition, each of the evaluations included a substantial number of welfare recipients who were receiving some form of federal housing assistance at program entry. The following brief summary highlights the key elements of these initiatives and shows how they compare with the traditional AFDC system.

Minnesota's Family Investment Program (MFIP)

In 1994, the State of Minnesota began operating a major welfare reform program aimed at encouraging work and reducing poverty.[16] For single-parent families — the intervention examined in this report — the MFIP program differed from the traditional Aid to Families with Dependent Children (AFDC) system in three specific ways:

- It provided enhanced *financial incentives* to welfare recipients who went to work, largely by decreasing the extent to which families' welfare grants were reduced when they became employed;
- It required participation among longer-term recipients in certain types of *employment and training services*; and
- It *integrated benefits* of AFDC, Family General Assistance, and Food Stamps into a single program. Part of the MFIP model was also to simplify the calculation and receipt of benefits: Recipients in the MFIP group had their Food Stamp benefits "cashed-out," meaning that they received them as part of their MFIP check.

Table 1.1[17] provides a more detailed, side-by-side comparison of the MFIP program and the AFDC system. MFIP was a major departure from the customary ways in which administrators and policymakers approached the problems of economic self-sufficiency for welfare recipients. For decades, welfare policies and programs have struggled with the dual task of simultaneously encouraging work and reducing poverty without compromising either goal. In general, when welfare recipients go to work, their welfare benefits are reduced to compensate for the increases in income from employment. So while traditional programs have been successful in terms of moving recipients from welfare-to-work, they have been less successful in lifting these families out of poverty, because more welfare recipients moving to work were trading their welfare benefits for low-wage employment. With its multi-pronged strategies for maximizing work and income, MFIP tackled this problem head-on: Offering an enhanced earnings disregard in the formula for

[16]Miller et al. (2000).

[17]The tables for Chapter 1 begin on page 10.

calculating welfare benefits, it helped to make low-wage work "pay" by allowing working recipients to keep more of their welfare benefits. In addition, it required long-term welfare recipients (that is, those who had received AFDC benefits for two years or more) to participate in mandatory work-focused activities such as job search assistance or training.

To test the effectiveness of MFIP relative to the traditional AFDC system, MDRC designed a random assignment evaluation that began in April 1994. MDRC studied how the MFIP model was implemented on the ground, the extent to which recipients participated in the program's various components, the extent to which it changed outcomes for the program and control groups, and the program's economic costs and benefits. Although MFIP served urban and rural recipients and single- and two-parent families, it was primarily effective for longer-term, single-parent welfare recipients living in urban areas. To learn about the differential effects of MFIP for different housing subgroups, this report therefore focuses on that sample.

This study also focuses on only two of the three research groups included in the larger MFIP evaluation. For that evaluation, individuals were randomly assigned to (1) an MFIP group, which received the full MFIP program; or (2) an incentives-only group, which had access only to the enhanced financial work incentives and was not subject to the participation requirements;[18] or (3) an AFDC (control) group, whose sample members were eligible only for traditional AFDC benefits and services. The incentives-only group was excluded from this report because it was found not to produce earnings impacts on the broader sample, unlike the full MFIP program. Thus, the MFIP-related analyses presented here focus on the single-parent, long-term welfare recipients (they had to have received public assistance for 24 of the 36 months preceding random assignment) who were randomly assigned between April 1994 and March 1996, for whom data are available from 1993 to 1998.

Connecticut's Jobs First Program

In 1996, after the MFIP evaluation was well under way, another welfare experiment was attracting national attention: Connecticut's Jobs First program. It embodied all the key elements of the 1990s welfare reform, including time limits, financial incentives, and a work requirement.[19] Connecticut's Jobs First program was designed with the similar core goals of encouraging work and reducing poverty, but, unlike MFIP, this welfare reform initiative included a 21-month time limit on welfare receipt. Implemented statewide, the Jobs First initiative included

[18]This group was created for the purpose of disentangling the main effects of the program's two major components: financial incentives and work requirements.

[19]Bloom et al. (2002).

a very generous financial incentive to encourage work: All earnings were disregarded when calculating a recipient's grant level, until the earnings reached the poverty line.

Jobs First replaced the state's AFDC program with Temporary Family Assistance (TFA) and significantly modified benefits and services.[20] Table 1.2 shows the differences between the two systems. The following features are key:

- Jobs First limited families to a total of *21 months of cash assistance* receipt. This time limit is one of the shortest lifetime limits in the nation. Certain families, such as those in which the parent was disabled or incapacitated, were exempt from the time limit. Those reaching the time limit could be considered for a six-month extension of their benefits if they were able to show a good-faith effort to find employment and if they had family income below the welfare payment standard.

- To encourage work, the program provided an *unusually generous earned income disregard* policy: All earned income was disregarded when calculating the recipients' cash and Food Stamp benefits as long as their earned income was below the federal poverty level (which was $1,138 per month for a family of three in 1998). Recipients became ineligible for cash assistance when their earnings reached or exceeded the poverty level. Thus recipients could earn up to $1 below the poverty level and continue to receive their full cash assistance.

- Unless exempt, most Jobs First group members were required to participate in mandatory "work-first" employment services. They were required to look for a job, either on their own or through the Job Search Skills Training courses that taught job-seeking and jobholding skills. Educating and training services were generally offered to those who were unable to find a job despite long-drawn job search efforts. Recipients who failed to meet their mandatory work-first requirements were sanctioned.

The evaluation of the Jobs First program started in 1996 and was conducted by MDRC in Manchester and New Haven. The sample includes individuals who were randomly assigned between 1996 and 1997 to one of two groups: a Jobs First group and an AFDC group. The latter group received traditional benefits and services and was not subject to a welfare time limit. These groups were followed for four years after random assignment — well beyond the point

[20]Once Jobs First was implemented, the AFDC program operated only in the study sites, Manchester and New Haven. The rest of the state shifted to TFA benefits and services.

when sample members of the Jobs First group began reaching the time limit. The data for this evaluation cover the period from 1994 through 2000.

The main evaluation of this program found that Jobs First increased employment and earnings, on average, relative to the control group, with substantially larger impacts for more disadvantaged sample members. The program also produced income gains, but these began to disappear after most recipients began reaching the time limit.[21] The MFIP and Connecticut Jobs First evaluations together demonstrate that the welfare reform policies they encompass can have important effects on welfare recipients' labor market outcomes and progress toward self-sufficiency. But does this hold true equally for recipients who also receive government housing assistance and for those who do not? This report will address that and related questions. Before doing so, it is important to understand the data and methods used in this analysis, which are discussed in Chapter 2.

[21]Bloom et al. (2002).

Housing Assistance and Self-Sufficiency Study

Table 1.1

Major Differences in Rules for Financial Assistance, Administration of Benefits, and Employment and Training Programs Under AFDC and MFIP

Program Dimension	MFIP	AFDC[a]
Eligibility		
Income requirements	Net income requirement only.	AFDC and Food Stamps both had gross and net income requirements that households must have met in order to be eligible for benefits.
Work history requirements and work limits for two-parent families	No such requirements.	To have been eligible for AFDC, one parent must either have been incapacitated or reported a recent work history, and worked less than 100 hours per month. Minnesota's Family General Assistance (FGA) program did not have these requirements.
Financial assistance		
Grant calculation when a recipient has earned income	If there was no earned income, the maximum grant equaled the combined value of AFDC and Food Stamps. If there was earned income, benefits equaled the maximum grant increased by 20 percent, minus net income. (Net income excluded 38 percent of gross earnings.) However, benefits could not exceed the maximum grant level.	AFDC grant calculation excluded $120 and one-third of any remaining monthly earnings during the first 4 months of work; $120 during the next 8 months; $90 per month thereafter. Food Stamp grant calculation excluded 70 percent of net income. Net income included the AFDC grant but excluded 20 percent of gross earnings, a $131 standard deduction, and up to $207 of excess shelter expenses.[b]
Transitional child care and Medicaid	Same as AFDC.	AFDC transitional benefits were available for the first 12 months after a registrant left welfare for work. Sliding-fee child care was available subsequently.
Penalty for noncompliance with required activities	Grant was reduced by 10 percent.	Noncompliant parent was removed from grant.
Administration of benefits[c]		
Rules for use of Food Stamp benefits	Food Stamps incorporated into MFIP cash grant without Food Stamp restrictions on purchases, unless Food Stamps requested by the recipient.	Federal Food Stamp rules applied.

(continued)

Table 1.1 (continued)

Program Dimension	MFIP	AFDC[a]
Employment and training programs[d]		
Mandatory activities for single-parent families	Mandatory participation in MFIP employment and training services for single parents with no children under age 1, who had received welfare for more than 2 years.	Mandatory orientation to STRIDE (Minnesota's JOBS program) for AFDC applicants in a STRIDE target group, except those with children under age 3.

SOURCE: Miller et al. (2000).

NOTES: [a]The term "AFDC" is used throughout this report to represent the range of programs MFIP was designed to replace, including not only AFDC but also Food Stamps; the Family General Assistance (FGA) program; and Minnesota's JOBS program, STRIDE. The rules shown above are primarily related to AFDC, except where otherwise noted.

[b]These calculation standards were in effect in 1994.

[c]For both AFDC and MFIP group members, Electronic Benefits Transfer was implemented for cash and Food Stamps during the evaluation period (in late 1994 in Hennepin, late 1997 in Anoka and Dakota, and mid-1998 in rural counties).

[d]Employment and training rules described for "AFDC" are the rules for AFDC recipients. They do not apply to those receiving only FGA or Food Stamps.

Housing Assistance and Self-Sufficiency Study
Table 1.2

Comparison of Connecticut Jobs First and AFDC Policies During the Study Period

Program Dimensions	Jobs First	AFDC
Eligibility		
Cash assistance eligibility for two-parent families	Similar nonfinancial eligibility rules for single- and two-parent families	Two-parent families subject to special nonfinancial eligibility criteria (e.g., that principal wage-earner work fewer than 100 hours per month)
Asset limit for cash assistance eligibility [a]	$3,000	$1,000
Value of vehicle excluded in counting assets for cash assistance eligibility [a]	Up to $9,500 in equity value of one vehicle excluded	Up to $1,500 in equity value of one vehicle excluded
Financial assistance		
Benefit increase for children conceived while mother receives welfare	$50 per month	Approximately $100 per month
Earned income disregard for cash assistance	All earned income disregarded (not counted) in calculating recipient's grants as long as earnings are below federal poverty level	First 4 months of work: $120 plus 33 percent of earnings disregarded; months 4-12: $120 disregarded; after month 12: $90 disregarded
Earned income disregard for Food Stamps	Federal poverty-level disregard while family receives cash assistance	20 percent of gross earnings disregarded, in accordance with regular Food Stamp rules
Medical assistance for families leaving welfare for work	Two years of transitional Medicaid; coverage beyond that point depends on eligibility for other programs	One year of transitional Medicaid; coverage beyond that point depends on eligibility for other programs
Child care assistance for families leaving welfare for work	Assistance provided as long as income is below 75 percent of state median	One year of transitional child care; assistance beyond that point depends on eligibility for other programs

(continued)

Table 1.2 (continued)

Program Dimensions	Jobs First	AFDC
Administration of benefits		
Time limit	21 months, with possibility of extensions	None
Sanctions for failure to comply with employment-related mandates	1st instance: grant reduced by 20 percent for 3 months; 2nd instance: grant reduced by 35 percent for 3 months; 3rd instance: grant canceled for 3 months	1st instance: adult removed from grant until compliance; 2nd instance: adult removed from grant for at least 3 months; 3rd instance: adult removed from grant for at least 6 months
Employment and training programs		
	Mandatory "Work First" employment services. Job Search or Job Search Skills Training. Educational and training only offered to those unable to find a job.	Participation mandates were not strongly required.

SOURCE: Bloom et al. (2002).

NOTE: [a] Because cash assistance recipients are categorically eligible for Food Stamps, these assest rules effectively apply to Food Stamp eligibility while a family receives Temporary Family Assistance (TFA).

Chapter 2

Data and Methods

This report draws on a rich combination of longitudinal administrative welfare and unemployment insurance (UI) wage records, follow-up client surveys, background information data collected at random assignment, and administrative records from the U.S. Department of Housing and Urban Development (HUD). As discussed below, each of these data sources provides a special lens to examine the effects of housing subsidies on economic outcomes for assisted and unassisted housing groups.

Data Sources

Unless specified, it is safe to assume that the data described below were available for the evaluations of both the Minnesota Family Investment Program (MFIP) and the Connecticut Jobs First program.

- **Welfare and UI wage administrative records.** These are the primary data sources for tracking key employment, earnings, and welfare and Food Stamp benefit receipt outcomes and impacts for the study groups. Quarterly employment records and monthly public assistance records were available for the sample for one year prior to random assignment and through the end of the follow-up period in each study — that is, for almost three years (or 11 quarters) of follow-up for MFIP and four years for Jobs First, respectively.

- **HUD administrative records.** Two systems maintained by HUD track the nation's population receiving some form of federal housing subsidy, including public and tenant-based housing.[1] Data from these systems were made available for this study to determine whether MFIP and Jobs First sample members received federal housing assistance at the time of enrollment in the welfare programs and during the follow-up period. A later section describes how these data were used for defining the housing assistance groups and for assessing the level of correspondence between self-reported data and agency administrative records on individual housing assistance status.

[1]The Multifamily Tenant Characteristics System (MTCS) tracks individuals receiving public housing, certificates, Section 8 vouchers, and moderate rehabilitation. The Tenant Rental Assistance Certification System (TRACS) tracks those receiving assistance through privately owned projects.

- **Recipients' background data.** Most MDRC evaluation studies collect background information for each sample member in the study. Just prior to random assignment, during one-on-one meetings with individuals referred to the county's welfare-to-work program, staff complete a Background Information Form (BIF). The form covers basic demographic and employment information, including marital status, housing status, household composition, race or ethnicity, history of welfare use, education level, employment history, and characteristics of a current job. The BIF data serve three important functions in this study. First, they are used to assess the degree to which self-reported housing status agrees with information stored on HUD's administrative agency records. Second, they are used to examine differences in characteristics of the assisted and unassisted housing subgroups prior to program participation. Third, BIF measures are used as covariates in the regression models to estimate and augment the precision of the impact estimates.

- **Surveys of recipients.** Both the Jobs First and the MFIP evaluations conducted follow-up surveys with clients. This report analyzes data from the Connecticut survey; the Minnesota survey had too few sample members to allow a comparison of the housing subgroups. The Connecticut survey provides a rich repository of information to complement the information available in administrative databases. It permits, for example, an analysis of household composition, housing and living arrangements, employment, housing mobility, housing hardships, and other material hardships and quality-of-life indicators for the assisted and the unassisted housing subgroups.

The Quality of Self-Reported Data on Housing Assistance

As previously mentioned, the original MFIP and Connecticut Jobs First evaluations included a pre-random assignment self-reported measure of housing assistance. Sample members were asked to report on the BIF whether they were receiving federal housing assistance at the time of enrollment in the study. The BIF question on housing assistance is worded as follows: *What is your current housing status? (1). Public Housing, (2) Subsidized Housing, (3) Emergency/Temporary Shelter, and (4) None of the above.*[2] As is evident from the response categories on this question, no distinction is made between types of subsidized housing other than pub-

[2]Interviewers were asked to check public housing if the client was living in housing owned by a federal, state, or local government agency. Clients who were living in private housing and getting government aid other than AFDC to help pay the rent were classified as living in subsidized housing.

lic housing. Consequently, the housing-status variable makes it impossible to distinguish individuals receiving Section 8 vouchers or certificates versus project-based Section 8 housing.

With this self-reported information, sample members in the program and control groups for each study were divided into three housing subgroups: those living in public housing, those receiving Section 8 assistance, and those receiving no housing subsidies.[3] Between one-fourth and one-third of the sample members in the two studies said that they received some federal housing assistance, with Section 8 being the primary form of assistance. A higher proportion of the Jobs First sample than of the MFIP sample said that they were living in public housing (9 percent versus 3 percent).

When used in surveys of the general population, self-reported housing data may be substantially inaccurate. Shroder, for example, notes that, in the American Housing Survey, these data implied that almost twice as many households were living in public housing than there were public housing units available.[4] Further, citing other studies that have examined reporting accuracies, Shroder concludes that no study has been able to demonstrate that inaccurate self-reports are random. If they are not, this means that studies that compare the experiences and outcomes of people classified according to their self-reported housing statuses may be seriously misleading.

Drawing on the research of Casey,[5] Shroder estimates that approximately 20 percent of individuals reporting federal housing assistance receipt were not assisted, according to HUD's records (false positive). A HUD-commissioned study of the causes for survey response errors finds that public housing residents were most likely to correctly identify their housing assistance status but that half the project-based Section 8 households, one-fifth the certificate and voucher households, and one-fifth the unassisted households reported incorrectly. At the same time, it is important to recognize that the lack of match between self-reports and HUD data may be driven not simply by misreporting but also, in part, by inaccuracies in HUD's administrative records data. There is reason to believe that many local housing authorities and private project owners do not meet the highest reporting standards, resulting in missing data on program participants in HUD's tracking systems.[6]

Riccio and Orenstein conducted two partial tests of the validity of a self-reported housing measure for a sample of welfare recipients living in Atlanta who participated in the National

[3]Because of the way the housing assistance question is worded on the BIF, there is no way to distinguish between those receiving two types of project-based assistance: public housing and project-based Section 8 housing.

[4]Shroder (2002, p. 412).

[5]Casey (1992).

[6]Personal communications with HUD staff.

Evaluation of Welfare-to-Work Strategies (NEWWS).[7] The first test involved comparing the respondents' own characterization of their housing to that of the interviewers, who conducted in-person surveys as part of the evaluation. Where respondents reported living in public housing, interviewers agreed in 92 percent of the cases; where recipients did not report a public housing residence, interviews concurred in 95 percent of the cases. The second test comes from verifying the home addresses of a subsample of respondents supplied during their program intake interview. By contacting staff in several of the public housing authorities, the authors verified that the addresses provided by the sample were, indeed, public housing properties. The authors conclude from these two tests that self-reports — particularly as they pertain to public housing residence — are substantially correct. It may be that, particularly among welfare recipients, the meaning of the term "public housing" is generally quite clear. Riccio and Orenstein were not able to assess the accuracy of sample members' reports of receiving Section 8 housing assistance.

HUD Administrative Records Data on Housing Assistance

Given the concerns about the accuracy of the self-reported data, MDRC and HUD matched MDRC's Minnesota and Connecticut electronic files of sample members with HUD administrative records data on housing assistance. HUD maintains two data systems that track households that receive some form of federal housing assistance. The Multifamily Tenant Characteristics System (MTCS) captures information on individuals receiving assistance for one of the following programs: (1) public housing, (2) certificates, (3) Section 8 vouchers, and (4) moderate rehabilitation. The Tenant Rental Assistance Certification System (TRACS) contains information submitted by private owners who have contracts with HUD, and it indicates whether an individual received a Section 8 subsidy, among other forms of assistance.

Using personal identifiers for MFIP and Job First sample members, HUD identified housing assistance transactions for sample members who had one or more record of housing assistance in the MTCS or TRACS in the period from 1994 to 2002. The following information was appended to each transaction record and was used in one way or another to make the housing subgroup determination: (1) type of housing assistance, (2) effective date for housing program participation, and (3) status of housing assistance — whether it ended or not.

The data available for this report thus include, for each sample member, HUD data indicating whether the person was receiving housing assistance, the type of assistance, and each individual's self-reported housing assistance status. This makes it possible to assess how well these very different types of indicators correspond to each other. For example, do most people who said on the BIF that they were receiving a particular form of housing assistance show up in

[7] Riccio and Orenstein (2003).

HUD records as receiving that assistance at that time? Would the same people who were classified as public housing residents, Section 8 recipients, or unassisted sample members according to their self-reports be classified in the same ways according to HUD administrative records? A high level of agreement between the two sources would suggest that either self-reports or administrative data could be used to accurately classify individuals into their housing assistance subgroups; high levels of disagreement, on the other hand, would raise questions about the quality and adequacy of relying on either data source. The next section turns to these questions.

Comparing Self-Reports and HUD Data on Housing Assistance Status

Using the HUD information, MDRC assigned sample members to the same three housing subgroups into which it classified sample members according to their self-reports: public housing assistance, Section 8 assistance, and no housing assistance. (For this diagnostic analysis, sample members appearing on the HUD records as receiving project-based Section 8 housing were combined with the Section 8 Vouchers and Certificates group, since the self-reports do not distinguish between different types of Section 8 assistance.)

Figure 2.1[8] shows the correspondence between the two data sources. The Connecticut Jobs First findings are shown on the left-hand side; the findings on the right-hand side are for the MFIP sample. (All program and control group members are combined for this analysis.) Panel A shows the level of agreement for those reporting public housing assistance at baseline; Panel B shows the information for those reporting subsidized (including Section 8) housing assistance at baseline; and Panel C shows the degree of correspondence for those who indicated no housing assistance at program entry. For both studies, these panels can be used to determine two things: (1) the percentage of matches, or the cases that match on type of housing assistance on both data sources (for example, people reporting receipt of public housing assistance and the administrative records supporting that housing status), and (2) the percentage of mismatches — that is, people who reported one type of housing status but who have a different classification according to HUD records.

Two conclusions can be drawn about the Connecticut sample by looking at the three panels of Figure 2.1. First, it is clear that the level of agreement — or matches — between the two data sources is highest for recipients who were not receiving any form of federal housing assistance at baseline (91 percent, in Panel C); the next-highest level of agreement is seen for those reporting public housing (52 percent, in Panel A); and the lowest level of agreement is seen for those reporting other subsidized housing (45 percent, in Panel B). Second, among those

[8]The table and figure for Chapter 2 begin on page 23.

whose housing assistance status did not match on both data sources, the majority were cases classified as being "unassisted," as opposed to cases receiving a different "type" of housing assistance. For example, Panel A for Connecticut shows that among the 48 percent whose records did not match, only 9 percent were receiving another type of housing assistance according to HUD records; the remaining 39 percent had no HUD record at the point of random assignment.[9]

The Minnesota results on the right-hand side of Figure 2.1 tell more or less the same story, although in contrast to the Connecticut results, the match rate is somewhat higher for the other subsidized housing group (52 percent, in Panel B) than for the public housing group (41 percent, in Panel A). Again, among all three housing subgroups, the match rate between self-reports and administrative data is highest for the unassisted recipients (92 percent, in Panel C).[10]

So what does one make of these findings, and what are the implications for defining the housing subgroups for this study? Is it prudent to ignore the classification differences described above and to assume that most individuals are knowledgeable about their housing situations and that the misclassification between the two sources result from incomplete or poor-quality administrative records? Or are the HUD data the most reliable indicators of housing status? There are no easy answers to these questions. Because it is difficult to claim with confidence that one data source is superior to the other, this report uses for its core analysis a more conservative definition of housing assistance, drawing on both data sources. Specifically, the analysis focuses on *sample members whose self-reported housing assistance status matches with HUD data.* This at least provides a high degree of assurance that the classification of these sample members according to their housing status is correct. This approach is viewed as offering the "best estimate" of the variation in program impacts across the housing subgroups. At the same time, it yields a loss of sample points and raises a risk of introducing biases into the analysis if the people on whom matching data are available are very different from those for whom matches do not exist. To address this concern, a number of sensitivity tests were conducted to determine whether the impact findings are substantially affected by the classification of residents into housing subgroups using just HUD data or just self-reports. As discussed later in the report, the different data sources did not change the overall pattern of results across the housing subgroups.

For the final classification of sample members — thus, for all the analyses that follow — those for whom HUD data indicated that they received project-based Section 8 assistance were assigned to the public housing subgroup under the assumption that this type of assistance had more in common with public housing than with voucher receipt. The decision to focus on

[9]Overall, self-reported housing assistance status at sample intake matched with HUD data for 71 percent of the Jobs First evaluation sample (or 3,382 of the 4,748 cases in the original study).

[10]Similarly, in the case of MFIP, self-reported housing assistance status at intake matched with HUD data for 74 percent of the long-term recipient sample in the original evaluation (or 1,277 out of 1,719 cases).

the sample with matching data leaves the analysis with the sample sizes shown in Table 2.1. Of the 1,696 sample members in the Connecticut program group, close to one-fourth had some form of housing assistance (8 percent public housing and 15 percent vouchers), and the remaining 77 percent were unassisted at program entry. The control group's housing assistance status closely resembles that of the program group. The lower panel of Table 2.1 shows the sample-size information for the MFIP program and control groups. Roughly one-third of the MFIP program and control group members received some form of housing assistance at program entry. Note that only about 4 percent of the MFIP participants were residing in public housing. The small sample of public housing residents in the program and control groups eliminates the possibility of estimating the effects of MFIP separately for the public housing and voucher groups. Thus, the MFIP public housing and voucher recipients are grouped together into an "assisted housing" category for the purposes of this study. In contrast, it is possible to examine some impacts of the Connecticut program separately by type of housing assistance.

Measuring and Comparing Welfare Reform Impacts by Housing Assistance Status

A word is in order about the method applied for testing the impacts of the welfare reform initiatives on outcomes for the housing subgroups. Recall that the two evaluations used in this analysis are random assignment experiments in which welfare applicants and recipients were randomly allocated either to a *program group* that received a special welfare-to-work intervention or to a *control group* that did not. The "effects," or "impacts," of each welfare-to-work program are determined by comparing the average value on a specified outcome variable (say, earnings) for the program group with the average value for the control group. The difference in outcomes between the program group and the control group is the impact of the program. The control group outcomes by themselves represent what would have happened in the absence of the program. Since random assignment ensures that both the program group and the control group are, on average, alike in all respects other than exposure to the treatment being studied, the differences in outcomes can be attributed to different policies experienced by the program and the control groups.

In the context of experimental designs, it is reasonable to estimate impacts for any subgroup, as long as the groups are defined according to any characteristic measured prior to random assignment. This study combines BIF self-reports and HUD data to define the housing subgroups. The outcomes for program group members in each housing subgroup are compared with the outcomes for control group members in that same subgroup, applying the same regression-adjustment procedures and tests of statistical significance used in the larger evaluations. These regression-adjusted impact estimates control for the very small residual measured differ-

ences in sample members' pre-random assignment characteristics that were not eliminated by random assignment. This helps to improve the precision of the impact estimates.

The statistical significance of each impact estimate *within* each housing subgroup is computed by applying a two-tailed t-test to the difference in outcomes between the program group and the control group. However, to test for the statistical significance of the differences in impacts across housing subgroups requires an augmented equation. Specifically, the procedure involves adding interaction variables to the model to account for the possibility that the differences in impacts across housing status are due to measurable differences in the characteristics of people living in assisted and unassisted housing. For example, if the bigger impacts for the assisted housing subgroup derive partly from the fact that the sample members are somewhat more educated, and if the program in general has bigger impacts for more educated recipients, then controlling for education differences by housing types in interaction with program and control group status is necessary in order to get a better estimate of the difference in impacts arising specifically from differences in housing status. In this case, the *regression model* (also referred to as "conditional regression") is expanded to include interaction terms that interact the experimental group dummy variables with selected background variables on which there are notable differences between the housing subgroups prior to random assignment. These include race, age, education, marital status, prior welfare receipt, and prior earnings.

Housing Assistance and Self-Sufficiency Study

Table 2.1

Final Sample Sizes Based on the HUD Records Data and Baseline Information Forms, by Housing Assistance Status at Random Assignment and Treatment-Control Status

Evaluation	Public Housing (Includes Project-Based Section 8) #	%	Section 8 Vouchers #	%	Unsubsidized #	%	Total
Connecticut Jobs First							
Program group (Jobs First)	133	7.8	260	15.3	1,303	76.8	1,696
Control group (AFDC)	126	7.5	232	13.8	1,328	78.8	1,686
MFIP							
Program group (MFIP)	22	3.7	143	23.8	436	72.6	601
Control group (AFDC)	27	4.0	165	24.4	484	71.6	676

SOURCES: MDRC calculations from the HUD administrative data and BIF data.

NOTES: The MFIP sample includes members randomly assigned from April 1994 to March 1996.

The Jobs First sample includes sample members randomly assigned from January 1996 to February 1997.

Housing assistance status was determined based on the self-reported information from the Baseline Information Form and the HUD's administrative records data.

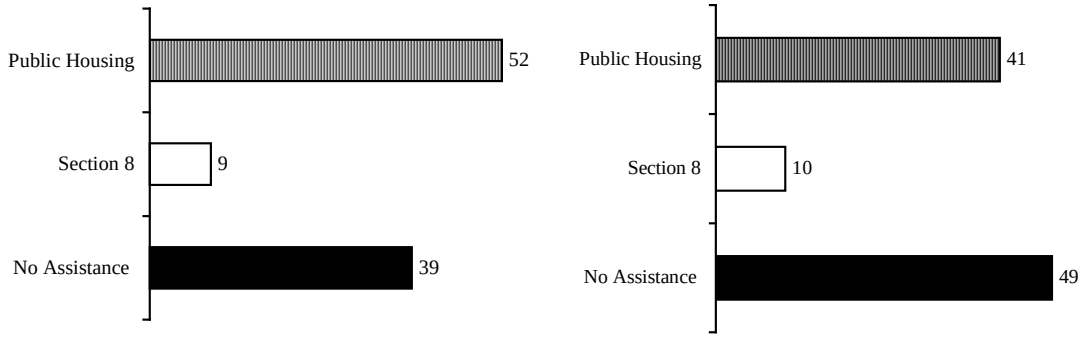
A total of 116 sample members from the Jobs First and MFIP evaluation that self-reported living in "Emergency/Temporary Shelter" at sample intake were excluded from this study.

Housing Assistance and Self-Sufficiency Study

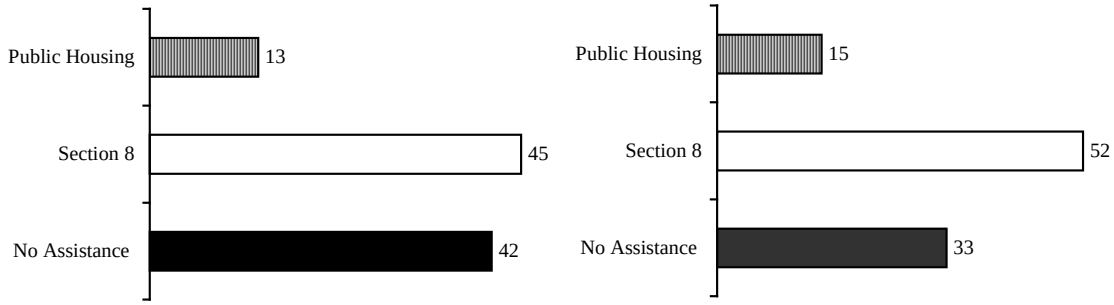
Figure 2.1
Correspondence Between HUD Records and Self-Reports on Housing Assistance Status at Sample Intake

Connecticut Jobs First **Minnesota Family Investment Program**

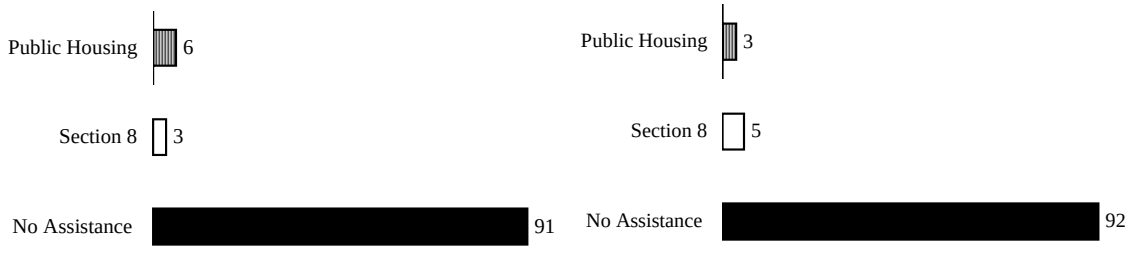
Panel A: Of all the respondents who said they were living in *public housing* at random assignment, percentage identified in HUD's records as receiving:



Panel B: Of all the respondents who said they were living in *Section 8* housing at random assignment, percentage identified in HUD's records as receiving:



Panel C: Of all the respondents who said they received *no federal housing assistance* at random assignment, percentage identified in HUD's records as receiving :



(continued)

Figure 2.1 (continued)

SOURCE: MDRC calculations using BIF data and HUD's administrative records.

NOTE: Housing assistance status was determined by a match between self-reported information from the Baseline Information Form and HUD's administrative records data (see Chapter 2 for details of the match performed between data sources).

Chapter 3

Impacts of Welfare Reform on Employment and Welfare Outcomes for Housing Subgroups

As in any voluntary program, the types of people who apply for and obtain housing assistance may be distinctive in important ways that also affect their likely success in the labor market. Thus, in considering the effectiveness — according to housing status — of the welfare reforms in the Connecticut Jobs First program and the Minnesota Family Investment Program (MFIP), it is important to ask first: Are welfare recipients who receive housing assistance more difficult (or less difficult) to employ than those without housing assistance, before they are even subject to the provisions of welfare reform? If clear, observable differences exist between the assisted and the unassisted subgroups, this would be one (though not the only) reason to hypothesize that those subgroups might respond differently to welfare reform. The chapter thus begins by exploring this question. It then turns to the comparison of impacts on key employment, earnings, welfare, and other income measures across the housing subgroups.

Characteristics of Assisted and Unassisted Recipients at Program Entry

As noted earlier, the Background Information Form (BIF) provides important information on the characteristics of program and control group members prior to random assignment. Figures 3.1[1] and 3.2 show how the different housing subgroups compare on a set of characteristics known to be associated with employment. A more complete set of comparisons is presented in Appendix Tables B.1 to B.3. The figures do not distinguish between the public housing and the Section 8 subgroups within the assisted housing subgroup, because of the small number of public housing residents in the MFIP sample;[2] however, a more detailed breakdown is possible for the Connecticut sample and is presented in Appendix Table B.3. Also note that the program and control groups are pooled for this particular analysis. Random assignment ensures (and this has been verified for these samples) that the individuals assigned to the two groups are comparable with regard to observable characteristics.

For the Jobs First sample, a mixed picture emerges. The housing subgroups appear to be very different with respect to their racial configuration and their prior welfare receipt. The subgroup with housing assistance includes a substantially smaller proportion of white, non-

[1]The table and figures for Chapter 3 begin on page 36.

[2]These sample sizes are shown in Table 2.1.

Hispanic recipients than the unassisted subgroup (27 percent versus 47 percent) and a higher proportion of longer-term welfare recipients (62 percent versus 21 percent). At the same time, the subgroups differ little on measures of prior employment and education (see also Appendix Table B.1). When different employment-related indicators are combined into an index of "extreme barriers to employment," there is some evidence to suggest that a higher proportion of the assisted subgroup is especially "hard-to-employ" (20 percent of the assisted recipients versus 8 percent of the unassisted recipients).[3]

Fewer differences are evident between the MFIP assisted and unassisted recipients, perhaps in part because the original sample includes only welfare receipts who received AFDC for at least two years by the time of random assignment. Figure 3.2 presents a few selected characteristics, similar to the ones shown for Jobs First.[4] Few differences stand out between the two housing subgroups. The racial/ethnic distributions look almost exactly the same, and so are the proportions on the education and employment measures shown in the figure. However, long-term welfare history (that is, received welfare for five years or more) is more pronounced among the assisted recipients — 68 percent, compared with 51 percent among the unassisted recipients.

Overall, the findings from the two studies suggest — as other studies have — that while welfare recipients who receive housing assistance *may* be a harder-to-employ group than those without assistance, this is not always the case, and it will vary by location.[5] In this study, there was some evidence of this pattern in the Connecticut sample but much less evidence of it in the Minnesota sample. But even in Connecticut, the differences in "employability" are not extreme. Assisted housing recipients were not consistently more disadvantaged across the full range of background indicators.[6] Nonetheless, it will be important to take the differences that do exist into account when interpreting the comparisons of impacts across the housing subgroups.

Impacts on Employment and Earnings

This section examines the effects, or impacts, of the Connecticut and Minnesota welfare reform programs on various employment-related outcome measures for the assisted and the unassisted housing subgroups. As previously mentioned, a program's impact refers to the *differ-*

[3]The index of extreme barriers to employment is based on the following measures: AFDC history, prior employment, and whether the sample member had a high school diploma or General Educational Development (GED) certificate. Those in the "extreme barriers" category were on welfare at least 22 months out of the 24 months prior to random assignment, had no prior work in the year before random assignment, and had no high school diploma or GED.

[4]An "extreme barriers to employment" scale could not be computed for the MFIP sample because of data limitations.

[5]See Riccio and Orenstein (2003) and Lee, Beecroft, Khadduri, and Patterson (2003).

[6]See Appendix Table B.3.

ence between the program group and the control group on a specified outcome measure, such as the rate of employment or average earnings, during a particular period of time after random assignment. The impact represents how much the intervention *changed* the outcome, on average, for the program group relative to what that group's experiences *would have been in the absence of the intervention* (as evidenced by the control group's outcomes).

Figure 3.3 illustrates the impacts of the Connecticut Jobs First program on quarterly employment rates during the four years after random assignment. The top panel shows the results for welfare recipients who were receiving any housing assistance when they entered the study (that is, the date of random assignment). The broken (or dashed) line tracks the outcome level for the "AFDC group" — that is, the control group — which did not get assigned to the Jobs First program. It shows the proportion of the AFDC group that was employed in the formal labor market during each quarter of the follow-up period. Employment was a little under 40 percent in the first quarter after random assignment for this group, and it increased to 53 percent (for reasons unrelated to the Jobs First program) over the 16 quarters of follow-up shown in the figure.

The solid line in Figure 3.3 shows the quarter-by-quarter employment rates for the Jobs First subgroup that received assisted housing at the time of entry into the study. Employment hovered around 51 percent in the first quarter after random assignment; by the last quarter of follow-up, employment had reached approximately 65 percent for the assisted Jobs First recipients. Thus, for the assisted housing sample, the Jobs First program caused quarterly employment rates to increase beyond what they would have been in the absence of the program. The size of the effect is illustrated by the difference between the two lines in the figure.

The story is different for the sample that was not receiving housing assistance at the point of entering the study. As the bottom panel of Figure 3.3 shows, the differences in employment trends between the Jobs First group and the AFDC group is much smaller than it was for the assisted housing subgroup. In other words, on this particular outcome measure, Jobs First was more effective for welfare recipients who lived in public housing or received other federal rent subsidies than it was for recipients who had no federal housing assistance. It is also noteworthy that while the Jobs First time limit took effect at about Quarter 7, the figure does not show very different impacts for either housing subgroup in the quarters before or immediately after the onset of the time limit.

Figure 3.4 illustrates the Connecticut program's impacts on average quarterly earnings. Once again, the gap between the Jobs First group's and the AFDC group's trend lines is larger for recipients who had housing assistance at the time of program entry (top panel) than for recipients who did not receive housing assistance (bottom panel), indicating a bigger effect for the assisted housing subgroup. Over time, the gap narrows for both subgroups, although a difference between them remains (see also Appendix Table B.4 for year-by-year impact estimates).

Figures 3.5 and 3.6 illustrate the impacts of the Minnesota program on the same quarterly employment and quarterly earnings outcome measures. As in Connecticut, the MFIP group's outcomes exceeded those of the AFDC group by a larger margin for the assisted housing subgroup (the top panel of each figure) than for the subgroup that had no housing assistance (the bottom panel of each figure).

Another way to view the programs' impacts on these measures is to take a cumulative perspective. Figure 3.7 shows the total impact on each of several outcome variables over the full follow-up period for the Connecticut and Minnesota samples. In each graph, the left-side (or shaded) bar displays the cumulative impact for the assisted housing subgroup, while the right-side (or white) bar does the same for the subgroup without housing assistance. For example, it can be seen from the Connecticut Jobs First results in the middle panel that the impact on average quarterly employment rate over four years was 14 percentage points for the assisted subgroup and only 6 percentage points for the unassisted subgroup.

Examining these cumulative four-year impacts for three employment-related outcome measures — ever employed, average total earnings, and average quarterly employment — reveals a consistent pattern: For both the Connecticut and the Minnesota samples, the welfare reform programs achieved a bigger positive impact for the assisted housing subgroup than for the unassisted subgroup. Indeed, in several cases, the program impacts for the subgroup with no housing assistance are fairly small or not statistically significant. For example, in Connecticut, the impact on average four-year earnings was $3,965 (statistically significant) for the assisted subgroup, compared with $1,658 (not statistically significant) for the unassisted subgroup — a difference of $2,307. In other words, the impact for the assisted subgroup was more than twice as big as the impact for the unassisted subgroup. In Minnesota, the disparity is even larger: Over the three-year follow-up period, the MFIP impact is $5,473 (statistically significant) for the assisted subgroup versus only $603 (not statistically significant) for the unassisted subgroup — a difference of $4,870. (For more detailed impact findings on employment and earnings measures, see Appendix Tables B.4 and B.5.)

Further statistical tests were conducted to determine whether the *differences in impacts* between the housing subgroups for average quarterly employment rates, average earnings, and average income are statistically significant (see Appendix Table B.6). For both these variables, the Minnesota cross-subgroup differences are statistically significant, as is the Connecticut cross-subgroup impact difference on quarterly employment rates. These findings — plus the overall pattern in both the Connecticut and the Minnesota samples according to which larger and statistically significant impacts are more frequently observed across a range of variables for the assisted subgroups than for the unassisted subgroups — add confidence to the overall conclusion that these two welfare reform initiatives were more successful in improving employment-related outcomes for welfare recipients who had housing assistance.

So far, this analysis has examined impacts for assisted housing subgroups that include individuals who either lived in public housing or used Section 8 vouchers. It is also important to consider whether the impacts differ for those two very different types of housing assistance. The number of public housing residents in the Minnesota sample is too small to permit such analysis for MFIP, but it can be done for the Connecticut sample, and the results are presented in Figure 3.8. It should be noted that, for this analysis, the sample members living in project-based Section 8 housing were combined with those in public housing.

It appears that the impact of Connecticut Jobs First was similar for the two different housing assistance subgroups. For example, the impact on four-year average earnings was $3,564 for the public housing subgroup and $3,368 for the voucher subgroup — a difference of only $196 over the entire follow-up period. However, while the impacts are not statistically significant for either group (perhaps because of relatively small sample sizes), they well exceeded the impacts observed for the unassisted subgroup. (See Appendix Table B.7 for details.)[7]

Finally, on a methodological note, it is important to recognize that this study uses a conservative definition of housing assistance by focusing on sample members whose self-reported housing assistance status matched the HUD data. While this approach provides a high degree of assurance that the classification of these sample members according to their housing status is correct, it is at the cost of losing sample points for the analysis. To address the concern that the reduced, "matched" sample could possibly result in biased estimates, sensitivity tests were conducted to see whether the impact findings were affected by the classification of residents into housing subgroups using either HUD data or just self-reports. As discussed in detail in Appendix C, the different definitions did not change the overall pattern of results across the assisted and unassisted housing subgroups. Further, the impacts are generally the largest in the most conservative classification scheme.[8]

Impacts on Welfare Payments

As welfare recipients move from welfare to work, usually their earnings eventually replace some or all of their welfare benefits. However, because both the Connecticut and the Minnesota welfare reforms included enhanced earnings disregards that made it easier for recipi-

[7]The difference in the earnings impacts for the housing assistance subgroups is also not statistically significant. However, when average quarterly employment is used as the outcome measure, the difference in the impacts is statistically significant.

[8]It is possible that the misclassification of recipients' housing assistance status obscures or dilutes the relationship being studied. Focusing on the matched sample eliminates or reduces the possibility of such classification errors. It is also worth noting, however, that the statistical significance of the impact findings did not vary that much by classification scheme but that the magnitude of the findings did, possibly as a result of classification errors.

ents to combine work and welfare, the programs tended to increase rather than decrease the amount of cash assistance that sample members received relative to the amounts received by the control groups. For the Connecticut Jobs First group, however, the opportunity to combine work and welfare was limited by the 21-month time limit on receipt of welfare benefits. Thus, the short-term gain in welfare benefits that was experienced by the program group relative to the control group as a result of the new financial incentive to work was followed by the opposite effect — a relative loss in welfare income — beginning around the third year of follow-up, after the time limit took effect.

Figure 3.9 shows that this pattern in Connecticut generally held true for both the assisted and the unassisted housing subgroups: The Jobs First welfare payment trend line is higher than the trend line for the AFDC group at first, but then it falls below that line after about the eighth follow-up quarter. As shown in Figure 3.10, the cumulative impact on welfare payments is small and not statistically significant for either housing subgroup.

More of a distinction is revealed, however, when the public housing and Section 8 voucher samples are separated, as illustrated in Figure 3.11. The impact on AFDC/TFA payments, although not statistically significant, is almost twice as large for the public housing subgroup as it is for the Section 8 voucher and the unassisted housing subgroups.

The story is different in Minnesota, which, again, included a financial incentives component but no time limit on welfare benefits. MFIP caused welfare payments (which included a cash-out of food stamps) to increase for the program group relative to the control group for most of the follow-up period, but the effect was more pronounced for the unassisted housing subgroup (see Figure 3.12). The cumulative impact on welfare payments was $1,739 (statistically significant) for the subgroup with no housing assistance, compared with $939 (not statistically significant) for the subgroup with housing assistance — a difference of $800 (Figure 3.10). (For more detailed impact findings on welfare measures, see Appendix Table B.5.)

Impacts on Combined Income from Earnings, Welfare, and Food Stamps

A rough measure of sample members' income can be obtained by adding the value of welfare payments and food stamps to earnings. Although this measure does not include other important sources of income (such as the Earned Income Credit [EIC]), or important work-related costs (such as transportation, child care, and taxes), it does provide a more complete picture of how the welfare reform programs affect individuals' economic well-being than any of the measures does in isolation.

On this composite measure, the Connecticut and Minnesota programs follow the now-familiar pattern of producing larger impacts for recipients in assisted housing than for recipients with no housing assistance (Figures 3.13 and 3.14). Connecticut Jobs First produced a cumulative gain in income (relative to the AFDC control group) for the housing assistance subgroup that was more than twice the size of the gain produced for the subgroup with no housing assistance, as illustrated in the bottom panel of Figure 3.10 ($4,703 versus $2,321 over the four years of follow-up). (The impact on income was somewhat higher for the public housing subgroup than for the Section 8 voucher subgroup, as show in the bottom panel of Figure 3.11.)

In Minnesota, the difference is even more striking. For the assisted housing subgroup, MFIP produced an increase on the combined average income measure of $6,412 over nearly three years of follow-up, compared with $2,342 for the unassisted subgroup — almost three times as large (bottom panel of Figure 3.10).

Interpreting the Overall Pattern of Impact Findings

The overall pattern of findings reported so far showing that welfare reform efforts tend to produce larger impacts on employment, earnings, and measured income are generally consistent with findings reported previously for welfare-to-work programs in Atlanta and Columbus,[9] for an earlier analysis of MFIP using only self-reported information on housing status,[10] and for one cohort studied as part of a welfare reform initiative in Indiana.[11] But what accounts for this pattern of findings? Unfortunately, this study can offer no definitive answer. However, a number of possible explanations are worth considering.

One explanation is simply that the types of people who receive housing assistance are different to begin with from those not receiving housing assistance, in ways that make them more susceptible to responding to and benefiting from welfare reform initiatives. An attempt to test this hypothesis involved computing *conditional* impact estimates on several outcome measures (quarterly employment rates, average earnings, and average measured income), which reveal the variation in impacts across the assisted and unassisted housing subgroups *after* controlling for differences across those subgroups in important measured background characteristics. If these measured differences in the types of people who received housing assistance matter, there would be little difference in the impacts for the housing subgroups after they were statistically controlled. But this was not the result. In fact, the differences in impacts across the assisted and unassisted housing subgroups after introducing these controls look very much like the previously observed "unconditional" differences in impacts across the housing subgroups. (See Fig-

[9]Riccio and Orenstein (2003).
[10]Miller (1998).
[11]Lee, Beecroft, Khadduri, and Patterson (2003).

ure 3.15 and Appendix Table B.6.) It is possible, of course, that unmeasured differences between people with and without housing assistance might still be contributing to the variation in impact findings, and this potential explanation cannot be ruled out.

Even among the "same" types of people, it is possible that the response to welfare reform efforts will vary depending on their housing status. For example, if, as many believe, housing assistance depresses work efforts because of the rent formula through which extra income due to earnings is "taxed" at 30 percent, it may be that the participation mandates, encouragement, and opportunities for assistance function to counteract the negative effect of the rent rules faced by the assisted housing subgroup, thus producing a bigger impact on employment and earnings than is observed for the unassisted subgroup, which faces no housing-based financial disincentive to work. It is important to recall from Chapter 1, however, that the evidence that housing assistance actually depresses work effort is less than certain.

Although this study cannot directly test whether a disincentive effect of assisted housing is directly counteracted by the opportunities and obligations offered by the welfare reform initiatives, it can shed light on changes in the use of employment-related services and activities across the assisted and unassisted housing subgroups. MDRC's main analysis of the overall implementation of Jobs First found that the program group heard a substantially different message from the welfare system than did the AFDC group.[12] The message for Jobs First participants was more strongly focused on employment and moving to self-sufficiency. As noted in the original report, staff urged them to find a job quickly and explained that doing so would improve their financial situation. At the same time, owing to several features of the program design, there was relatively limited contact between clients and staff — and thus relatively few opportunities to reinforce this program message. Nonetheless, the final report for Jobs First evaluation finds that program group members were significantly more likely than their AFDC counterparts to participate in job search activities during the study period.

Using data from the Connecticut evaluation's client survey,[13] it is possible to compare the rates of participation in employment-related activities within a three-year follow-up period for the assisted and the unassisted housing subgroups. Table 3.1 shows that members of both subgroups were quite likely to report that they had participated in at least one employment-related activity during the three years of follow-up. However, Job First increased this participation by a larger margin for the assisted housing subgroup: The program produced an impact of 20 percentage points for the assisted housing subgroup, compared with an impact of 11 percentage points for the unassisted subgroup. This overall difference in participation impacts appears

[12]Bloom et al. (2002).

[13]See Chapter 4 for more detail on the administration of this survey. It should be noted that these estimates are subject to recall error, particularly for activities that occurred soon after random assignment. Thus, there may be some undercounting of participation, and the program-control group differentials may be conservative estimates.

to have been driven largely by impacts on participation in job search activities, where Jobs First raised participation by 24 percentage points for the assisted subgroup, compared with 16 percentage points for the unassisted subgroup. Consistent with the employment focus of Jobs First, the program had little effect on the use of education-related activities.

The differences in job search participation impacts, through modest, may be part of the reason why employment and earnings impacts were larger for the assisted housing subgroup. However, why the participation impacts themselves were greater remains an open question, of course.

Another reason why the housing assistance subgroup might have had better employment impacts than those without housing assistance concerns the role that housing assistance might play in fostering conditions that encourage or help people take advantage of opportunities offered by welfare-to-work programs. As previously mentioned, some experts believe that, among similar types of people, the greater housing stability, lower likelihood of suffering from an excessive rent burden, and lower likelihood of household crowding that can result from housing assistance might make it easier to prepare for and hold a job.[14] If so, the welfare recipients with assisted housing may be better poised to benefit from a welfare-to-work intervention than those without housing assistance. This report can offer no evidence to support or challenge this speculation.

Finally, it is worth considering whether residential location could account for the observed differences in program impacts. Residential location may greatly shape access to employment opportunities, and housing subsidies in the form of Section 8 assistance may provide housing options closer to place of employment and job growth. While this study is not able to test for the effects of location, the existing research does not provide clear, compelling evidence on the relationship between place of residence and economic self-sufficiency. Research on the experience of Chicago families in the Gautreaux housing experiment suggests that moves to suburban locations may increase employment rates.[15] However, the Moving to Opportunity experiment, which provided vouchers to the treatment group in order to rent in places of low poverty, does not show any meaningful differences in employment across the treatment and comparison groups in the short run — that is, two years after random assignment.[16] Also, previous research on MFIP was not able to uncover large differences in the residential patterns of the assisted and unassisted groups, and accounting for the effects of location did not reduce the assisted-unassisted differential.[17]

[14]Sard and Waller (2002).
[15]Rosenbaum (1995).
[16]Del Conte and Kling (2001).
[17]Miller (1998).

Housing Assistance and Self-Sufficiency Study

Table 3.1

Three-Year Impacts on Participation, by Housing Assistance Status at Sample Intake, Connecticut Jobs First Program

	Assisted (Includes Public Housing and Section 8)				Unassisted			
Activity	**Jobs First**	**AFDC**	**Impact**	**Percentage Change**	**Jobs First**	**AFDC**	**Impact**	**Percentage Change**
Ever participated in:								
Any employment-related activity (%)	65.1	45.4	19.7 ***	43.5	60.9	49.6	11.2 ***	22.6
Any job search activity (%)	44.9	21.1	23.8 ***	112.5	35.5	19.8	15.6 ***	78.8
Job club (%)	40.4	18.5	22.0 ***	119.0	27.2	13.7	13.5 ***	98.4
Independent job search (%)	11.1	4.7	6.4 **	135.9	7.1	3.0	4.1 ***	136.7
Any education or training activity (%)	31.0	28.9	2.1	7.3	38.2	32.8	5.4 **	16.3
Basic education (%)	13.1	11.5	1.6	14.0	12.0	12.4	-0.4	-3.3
ABE or GED classes (%)	11.4	9.9	1.5	15.1	8.7	9.8	-1.1	-11.6
ESL classes (%)	2.0	1.7	0.4	21.8	3.9	2.8	1.0	36.4
College (%)	6.8	5.2	1.5	29.1	13.9	9.6	4.3 **	44.9
Vocational training (%)	16.3	17.2	-0.9	-5.2	18.2	15.4	2.9	18.7
Sample size	260	226			655	612		

SOURCES: MDRC calculations using the Connecticut's Three-Year Client Survey, BIF data, and HUD's administrative records.

NOTES: The Connecticut sample includes single parents randomly assigned from January 1996 to February 1997.

Housing assistance status was determined based on the self-reported information from the Baseline Information Form and HUD's administrative records data (see Chapter 2 for further details).

Although the respondents chosen from the survey were selected at random, a subset of the sample was over-sampled. For this reason, a weight was constructed to make the survey sample more representative of the full sample (see Bloom et al., 2002).

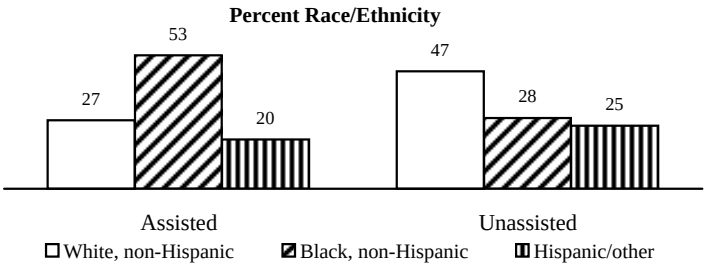
Estimates were adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members.

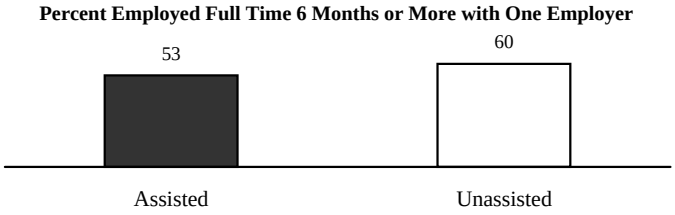
A two-tailed t-test was applied to differences between the research groups. Statistical significance levels are indicated as *** = 1 percent, ** = 5 percent, and * = 10 percent.

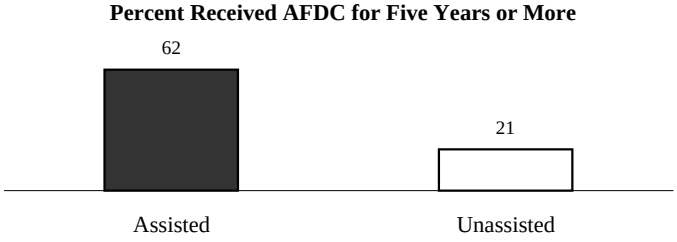
Rounding may cause slight discrepancies in the calculation of sums and differences.

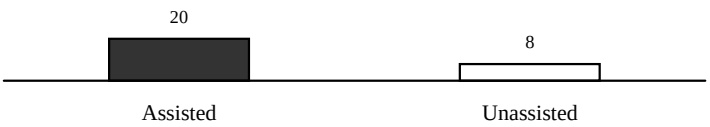
Housing Assistance and Self-Sufficiency Study

Figure 3.1
Selected Characteristics of Recipients Prior to Random Assignment, Connecticut Jobs First Program









(continued)

Figure 3.1 (continued)

SOURCES: MDRC calculations using BIF data and HUD's administrative records.

NOTES: The Jobs First sample includes 3,382 single parents randomly assigned from January 1996 to February 1997.

Housing assistance status was determined based on the self-reported information from the Baseline Information Form and HUD's administrative records data (see Chapter 2 for further details).

Invalid or missing values are not included in individual variable distributions.

Rounding may cause slight discrepancies in the calculation of sums and differences.

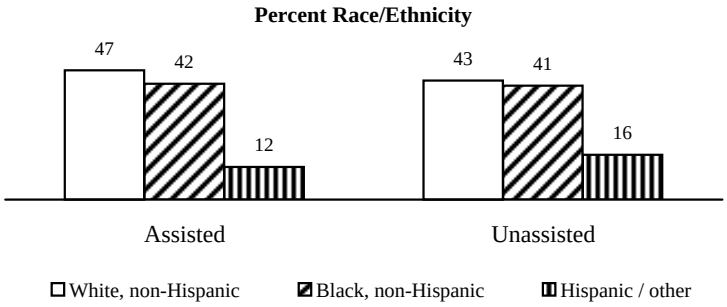
The General Educational Development (GED) certificate is given to those who pass the GED test and is intended to signify knowledge of basic high school subjects.

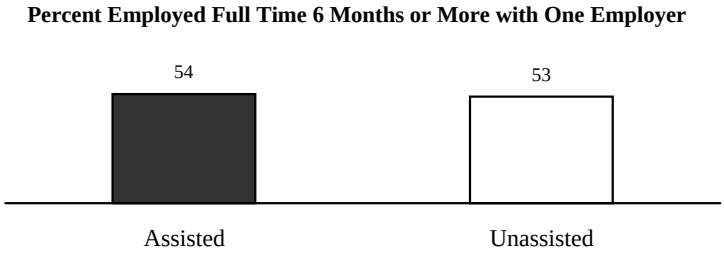
The AFDC receipt refers to the total number of months an individual or her spouse has spent on AFDC at one or more periods of time as an adult. It does not include AFDC receipt under a parent's name.

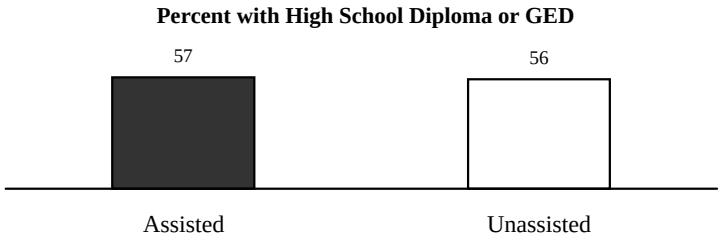
Housing Assistance and Self-Sufficiency Study

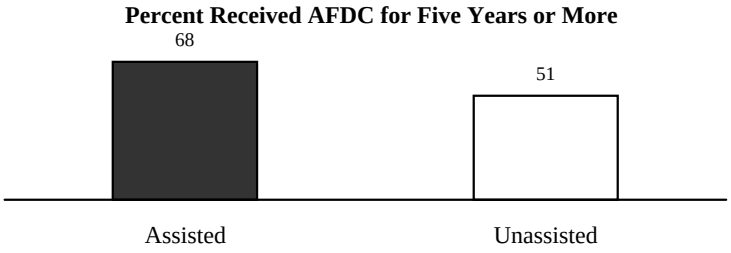
Figure 3.2

Selected Characteristics of Recipients Prior to Random Assignment, Minnesota Family Investment Program









(continued)

Figure 3.2 (continued)

SOURCES: MDRC calculations using BIF data and HUD's administrative records.

NOTES: The MFIP sample includes 1,277 members randomly assigned from April 1994 to March 1996.

Housing assistance status was determined based on the self-reported information from the Baseline Information Form and HUD's administrative records data (see Chapter 2 for further details).

Invalid or missing values are not included in individual variable distributions.

Rounding may cause slight discrepancies in the calculation of sums and differences.

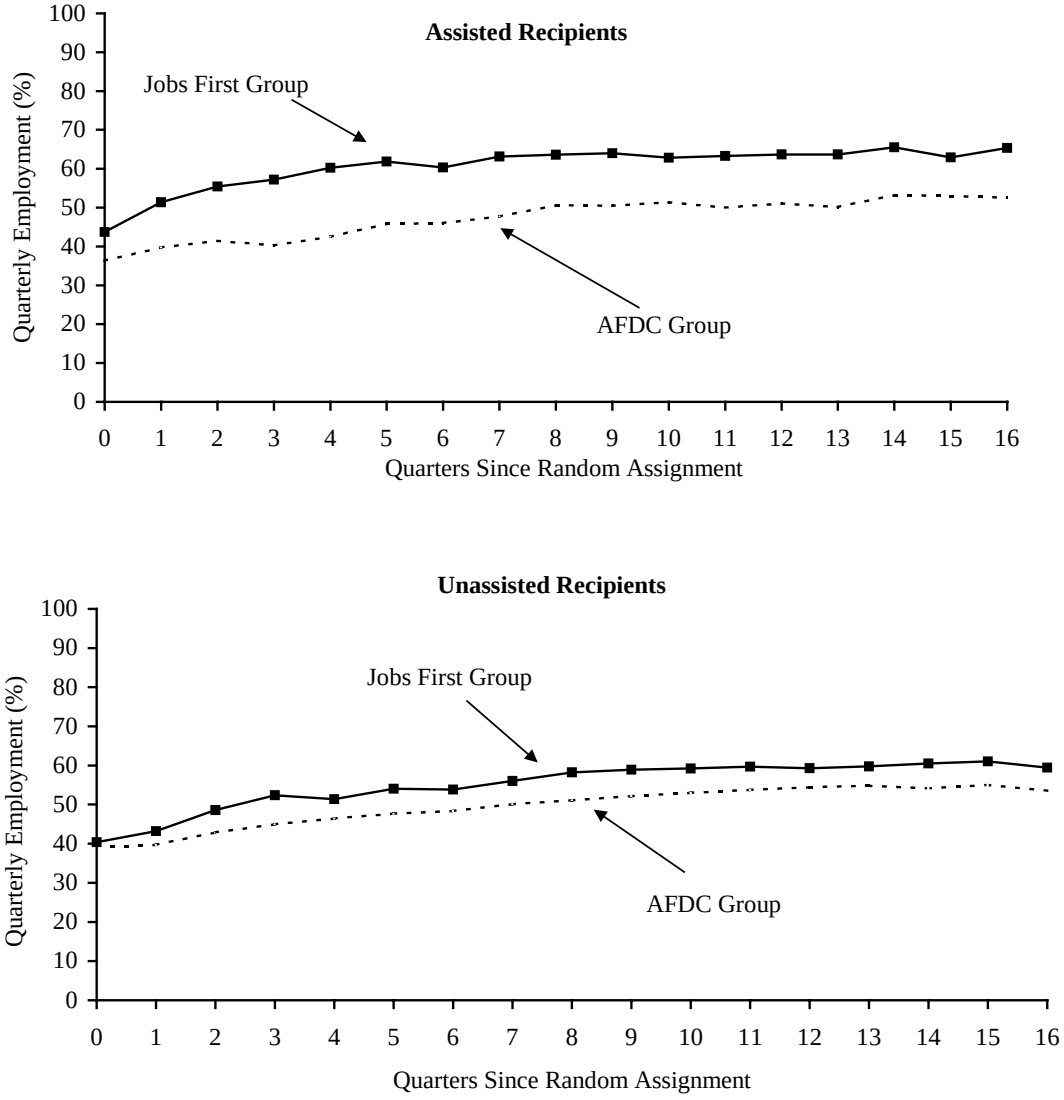
The General Educational Development (GED) certificate is given to those who pass the GED test and is intended to signify knowledge of basic high school subjects.

The AFDC receipt refers to the total number of months an individual or her spouse has spent on AFDC at one or more periods of time as an adult. It does not include AFDC receipt under a parent's name.

Housing Assistance and Self-Sufficiency Study

Figure 3.3

Quarterly Employment for Jobs First and AFDC Groups, by Housing Assistance Status at Sample Intake, Connecticut Jobs First Program



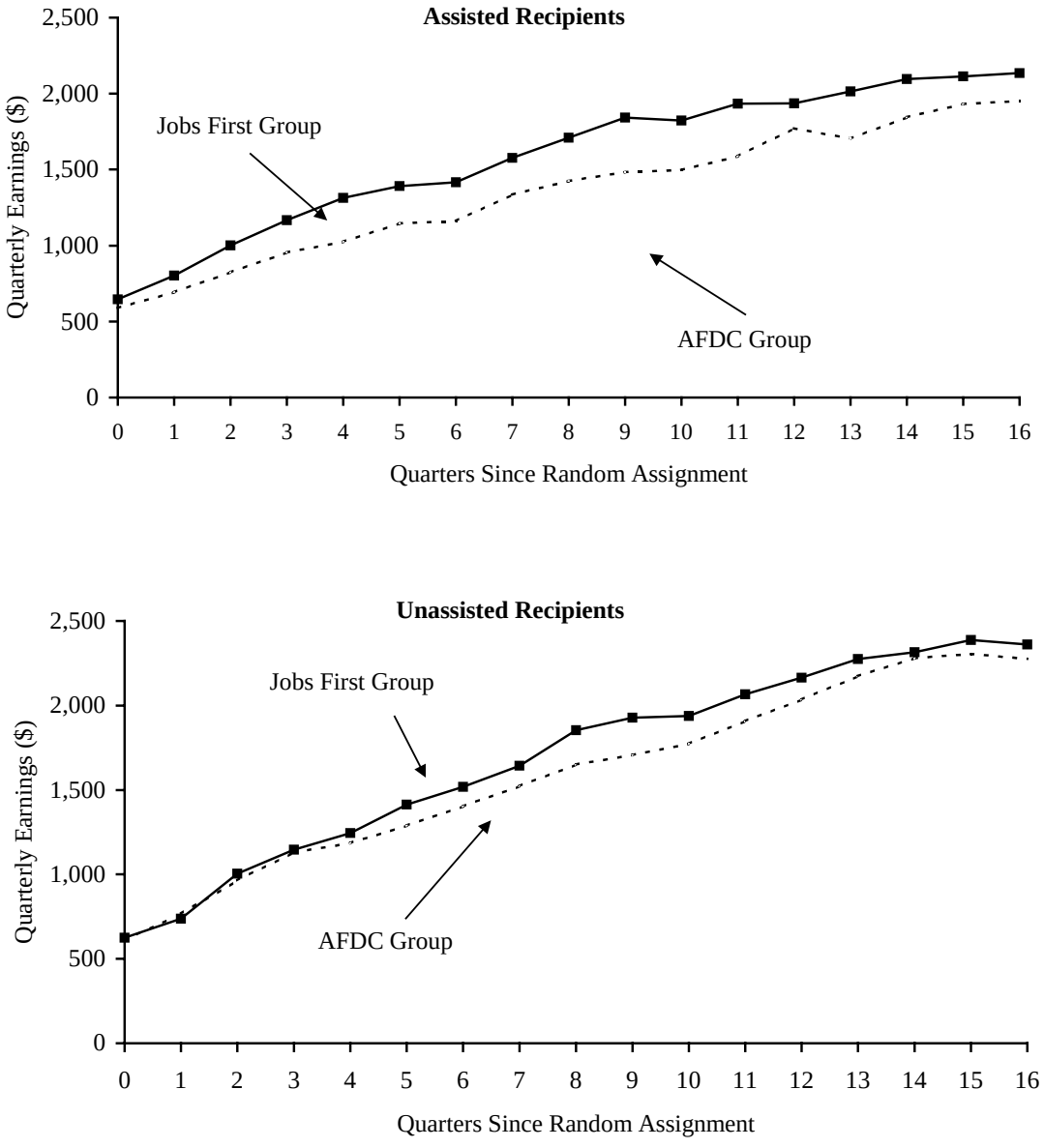
SOURCE: MDRC calculations using Connecticut UI records.

NOTE: Estimates were adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members.

Housing Assistance and Self-Sufficiency Study

Figure 3.4

Quarterly Earnings for Jobs First and AFDC Groups, by Housing Assistance Status at Sample Intake, Connecticut Jobs First Program



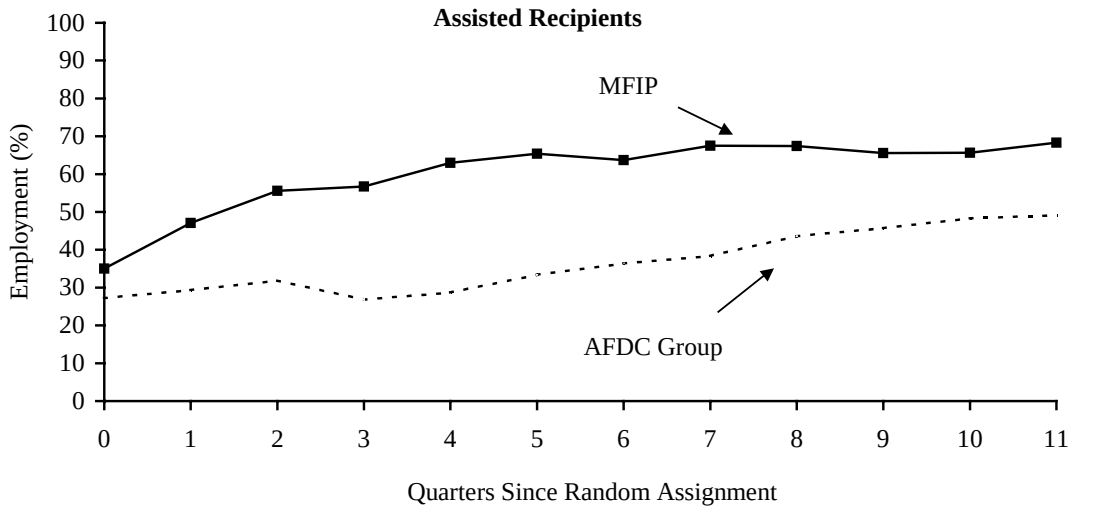
SOURCE: MDRC calculations using Connecticut UI records.

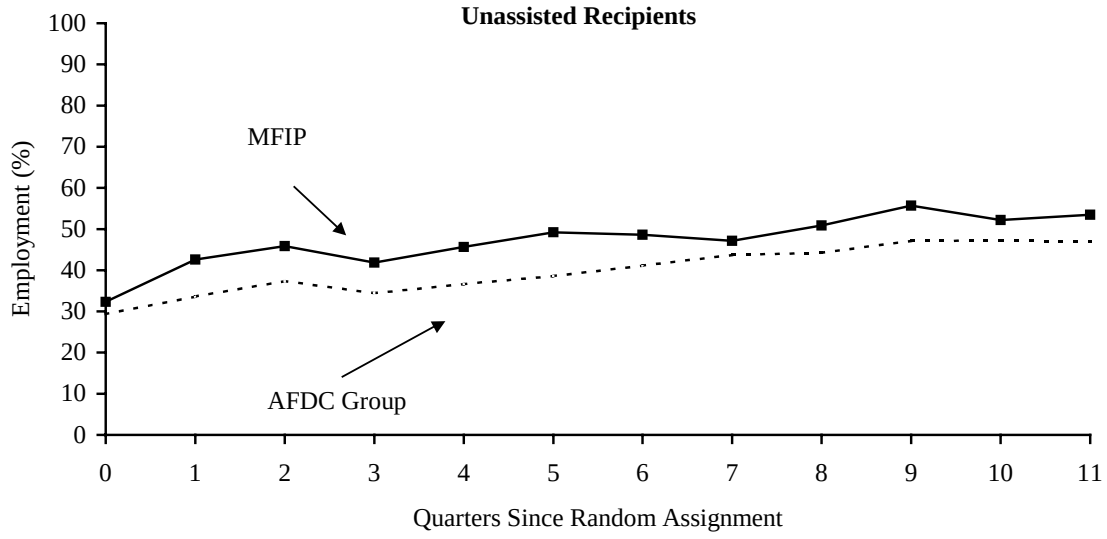
NOTE: Estimates were adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members.

Housing Assistance and Self-Sufficiency Study

Figure 3.5

Quarterly Employment for MFIP and AFDC Groups, by Housing Assistance Status at Sample Intake, Minnesota Family Investment Program





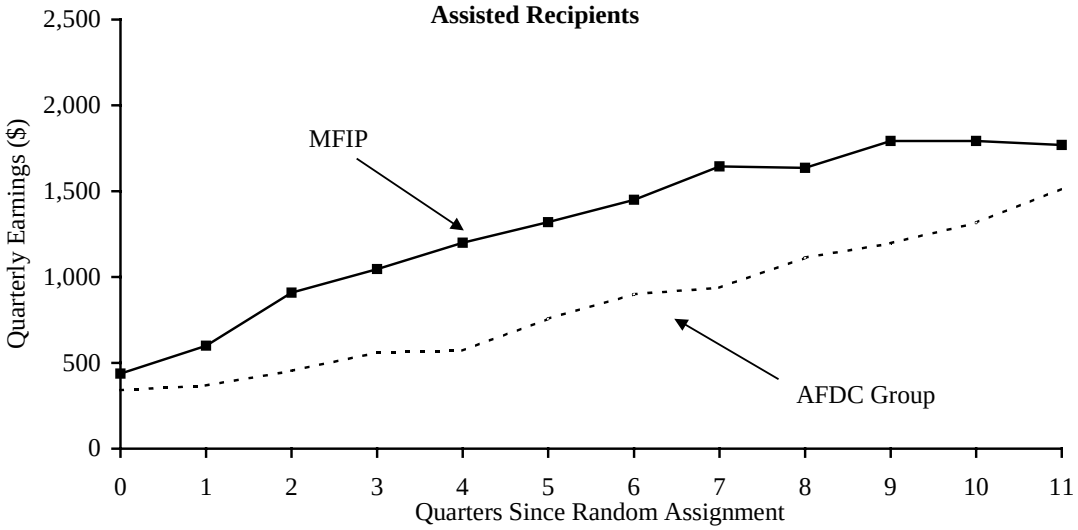
SOURCE: MDRC calculations using Minnesota's UI records.

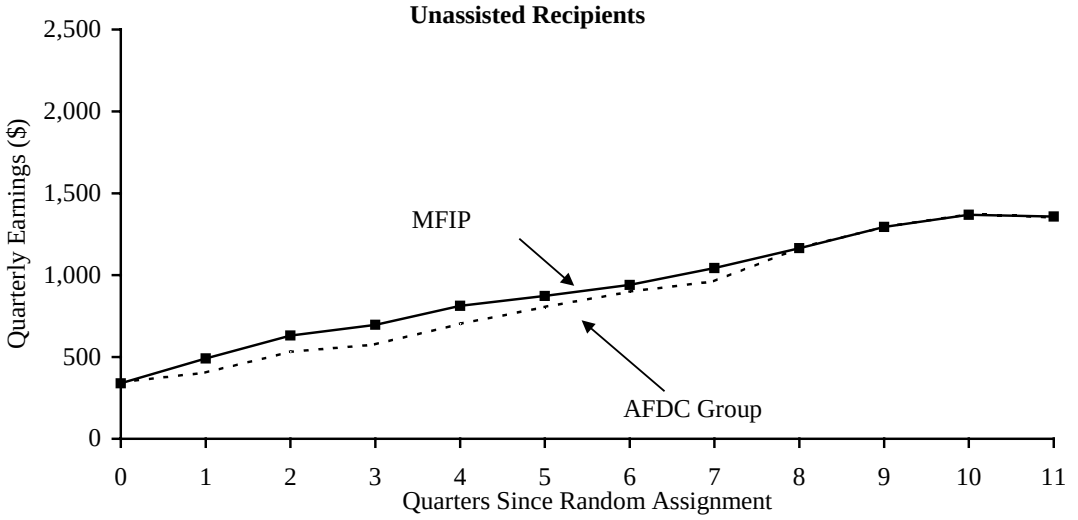
NOTE: Estimates were adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members.

Housing Assistance and Self-Sufficiency Study

Figure 3.6

Quarterly Earnings for MFIP and AFDC Groups, by Housing Assistance Status at Sample Intake, Minnesota Family Investment Program





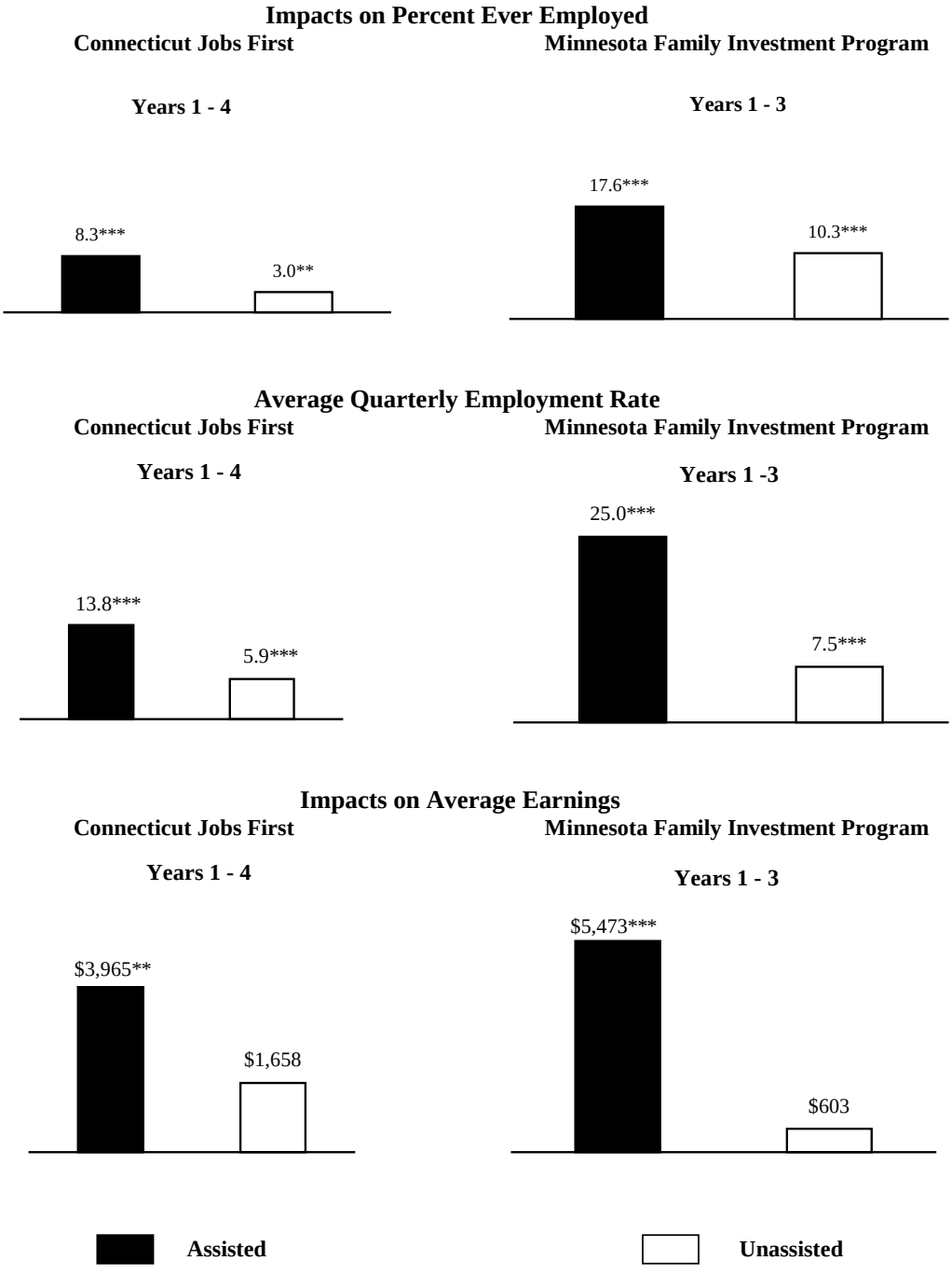
SOURCE: MDRC calculations using Minnesota's UI records.

NOTE: Estimates were adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members.

Housing Assistance and Self-Sufficiency Study

Figure 3.7

Program Impacts on Recipients' Employment and Earnings



(continued)

Figure 3.7 (continued)

SOURCES: MDRC calculations using Unemployment Insurance (UI) earning records, BIF data, and HUD's administrative records.

NOTES: Dollar averages include zero values for sample members who were not employed. Estimates were adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members.

A two-tailed t-test was applied to differences between the research groups. Statistical significance levels are indicated as ***=1 percent, **=5 percent, and *=10 percent.

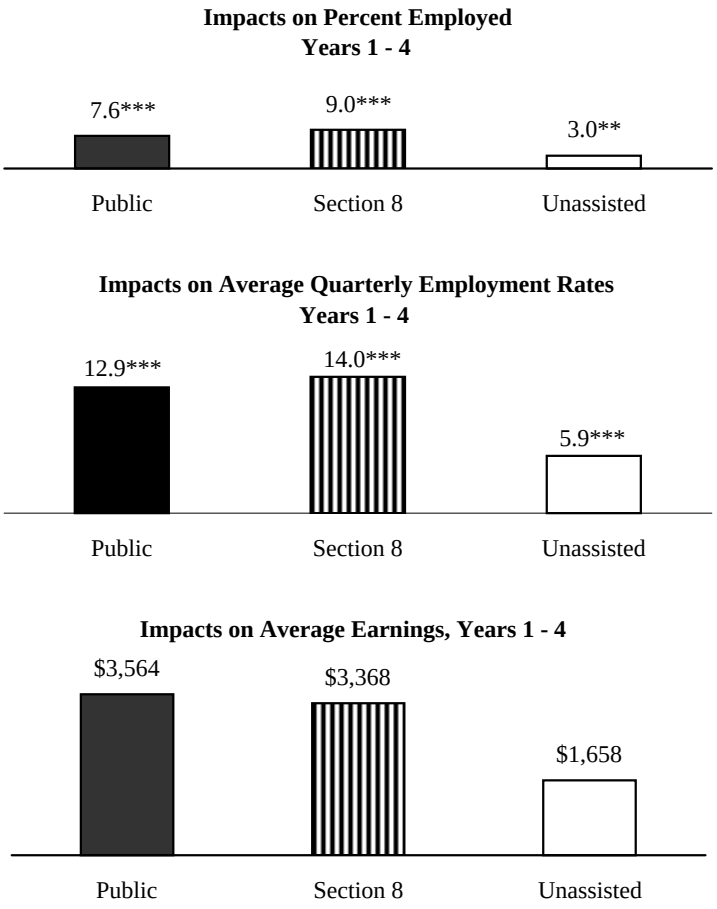
MFIP employment and earnings data are only available for the first four quarters of Years 1 and 2 and for the first three quarters of Year 3. In other words, Quarter 4 of Year 3 is not included in the analysis.

In Jobs First, a total of 20 sample members were excluded from these measures because data for the last quarter of the follow-up period were not available for them.

Housing Assistance and Self-Sufficiency Study

Figure 3.8

Program Impacts on Recipients' Employment and Earnings, by Type of Housing Assistance, Connecticut Jobs First Program



SOURCES: MDRC calculations using Connecticut Unemployment Insurance (UI) earning records, BIF data, and HUD's administrative records data.

NOTES: Dollar averages include zero values for sample members who were not employed. Estimates were adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members.

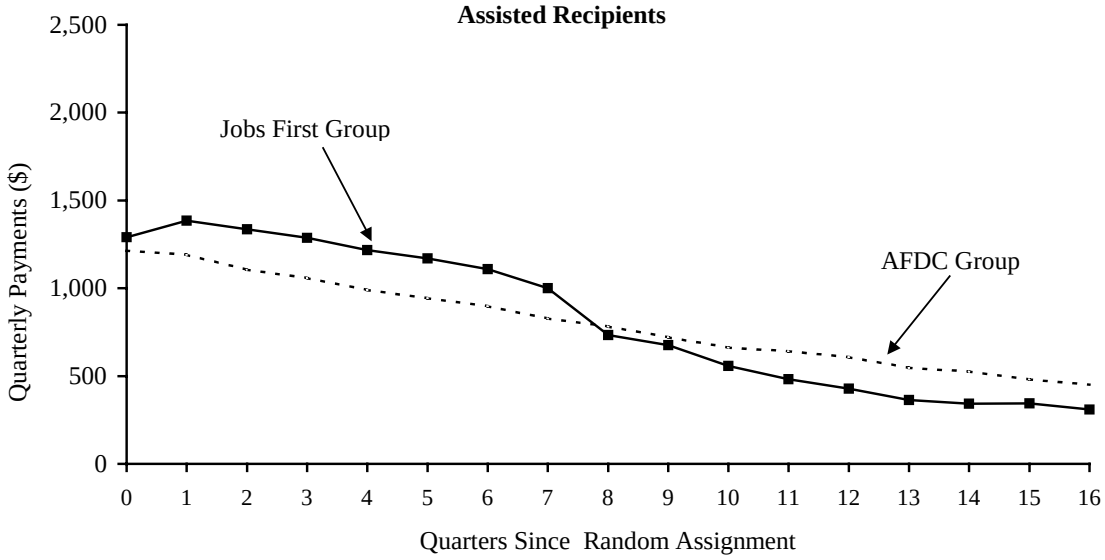
A two-tailed t-test was applied to differences between the research groups. Statistical significance levels are indicated as ***=1 percent, **=5 percent, and *=10 percent.

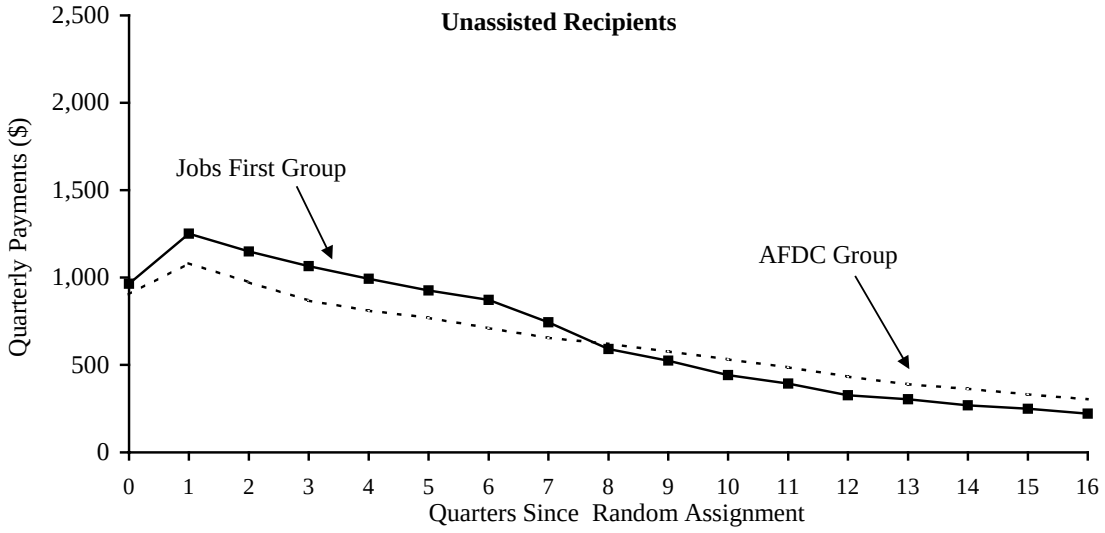
A total of 20 sample members were excluded from measures involving Year 4 because UI earnings data for the last quarter of the follow-up period were not available for them.

Housing Assistance and Self-Sufficiency Study

Figure 3.9

Quarterly AFDC/TFA Benefit Amounts for Jobs First and AFDC Groups, by Housing Assistance Status at Sample Intake, Connecticut Jobs First Program





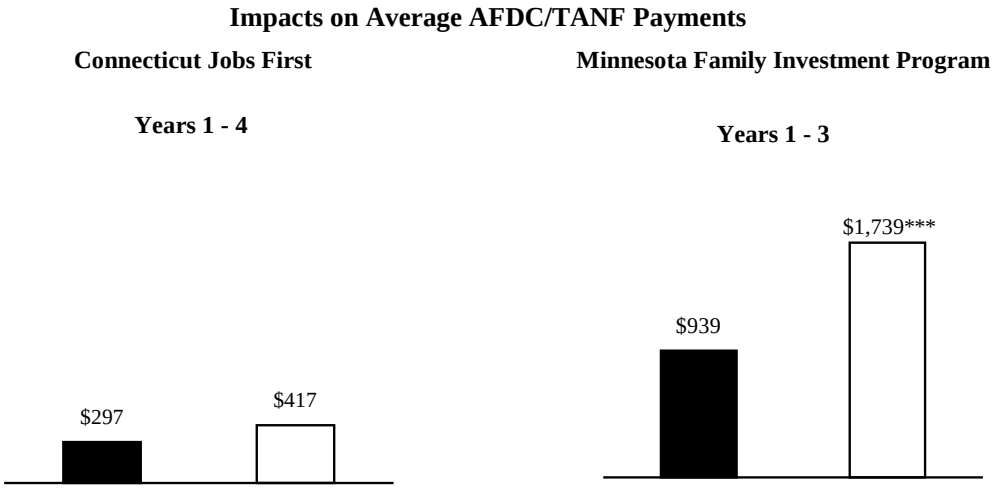
SOURCES: MDRC calculations using Connecticut AFDC/TFA records.

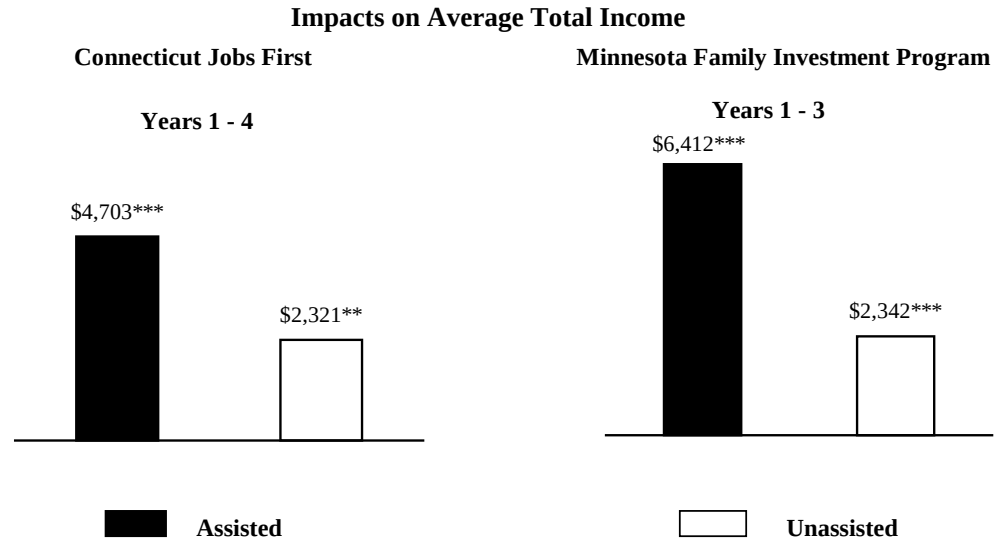
NOTES: Estimates were adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members.

Housing Assistance and Self-Sufficiency Study

Figure 3.10

Program Impacts on Recipients' Welfare Payments and Income





(continued)

Figure 3.10 (continued)

SOURCES: MDRC calculations from administrative records data sources, which combines UI-reported earnings, TANF payments, and Food Stamp benefits.

NOTES: Dollar averages include zero values for sample members who were not employed or were not receiving AFDC/TANF or Food Stamps. Estimates were adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members.

A two-tailed t-test was applied to differences between the research groups. Statistical significance levels are indicated as **=1 percent, **=5 percent, and *=10 percent.

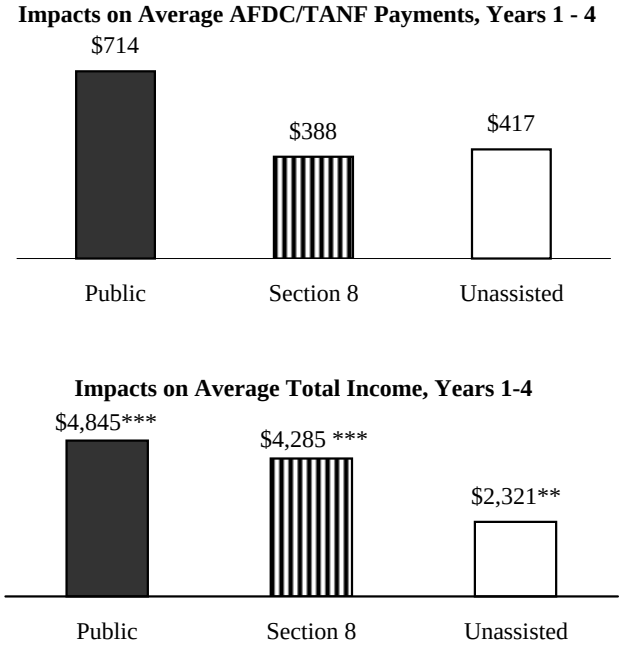
MFIP employment and earnings data are only available for the first four quarters of Years 1 and 2 and for the first three quarters of Year 3. In other words, Quarter 4 of Year 3 is not included in the analysis.

In Jobs First, a total of 20 sample members were excluded from these measures because data for the last quarter of the follow-up period were not available for them.

Housing Assistance and Self-Sufficiency Study

Figure 3.11

Program Impacts on Recipients' Welfare Payments and Income, by Type of Housing Assistance, Connecticut Jobs First Program



SOURCES: MDRC calculations using Connecticut Unemployment Insurance (UI) earning records, Connecticut AFDC/TFA records, Food Stamp records, BIF data, and HUD's administrative records data.

NOTES: Dollar averages include zero values for sample members who were not employed or were not receiving AFDC/TANF or Food Stamps. Estimates were adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members.

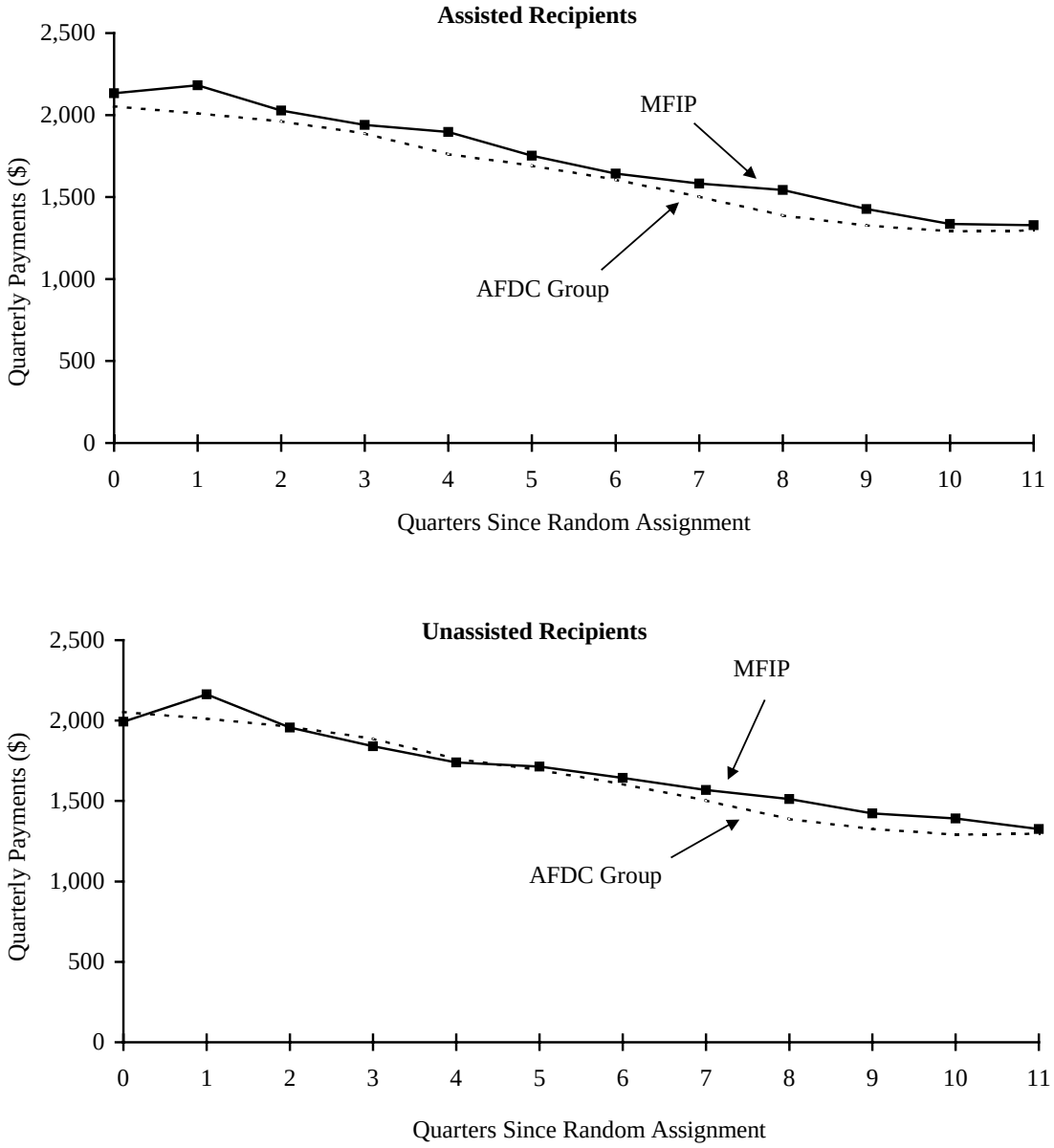
A two-tailed t-test was applied to differences between the research groups. Statistical significance levels are indicated as ***=1 percent, **=5 percent, and *=10 percent.

A total of 20 sample members were excluded from measures involving Year 4 because UI earnings data for the last quarter of the follow-up period were not available for them.

Housing Assistance and Self-Sufficiency Study

Figure 3.12

Quarterly Benefit Amounts for MFIP and AFDC Groups, by Housing Assistance Status at Sample Intake, Minnesota Family Investment Program



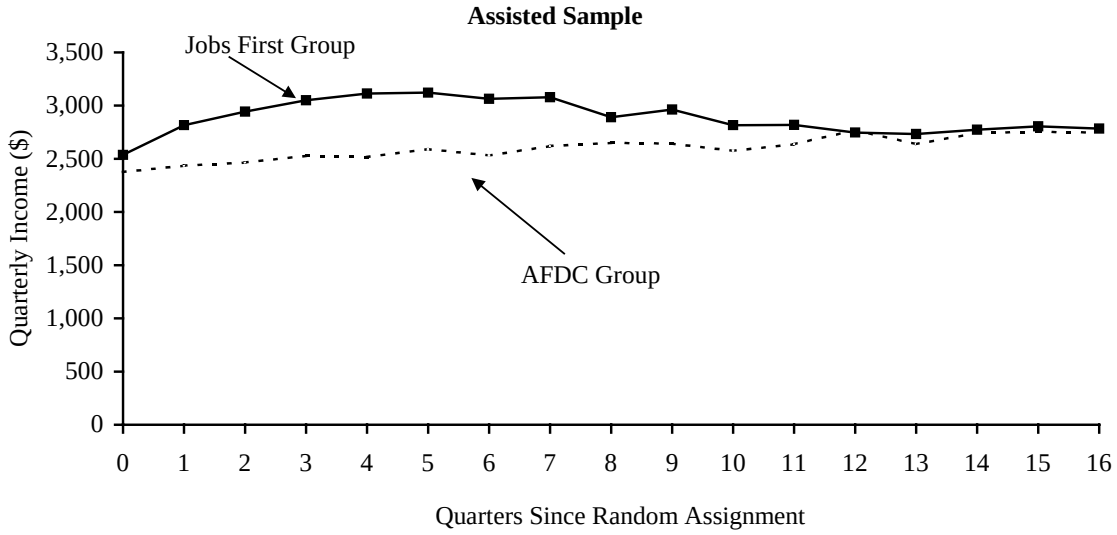
SOURCE: MDRC calculations using Minnesota's public assistance benefit records.

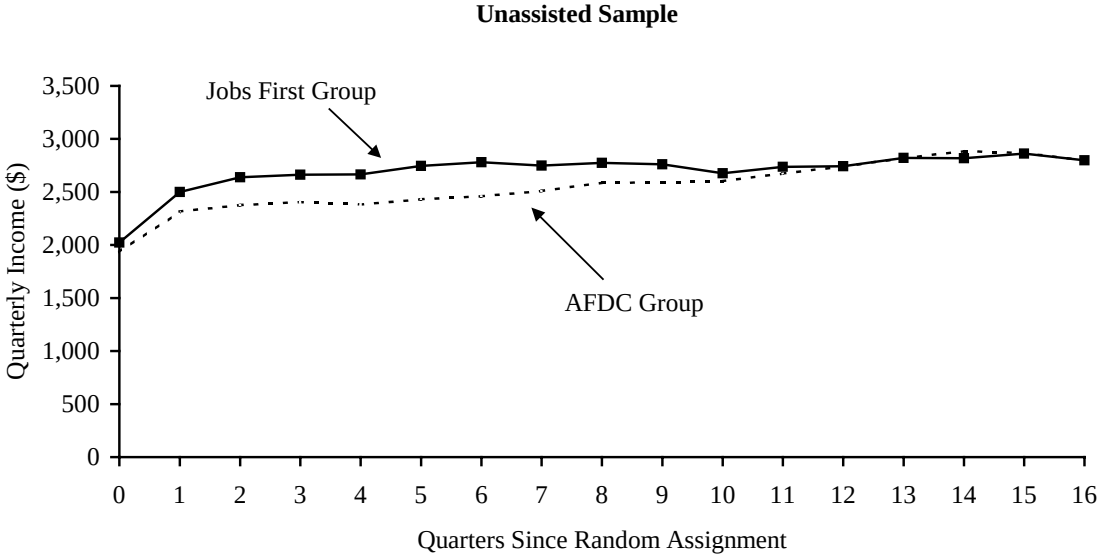
NOTE: Estimates were adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members.

Housing Assistance and Self-Sufficiency Study

Figure 3.13

Quarterly Income Amounts for Jobs First and AFDC Groups, by Housing Assistance Status at Sample Intake, Connecticut Jobs First Program





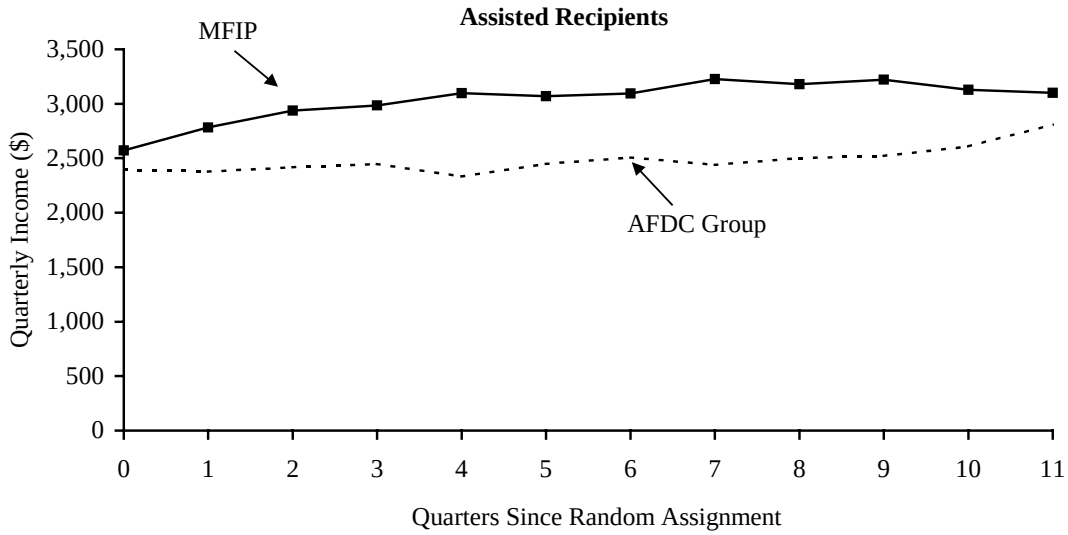
SOURCE: MDRC calculations using Connecticut UI records.

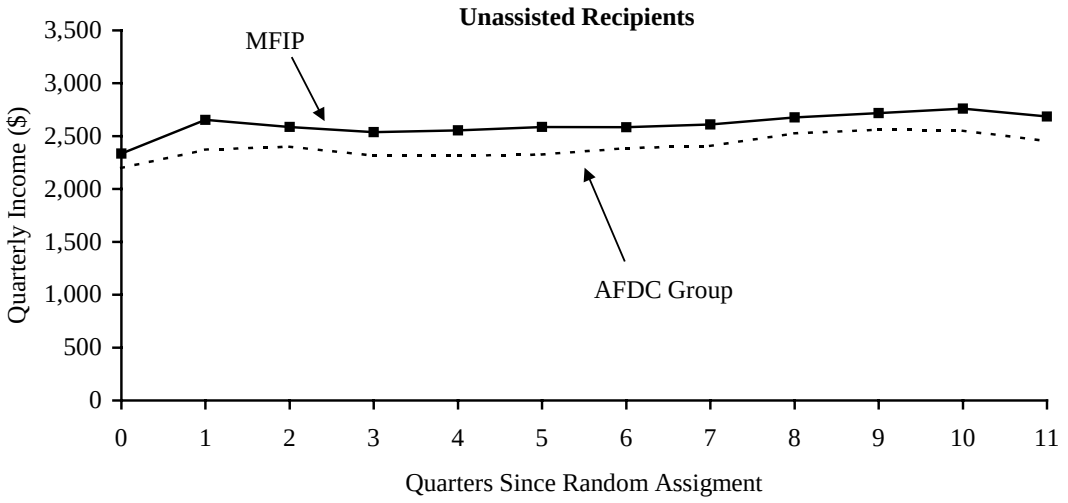
NOTE: Estimates were adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members.

Housing Assistance and Self-Sufficiency Study

Figure 3.14

Quarterly Income Amounts for MFIP and AFDC Groups, by Housing Assistance Status at Sample Intake, Minnesota Family Investment Program





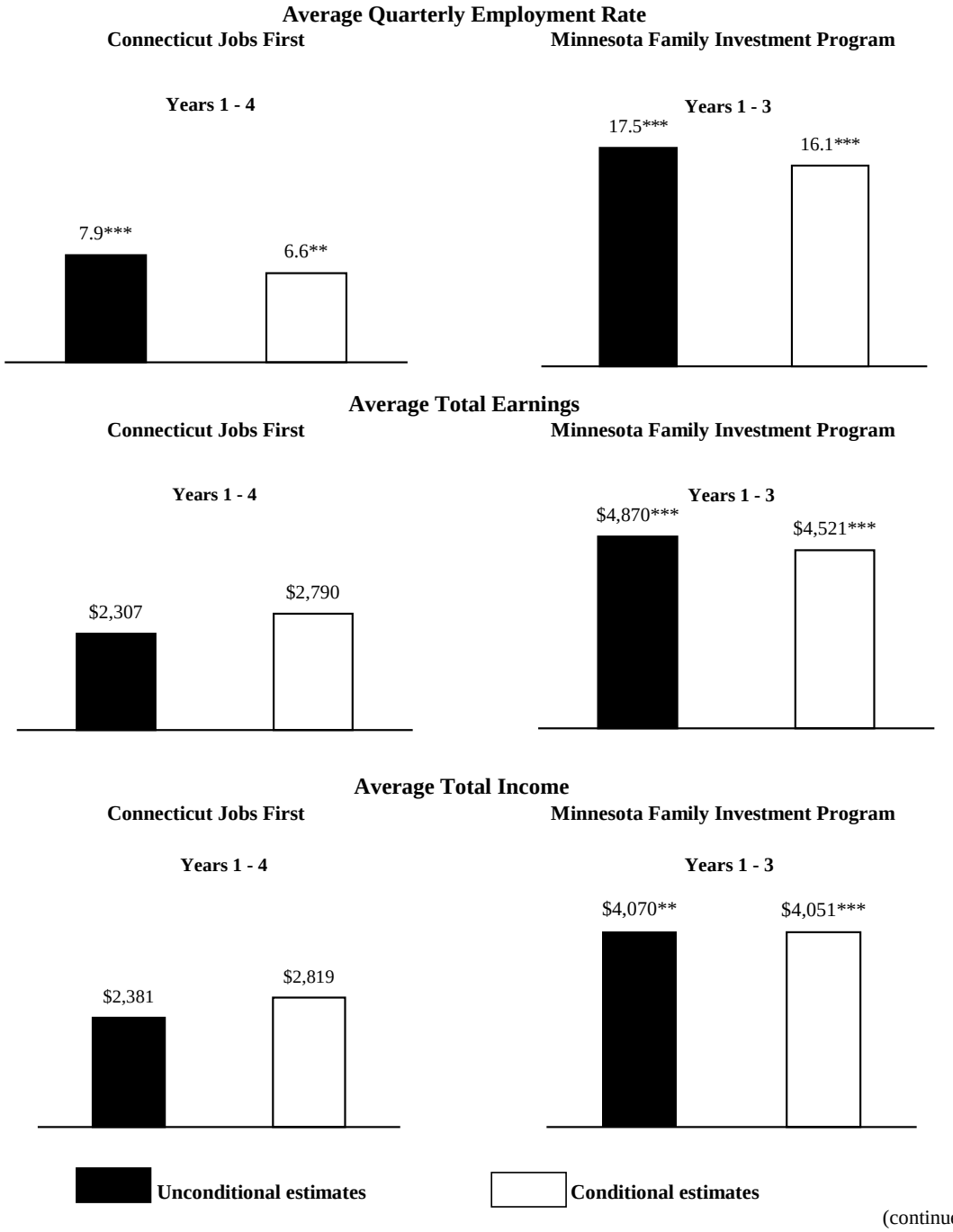
SOURCES: MDRC calculations using Minnesota's public assistance benefit records and UI records.

NOTE: Estimates were adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members.

Housing Assistance and Self-Sufficiency Study

Figure 3.15

Differences in Impacts Between Housing Assistance Groups Before and After Controlling for the Types of People Receiving Housing Assistance



(continued)

Figure 3.15 (continued)

SOURCES: MDRC calculations using Unemployment Insurance (UI) earning records, public assistance, BIF data, and HUD's administrative records.

NOTES: Conditional impacts were performed to account for the possibility that the program affected housing groups differently. The results show the effects the differences in characteristics between the housing statuses had on the impact estimates. In addition to controlling for background characteristics, interaction variables were added to the regression model. The following variables were interacted with the research group dummy: earnings in prior year, AFDC payments in the prior year, possession of a high school diploma, race, age, and marital status.

Chapter 4

Impacts of Welfare Reform on Other Outcomes for Housing Subgroups

The first part of this chapter draws on the Connecticut Jobs First client survey to look at program impacts on a range of outcomes that could not be addressed through administrative records. (This analysis could not be replicated for the Minnesota Family Investment Program [MFIP] because the survey sample from that study is too small for estimating housing subgroup impacts.)[1] In addition to providing a more rounded picture of household economic circumstances (as discussed in earlier chapters), the client survey offers an opportunity to look at an extended set of indicators of family well-being, including information about material circumstances, housing, neighborhood conditions, food security, and health insurance. Impacts on these measures might be expected to flow from impacts on employment, earnings, welfare, and income effects.

The Connecticut client survey was administered roughly three years — that is, between 31 months and 38 months — after individuals were randomly assigned to Jobs First. Unlike the more longitudinal impact measures presented in Chapter 3, the measures in this chapter provide a snapshot of individual circumstances at a point in time — generally, at the time respondents completed the interview or in the preceding month. Approximately 80 percent of the survey sample completed an interview, and response rates were roughly equal for the Jobs First and the AFDC group members.[2] It is important to keep in mind that the assisted and unassisted housing subgroups are defined using the housing status of sample members at program intake. It is possible that sample members were no longer in their "baseline" housing status at the three-year follow-up point. However, their original status when they entered the study matters most for determining Jobs First's impacts.[3]

The last section of this chapter uses data from HUD administrative records to examine the programs' impacts on exits from assisted housing.

---

[1]Of the total matched sample for MFIP (including sample members in both the program and the control groups), only 517 recipients completed the follow-up client survey. Of the total respondents, 146 — including 76 in the MFIP group and 70 in the AFDC group —- received housing assistance at sample intake.

[2]See Bloom et al. (2002) for further details on the survey.

[3]For the program group, subsequent housing status could change as a result of the program intervention, thus undermining the assumptions of random assignment. Defining housing subgroups on the basis of post-random assignment information (for example, housing status at the time of the survey) would thus not ensure that the program and the control groups for each housing subgroup were made up of equivalent types of people.

Impacts on Household Composition, Marriage, and Childbearing

Some experts have speculated that welfare reform policies — including time limits and family cap policies — might generate changes in the composition of households; for example, financial pressure might force recipients to "double up" with their parents or relatives, and family caps might discourage childbearing. The top panel of Table 4.1[4] describes the types of living arrangements that survey respondents reported for their households. These data indicate that Jobs First had a series of small impacts on household composition, which appear to be concentrated among the subgroup with no housing assistance. While the most common living arrangement included a single parent living with her children and no other adults, Jobs First decreased the percentage of sample members in the unassisted subgroup living with no other adults, by about 5 percentage points, and increased the proportion of the sample members living with children and other adults for this subgroup. As shown in the table, there is no evidence that Jobs First had an impact on childbearing — despite the family cap provisions of Jobs First — for the assisted or unassisted subgroups.

Impacts on Housing and Mobility

Since Jobs First produced larger employment and income impacts for assisted program participants (see Chapter 3), it is of interest to understand whether those economic impacts resulted in larger differences in the material and housing circumstances of the assisted and the unassisted subgroups. For example, did the program have an effect on the housing arrangements of the subgroups? Did it differentially affect home ownership or residential mobility? Did it differentially affect housing-related distress?

The top panel of Table 4.2 shows the housing arrangements reported by the assisted and the unassisted housing subgroups at the time of the client interview. It appears that Jobs First produced a small number of impacts for both subgroups. For the assisted housing subgroup, the table shows that the Jobs First group members were more likely than the AFDC group to rent their own home or apartment and were less likely to live with family or friends and pay part of the rent or mortgage. On the other hand, for the unassisted subgroups, the table shows that Jobs First reduced the percentage renting their own home and increased the percentage living with family and friends and paying only part of the rent. It may be that the relatively greater earnings and overall measured income for the assisted subgroup than for the unassisted subgroup helped make the assisted subgroup less dependent on others for meeting their basic housing needs.

Three years into the follow-up, there is no evidence that the program had an impact for either housing subgroup on measures of home ownership, housing expenditures, or the degree to

[4]The tables and figures for Chapter 4 begin on page 62.

which sample members relied on government subsidies for housing. For example, approximately 81 percent of the assisted housing sample members in the Jobs First and AFDC groups who reported receiving housing assistance at baseline said that they were living in public housing or receiving a government subsidy to help them pay their rent at the time of the follow-up interview; similarly, about 20 percent of Jobs First and AFDC sample members in the unassisted housing subgroup reported receipt of a housing subsidy at the time of the follow-up interview.

The middle panel of Table 4.2 reports on sample members' residential mobility. Jobs First did not have much of an impact on mobility. However, it is interesting to note that a higher percentage of the unassisted subgroup had ever moved during the three years of follow-up, and they moved more often than those with housing assistance (an average of two moves compared with one move for the assisted subgroup).

The bottom panel of Table 4.2 shows the program's impacts on a number of indicators of housing-related distress and insecurity, such as excess rent burden, trouble meeting full rent obligations, moving in with others for a place to live, and so on. It might be expected that Jobs First, which produced some overall income gains for the program group, would decrease the incidence and levels of housing insecurity and distress as a consequence. Overall, there is no sign of negative or positive impacts of the program for either housing subgroup on the range of indicators of housing distress. At the same time, it is worth noting that some of the absolute levels on the housing distress measures for the program and control groups are relatively high, especially for sample members with no housing assistance.

Impacts on Other Material Hardships

Table 4.3 presents a wide range of other hardship indicators, including neighborhood problems, material hardships, and food security. For most of these items, respondents were asked to indicate whether or not (or, in some cases, how much) each item was a problem during the past year. The table also shows the level of food insecurity, which is calculated using a subset of questions in the Household Food Security Scale administered by the U.S. Bureau of the Census in the annual Current Population Survey.[5]

Looking across the range of indicators, it appears that Jobs First caused a statistically significant reduction in hardship on a variety of measures for the assisted housing subgroup. Only two such effects were observed for the unassisted subgroup. On some measures of the extent to which sample members reported certain troubling conditions in their neighborhood, it appears that Jobs First had a somewhat larger effect for the assisted than for the unassisted subgroup. For ex-

[5]The six-item food security scale classifies respondents into one of three categories: food secure, food insecure without hunger, and food insecure with hunger.

ample, Jobs First reduced the likelihood of living in a neighborhood where drug users and pushers were a problem by 13 percentage points (statistically significant) for the assisted subgroup but only by 3 percentage points (not statistically significant) for the unassisted subgroup. A similar pattern of results was found on several other measures: The program's impacts were more favorable for the assisted than for the unassisted subgroup in reducing the number of housing-quality problems, the likelihood of unmet dental needs, relying on food banks, and relying on secondhand clothes. There are few notable counter-examples of reductions in hardships that were larger for the subgroup without housing assistance than for those with assistance. At the same time, Jobs First had little impact on measures of savings, assets, and debt among either housing subgroup (Table 4.4). It is also important to recognize from Tables 4.3 and 4.4 that the absolute levels of hardship reported by both housing subgroups continued to be high.

Does Welfare Reform Reduce Reliance on Housing Assistance?

The administrative records data analysis presented in earlier chapters points to bigger impacts on cumulative total measured income for the assisted housing samples than for the unassisted samples. Yet the Connecticut survey data suggest that for the subgroup that received housing assistance at the beginning of the study (based on respondents' self-reported housing status), Jobs First did not contribute to a reduction in the use of that assistance by the time of the three-year follow-up survey. Similarly, for the subgroup that started without housing subsidies, Jobs First did not contribute to any increase in the use of the subsidies. This set of comparisons is limited, however, for three reasons. First, the information on housing assistance is based entirely on survey respondents' self-reports. Second, the analysis considers housing status only at one point in time: at the time of the interview. Third, the analysis could be done only for the Connecticut survey sample. To address these limitations, an alternative analysis was conducted using HUD administrative records on housing assistance over several years of follow-up for both the Connecticut and the Minnesota samples.[6]

For one part of this analysis, post-random assignment housing assistance "exposure" was measured by first grouping sample members by their housing status at program enrollment and then calculating the extent of their subsequent monthly housing assistance of the same kind. For example, in the case of an individual identified as receiving public housing at program entry, the monthly exposure measure indicates whether and for how long the person continued to receive public housing assistance in the four-year follow-up period. Note that for MFIP —

[6]Lee, Beecroft, Khadduri, and Patterson (2003) found that that Indiana's welfare reforms decreased the receipt of public housing assistance and vouchers but that the timing of the impacts varied for those receiving different types of housing subsidies. For instance, welfare reform reduced the proportion of the treatment group receiving public housing in the first two years of follow-up, and the impacts faded after that point. In the case of those receiving vouchers, the impacts emerged in the last year of follow-up.

unlike some of the other outcomes examined in this report — longer follow-up data (covering 48 months) are available for the housing assistance exposure measure.

Turning first to the MFIP findings, Figure 4.1 shows the percentages of the MFIP and the AFDC groups that were receiving some form of federal housing assistance in the 48 months of post-random assignment follow-up. Given sample-size considerations for MFIP, the impacts on exits are examined for the public housing and the Section 8 subgroups combined. The solid line shows the housing assistance receipt rate for the MFIP group, and the dashed line shows the same for the AFDC group. The gap between the two lines is the impact of the program on housing exposure rates. The figure does not suggest that MFIP changed the pattern of exits for housing-assisted recipients. Both subgroups were equally likely to follow a similar sequence of exposure: (1) an initial steady state, (2) an accelerated exit phase beginning around Month 16, and (3) a slow and gradual exit phase beginning around Month 31.

Figure 4.2 shows the impacts for the assisted Jobs First sample. With the public housing and Section 8 subgroups combined for this analysis, the figure does not suggest a program effect on the exit rate from housing assistance for the assisted Jobs First group. When the pattern is examined separately by type of housing assistance received at baseline (Figures 4.3 and 4.4), there is some evidence of an impact on the public housing subgroup. However, this effect appears to be transitory and largely disappears by the end of the follow-up period.

Overall, this analysis does not provide compelling evidence that welfare reform accelerates exit rates from housing assistance programs. However, these findings should be interpreted cautiously, given some of the reporting issues inherent in the HUD administrative records data used to calculate the housing exposure measure.

Housing Assistance and Self-Sufficiency Study

Table 4.1

Three-Year Impacts on Household Composition, Marital Status, and Childbearing, by Housing Assistance Status at Sample Intake, Connecticut Jobs First Program

	Assisted (Includes Public Housing and Section 8)				Unassisted			
Outcome	**Jobs First**	**AFDC**	**Impact**	**Percentage Change**	**Jobs First**	**AFDC**	**Impact**	**Percentage Change**
Household composition								
Average number living in household	3.4	3.5	0.0	-1.0	3.5	3.3	0.2 **	4.7
Respondent lives with no other adults (%)	60.3	59.8	0.5	0.8	49.8	54.9	-5.1 *	-9.3
Lives alone	2.4	5.6	-3.1 *	-56.4	4.5	6.3	-1.8	-29.2
Lives with children only	57.8	54.2	3.6	6.6	45.3	48.6	-3.3	-6.7
Respondent lives with at least one other adult (%)	39.7	40.2	-0.5	-1.1	50.2	45.1	5.1 *	11.3
Lives with adults only	8.9	7.5	1.4	19.3	6.8	8.7	-1.9	-21.5
Lives with children and spouse only	6.5	5.0	1.5	29.0	7.5	8.4	-0.9	-10.7
Lives with children and partner only	2.3	4.7	-2.4	-51.3	10.5	8.3	2.2	27.1
Lives with children and parent only	1.2	1.4	-0.2	-17.1	7.3	5.2	2.1	41.2
Lives with children and other adults	20.9	21.6	-0.7	-3.2	18.1	14.6	3.5 *	23.9
Respondent's marital status (%)								
Currently married and living with spouse	7.1	6.6	0.5	7.5	10.9	12.6	-1.7	-13.7
Separated or living apart from spouse	16.2	13.1	3.2	24.4	10.3	10.9	-0.6	-5.2
Divorced	20.7	21.2	-0.5	-2.4	21.6	21.5	0.1	0.4
Widowed	2.3	0.8	1.4	171.8	1.4	2.4	-1.0	-42.8
Never married	53.8	58.3	-4.6	-7.9	55.9	52.7	3.2 *	6.1
Childbearing (%)[a]								
Respondent became pregnant since random assignment	22.2	20.6	1.6	7.9	30.0	29.0	1.0	3.3
Sample size	260	226			655	612		

(continued)

Table 4.1 (continued)

SOURCES: MDRC calculations using Connecticut's Three-Year Client Survey, BIF data, and HUD's administrative records.

NOTES: The Connecticut sample includes single parents randomly assigned from January 1996 to February 1997.

Housing assistance status was determined based on the self-reported information from the Baseline Information Form and HUD's administrative records data (see Chapter 2 for further details).

Although the respondents chosen from the survey were selected at random, a subset of the sample was over-sampled. For this reason, a weight was constructed to make the survey sample more representative of the full sample (see Bloom et al., 2002).

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Rounding may cause slight discrepancies in the calculation of sums and differences.

A two-tailed t-test was applied to differences between the Jobs First and AFDC groups. Statistical significance levels are indicated as *** = 1 percent; ** = 5 percent; * = 10 percent.

Results in this table were weighted to make them more representative of the full sample.

[a]These measures were only asked of women.

Housing Assistance and Self-Sufficiency Study

Table 4.2

Impacts on Housing-Related Outcomes, by Housing Assistance Status at Sample Intake, Connecticut Jobs First Program

Outcome	Assisted (Includes Public Housing and Section 8)				Unassisted			
	Jobs First	AFDC	Impact	Percentage Change	Jobs First	AFDC	Impact	Percentage Change
Housing status								
Rents own home or apartment (%)	94.0	89.6	4.5 *	5.0	70.7	75.7	-5.0 **	-6.6
Owns own home (%)	3.9	2.5	1.5	59.0	5.9	6.1	-0.3	-4.2
Lives with family/friends and doesn't pay rent (%)	0.5	2.7	-2.2 *	-81.8	7.7	6.2	1.5	24.2
Lives with family/friends and pays part of rent or mortgage (%)	1.3	4.5	-3.3 **	-72.2	13.7	9.3	4.4 **	47.1
Other arrangement, doesn't pay rent (%)	0.3	0.7	-0.4	-57.0	2.1	2.7	-0.6	-22.1
Lives in public housing or receives assistance from the government to pay for housing (%)	82.4	80.7	1.7	2.1	21.3	20.3	1.0	4.9
Total housing expenditures[a] ($)	414	448	-34.3	-7.7	667	642	24.9	3.9
Mobility								
Ever moved since random assignment (%)	56.2	49.9	6.4	12.8	70.1	72.4	-2.3	-3.2
Number of moves	0.9	0.8	0.1	6.4	1.5	1.7	-0.1	-8.6
Indicators of housing distress (%)								
Ever homeless and living on street in past year	0.4	0.9	-0.4	-50.4	2.5	2.1	0.4	18.6
Lived in homeless, emergency, or domestic violence shelter in past year	0.5	1.9	-1.4	-73.2	3.7	4.4	-0.7	-15.9
Rent burden exceeds 50 percent of income	26.7	22.4	4.3	19.1	35.1	39.0	-3.9	-10.1
Sample size	260	226			655	612		

(continued)

Table 4.2 (continued)

Outcome	Assisted (Includes Public Housing and Section 8) Jobs First	AFDC	Impact	Percentage Change (%)	Unassisted Jobs First	AFDC	Impact	Percentage Change (%)
Indicators of housing distress (%)								
Didn't pay full amount of rent or mortgage in the past 12 months	28.7	30.8	-2.1	-6.8	38.6	34.7	3.9	11.1
Moved in with another household because needed a place to live or to reduce expenses	10.7	10.3	0.4	4.1	30.8	30.4	0.4	1.3
Took in family or friends because they needed place to live or to reduce expenses	11.9	10.4	1.5	14.1	12.4	13.4	-1.0	-7.7
Took in boarders or roommates to help pay expenses	1.6	2.2	-0.6	-29.2	3.7	4.7	-1.0	-22.0
Sample size	260	226			655	612		

SOURCES: MDRC calculations using Connecticut's Three-Year Client Survey, BIF data, and HUD's administrative records.

NOTES: The Connecticut sample includes single parents randomly assigned from January 1996 to February 1997.

Housing assistance status was determined based on the self-reported information from the Baseline Information Form and HUD's administrative records data (see Chapter 2 for further details).

Although the respondents chosen from the survey were selected at random, a subset of the sample was over-sampled. For this reason, a weight was constructed to make the survey sample more representative of the full sample (see Bloom et al., 2002).

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Rounding may cause slight discrepancies in the calculation of sums and differences.

A two-tailed t-test was applied to differences between the Jobs First and AFDC groups. Statistical significance levels are indicated as *** = 1 percent; ** = 5 percent; * = 10 percent.

Results in this table were weighted to make them more representative of the full sample.

[a]Includes household rent or mortgage expenses and expenditures on utilities.

Housing Assistance and Self-Sufficiency Study

Table 4.3

Three-Year Impacts on Hardship Indicators, by Housing Assistance Status at Sample Intake, Connecticut Jobs First Program

	Assisted (Includes Public Housing and Section 8)				Unassisted			
Outcome	**Jobs First**	**AFDC**	**Impact**	**Percentage Change (%)**	**Jobs First**	**AFDC**	**Impact**	**Percentage Change (%)**
Number of neighborhood problems (%)								
0	35.1	27.1	7.9 *	29.1	37.7	32.6	5.1 *	15.6
1-3	37.8	46.3	-8.4 *	-18.2	41.5	45.0	-3.5	-7.8
4 or more	27.1	26.6	0.5	2.0	20.8	22.4	-1.6	-7.0
Types of neighborhood problems (%)								
Unemployment	41.7	47.7	-5.9	-12.5	37.2	37.0	0.3	0.7
Drug users or pushers	38.9	51.7	-12.7 ***	-24.7	37.3	40.4	-3.1	-7.7
Crime, assault, or burglaries	27.8	34.0	-6.2	-18.2	28.3	27.9	0.4	1.5
Run-down buildings and yards	30.3	33.6	-3.2	-9.6	28.5	31.2	-2.7	-8.5
Noise, odors, or heavy traffic	42.0	45.9	-3.9	-8.4	41.0	43.1	-2.1	-4.9
Number of housing-quality problems (%)								
0	63.8	51.6	12.2 ***	23.6	67.0	64.8	2.1	3.3
1	19.9	25.8	-5.9	-22.9	17.1	18.5	-1.4	-7.7
2 or more	16.3	22.6	-6.3 *	-27.7	15.9	16.6	-0.7	-4.3
Types of housing-quality problems (%)								
Leaky roof or ceiling	10.5	16.5	-6.0 *	-36.3	10.6	9.1	1.5	16.8
Broken plumbing	8.4	10.1	-1.7	-17.1	8.4	9.7	-1.3	-13.9
Broken Windows	11.0	16.0	-5.0	-31.3	10.7	10.4	0.3	2.7
Electrical problems	2.8	4.0	-1.2	-29.9	4.8	5.9	-1.1	-19.4
Roaches/insects	20.0	21.4	-1.3	-6.2	16.4	19.6	-3.2	-16.2
Heating-system problems	8.6	8.8	-0.2	-2.4	5.0	6.0	-1.0	-16.1
Broken appliances	8.4	9.2	-0.7	-7.8	8.1	7.5	0.7	9.0

(continued)

Table 4.3 (continued)

Outcome	Assisted (Includes Public Housing and Section 8)				Unassisted			
	Jobs First	AFDC	Impact	Percentage Change (%)	Jobs First	AFDC	Impact	Percentage Change (%)
Number of material hardships (%)								
0	31.7	33.9	-2.2	-6.5	31.1	32.4	-1.3	-3.9
1-3	57.3	49.7	7.6	15.3	52.6	48.6	4.0	8.2
4 or more	11.0	16.4	-5.4 *	-32.9	16.3	19.0	-2.7	-14.4
Types of material hardships (%)								
Could not pay rent or mortgage in full	28.7	30.8	-2.1	-6.8	38.6	34.7	3.9	11.1
Evicted for not paying rent or mortgage	2.9	3.5	-0.7	-18.7	7.8	9.1	-1.3	-14.2
Could not pay full amount of utility bills	55.2	50.5	4.7	9.3	53.6	55.1	-1.5	-2.7
Electric or gas turned off	17.1	18.7	-1.6	-8.7	18.1	22.8	-4.7 **	-20.5
Telephone disconnected	22.5	26.1	-3.6	-13.7	25.5	25.0	0.5	1.9
Unmet medical needs	13.1	16.5	-3.4	-20.5	15.5	17.2	-1.7	-9.7
Unmet dental needs	14.9	22.2	-7.3 **	-32.9	19.4	21.7	-2.3	-10.7
Social services used (%)								
Food banks	19.8	28.3	-8.5 **	-30.1	18.2	20.0	-1.8	-8.8
Soup kitchens	3.9	5.3	-1.4	-27.1	3.2	3.6	-0.5	-12.8
Secondhand clothes	18.3	26.4	-8.2 **	-30.9	20.6	18.6	2.0	11.0
Food security (%)								
Food secure	62.1	57.7	4.4	7.6	63.2	59.4	3.7	6.3
Food insecure	18.6	17.7	0.9	5.0	15.2	16.9	-1.7	-9.8
Food insecure with hunger	19.3	24.6	-5.3	-21.4	21.6	23.7	-2.1	-8.8
Number of "severe hardships"[a] (%)								
0	36.9	26.9	10.0 **	37.0	47.8	46.9	0.9	1.9
1-2	54.1	57.4	-3.3	-5.8	40.6	42.0	-1.4	-3.4
3 or more	9.1	15.7	-6.6 **	-42.1	11.6	11.0	0.6	5.1
Respondent covered by Medicaid (%)								
Covered by Medicaid	76.8	66.8	10.0 **	15.0	63.5	53.6	10.0 ***	18.6
Covered by non-Medicaid health insurance	13.1	17.0	-3.9	-23.0	20.6	25.2	-4.6 **	-18.3
Not covered by any health insurance	10.2	16.2	-6.1 *	-37.4	15.9	21.2	-5.3 **	-25.2
Sample size	260	226			655	612		

(continued)

Table 4.3 (continued)

SOURCES: MDRC calculations using Connecticut's Three-Year Client Survey, BIF data, and HUD's administrative records.

NOTES: The Connecticut sample includes single parents randomly assigned from January 1996 to February 1997.

Housing assistance status was determined based on the self-reported information from the Baseline Information Form and HUD's administrative records data (see Chapter 2 for further details).

Although the respondents chosen from the survey were selected at random, a subset of the sample was over-sampled. For this reason, a weight was constructed to make the survey sample more representative of the full sample (see Bloom et al., 2002).

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Rounding may cause slight discrepancies in the calculation of sums and differences.

A two-tailed t-test was applied to differences between the Jobs First and AFDC groups. Statistical significance levels are indicated as *** = 1 percent; ** = 5 percent; * = 10 percent.

Results in this table were weighted to make them more representative of the full sample.

[a]"Severe hardships" are based on the categories above and include: four or more neighborhood problems; two or more housing problems; four or more material hardships; three or more social services used; and food insecure with hunger.

Housing Assistance and Self-Sufficiency Study

Table 4.4

Impacts on Savings, Assets, and Debt, by Housing Assistance Status at Sample Intake, Connecticut Jobs First Program

	Assisted (Includes Public Housing and Section 8)				Unassisted			
Outcome	Jobs First	AFDC	Impact	Percentage Change	Jobs First	AFDC	Impact	Percentage Change
Average amount of respondent's savings ($)	108	122	-14.4	-11.8	181	205	-23.7	-11.6
Distribution of respondent's savings (%)								
No savings	83.7	81.7	2.0	2.5	77.2	75.4	1.8	2.3
$1-$250	9.0	9.7	-0.7	-7.4	10.5	10.2	0.3	3.4
$251-$500	3.6	3.5	0.0	0.8	3.8	5.3	-1.5	-28.5
$501 or more	3.8	5.1	-1.3	-25.7	8.5	9.1	-0.6	-6.6
Respondent owns a car, van, or truck (%)	33.6	34.7	-1.1	-3.2	45.0	40.9	4.1	9.9
Respondent owns home (%)	3.9	2.5	1.5	59.0	5.9	6.1	-0.3	-4.2
Average amount of respondent's debt ($)	1,621	1,626	-5.4	-0.3	2,783	2,947	-164.6	-5.6
No debt[a]	41.4	46.6	-5.2	-11.1	34.5	37.3	-2.8	-7.4
$1-$1,000	22.5	17.9	4.6	25.8	25.4	21.0	4.4 *	20.9
$1,001-$2,000	12.9	19.5	-6.5 *	-33.6	14.6	12.6	2.0	16.0
$2,001 or more	23.1	16.0	7.1 *	44.2	25.5	29.1	-3.7	-12.5
At the end of the month there is (%)								
Some money left over	12.3	16.2	-3.9	-24.2	15.4	18.5	-3.2	-17.1
Just enough to make ends meet	41.0	42.6	-1.6	-3.9	43.2	41.5	1.7	4.0
Not enough money to make ends meet	46.8	41.2	5.6	13.5	41.5	40.0	1.5	3.7
Sample size	260	226			655	612		

(continued)

Table 4.4 (continued)

SOURCES: MDRC calculations using Connecticut's Three-Year Client Survey, BIF data, and HUD's administrative records.

NOTES: The Connecticut sample includes single parents randomly assigned from January 1996 to February 1997.

Housing assistance status was determined based on the self-reported information from the Baseline Information Form and HUD's administrative records data (see Chapter 2 for further details).

Although the respondents chosen from the survey were selected at random, a subset of the sample was over-sampled. For this reason, a weight was constructed to make the survey sample more representative of the full sample (see Bloom et al., 2002).

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Rounding may cause slight discrepancies in the calculation of sums and differences.

Results in this table were weighted to make them more representative of the full sample.

A two-tailed t-test was applied to differences between the Jobs First and AFDC groups. Statistical significance levels are indicated as *** = 1 percent; ** = 5 percent; * = 10 percent.

[a]In order to create this measure, a few individuals were excluded because they didn't provide information about the amount of debt that they had. A separate question (presented elsewhere in the report) simply asked whether respondents had debt.

Housing Assistance and Self-Sufficiency Study

Figure 4.1

Impacts on Housing Assistance Receipt for Sample Members with Housing Assistance at Random Assignment, Minnesota Family Investment Program

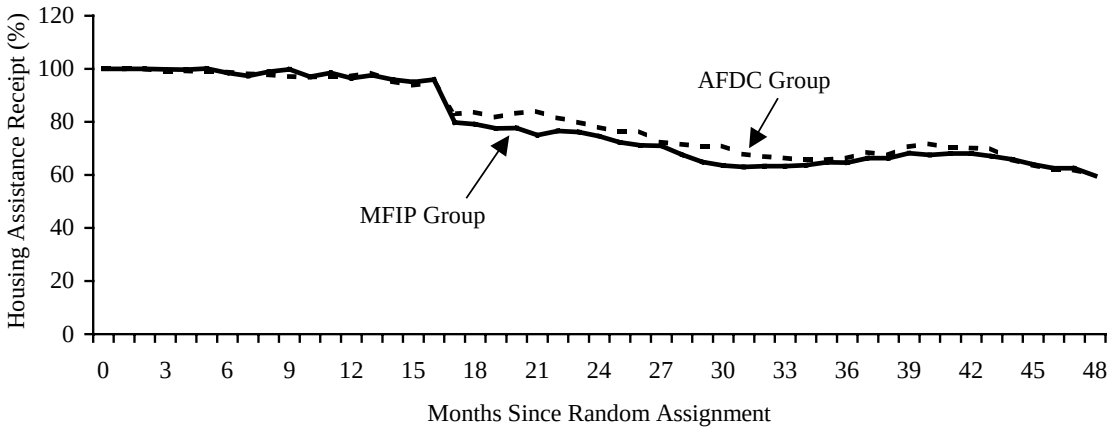
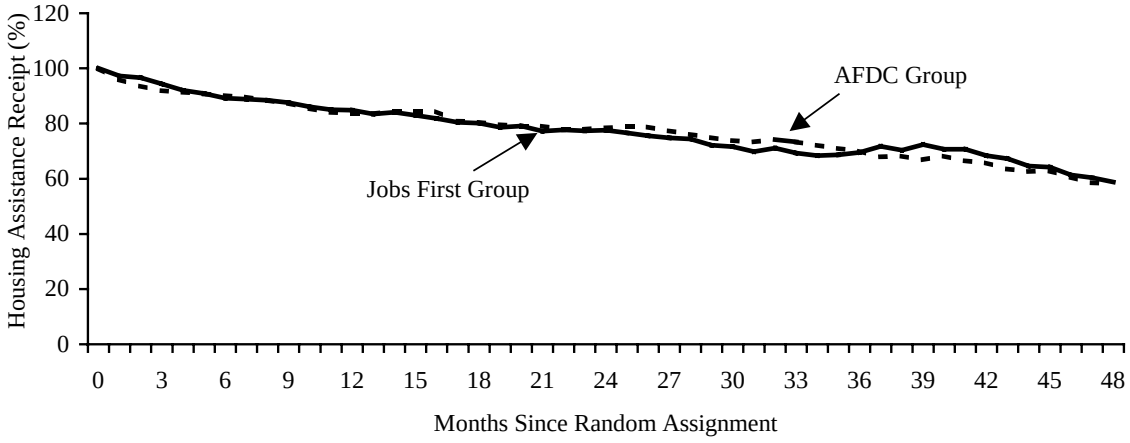


Figure 4.2

Impacts on Housing Assistance Receipt for Sample Members with Housing Assistance at Random Assignment, Connecticut Jobs First Program



SOURCES: MDRC calculations using BIF data and HUD's administrative records data.

NOTES: Housing assistance status was determined by a match between self-reported information from the Baseline Information Form and HUD's administrative records data (see Chapter 2 for details of the match performed between data sources).

The public housing and Section 8 housing groups are combined for this analysis.

Housing Assistance and Self-Sufficiency Study

Figure 4.3

Impacts on Public Housing Receipt for Sample Members Who Received Public Housing at Random Assignment, Connecticut Jobs First Program

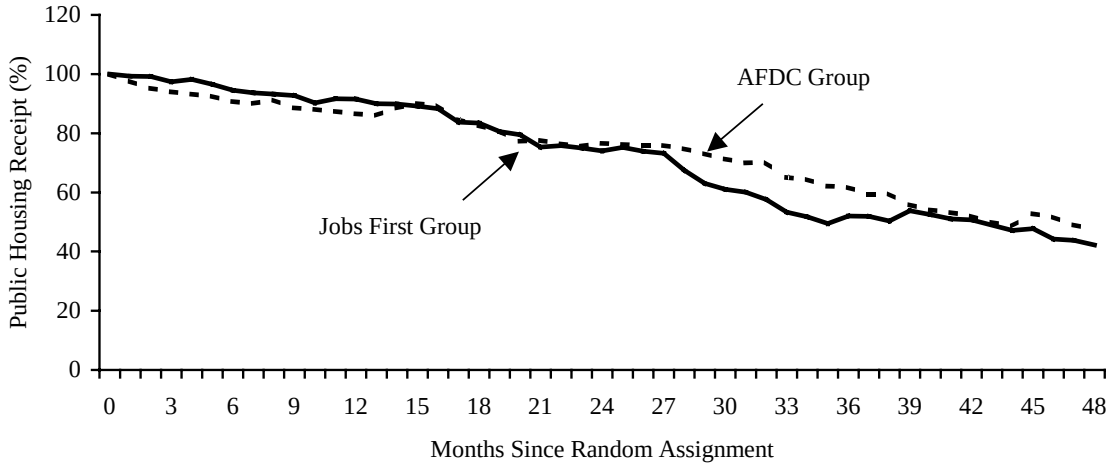
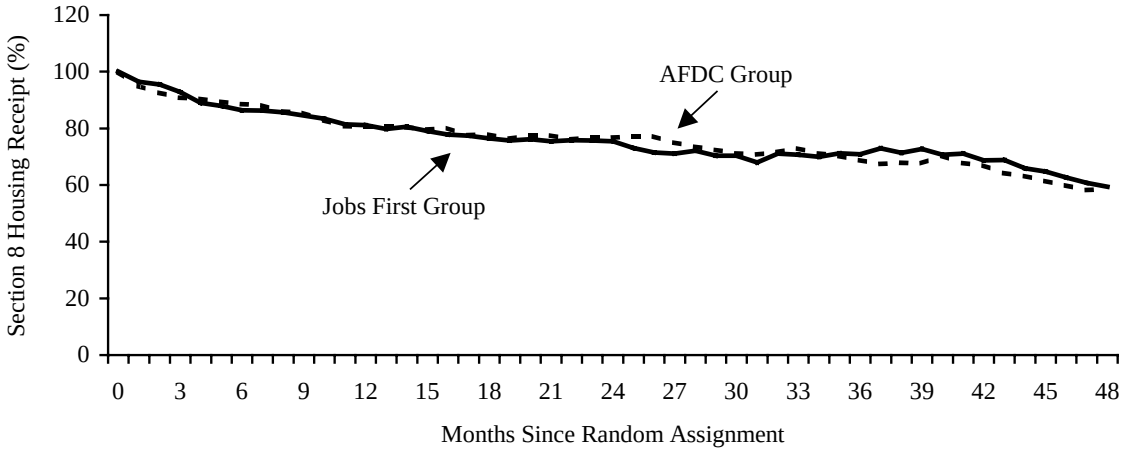


Figure 4.4

Impacts on Section 8 Housing Assistance Receipt for Sample Members Who Received Section 8 at Random Assignment, Connecticut Jobs First Program



SOURCES: MDRC calculations using Connecticut AFDC/TFA records, Food Stamp records, BIF data, and HUD's administrative records data.

NOTES: Housing assistance status was determined by a match between self-reported information from the Baseline Information Form and HUD's administrative records data (see Chapter 2 for details of the match performed between data sources).

The public housing and Section 8 housing groups are combined for this analysis.

Chapter 5

Housing Assistance and Labor Market Outcomes: A Nonexperimental Analysis

Up to this point, this report has relied on the experimental designs of the Minnesota Family Investment Program (MFIP) and the Connecticut Jobs First program to examine the impacts of welfare reform on recipients with and without housing assistance. Since experimental designs randomize exposure to welfare reform, they provide one way of looking at the interaction between housing status and welfare reform on outcomes of interest. The evidence from both Connecticut and Minnesota suggests that welfare reform interventions in these two states have produced larger positive impacts for recipients with housing assistance than for those without it. With these findings as a backdrop, this chapter uses nonexperimental techniques to look at the same interaction, but to explore a somewhat different issue. Relying on the natural variation in sample members' receipt of housing assistance, the analysis examines the degree to which housing assistance per se influences welfare recipients' economic outcomes and how that influence varies with the presence or absence of welfare reform.

The first stage of this exploration examines whether receipt of housing assistance per se is associated with positive labor market outcomes. Using the same housing subgroups created for the analyses in prior chapters (which are based on sample members' housing status at the time of enrollment into the study, as determined by their Background Information Forms [BIFs] and HUD administrative records data), it measures the independent relationship between housing status and labor market and welfare outcomes, controlling for a variety of background characteristics that are also related to self-sufficiency outcomes. The second analysis explores the independent relationship between the duration or tenure of housing assistance and the key outcome measures, using the full sample of recipients who were assisted or unassisted at program intake. The third analysis again looks at the relationship between duration of assistance and key outcomes, but only for sample members who entered the study already benefiting from housing assistance.[1] For each of these explorations, separate analyses are conducted for the assisted MFIP and Jobs First program and control group sample members. The findings for the control groups provide insights into the relationship between housing receipt and economic outcomes in the "absence" of an intervention designed to increase employment and income. Conversely, the results for the program group show the nature of the relationship in the context of welfare reform.

[1]All these analyses are conducted on the matched sample, according to which individuals' housing status at the time of random assignment is based on a combination of self-reported and HUD administrative data. However, because self-reported longitudinal data on housing status are not available, the housing subsidy duration measures are based entirely on HUD administrative records.

Relationship Between Initial Housing Assistance Receipt and Key Outcomes

Table 5.1[2] presents the findings on the relationship between key outcomes and residence in public or Section 8 housing *at the time of program intake* and during the full follow-up period. Note that the outcomes, or dependent variables, are defined using four years of data for the Connecticut sample and three years of data for the Minnesota sample. The upper panel of the table shows the relevant regression findings for the Connecticut Jobs First (or program) group and the AFDC (or control) group. The bottom panel of the table presents the results for the MFIP and the AFDC groups. The regression coefficients reflect the direction and magnitude of the relationship between housing status at program intake and key labor market outcomes once the effects of other important background characteristics — such as age, race, and prior welfare receipt — are taken into account.

For the Connecticut sample, Table 5.1 suggests that, for the Jobs First group, receipt of housing assistance at intake is positively related to an increase in employment and earnings, holding all else constant. For example, receipt of housing assistance is associated with a statistically significant increase in employment of almost 7 percentage points during Years 1-4 and with a substantial positive (though not statistically significant) increase in earnings and total measured income. In contrast, these relationships turn negative for the AFDC group, although they are not statistically significant.

For the Minnesota sample, the results for the MFIP group suggest a strong relationship between housing assistance receipt and the employment-related outcomes measures. Over the three-year follow-up period, housing assistance is associated with an increase in employment of 12 percentage points, an increase in earnings of $3,637, and an increase in total measured income of $3,167 — all of which are statistically significant. However, like the Connecticut results, the Minnesota relationships turn negative for the AFDC group.

Taken together, the Connecticut and Minnesota findings provide some support for the hypothesis that housing assistance may promote labor market gains for welfare recipients, but only in the context of welfare reform efforts that include special work-related assistance and inducements. This overall pattern is consistent with an interpretation suggesting that welfare reforms that promote work may be counteracting a potential negative effect of housing assistance on welfare recipients' labor force participation. However, this analysis is limited by its rather crude indicator of housing status at just one point in time: at program intake. It is thus important to consider whether the relationship changes when the duration of housing assistance measured over several years is considered. This question is examined below.

[2]The tables for Chapter 5 begin on page 77.

Relationship Between Tenure and Key Outcomes

This sections looks at the relationship between tenure, or time spent in assisted housing, and the same four outcomes: employment, earnings, income, and welfare receipt. In this analysis, the dependent variables for the regression models are specified as outcomes measured only during the last year of follow-up, and the key independent variable — tenure —is measured for the years prior to the last year of follow-up. This is necessary in order to establish a clear temporal order between the independent and dependent variables and one that is appropriate to the question of whether a change in housing assistance contributes to a change in earnings, not whether a change in earnings contributes to a change in housing assistance. To illustrate, in the Connecticut analysis, all the dependent variables are defined as Year 4 outcomes, while tenure — the independent variable — is measured in months during Years 1-3. Further, since the independent relationship between tenure and the key outcomes is of primary interest, this relationship is estimated after controlling for a range of background characteristics and exposure to welfare receipt in the follow-up period.[3]

Table 5.2 separately presents the regression results for welfare recipients in the program group and in the control group. (Welfare recipients who received no housing assistance are included in the analyses but have a zero value on the tenure variable.) The table shows the estimated relationship between tenure — the total number of months spent in public or Section 8 housing during the years prior to the final year of follow-up — and the four outcomes of interest. The top panel presents the findings for the Connecticut sample, and the bottom panel shows them for the Minnesota sample.

The results offer partial support for the hypothesis that housing assistance can help recipients improve their labor market outcomes. For the Connecticut program and control groups, the relationships are very small and generally are not statistically significant. In contrast, the Minnesota findings, shown in the bottom panel, suggest a more consistent pattern of positive associations between housing and the key outcomes, but a pattern that holds only for the program group. Holding all other factors constant, residence in public or Section 8 housing is linked with an increase in employment, earnings, and income among the recipients assigned to MFIP.

When the analysis is restricted to just individuals who received housing assistance at program intake (Table 5.3), a positive and statistically significant relationship again emerges between the subsequent duration of housing assistance and final-year earnings for sample members in the program group. For example, for the Connecticut Jobs First group, every additional month spent living in public or Section 8 housing in Years 1-3 is associated with an $81 in-

[3]The covariates used to estimate regression-adjusted impacts are used here as control variables. They include age, race, education, marital status, prior earnings, welfare receipt prior to random assignment to the program, number of children, age of youngest child, prior employment, and prior Food Stamp receipt.

crease in earnings in Year 4. For the MFIP sample, earnings in Year 3 increase by $237 with every extra month of housing assistance during Years 1-2. The coefficients are considerably smaller and are not statistically significant for the control groups in both the Connecticut and the Minnesota analyses.

The overall pattern of findings presented here is consistent with an interpretation that housing assistance can help welfare recipients progress in the labor market when they are involved in a welfare reform intervention, but not independently of such an intervention. These findings are also consistent with the growing body of nonexperimental studies on the effects of housing assistance on short-term labor supply among former welfare recipients.[4] However, given the methodological limitations of these analyses, these findings should be considered suggestive only.

[4]Mancusco, Lieberman, Lindler, and Moses (2003); Nagle (2003); and Verma and Hendra (2003).

Housing Assistance and Self-Sufficiency Study

Table 5.1

Regression of Average Earnings, Measured Income, Employment Rate, and Welfare Payments on Receipt of Housing Assistance at Program Intake, Controlling for Background Characteristics

Connecticut Jobs First

	Jobs First Group				AFDC Group			
Regression Coefficient	Employment Rate (%) Years 1-4	Earnings ($) Years 1-4	Welfare Payments ($) Years 1-4	Income ($)[a] Years 1-4	Employment Rate (%) Years 1-4	Earnings ($) Years 1-4	Welfare Payments ($) Years 1-4	Income ($)[a] Years 1-4
Received public or Section 8 housing at program intake	6.9 ***	1,032	-133	1,057	-0.5	-2,232	153	-1,794

Minnesota Family Investment Program [b]

	MFIP Group				AFDC Group			
Regression Coefficient	Employment Rate (%) Years 1-3	Earnings ($) Years 1-3	Welfare Payments ($) Years 1-3	Income ($)[c] Years 1-3	Employment Rate (%) Years 1-3	Earnings ($) Years 1-3	Welfare Payments ($) Years 1-3	Income ($)[c] Years 1-3
Received public or Section 8 housing at program intake	12.1 ***	3,637 ***	-470	3,167 ***	-4.6 *	-1,083	180	-903

(continued)

Table 5.1 (continued)

SOURCES: MDRC calculations using Unemployment Insurance (UI) earning records, public assistance, BIF data, and HUD's administrative records.

NOTES: Housing assistance status was determined based on the self-reported information from the Baseline Information Form and HUD's administrative records data (see Chapter 2 for further details).
Statistical significance levels are indicated as ***=1 percent, **=5 percent, and *=10 percent.
The Jobs First sample includes 3,382 single parents randomly assigned from January 1996 to February 1997.
The MFIP sample includes 1,277 members randomly assigned from April 1994 to March 1996.
A total of 20 sample members in Jobs First were excluded from measures involving Year 4 because UI earnings data for the last quarter of the follow-up period were not available for them.

[a]Income measured from administrative records data sources, which combines UI-reported earnings, TANF payments, and Food Stamp benefits.

[b]MFIP employment and earnings data are only available for the first four quarters of Years 1 and 2 and for the first three quarters of Year 3. In other words, Quarter 4 of Year 3 is not included in the analysis.

[c]Income measured from administrative records data sources, which combines UI-reported earnings and the MFIP amount.

Housing Assistance and Self-Sufficiency Study

Table 5.2

Regression of Average Earnings, Measured Income, Employment Rate, and Welfare Payments on Tenure in Assisted Housing, for Sample Members With and Without Housing Assistance at Sample Intake

Connecticut Jobs First

	Jobs First Group				AFDC Group			
Regression Coefficienct	Employment Rate (%) Year 4	Earnings ($) Year 4	Welfare Payments ($) Year 4	Income ($)[a] Year 4	Employment Rate (%) Year 4	Earnings ($) Year 4	Welfare Payments ($) Year 4	Income ($)[a] Year 4
Number of months receiving public housing or Section 8 after program intake, Years 1-3	0.2 *	2	-3	0 [b]	-0.0	-19	7	-7
Post-random assignment welfare receipt, Years 1-3	0.2	-128 ***	82 ***	9	-0.3 ***	-192 ***	97 ***	-44 **

Minnesota Family Investment Program[c]

	MFIP Group				AFDC Group			
Regression Coefficienct	Employment Rate (%) Year 3	Earnings ($) Year 3	Welfare Payments ($) Year 3	Income ($)[d] Year 3	Employment Rate (%) Year 3	Earnings ($) Year 3	Welfare Payments ($) Year 3	Income ($)[d] Year 3
Number of months receiving public housing or Section 8 after program intake, Years 1-2	0.5 ***	45 **	-8 *	37 *	0.0	-12	6	-6
Post-random assignment welfare receipt, Years 1-2	-0.3	-135 *	94 **	41	-1.4 ***	-249 ***	246 ***	-4

(continued)

Table 5.2 (continued)

SOURCES: MDRC calculations using Unemployment Insurance (UI) earning records, public assistance, BIF data, and HUD's administrative records.

NOTES: Housing assistance status was determined based on the self-reported information from the Baseline Information Form and HUD's administrative records data (see Chapter 2 for further details).
Statistical significance levels are indicated as ***=1 percent, **=5 percent, and *=10 percent.
The Jobs First sample includes 3,382 single parents randomly assigned from January 1996 to February 1997.
The MFIP sample includes 1,277 members randomly assigned from April 1994 to March 1996.
A total of 20 sample members in Jobs First were excluded from measures involving Year 4 because UI earnings data for the last quarter of the follow-up period were not available for them.

[a]Income measured from administrative records data sources, which combines UI-reported earnings, TANF payments, and Food Stamp benefits.

[b]The income coefficient equals -0.234. Due to rounding, the income estimate appears as 0.

[c]MFIP employment and earnings data are only available for the first four quarters of Years 1 and 2 and for the first three quarters of Year 3. In other words, Quarter 4 of Year 3 is not included in the analysis.

[d]Income measured from administrative records data sources, which combines UI-reported earnings and the MFIP amount.

Housing Assistance and Self-Sufficiency Study

Table 5.3

Regression of Average Earnings, Measured Income, Employment Rate, and Welfare Payments on Tenure in Assisted Housing, for Sample Members Receiving Housing Assistance at Program Intake

Connecticut Jobs First

	Jobs First Group				AFDC Group			
Regression Coefficient	Employment Rate (%) Year 4	Earnings ($) Year 4	Welfare Payments ($) Year 4	Income ($)[a] Year 4	Employment Rate (%) Year 4	Earnings ($) Year 4	Welfare Payments ($) Year 4	Income ($)[a] Year 4
Number of months receiving public housing or Section 8 after program intake, Years 1-3	0.4	81 *	-16	61	-0.1	48	17	64
Post-random assignment welfare receipt, Years 1-3	-0.5 **	-225 ***	109 ***	-53	-0.6 ***	-234 ***	112 ***	-64 *

Minnesota Family Investment Program[b]

	MFIP Group				AFDC Group			
Regression Coefficienct	Employment Rate (%) Year 3	Earnings ($) Year 3	Welfare Payments ($) Year 3	Income ($)[c] Year 3	Employment Rate (%) Year 3	Earnings ($) Year 3	Welfare Payments ($) Year 3	Income ($)[c] Year 3
Number of months receiving public housing or Section 8 after program intake, Years 1-2	2.5 **	237 *	84	320 ***	0.8	93	26	118
Post-random assignment welfare receipt, Years 1-2	-2.5	-231	-62	-293	-2.0 ***	-355 ***	290 ***	-66

(continued)

Table 5.3 (continued)

SOURCES: MDRC calculations using Unemployment Insurance (UI) earning records, public assistance, BIF data, and HUD's administrative records.

NOTES: Housing assistance status was determined based on the self-reported information from the Baseline Information Form and HUD's administrative records data (see Chapter 2 for further details).
Invalid or missing values are not included in individual variable distributions.
Statistical significance levels are indicated as ***=1 percent, **=5 percent, and *=10 percent.
The Jobs First sample includes 3,382 single parents randomly assigned from January 1996 to February 1997.
The MFIP sample includes 1,277 members randomly assigned from April 1994 to March 1996.
A total of 20 sample members in Jobs First were excluded from measures involving Year 4 because UI earnings data for the last quarter of the follow-up period were not available for them.
[a]Income measured from administrative records data sources, which combines UI-reported earnings, TANF payments, and Food Stamp benefits.
[b]MFIP employment and earnings data are only available for the first four quarters of Years 1 and 2 and for the first three quarters of Year 3. In other words, Quarter 4 of Year 3 is not included in the analysis.
[c]Income measured from administrative records data sources, which combines UI-reported earnings and the MFIP amount.

Chapter 6

Conclusion

This report adds important findings to the small body of literature on the relationship between the effectiveness of welfare reform and housing assistance. On balance, the evidence from a series of analyses based on welfare reform experiments suggests that housing status matters — and, in some cases, it can matter a lot — to the effectiveness of welfare reform. Table 6.1[1] illustrates this point by summarizing the evidence on earnings impacts.

As shown in the table, there have been at least 10 attempts to examine the variation in impacts of welfare reform across subgroups of welfare recipients with housing assistance and those without it. These studies have drawn on a broad range of welfare policy experiments implemented under different policy contexts. For example, the Minnesota Family Investment Program (MFIP) and Connecticut's Jobs First were both reform initiatives that heavily emphasized work and offered generous financial incentives to make work pay. Indiana's Manpower and Comprehensive Training Program (IMPACT) and Connecticut's Jobs First initiative both included time limits on welfare receipt. The National Evaluation of Welfare-to-Work Strategies (NEWWS) tested the effects of different case management strategies (traditional or integrated) and alternative welfare-to-work approaches emphasizing either quick employment (labor force attachment) or human capital development through education and training. These evaluations were also conducted in a variety of locations around the county and with diverse samples.

The housing subgroup studies based on these social experiments fall into two categories: (1) those that distinguish only between recipients with any type of housing assistance and those with no assistance and (2) those that make a further distinction between recipients living in public housing and those receiving project-based or tenant-based Section 8 subsidies. Taking these studies as a whole, the weight of the evidence clearly suggests that welfare reform is more effective for subgroups of welfare recipients who have housing assistance than it is for those who do not. This pattern held in 8 of the 10 studies.[2] Furthermore, as Table 6.1 shows, only two studies found statistically significant impacts for recipients with no housing assistance. There is one main example that runs counter to the overall pattern: Delaware's A Better Chance program, where the difference in impacts across housing subgroups is small. However, this pro-

[1] The table for Chapter 6 is found on page 85.

[2] Although the larger and sizable impacts for the public housing subgroup in the Columbus NEWWS Integrated Case Management study are not statistically significant, impacts on other employment-related outcome measures not shown in Table 6.1 are statistically significant for the public housing subgroup — and not for the Section 8 or unassisted subgroups (for example, employment rates and average earnings in the last quarter of the follow-up period).

gram was not particularly effective for either housing subgroup, and its impacts had faded almost completely by the second year of follow-up.

Although this pattern of findings suggests that welfare innovations are more effective when combined with housing subsides, it does not mean that welfare reforms cannot work for unassisted populations. For example, the Atlanta NEWWS Labor Force Attachment analysis and the Indiana early cohort analysis shown in Table 6.1 did produce statistically significant earnings impacts for recipients with no housing assistance. In addition, two nationally recognized welfare-to-work programs — the Riverside, California, Greater Avenues to Independence (GAIN) and the Portland, Oregon, NEWWS programs — which did not serve very many recipients with housing assistance, were found to be among the most effective programs of their type.[3]

Still, the growing evidence about the relationship between housing assistance and the effectiveness of welfare reform is striking. What is less clear is what accounts for these results. Several explanations were explored in this report. Continued efforts to understand the pattern of findings could therefore be informative for future reforms in both the welfare and the housing policy worlds.

[3]See Riccio, Friedlander, and Freedman (1994); and Hamilton et al. (2001).

Housing Assistance and Self-Sufficiency Study

Table 6.1

Impacts of Welfare Reform Interventions on the Average Earnings of Welfare Recipients, by Housing Subgroup

Welfare Reform Intervention / *Sample*	Earnings Follow-Up Period (years)	Welfare Recipient Subgroup				
		Public Housing ($)	Vouchers ($)	Combined Section 8 ($)[e]	Any Housing Assistance ($)	No Housing Assistance ($)
Minnesota Family Investment Program - *interim findings; no HUD data*[a]	1.5	-	-	-	2,041***	429
Minnesota Family Investment Program - *long-term findings; with HUD data*[b]	3	-	-	-	5,473***	603
Indiana Manpower and Comprehensive Training Program (IMPACT) - *later cohort*[c]	2	-	-	-	1,461*	-202
Delaware's A Better Chance[c]	2	-	-	-	591	318
Connecticut Jobs First						
First comparison[b]	4		-		3,965**	1,658
Second comparison[b]	4	3,564	3,368			1,658
Indiana Manpower and Comprehensive Training Program (IMPACT) - *early cohort*[c]	5	2,209	2,549		-	2,003***
Atlanta National Evaluation of Welfare-to-Work Strategies (NEWWS) - *Labor Force Attachment*[d]	3	2,115***	-	1,801**	-	1,585*
Atlanta NEWWS - *Human Capital Development*[d]	3	1,762***	-	1,471*	-	853
Columbus NEWWS- *traditional case management strategies*[d]	3	2,819*	-	-20	-	140
Columbus NEWWS- *integrated case management strategies*[d]	3	2,239	-	460	-	992

(continued)

Table 6.1 (continued)

SOURCES: [a]Miller (1998).
[b]Verma and Riccio (2003).
[c]Lee, Beecroft, Khadduri, and Patterson (2003).
[d]Riccio and Orenstein (2003).

NOTES: - = not applicable.
Statistical significance levels are indicated as ***=1 percent, **=5 percent, and *=10 percent.
[e]The Combined Section 8 category includes project-based Section 8 assistance and Section 8 vouchers.

Appendix A

Determining Housing Assistance at Program Enrollment Using HUD Administrative Records

This appendix describes the process used to determine housing assistance status and subgroup at sample intake from HUD administrative records for the Connecticut Jobs First and the Minnesota Family Investment Program (MFIP) samples. As noted in the report, for the purpose of this study, MDRC data were matched to HUD administrative records databases (MTCS and TRACS) to obtain information on federal housing receipt during the study period.[1] HUD provided MDRC with the following information for each sample matched to its databases: type of program transaction, transaction date, admission date, and type of assistance. Transaction types include admission, annual reexamination or recertification, interim reexamination or recertification, end of participation, and change of housing unit.

Note that the objective of matching MDRC data to HUD files was to identify from this source whether individuals were receiving federal housing assistance at the point of random assignment to the program. Since the date of admission or transaction does not necessarily fall within the month of sample intake, the first step was to create monthly measures at the sample member level that would indicate whether or not an individual was receiving housing assistance in a particular month. The most straightforward way to create monthly participation is to use the start and end dates for each housing spell. However, on examination of HUD data, it became clear that a large number of records were either missing admission dates or did not have transactions indicating the end of participation. Further, there were many instances where a transaction, such as a recertification, was not preceded by an admission transaction. Following discussions with HUD, it was determined that the missing data resulted from the less-than-perfect reporting standards of the local public housing authorities or private project owners. Thus, this study relies on a combination of transaction codes, dates, and assumptions to determine housing assistance status at random assignment. (See Box A.1 for a summary.)

The transaction dates were used to create monthly housing receipt flags for each sample member. For example, if a person had a transaction showing admission to public housing in January and had an interim reexamination in June of the same year, it was assumed that this person was living in public housing from January through June. Participation exit was recorded when a transaction showed an "end of participation" status or when a new transaction was recorded for a new program. Unless there was a new transaction type, the person was recorded as participating in the type of housing assistance for at least 18 months. For the example above, if a new transaction was not recorded after the interim reexamination, it was assumed that the person continued living in public housing for 18 months after the transaction date.

[1]The Multifamily Tenant Characteristics System (MTCS) tracks individuals receiving public housing, certificates, Section 8 vouchers, and moderate rehabilitation. The Tenant Rental Assistance Certification System (TRACS) tracks those receiving assistance through privately owned projects.

Furthermore, post-random assignment transaction dates were also examined in order to determine whether the individual was receiving housing assistance at sample intake. If a sample member had a transaction within 18 months of sample intake that indicated an annual reexamination, an interim reexamination, an end of participation, or a change of unit, the sample member was categorized as receiving the type of housing assistance related to the transaction at the time of sample intake. If the first transaction after random assignment indicated a program admission — and no other transaction appeared prior to random assignment — the sample member was categorized as living in unsubsidized or unassisted housing at the time of sample intake.

It is possible that the use of the 18-month rule to end housing receipt for cases with no transaction record within the 18 months of the last transaction allows for some degree of misclassification. However, note that 64 percent of the MFIP sample and 66 percent of the Jobs First sample had a transaction type in the month of sample intake, or 12 months prior to or 12 months after random assignment. Thus, the 18-month rule was applied to about one-third of the cases in both sites to determine housing assistance status.

In addition, the fact that housing authorities might inaccurately report the housing assistance type or fail to report housing transactions might also have resulted in the misclassification of sample members. If a sample member did not match HUD's database, she was classified as unassisted, when in fact she might have been receiving housing assistance during sample intake. In addition, if an "end of participation" transaction was not reported by the public housing authority, the sample member might appear as assisted, when in fact she could have moved out from the subsidized housing.

Once monthly participation flags were created for each active housing spell and program type, the HUD records were matched with the respondents' self-reported housing information to assess the correspondence between the two data sources. The strategy for this report was to focus on the matched sample: cases for which both sources of information are in agreement. While this is a conservative approach, it provides a more accurate identification of the assisted sample.

Box A.1

Classification of Housing Assistance Status and Subgroup at Program Intake Using HUD Administrative Records

A sample member *received* housing assistance if he/she had:

- A transaction other than an "end of participation" in the month of sample intake
- A transaction indicating program admission, recertification or reexamination, or a move in or move out of unit, 18 months prior to program intake
- A transaction, other than program admission, within 18 months after program intake

A sample member *did not receive* housing assistance if he/she:

- Did not have a record in the HUD administrative records systems (TRACS or MTCS)
- Had an "end of participation" transaction prior to sample intake, with no indication of entering another housing subsidy after sample intake
- Did not have a transaction prior to sample intake and began a program after sample intake

Appendix B

Supplementary Impact Tables

Housing Assistance and Self-Sufficiency Study

Table B.1
Selected Characteristics at Random Assignment to Program, by Housing Status at Sample Intake, Connecticut Jobs First Program

	Assisted	Unassisted	
Demographic characteristics			
Age (%)			
Under 20	2.0	11.5	***
20-24	12.5	24.8	***
25-34	47.8	38.3	***
35 - 44	31.2	20.7	***
55 or over	6.5	4.6	**
Average age (years)	33.0	29.4	***
Race/ethnicity (%)			
White, non-Hispanic	27.2	46.8	***
Black, non-Hispanic	53.2	28.2	***
Hispanic	19.1	23.9	***
Other	0.5	1.2	
Family status			
Marital status (%)			
Never married	65.6	63.5	
Married, living with spouse	1.2	1.5	
Married, living apart	12.1	15.5	**
Separated	6.8	5.4	
Divorced	13.4	13.0	
Widowed	0.8	1.1	
Number of children (%)			
None[a]	2.4	12.8	***
1 child	32.8	45.6	***
2 children	32.6	24.6	***
3 children	20.2	11.2	***
4 or more children	12.0	5.8	***
Average number of children	2.1	1.5	***
Youngest child's age (%)			
2 or younger	27.6	43.1	***
3-5	22.5	22.7	
6 or older	49.9	34.1	***
Employment status			
Ever worked (%)	89.9	89.3	
Ever worked full time for six months or more for one employer (%)	52.9	59.6	***
Any earnings in past 12 months (%)	40.8	53.3	***
Employed at random assignment (%)	25.5	23.2	

(continued)

Table B.1 (continued)

	Assisted	Unassisted	
Educational status			
Highest degree/diploma earned (%)			
GED[b]	12.3	11.0	
High school diploma	47.1	48.4	
Technical/two-year college degree	2.7	5.2	***
Four-year (or more) college degree	0.9	2.1	**
None of the above	36.9	33.3	*
Highest grade completed in school (average)	11.1	11.3	***
Received a high school diploma or GED	59.4	59.5	
Enrolled in education or training during the past 12 months (%)	19.8	21.9	
Public assistance status			
Aid status (%)			
Applicant	17.2	47.4	***
Recipient	82.8	52.6	***
Total prior AFDC receipt[c] (%)			
None	3.5	26.2	***
Less than 2 years	10.4	29.1	***
2 years or more but less than 5 years	24.1	23.5	
5 years or more but less than 10 years	30.8	13.7	***
10 years or more	31.2	7.5	***
Resided as a child in a household receiving AFDC (%)	26.4	22.2	**
Level of disadvantage[d]			
Participant's level of disadvantage (%)			
Least disadvantaged	14.1	27.3	***
Moderately disadvantaged	65.8	64.6	
Most disadvantaged	20.2	8.1	***
Sample size	751	2,631	

(continued)

Table B.1 (continued)

SOURCES: MDRC calculations using BIF data and HUD's administrative records.

NOTES:

Housing assistance status was determined based on the self-reported information from the Baseline Information Form and HUD's administrative records data (see Chapter 2 for further details).

Invalid or missing values are not included in individual variable distributions.

Rounding may cause slight discrepancies in the calculation of sums and differences.

[a]This category includes sample members who were pregnant with their first child at the time of random assignment.

[b]The General Educational Development (GED) certificate is given to those who pass the GED test and is intended to signify knowledge of basic high school subjects.

[c]This refers to the total number of months accumulated from one spell or more on an individual's own or spouse's AFDC case. It does not include AFDC receipt under a parent's name.

[d]The levels of disadvantage subgroups are based on AFDC history, prior employment, and whether the sample member had a high school diploma or GED. Those in the "Most Disadvantaged" subgroup were on welfare at least 22 months out of the 24 months prior to random assignment, had no prior work in the year before random assignment, and had no high school diploma or GED. Sample members in the "Least Disadvantaged" subgroup were not long-term welfare recipients, had prior work experience, and had a high school diploma or GED. Those in the "Moderately Disadvantaged" subgroup had some, but not all, of the risk factors.

A two-tailed t-test was applied to differences between the Jobs First and AFDC groups. Statistical significance levels are indicated as *** = 1 percent; ** = 5 percent; * = 10 percent.

Housing Assistance and Self-Sufficiency Study

Table B.2

Selected Characteristics at Random Assignment to Program, by Housing Status at Sample Intake, Minnesota Family Investment Program

	Assisted	Unassisted	
Demographic characteristics			
Age (%)			
Under 20	1.1	6.8	***
20-24	17.1	25.9	***
25-34	49.3	43.5	*
35 - 44	27.7	20.3	***
55 or over	4.8	3.5	
Average age (years)	32.0	29.8	***
Race/ethnicity (%)			
White, non-Hispanic	46.6	42.8	
Black	41.7	41.1	
Hispanic	1.7	2.2	
Other	10.0	13.9	*
Family status			
Marital status (%)			
Never married	70.1	67.8	
Married, living with spouse	0.0	0.5	
Married, living apart	7.3	9.9	
Separated	1.7	2.6	
Divorced	18.6	18.1	
Widowed	2.3	1.0	*
Number of children (%)			
None	n/a	n/a	
1 child	30.7	37.9	**
2 children	38.4	30.8	**
3 children	19.3	19.4	
4 or more	11.6	11.9	
Average number of children	2.2	2.1	
Youngest child's age (%)			
2 or younger	28.4	39.7	***
3-5	29.0	29.1	
6 or older	42.6	31.2	***
Employment status			
Ever worked full time for six months or more for one employer (%)	54.1	52.8	
Any earnings in past 12 months (%)	69.2	69.0	
Employed at random assignment (%)	15.4	12.2	

(continued)

Table B.2 (continued)

	Assisted	Unassisted	
Educational status			
Highest degree/diploma earned (%)			
GED[a]	19.2	19.1	
High school diploma	38.0	37.2	
Technical/two-year college degree	14.4	6.3	***
Four-year (or more) college degree	0.8	1.2	
None of the above	27.6	36.2	***
Highest grade completed in school (average)	11.5	11.3	*
Received a high school diploma or GED	57.2	56.3	
Enrolled in education or training during the past 12 months (%)	30.3	24.8	**
Reservation wage			
Average minimum hourly wage at which the client would take a full-time job ($)			
With no medical benefits	12.7	11.2	***
With full medical benefits	9.6	8.9	***
With full medical benefits, and the welfare department would let client continue to get most of the welfare check	8.1	7.8	
Public assistance status			
Total prior AFDC receipt[b] (%)			
None	1.4	0.8	
Less than 2 years	1.1	6.2	***
2 years or more but less than 5 years	29.2	41.7	***
5 years or more but less than 10 years	38.4	30.7	***
10 years or more	29.8	20.7	***
Resided as a child in a household receiving AFDC (%)	30.3	33.1	
Sample size	357	920	

(continued)

Table B.2 (continued)

SOURCES: MDRC calculations using Background Information Form data, Private Opinion Survey data, and HUD's administrative records.

NOTES:

Housing assistance status was determined based on the self-reported information from the Baseline Information Form and HUD's administrative records data (see Chapter 2 for further details).

Invalid or missing values are not included in individual variable distributions.

Rounding may cause slight discrepancies in the calculation of sums and differences.

[a] The General Educational Development (GED) certificate is given to those who pass the GED test and is intended to signify knowldege of basic high school subjects.

[b] This refers to the total number of months an individual or her spouse has spent on AFDC at one or more perods of time as an adult. It does not include AFDC receipt under a parent's name.

Thirty percent of the sample members for this report did not fill out a Private Opinion Survey.

A two-tailed t-test was applied to differences between the MFIP and AFDC groups. Statistical significance levels are indicated as *** = 1 percent; ** = 5 percent; * = 10 percent.

Housing Assistance and Self-Sufficiency Study

Table B.3

Selected Characteristics at Random Assignment to Program, by Housing Status at Sample Intake, Connecticut Jobs First Program

	Public	Section 8	Unassisted	
Demographic characteristics				
Age (%)				
Under 20	4.2	0.8	11.5	***
20-24	19.3	8.9	24.8	***
25-34	45.6	49.0	38.3	***
35 - 44	26.3	33.7	20.7	***
55 or over	4.6	7.5	4.6	**
Average age (years)	31.3	33.9	29.4	***
Race/ethnicity (%)				
White, non-Hispanic	10.0	36.3	46.8	***
Black, non-Hispanic	73.3	42.6	28.2	***
Hispanic	16.7	20.3	23.9	**
Other	0.0	0.8	1.2	
Family status				
Marital status (%)				
Never married	73.3	61.6	63.5	***
Married, living with spouse	1.2	1.2	1.5	
Married, living apart	11.2	12.5	15.5	*
Separated	8.5	6.0	5.4	
Divorced	5.4	17.7	13.0	***
Widowed	0.4	1.0	1.1	
Number of children (%)				
None[a]	1.5	2.8	12.8	***
1 child	35.1	31.5	45.6	***
2 children	35.1	31.3	24.6	***
3 children	17.8	21.5	11.2	***
4 or more children	10.4	12.8	5.8	***
Average number of children	2.1	2.1	1.5	***
Youngest child's age (%)				
2 or younger	38.8	21.5	43.1	***
3-5	22.4	22.6	22.7	
6 or older	38.8	55.9	34.1	***
Employment status				
Ever worked (%)	86.1	91.9	89.3	**
Ever worked full time for six months or more for one employer (%)	50.8	53.9	59.6	***
Any earnings in past 12 months (%)	32.1	45.1	53.3	***
Employed at random assignment (%)	22.0	27.3	23.2	

(continued)

Table B.3 (continued)

	Public	Section 8	Unassisted	
Educational status				
Highest degree/diploma earned (%)				
GED[b]	6.7	15.3	11.0	***
High school diploma	54.5	43.2	48.4	**
Technical/two-year college degree	0.8	3.7	5.2	***
Four-year (or more) college degree	0.4	1.2	2.1	*
None of the above	37.6	36.6	33.3	
Highest grade completed in school (average)	11.2	11.0	11.3	***
Received a high school diploma or GED	61.2	58.5	59.5	
Enrolled in education or training during the past 12 months (%)	17.9	20.8	21.9	
Public assistance status				
Aid status (%)				
Applicant	12.4	19.7	47.4	***
Recipient	87.6	80.3	52.6	***
Total prior AFDC receipt[c] (%)				
None	3.9	3.3	26.2	***
Less than 2 years	12.9	9.0	29.1	***
2 years or more but less than 5 years	29.0	21.5	23.5	*
5 years or more but less than 10 years	26.7	33.0	13.7	***
10 years or more	27.5	33.2	7.5	***
Resided as a child in a household receiving AFDC (%)	28.0	25.6	22.2	**
Level of disadvantage[d]				
Participant's level of disadvantage (%)				
Least disadvantaged	12.2	15.1	27.3	***
Moderately disadvantaged	69.4	63.8	64.6	
Most disadvantaged	18.4	21.1	8.1	***
Sample size	259	492	2,631	

(continued)

Table B.3 (continued)

SOURCES: MDRC calculations using BIF data and HUD's administrative records.

NOTES:

Housing assistance status was determined based on the self-reported information from the Baseline Information Form and HUD's administrative records data (see Chapter 2 for further details).

Invalid or missing values are not included in individual variable distributions.

Rounding may cause slight discrepancies in the calculation of sums and differences.

[a]This category includes sample members who were pregnant with their first child at the time of random assignment.

[b]The General Educational Development (GED) certificate is given to those who pass the GED test and is intended to signify knowledge of basic high school subjects.

[c]This refers to the total number of months accumulated from one spell or more on an individual's own or spouse's AFDC case. It does not include AFDC receipt under a parent's name.

[d]The levels of disadvantage subgroups are based on AFDC history, prior employment, and whether the sample member had a high school diploma or GED. Those in the "Most Disadvantaged" subgroup were on welfare at least 22 months out of the 24 months prior to random assignment, had no prior work in the year before random assignment, and had no high school diploma or GED. Sample members in the "Least Disadvantaged" subgroup were not long-term welfare recipients, had prior work experience, and had a high school diploma or GED. Those in the "Moderately Disadvantaged" subgroup had some, but not all, of the risk factors.

Housing Assistance and Self-Sufficiency Study

Table B.4

Impacts on Employment, Earnings, and Income, by Housing Assistance Status at Sample Intake, Connecticut Jobs First Program

	Assisted (Includes Public Housing and Section 8)				Unassisted			
	Jobs First	AFDC	Impact	Percentage Change	Jobs First	AFDC	Impact	Percentage Change
Employment (%)								
Average quarterly employment rate								
Year 1	56.1	41.0	15.1 ***	36.8	48.9	43.5	5.4 ***	12.4
Year 2	62.2	47.5	14.7 ***	31.0	55.5	49.3	6.2 ***	12.6
Year 3	63.5	50.7	12.7 ***	25.1	59.3	53.3	6.0 ***	11.2
Year 4	64.4	52.2	12.2 ***	23.5	60.2	54.5	5.8 ***	10.6
Years 1-4	61.6	47.8	13.8 ***	28.9	56.0	50.2	5.9 ***	11.7
Employment stability (%)								
Employed 4 consecutive quarters in first 2.5 years of follow-up	70.0	53.1	16.9 ***	31.7	63.1	57.9	5.3 ***	9.1
Employed all quarters, Year 1-3	22.9	16.8	6.1 **	36.5	19.8	17.6	2.3	13.0
Employed all quarters, Years 2-3	35.5	25.9	9.6 ***	37.1	32.4	27.3	5.1 ***	18.6
Employed all quarters, Year 1-4	20.2	15.0	5.1 **	34.3	16.9	14.9	2.0	13.5
Ever employed Years 1-4	88.1	79.8	8.3 ***	10.4	85.7	82.7	3.0 **	3.6
Average earnings ($)								
Year 1	4,284	3,495	789 **	22.6	4,132	4,046	86	2.1
Year 2	6,096	5,066	1,030 **	20.3	6,429	5,863	565 **	9.6
Year 3	7,537	6,339	1,198 **	18.9	8,095	7,423	672 **	9.1
Year 4	8,356	7,427	929	12.5	9,353	9,038	315	3.5
Years 1-4	26,245	22,281	3,965 **	17.8	28,033	26,375	1,658	6.3
Average TANF receipt (%)								
Year 1	88.8	80.0	8.8 ***	11.0	78.9	71.2	7.7 ***	10.7
Year 2	69.8	63.6	6.3 **	9.9	56.0	51.1	4.8 ***	9.5
Year 3	38.6	49.6	-11.0 ***	-22.2	31.1	37.8	-6.8 ***	-17.9
Year 4	24.3	38.5	-14.2 ***	-36.9	19.1	26.0	-6.9 ***	-26.5
Years 1-4	97.4	91.9	5.5 ***	6.0	92.5	89.5	2.9 ***	3.3
Average TANF payment ($)								
Year 1	5,223	4,343	880 ***	20.2	4,457	3,735	722 ***	19.3
Year 2	4,012	3,451	562 ***	16.3	3,134	2,756	378 ***	13.7
Year 3	2,142	2,630	-487 ***	-18.5	1,685	2,028	-343 ***	-16.9
Year 4	1,354	2,008	-654 ***	-32.6	1,041	1,386	-344 ***	-24.8
Years 1-4	12,712	12,415	297	2.4	10,308	9,892	417	4.2

(continued)

Table B.4 (continued)

	Assisted (Includes Public Housing and Section 8)				Unassisted			
	Jobs First	AFDC	Impact	Percentage Change	Jobs First	AFDC	Impact	Percentage Change
Average income[a] ($)								
Year 1	11,925	9,948	1,977 ***	19.9	10,463	9,479	984 ***	10.4
Year 2	12,158	10,395	1,762 ***	17.0	11,048	9,986	1,062 ***	10.6
Year 3	11,348	10,626	722	6.8	10,912	10,606	305	2.9
Year 4	11,092	10,881	211	1.9	11,312	11,364	-53	-0.5
Years 1-4	46,474	41,772	4,703 ***	11.3	43,740	41,419	2,321 **	5.6
Sample size	393	358			1,303	1,328		

SOURCES: MDRC calculations using Connecticut Unemployment Insurance (UI) earning records, Connecticut AFDC/TFA records, Food Stamp records, BIF data, and HUD's administrative records data.

NOTES:

Housing assistance status was determined based on the self-reported information from the Baseline Information Form and HUD's administrative records data (see Chapter 2 for further details).

Invalid or missing values are not included in individual variable distributions.

Rounding may cause slight discrepancies in the calculation of sums and differences.

Dollar averages include zero values for sample members who were not employed or were not receiving AFDC/TANF or Food Stamps. Estimates were adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members.

A two-tailed t-test was applied to differences between the research groups. Statistical significance levels are indicated as ***=1 percent, **=5 percent, and *=10 percent.

A total of 20 sample members were excluded from measures involving Year 4 because UI earnings data for the last quarter of the follow-up period were not available for them. For this reason, measures from Years 1-2 and Years 3-4 will not exactly sum into Years 1-4.

[a]Average income combines earnings, TANF payments, and Food Stamp benefits.

Table B.5
Impacts on Employment, Earnings, and Income, by Housing Assistance Status at Sample Intake, Minnesota Family Investment Program

	Assisted (Includes Public Housing and Section 8)				Unassisted			
	MFIP	AFDC	Impact	Percentage Change	MFIP	AFDC	Impact	Percentage Change
Employment (%)								
Average quarterly employment rate								
Year 1	55.6	29.2	26.4 ***	90.5	44.0	35.5	8.5 ***	23.9
Year 2	66.0	37.9	28.1 ***	74.2	49.0	41.9	7.1 ***	16.8
Year 3 (Quarters 1-3)	66.5	47.7	18.8 ***	39.5	53.8	47.1	6.7 **	14.2
Years 1-3	62.4	37.4	25.0 ***	66.7	48.5	41.0	7.5 ***	18.3
Employment stability (%)								
Employed 4 consecutive quarters, Years 1-3	73.5	46.2	27.4 ***	59.2	57.8	47.3	10.4 ***	22.0
Employed all quarters, Years 1-3	20.3	8.1	12.2 ***	151.5	12.6	9.1	3.5 *	38.0
Employed all quarters, Years 2-3	39.2	16.3	23.0 ***	141.0	23.9	19.8	4.2	21.1
Ever employed Years 1-3	89.0	71.4	17.6 ***	24.7	84.1	73.8	10.3 ***	14.0
Average earnings ($)								
Year 1	3,754	1,952	1,801 ***	92.3	2,631	2,216	415 *	18.7
Year 2	6,049	3,707	2,342 ***	63.2	4,018	3,833	185	4.8
Year 3 (Quarters 1-3)	5,356	4,026	1,330 **	33.0	4,021	4,019	3	0.1
Years 1-3	15,159	9,686	5,473 ***	56.5	10,670	10,067	603	6.0
Average AFDC receipt (%)								
Year 1	96.7	92.9	3.8 *	4.1	91.1	90.3	0.9	1.0
Year 2	87.0	80.2	6.7 *	8.4	79.0	73.5	5.5 **	7.5
Year 3 (Quarters 1-3)	74.0	66.6	7.4	11.2	70.2	60.6	9.6 ***	15.9
Years 1-3	87.0	81.1	5.9 **	7.2	81.0	76.1	5.0 ***	6.5
Average AFDC payment ($)								
Year 1	8,047	7,621	426 *	5.6	7,701	7,183	517 ***	7.2
Year 2	6,521	6,187	334	5.4	6,439	5,810	628 **	10.8
Year 3 (Quarters 1-3)	4,093	3,914	179	4.6	4,139	3,546	594 ***	16.7
Years 1-3	18,661	17,722	939	5.3	18,279	16,539	1,739 ***	10.5
Average income[a] ($)								
Year 1	11,801	9,573	2,228 ***	23.3	10,331	9,399	932 ***	9.9
Year 2	12,570	9,894	2,676 ***	27.0	10,457	9,643	813 **	8.4
Year 3 (Quarters 1-3)	9,449	7,940	1,509 ***	19.0	8,160	7,564	596 *	7.9
Years 1-3	33,819	27,407	6,412 ***	23.4	28,949	26,607	2,342 ***	8.8
Sample size	165	192			436	484		

(continued)

Table B.5 (continued)

SOURCES: MDRC calculations using Minnesota's Unemployment Insurance (UI) earning records, Public Assistance records, BIF data, and HUD's administrative records data.

NOTES:

Housing assistance status was determined based on the self-reported information from the Baseline Information Form and HUD's administrative records data (see Chapter 2 for further details).

Invalid or missing values are not included in individual variable distributions.

Rounding may cause slight discrepancies in the calculation of sums and differences.

Dollar averages include zero values for sample members who were not employed or were not receiving AFDC/TANF or Food Stamps. Estimates were adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members.

MFIP employment and earnings data are only available for the first four quarters of Years 1 and 2 and for the first three quarters of Year 3. In other words, Quarter 4 of Year 3 is not included in the analysis.

A two-tailed t-test was applied to differences between the research groups. Statistical significance levels are indicated as ***=1 percent, **=5 percent, and *=10 percent.

[a]Average income combines earnings and the MFIP amount.

Housing Assistance and Self-Sufficiency Study

Table B.6

Differences Between the Welfare Reform Impacts on Assisted and Unassisted Housing Groups, Connecticut Jobs First and Minnesota Family Investment Program

	Unconditional Estimates			Conditional Estimates
Program and Measure	Impact on Asstisted Group	Impact on Unasstisted Group	Difference in Impact	Difference in Impact
Connecticut Jobs First				
Average quarterly employment rate				
Years 1-4	13.8 ***	5.9 ***	7.9 ***	6.6 **
Average total earnings ($)				
Years 1-4	3,965 **	1,658	2,307	2,790
Average total income ($)				
Years 1-4	4,703 ***	2,321 **	2,381	2,819
Minnesota Family Investment Program				
Average quarterly employment rate				
Years 1-3	25.0 ***	7.5 ***	17.5 ***	16.1 ***
Average total earnings ($)				
Years 1-3	5,473 ***	603	4,870 ***	4,521 ***
Average total income ($)				
Years 1-3	6,412 ***	2,342 ***	4,070 **	4,051 ***

SOURCES: MDRC calculations using Unemployment Insurance (UI) earning records, public assistance, BIF data, and HUD's administrative records.

NOTES: Conditional impacts were performed to account for the possibility that the program affected housing groups differently. The results show the effects the differences in characteristics between the housing statuses had on the impact estimates. In addition to controlling for background characteristics, interaction variables were added to the regression model. The following variables were interacted with the research group dummy: earnings in prior year, AFDC payments in the prior year, possession of a high school diploma, race, age, and marital status.

Housing Assistance and Self-Sufficiency Study

Table B.7

Impacts on Employment, Earnings, and Income, by Housing Assistance Status at Sample Intake, Connecticut Jobs First Program

	Public Housing (Includes Project-Based Assistance)				Section 8				Unassisted			
	Jobs First	AFDC	Impact	Percentage Change	Jobs First	AFDC	Impact	Percentage Change	Jobs First	AFDC	Impact	Percentage Change
Employment (%)												
Average quarterly employment rate												
Year 1	53.5	41.5	12.0 ***	29.0	57.1	41.0	16.1 ***	39.4	48.9	43.5	5.4 ***	12.4
Year 2	60.3	46.3	14.0 ***	30.3	63.2	48.2	15.0 ***	31.2	55.5	49.3	6.2 ***	12.6
Year 3	64.6	50.8	13.8 ***	27.2	62.8	50.8	12.0 ***	23.7	59.3	53.3	6.0 ***	11.2
Year 4	65.5	53.5	12.0 **	22.5	63.7	51.6	12.1 ***	23.5	60.2	54.5	5.8 ***	10.6
Years 1-4	61.0	48.1	12.9 ***	26.9	61.7	47.7	14.0 ***	29.4	56.0	50.2	5.9 ***	11.7
Employment stability (%)												
Employed 4 consecutive quarters in first 2.5 years of follow-up	68.6	52.9	15.7 ***	29.7	70.5	53.4	17.1 ***	32.0	63.1	57.9	5.3 ***	9.1
Employed all quarters, Years 1-3	22.5	16.7	5.8	34.5	22.5	17.4	5.1	29.3	19.8	17.6	2.3	13.0
Employed all quarters, Years 2-3	37.4	23.2	14.3 **	61.5	34.1	27.7	6.3	22.9	32.4	27.3	5.1 ***	18.6
Employed all quarters, Years 1-4	18.9	16.6	2.3	14.1	20.3	14.8	5.5 *	37.1	16.9	14.9	2.0	13.5
Ever employed, Years 1-4	90.8	83.2	7.6 *	9.2	86.8	77.8	9.0 ***	11.6	85.7	82.7	3.0 **	3.6

(continued)

Table B.7 (continued)

	Public Housing (Includes Project-Based Assistance)				Section 8				Unassisted			
	Jobs First	AFDC	Impact	Percentage Change	Jobs First	AFDC	Impact	Percentage Change	Jobs First	AFDC	Impact	Percentage Change
Average earnings ($)												
Year 1	4,106	3,386	720	21.3	4,278	3,662	616	16.8	4,132	4,046	86	2.1
Year 2	5,867	4,973	894	18.0	6,157	5,181	977 *	18.9	6,429	5,863	565 **	9.6
Year 3	7,371	6,187	1,184	19.1	7,506	6,551	955	14.6	8,095	7,423	672 **	9.1
Year 4	8,190	7,372	818	11.1	8,328	7,585	743	9.8	9,353	9,038	315	3.5
Years 1-4	25,398	21,834	3,564	16.3	26,307	22,939	3,368	14.7	28,033	26,375	1,658	6.3
Average TANF receipt (%)												
Year 1	94.9	86.8	8.1 ***	9.3	85.8	76.1	9.7 ***	12.7	78.9	71.2	7.7 ***	10.7
Year 2	79.6	71.7	8.0 *	11.1	65.2	58.7	6.5 *	11.1	56.0	51.1	4.8 ***	9.5
Year 3	47.0	56.3	-9.2 *	-16.4	34.7	45.4	-10.8 ***	-23.7	31.1	37.8	-6.8 ***	-17.9
Year 4	34.3	48.4	-14.1 **	-29.1	19.6	32.8	-13.2 ***	-40.1	19.1	26.0	-6.9 ***	-26.5
Years 1-4	99.0	94.6	4.5 **	4.7	96.7	90.2	6.5 ***	7.1	92.5	89.5	2.9 ***	3.3
Average TANF payment ($)												
Year 1	5,859	4,912	947 ***	19.3	4,912	4,018	894 ***	22.3	4,457	3,735	722 ***	19.3
Year 2	4,831	4,058	772 **	19.0	3,631	3,079	552 **	17.9	3,134	2,756	378 ***	13.7
Year 3	2,636	3,121	-485	-15.6	1,915	2,335	-420 *	-18.0	1,685	2,028	-343 ***	-16.9
Year 4	2,042	2,624	-582 *	-22.2	1,038	1,636	-598 ***	-36.5	1,041	1,386	-344 ***	-24.8
Years 1-4	15,380	14,665	714	4.9	11,462	11,074	388	3.5	10,308	9,892	417	4.2
Average income[a] ($)												
Year 1	12,245	10,418	1,827 ***	17.5	11,692	9,770	1,921 ***	19.7	10,463	9,479	984 ***	10.4
Year 2	12,770	10,940	1,829 ***	16.7	11,838	10,106	1,732 ***	17.1	11,048	9,986	1,062 ***	10.6
Year 3	11,848	11,102	746	6.7	11,023	10,444	579	5.5	10,912	10,606	305	2.9
Year 4	11,945	11,546	399	3.5	10,597	10,587	10	0.1	11,312	11,364	-53	-0.5
Years 1-4	48,701	43,856	4,845 **	11.0	45,145	40,860	4,285 **	10.5	43,740	41,419	2,321 **	5.6
Sample size	133	126			260	232			1,303	1,328		

(continued)

Table B.7 (continued)

SOURCES: MDRC calculations using Connecticut Unemployment Insurance (UI) earning records, Connecticut AFDC/TFA records, Food Stamp records, BIF data, and HUD's administrative records data.

NOTES: Housing assistance status was determined by a match between self-reported information from the Baseline Information Form and HUD's administrative records data (see Chapter 2 for details of the match performed between data sources).

Invalid or missing values are not included in individual variable distributions.

Rounding may cause slight discrepancies in the calculation of sums and differences.

Dollar averages include zero values for sample members who were not employed or were not receiving AFDC/TANF or Food Stamps. Estimates were adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members.

A two-tailed t-test was applied to differences between the research groups. Statistical significance levels are indicated as ***=1 percent, **=5 percent, and *=10 percent.

A total of 20 sample members were excluded from measures involving Year 4 because UI earnings data for the last quarter of the follow-up period were not available for them. For this reason, measures from Years 1-2 and Years 3-4 will not exactly sum into Years 1-4.

[a]Average income combines earnings, TANF payments, and Food Stamp benefits.

Appendix C

Sensitivity Analysis of the Housing Subgroup Definitions

As described in the main report, this study combines self-reports and HUD data to create the housing subgroups of interest: Both the self-reported data and the HUD data had to indicate the same type of housing assistance during a specific time period (random assignment). Given the multiple data sources available for defining the subgroups, alternative definitions of housing assistance groups were possible — that is, using self-reports only or using HUD data only. To examine the robustness of the findings presented in the main report, this appendix presents a sensitivity test for the impacts by varying the data source used to define the housing assistance subgroups. This comparison is useful to assess whether the story changes when a different data source is used to define housing assistance.

As with the results presented in the main report, all the impacts presented in this appendix are regression-adjusted, within each housing subgroup, to control for differences in background characteristics, prior earnings, prior employment, prior welfare receipt, and prior Food Stamp receipt. The impacts for the matched sample are presented in the column labeled "Matched Sample"; the impacts for the sample defined using HUD data only are shown in the column labeled "HUD Sample"; and impacts for the sample defined using the Background Information Form (BIF) housing assistance question are shown in the column labeled "BIF Sample."

Appendix Table C.1[1] shows the Connecticut Jobs First impacts for the assisted sample members (public housing and Section 8 combined) for the matched, HUD, and BIF samples. Overall, this table shows that the impacts for the HUD and the BIF samples are consistent with the impacts for the matched sample. For the unassisted sample, the impacts for the HUD and the BIF samples are also consistent with those in the matched sample.

Table C.2 shows the Jobs First program impacts for the unassisted recipients using all definitions. The Job First program increased employment and income during the follow-up period. Whether it is the matched sample, the BIF sample, or the HUD sample, the impacts for the assisted sample are consistently larger than the impacts for the unassisted sample. For example, the impact on income for the HUD assisted sample is $2,676 after four years of follow-up, compared with $2,034 for the HUD unassisted sample after four years of follow-up. It is important to note that the total impacts on earnings for the matched sample are more like the impacts found in the BIF sample than like the HUD sample. For example, statistically significant impacts on average total earnings were found for the first year of follow-up for the matched and the BIF samples, but the impacts are not significant for the HUD sample (see Table C.1).

Similar to Connecticut's Jobs First program, the Minnesota Family Investment Program (MFIP) increased employment and total income for the assisted and unassisted subgroup members. These impacts are also consistent across the HUD- and BIF-defined samples. Table C.3

[1]The tables for Appendix C begin on page 112.

shows the MFIP impacts for the assisted sample using all three definitions; Table C.4 shows the same for the unassisted sample. Similar to the Jobs First impacts, the MFIP impacts are larger for the assisted sample regardless of the data source used to determine housing assistance. For example, the impact on average total income during the full follow-up period for the matched assisted sample is $6,412, while it is only $2,342 for the matched unassisted sample. For the HUD-defined sample, the impact is $6,019 for the assisted sample and only $2,856 for the unassisted sample. The same for the BIF-defined sample is $5,022 and only $2,779 for the unassisted BIF sample. Significant impacts on TANF receipt during the follow-up period are found for the unassisted matched, HUD, and BIF samples. The impacts on TANF payments across the assisted sample members in the matched, HUD, and BIF samples differ. Statistically significant impacts on average welfare payments were found during the first and second years for the BIF-defined sample; however, statistically significant impacts were found only during the first year of follow-up for the matched and the HUD samples (see Table C.3).

Regardless of the data source and strategy used to define housing assistance status at sample intake, there is generally a consistent relationship between housing assistance and program impacts. The pattern suggests that welfare-to-work programs have larger effects on sample members living in assisted housing: Income and employment gains were greater for program group members receiving housing assistance at sample intake. In sum, although the magnitude of the impacts varied slightly depending on the data used to define the groups, the impact findings are fairly stable.

Table C.1

Impacts on Key Economic Outcomes for Matched, HUD-Defined, and BIF-Defined Assisted Housing Groups, Connecticut Jobs First Program

	Match Sample				HUD Sample				BIF Sample			
	Jobs First	Control	Impact	Percentage Change	Jobs First	Control	Impact	Percentage Change	Jobs First	Control	Impact	Percentage Change
Employment (%)												
Average quarterly employment rate												
Year 1	56.1	41.0	15.1 ***	36.8	53.4	41.9	11.6 ***	27.6	52.0	40.8	11.2 ***	27.4
Year 2	62.2	47.5	14.7 ***	31.0	59.2	48.1	11.2 ***	23.2	59.4	45.9	13.4 ***	29.3
Year 3	63.5	50.7	12.7 ***	25.1	60.8	52.9	8.0 ***	15.1	60.3	51.7	8.6 ***	16.6
Year 4	64.4	52.2	12.2 ***	23.5	61.6	53.5	8.1 ***	15.2	62.8	53.1	9.7 ***	18.3
Years 1-4	61.6	47.8	13.8 ***	28.9	58.8	49.0	9.7 ***	19.9	58.6	47.9	10.7 ***	22.3
Employment stability (%)												
Employed 4 consecutive quarters in first 2.5 years of follow-up	70.0	53.1	16.9 ***	31.7	67.1	54.4	12.7 ***	23.3	65.8	53.1	12.7 ***	23.9
Employed all quarters, Years 1-3	22.9	16.8	6.1 **	36.5	21.4	16.6	4.8 **	29.0	21.4	17.0	4.3 **	25.4
Employed all quarters, Years 2-3	35.5	25.9	9.6 ***	37.1	33.7	26.1	7.6 ***	29.0	33.0	24.5	8.5 ***	34.6
Employed all quarters, Years 1-4	20.2	15.0	5.1 **	34.3	18.5	14.0	4.5 **	31.9	18.8	14.5	4.3 **	29.9
Average earnings ($)												
Year 1	4,284	3,495	789 **	22.6	3,969	3,561	408	11.5	3,990	3,448	542 **	15.7
Year 2	6,096	5,066	1,030 **	20.3	5,863	5,117	747 **	14.6	5,897	4,805	1,092 ***	22.7
Year 3	7,537	6,339	1,198 **	18.9	7,462	6,698	764 *	11.4	7,273	6,391	883 **	13.8
Year 4	8,356	7,427	929	12.5	8,370	7,833	537	6.9	8,362	7,541	821 *	10.9
Years 1-4	26,245	22,281	3,965 **	17.8	25,607	23,186	2,421 *	10.4	25,510	22,190	3,320 ***	15.0

(continued)

Table C.1 (continued)

	Match Sample				HUD Sample				BIF Sample			
	Jobs First	Control	Impact	Percentage Change	Jobs First	Control	Impact	Percentage Change	Jobs First	Control	Impact	Percentage Change
Average TANF receipt (%)												
Year 1	88.8	80.0	8.8 ***	11.0	86.7	79.1	7.6 ***	9.6	88.0	79.5	8.5 ***	10.7
Year 2	69.8	63.6	6.3 **	9.9	66.3	63.1	3.2	5.0	68.3	63.4	4.8 **	7.6
Year 3	38.6	49.6	-11.0 ***	-22.2	36.1	48.0	-11.9 ***	-24.8	38.4	49.9	-11.5 ***	-23.0
Year 4	24.3	38.5	-14.2 ***	-36.9	22.6	36.3	-13.7 ***	-37.8	25.5	38.2	-12.7 ***	-33.2
Years 1-4	97.4	91.9	5.5 ***	6.0	96.1	91.2	4.9 ***	5.4	96.3	91.3	5.0 ***	5.4
Average TANF payment ($)												
Year 1	5,223	4,343	880 ***	20.2	5,018	4,238	780 ***	18.4	5,204	4,336	868 ***	20.0
Year 2	4,012	3,451	562 ***	16.3	3,761	3,422	339 **	9.9	3,940	3,470	470 ***	13.6
Year 3	2,142	2,630	-487 ***	-18.5	1,978	2,563	-585 ***	-22.8	2,133	2,636	-503 ***	-19.1
Year 4	1,354	2,008	-654 ***	-32.6	1,246	1,924	-679 ***	-35.3	1,411	2,034	-623 ***	-30.7
Years 1-4	12,712	12,415	297	2.4	11,987	12,142	-156	-1.3	12,673	12,457	216	1.7
Average income ($)												
Year 1	11,925	9,948	1,977 ***	19.9	11,281	9,810	1,471 ***	15.0	11,586	9,911	1,675 ***	16.9
Year 2	12,158	10,395	1,762 ***	17.0	11,563	10,346	1,218 ***	11.8	11,880	10,175	1,705 ***	16.8
Year 3	11,348	10,626	722	6.8	11,010	10,843	167	1.5	11,072	10,669	403	3.8
Year 4	11,092	10,881	211	1.9	10,919	11,056	-137	-1.2	11,196	10,993	204	1.9
Years 1-4	46,474	41,772	4,703 ***	11.3	44,695	42,019	2,676 **	6.4	45,707	41,720	3,987 ***	9.6
Sample size	393	358			644	622			803	783		

(continued)

Table C.1 (continued)

SOURCES: MDRC calculations using Connecticut Unemployment Insurance (UI) earning records, Connecticut AFDC/TFA records, Food Stamp records, BIF data, and HUD's administrative records data.

NOTES:

Housing assistance status for the match sample was determined based on the self-reported information from the Baseline Information Form and HUD's administrative records data (see Chapter 2 for further details).

Housing assistance for the HUD sample was determined based on the HUD admistrative records data.

Housing assistance for the BIF sample was determined based on the Baseline Information Form.

Invalid or missing values are not included in individual variable distributions.

Rounding may cause slight discrepancies in the calculation of sums and differences.

Dollar averages include zero values for sample members who were not employed or were not receiving AFDC/TANF or Food Stamps. Estimates were adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members.

A two-tailed t-test was applied to differences between the research groups. Statistical significance levels are indicated as ***=1 percent, **=5 percent, and *=10 percent.

Housing Assistance and Self-Sufficiency Study

Table C.2

Impacts on Key Economic Outcomes for Matched, HUD-Defined, and BIF-Defined Unassisted Housing Groups, Connecticut Jobs First Program

	Match Sample				HUD Sample				BIF Sample			
	Jobs First	Control	Impact	Percentage Change	Jobs First	Control	Impact	Percentage Change	Jobs First	Control	Impact	Percentage Change
Employment (%)												
Average quarterly employment rate												
Year 1	48.9	43.5	5.4 ***	12.4	48.0	42.4	5.6 ***	13.1	48.6	43.4	5.1 ***	11.8
Year 2	55.5	49.3	6.2 ***	12.6	55.0	47.8	7.3 ***	15.2	55.3	49.3	6.1 ***	12.3
Year 3	59.3	53.3	6.0 ***	11.2	58.1	52.5	5.7 ***	10.8	58.8	53.4	5.4 ***	10.1
Year 4	60.2	54.5	5.8 ***	10.6	60.0	53.8	6.3 ***	11.6	60.0	54.3	5.7 ***	10.4
Years 1-4	56.0	50.2	5.9 ***	11.7	55.3	49.1	6.2 ***	12.5	55.7	50.1	5.6 ***	11.1
Employment stability (%)												
Employed 4 consecutive quarters in first 2.5 years of follow-up	63.1	57.9	5.3 ***	9.1	62.3	56.2	6.1 ***	10.8	63.0	57.8	5.2 ***	9.0
Employed all quarters, Years 1-3	19.8	17.6	2.3	13.0	19.5	17.1	2.4 **	14.2	19.4	17.4	2.0	11.3
Employed all quarters, Years 2-3	32.4	27.3	5.1 ***	18.6	31.3	26.0	5.2 ***	20.1	31.8	27.3	4.5 ***	16.3
Employed all quarters, Years 1-4	16.9	14.9	2.0	13.5	16.7	14.5	2.3 **	15.6	16.4	14.6	1.8	12.3
Average earnings ($)												
Year 1	4,132	4,046	86	2.1	4,042	3,933	109	2.8	4,048	4,040	9	0.2
Year 2	6,429	5,863	565 **	9.6	6,183	5,596	587 **	10.5	6,298	5,798	501 *	8.6
Year 3	8,095	7,423	672 **	9.1	7,726	7,185	541 *	7.5	7,951	7,380	571 *	7.7
Year 4	9,353	9,038	315	3.5	9,068	8,744	324	3.7	9,226	8,941	285	3.2
Years 1-4	28,033	26,375	1,658	6.3	27,034	25,474	1,561 *	6.1	27,524	26,157	1,366	5.2

(continued)

Table C.2 (continued)

	Match Sample				HUD Sample				BIF Sample			
	Jobs First	Control	Impact	Percentage Change	Jobs First	Control	Impact	Percentage Change	Jobs First	Control	Impact	Percentage Change
Average TANF receipt (%)												
Year 1	78.9	71.2	7.7 ***	10.7	79.1	72.1	7.1 ***	9.8	79.2	71.6	7.6 ***	10.6
Year 2	56.0	51.1	4.8 ***	9.5	57.3	53.2	4.1 ***	7.7	56.3	52.1	4.2 ***	8.0
Year 3	31.1	37.8	-6.8 ***	-17.9	32.7	40.2	-7.5 ***	-18.7	31.5	38.4	-6.9 ***	-17.9
Year 4	19.1	26.0	-6.9 ***	-26.5	20.8	28.9	-8.1 ***	-28.0	19.5	26.4	-6.9 ***	-26.3
Years 1-4	92.5	89.5	2.9 ***	3.3	92.1	89.4	2.7 ***	3.0	92.4	89.7	2.8 ***	3.1
Average TANF payment ($)												
Year 1	4,457	3,735	722 ***	19.3	4,522	3,837	685 ***	17.8	4,477	3,758	719 ***	19.1
Year 2	3,134	2,756	378 ***	13.7	3,231	2,891	340 ***	11.7	3,150	2,813	337 ***	12.0
Year 3	1,685	2,028	-343 ***	-16.9	1,782	2,158	-376 ***	-17.4	1,700	2,059	-359 ***	-17.4
Year 4	1,041	1,386	-344 ***	-24.8	1,133	1,549	-416 ***	-26.9	1,062	1,415	-353 ***	-24.9
Years 1-4	10,308	9,892	417	4.2	10,671	10,421	250	2.4	10,385	10,036	349	3.5
Average income ($)												
Year 1	10,463	9,479	984 ***	10.4	10,502	9,549	954 ***	10.0	10,407	9,503	904 ***	9.5
Year 2	11,048	9,986	1,062 ***	10.6	10,981	9,958	1,023 ***	10.3	10,947	10,001	946 ***	9.5
Year 3	10,912	10,606	305	2.9	10,738	10,591	147	1.4	10,814	10,614	200	1.9
Year 4	11,312	11,364	-53	-0.5	11,222	11,339	-117	-1.0	11,236	11,303	-67	-0.6
Years 1-4	43,740	41,419	2,321 **	5.6	43,463	41,429	2,034 **	4.9	43,393	41,405	1,989 **	4.8
Sample size	1,303	1,328			1,752	1,785			1,424	1,455		

(continued)

Table C.2 (continued)

SOURCES: MDRC calculations using Connecticut Unemployment Insurance (UI) earning records, Connecticut AFDC/TFA records, Food Stamp records, BIF data, and HUD's administrative records data.

NOTES:

Housing assistance status for the match sample was determined based on the self-reported information from the Baseline Information Form and HUD's administrative records data (see Chapter 2 for further details).

Housing assistance for the HUD sample was determined based on the HUD administrative records data.

Housing assistance for the BIF sample was determined based on the Baseline Information Form.

Invalid or missing values are not included in individual variable distributions.

Rounding may cause slight discrepancies in the calculation of sums and differences.

Dollar averages include zero values for sample members who were not employed or were not receiving AFDC/TANF or Food Stamps. Estimates were adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members.

A two-tailed t-test was applied to differences between the research groups. Statistical significance levels are indicated as ***=1 percent, **=5 percent, and *=10 percent.

Housing Assistance and Self-Sufficiency Study

Table C.3

Impacts on Key Economic Outcomes for Matched, HUD-Defined, and BIF-Defined Assisted Housing Groups, Minnesota Family Investment Program

	Match Sample				HUD Sample				BIF Sample			
	MFIP	Control	Impact	Percentage Change	MFIP	Control	Impact	Percentage Change	MFIP	Control	Impact	Percentage Change
Employment (%)												
Average quarterly employment rate												
Year 1	55.6	29.2	26.4 ***	90.5	52.8	30.6	22.2 ***	72.4	48.9	29.6	19.3 ***	65.3
Year 2	66.0	37.9	28.1 ***	74.2	62.6	37.2	25.4 ***	68.5	60.0	37.4	22.6 ***	60.2
Year 3 (Quarters 1-3)	66.5	47.7	18.8 ***	39.5	63.0	44.9	18.1 ***	40.3	61.9	43.5	18.4 ***	42.3
Years 1-3	62.4	37.4	25.0 ***	66.7	59.1	36.9	22.3 ***	60.3	56.5	36.2	20.3 ***	55.9
Employment stability (%)												
Employed 4 consecutive quarters, Years 1-3	73.5	46.2	27.4 ***	59.2	70.2	44.1	26.1 ***	59.1	68.3	43.6	24.7 ***	56.6
Employed all quarters, Years 1-3	20.3	8.1	12.2 ***	151.5	16.6	8.5	8.1 ***	95.2	14.8	9.0	5.8 **	64.0
Employed all quarters, Years 2-3	39.2	16.3	23.0 ***	141.0	34.0	17.3	16.7 ***	96.8	31.5	17.4	14.2 ***	81.6
Average earnings ($)												
Year 1	3,754	1,952	1,801 ***	92.3	3,464	2,029	1,435 ***	70.7	3,166	2,226	941 ***	42.3
Year 2	6,049	3,707	2,342 ***	63.2	5,686	3,441	2,245 ***	65.3	5,327	3,798	1,529 ***	40.3
Year 3 (Quarters 1-3)	5,356	4,026	1,330 **	33.0	5,168	3,764	1,405 ***	37.3	4,999	3,973	1,025 **	25.8
Years 1-3	15,159	9,686	5,473 ***	56.5	14,318	9,233	5,085 ***	55.1	13,492	9,997	3,495 ***	35.0
Average AFDC receipt (%)												
Year 1	96.7	92.9	3.8 *	4.1	95.4	92.6	2.8 *	3.0	95.4	92.5	2.9 **	3.1
Year 2	87.0	80.2	6.7 *	8.4	85.1	80.7	4.4	5.5	85.9	78.9	7.1 ***	9.0
Year 3 (Quarters 1-3)	74.0	66.6	7.4	11.2	73.0	67.6	5.4	7.9	74.3	66.7	7.6 **	11.4
Years 1-3	87.0	81.1	5.9 **	7.2	85.5	81.4	4.1 *	5.0	86.2	80.5	5.7 ***	7.1

(continued)

Table C.3 (continued)

	Match Sample				HUD Sample				BIF Sample			
	MFIP	Control	Impact	Percentage Change	MFIP	Control	Impact	Percentage Change	MFIP	Control	Impact	Percentage Change
Average AFDC payment ($)												
Year 1	8,047	7,621	426 *	5.6	8,046	7,444	602 ***	8.1	8,035	7,376	659 ***	8.9
Year 2	6,521	6,187	334	5.4	6,482	6,241	240	3.8	6,664	6,094	570 **	9.3
Year 3 (Quarters 1-3)	4,093	3,914	179	4.6	4,067	3,975	91	2.3	4,150	3,853	297	7.7
Years 1-3	18,661	17,722	939	5.3	18,595	17,661	934	5.3	18,850	17,324	1,526 ***	8.8
Average income ($)												
Year 1	11,801	9,573	2,228 ***	23.3	11,510	9,473	2,037 ***	21.5	11,202	9,601	1,600 ***	16.7
Year 2	12,570	9,894	2,676 ***	27.0	12,168	9,682	2,485 ***	25.7	11,991	9,892	2,099 ***	21.2
Year 3 (Quarters 1-3)	9,449	7,940	1,509 ***	19.0	9,235	7,739	1,496 ***	19.3	9,149	7,827	1,323 ***	16.9
Years 1-3	33,819	27,407	6,412 ***	23.4	32,913	26,894	6,019 ***	22.4	32,342	27,320	5,022 ***	18.4
Sample size	165	192			261	290			332	376		

SOURCES: MDRC calculations using Minnesota Unemployment Insurance (UI) earning records, public assistance records, BIF data, and HUD's administrative records.

NOTES:

Housing assistance status for the match sample was determined based on the self-reported information from the Baseline Information Form and HUD's administrative records data. (see Chapter 2 for details).

Housing assistance for the HUD sample was determined based on the HUD administrative records data.

Housing assistance for the BIF sample was determined based on the Baseline Information Form.

Invalid or missing values are not included in individual variable distributions.

Rounding may cause slight discrepancies in the calculation of sums and differences.

Dollar averages include zero values for sample members who were not employed or were not receiving AFDC/TANF or Food Stamps. Estimates were adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members.

MFIP employment and earnings data are only available for the first four quarters of Years 1 and 2 and for the first three quarters of Year 3. In other words, Quarter 4 of Year 3 is not included in the analysis.

A two-tailed t-test was applied to differences between the research groups. Statistical significance levels are indicated as ***=1 percent, **=5 percent, and *=10 percent.

Housing Assistance and Self-Sufficiency Study

Table C.4

Impacts on Key Economic Outcomes for Matched, HUD-Defined, and BIF-Defined Unassisted Housing Groups, Minnesota Family Investment Program

	Match Sample				HUD Sample				BIF Sample			
	MFIP	Control	Impact	Percentage Change	MFIP	Control	Impact	Percentage Change	MFIP	Control	Impact	Percentage Change
Employment (%)												
Average quarterly employment rate												
Year 1	44.0	35.5	8.5 ***	23.9	42.5	33.5	9.0 ***	26.9	44.5	35.1	9.4 ***	26.7
Year 2	49.0	41.9	7.1 ***	16.8	48.6	39.9	8.8 ***	22.1	49.7	40.9	8.8 ***	21.6
Year 3 (Quarters 1-3)	53.8	47.1	6.7 **	14.2	53.4	44.2	9.2 ***	20.8	54.1	46.1	8.0 ***	17.5
Years 1-3	48.5	41.0	7.5 ***	18.3	47.7	38.7	9.0 ***	23.2	49.0	40.2	8.8 ***	21.9
Employment stability (%)												
Employed 4 consecutive quarters, Years 1-3	57.8	47.3	10.4 ***	22.0	57.4	45.1	12.3 ***	27.4	58.0	46.4	11.5 ***	24.8
Employed all quarters, Years 1-3	12.6	9.1	3.5 *	38.0	11.5	8.6	2.9 *	33.5	12.5	8.8	3.7 *	42.1
Employed all quarters, Years 2-3	23.9	19.8	4.2	21.1	23.4	18.2	5.2 **	28.4	24.1	19.2	4.9 *	25.6
Average earnings ($)												
Year 1	2,631	2,216	415 *	18.7	2,516	2,157	359 *	16.6	2,638	2,164	474 **	21.9
Year 2	4,018	3,833	185	4.8	4,022	3,686	337	9.1	4,080	3,678	402	10.9
Year 3 (Quarters 1-3)	4,021	4,019	3	0.1	4,043	3,866	177	4.6	4,058	3,909	149	3.8
Years 1-3	10,670	10,067	603	6.0	10,581	9,708	873	9.0	10,777	9,751	1,026	10.5
Average AFDC receipt (%)												
Year 1	91.1	90.3	0.9	1.0	90.9	89.7	1.2	1.3	90.9	90.3	0.6	0.7
Year 2	79.0	73.5	5.5 **	7.5	79.3	73.2	6.0 ***	8.3	79.2	74.0	5.1 **	6.9
Year 3 (Quarters 1-3)	70.2	60.6	9.6 ***	15.9	70.4	61.4	8.9 ***	14.5	70.4	61.1	9.3 ***	15.2
Years 1-3	81.0	76.1	5.0 ***	6.5	81.1	76.0	5.1 ***	6.7	81.1	76.4	4.6 **	6.1

(continued)

Table C.4 (continued)

	Match Sample				HUD Sample				BIF Sample			
	MFIP	Control	Impact	Percentage Change	MFIP	Control	Impact	Percentage Change	MFIP	Control	Impact	Percentage Change
Average AFDC payment ($)												
Year 1	7,701	7,183	517 ***	7.2	7,746	7,122	624 ***	8.8	7,718	7,166	552 ***	7.7
Year 2	6,439	5,810	628 **	10.8	6,526	5,772	755 ***	13.1	6,455	5,837	618 ***	10.6
Year 3 (Quarters 1-3)	4,139	3,546	594 ***	16.7	4,149	3,544	605 ***	17.1	4,135	3,551	584 ***	16.5
Years 1-3	18,279	16,539	1,739 ***	10.5	18,422	16,439	1,983 ***	12.1	18,307	16,554	1,754 ***	10.6
Average income ($)												
Year 1	10,331	9,399	932 ***	10	10,262	9,279	983 ***	10.6	10,356	9,330	1,026 ***	11.0
Year 2	10,457	9,643	813 **	8	10,549	9,457	1,091 ***	11.5	10,535	9,515	1,020 ***	10.7
Year 3 (Quarters 1-3)	8,160	7,564	596 *	8	8,192	7,410	782 ***	10.6	8,193	7,460	733 **	9.8
Years 1-3	28,949	26,607	2342 ***	9	29,003	26,147	2,856 ***	10.9	29,084	26,305	2,779 ***	10.6
Sample size	436	484			585	644			479	526		

SOURCES: MDRC calculations using Minnesota Unemployment Insurance (UI) earning records, public assistance records, BIF data, and HUD's administrative records data.

NOTES:

Housing assistance status for the match sample was determined based on the self-reported information from the Baseline Information Form and HUD's administrative records data.

Housing assistance for the HUD sample was determined based on the HUD administrative records data.

Housing assistance for the BIF sample was determined based on the Baseline Information Form.

Invalid or missing values are not included in individual variable distributions.

Rounding may cause slight discrepancies in the calculation of sums and differences.

Dollar averages include zero values for sample members who were not employed or were not receiving AFDC/TANF or Food Stamps. Estimates were adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members.

MFIP employment and earnings data are only available for the first four quarters of Years 1 and 2 and for the first three quarters of Year 3. In other words, Quarter 4 of Year 3 is not included in the analysis.

A two-tailed t-test was applied to differences between the research groups. Statistical significance levels are indicated as ***=1 percent, **=5 percent, and *=10 percent.

References

Bloom, Dan, Susan Scrivener, Charles Michalopoulos, Pamela Morris, Richard Hendra, Diana Adams-Ciardullo, and Johanna Walter with Wanda Vargas. 2002. *Final Report on Connecticut's Welfare Reform Initiative.* New York: MDRC.

Casey, Connie H. 1992. *Characteristics of HUD-Assisted Renters and Their Units in 1989.* Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research.

Del Conte, Alessandra, and Jeffrey Kling. 2001. "Research on Self-Sufficiency, Safety and Health, and Behavior and Delinquency." *Poverty Research News* 5.

Devine, Deborah J., Lester Rubin, and Robert W. Gray. 1999. *The Use of Discretionary Authority in the Public Housing Program: A Baseline Inventory of Issues, Policy, and Practice*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research.

Hamilton, Gayle, Stephen Freedman, Lisa Gennetian, Charles Michalopoulos, Johanna Walter, Diana Adams-Ciardullo, Anna Gassman-Pines, Sharon McGroder, Martha Zaslow, Surjeet Ahluwalia, and Jennifer Brooks with Electra Small and Bryan Ricchetti. 2001. *Five-Year Adult and Child Impacts for Eleven Programs*. New York: MDRC.

Lee, Wang, Eric Beecroft, Jill Khadduri, and Rhiannon Patterson. 2003. *Impacts of Welfare Reform on Recipients of Housing Assistance: Evidence from Indiana and Delaware*. Bethesda, MD: Abt Associates.

Mancusco, David C., Charles J. Lieberman, Vanessa L. Lindler, and Anne Moses. 2003. "TANF Leavers: Examining the Relationship Between the Receipt of Housing Assistance and Post-TANF Well-Being." *Cityscape* 6: 123-138.

Miller, Cynthia. 1998. *Explaining the Minnesota Family Investment Program's Impacts by Housing Status*. New York: MDRC.

Miller, Cynthia, Virginia Knox, Lisa Gennetian, Martey Dodoo, Jo Anna Hunter, and Cindy Redcross. 2000. *Final Report on the Minnesota Family Investment Program. Volume 1: Effects on Adults*. New York: MDRC.

Nagle, Gloria. 2003. "Comparing Housing-Assisted and Housing-Unassisted Welfare Leavers in Massachusetts." *Cityscape* 6: 139-158.

Newman, Sandra J., and Ann B. Schnare. 1997. "… And a Suitable Living Environment: Failure of Housing Programs to Deliver on Neighborhood Quality." *Housing Policy Debate* 7: 473-490.

Riccio, James, Daniel Friedlander, and Stephen Freedman. 1994. *GAIN: Benefits, Costs, and Three-Year Impacts of a Welfare-to-Work Program.* New York: MDRC.

Riccio, James, and Alan Orenstein. 2003. "Are Welfare Recipients in Public Housing Harder to Employ?" Pages 63-103 in *A Place to Live, a Means to Work: How Housing Assistance Can Strengthen Welfare Policy*. Washington, DC: Fannie Mae Foundation.

Rosenbaum, James E. 1995. "Changing the Geography of Opportunity by Expanding Residential Choice: Lessons from the Gautreaux Program." *Housing Policy Debate* 6: 231-269.

Sard, Barbara. 2000a. *The Importance of Issues at the Intersection of Housing and Welfare Reform for Legal Services*. Washington, DC: Center on Budget and Policy Priorities.

Sard, Barbara. 2000b. *Research Evidence Suggests That Housing Subsidies Can Help Long-Term Welfare Recipients Find and Retain Jobs*. Washington, DC: Center on Budget and Policy Priorities.

Sard, Barbara. 2003. "Housing and Working Families — Background Data." Microsoft PowerPoint presentation presented at a forum sponsored by the Brookings Institution Center on Urban and Metropolitan Policy and Harvard's Joint Center for Housing.

Sard, Barbara, and Margy Waller. 2002. *Housing Strategies to Strengthen Welfare Policy and Support Working Families*. Washington, DC: Brookings Institution.

Shroder, Mark. 2002. "Does Housing Assistance Perversely Affect Self-Sufficiency? A Review Essay." *Journal of Housing Economics* 11: 381-417.

Verma, Nandita, and Rick Hendra. 2003. "Comparing Outcomes for Los Angeles County's HUD-Assisted and Unassisted Welfare Leavers." *Cityscape* 6: 89-122.