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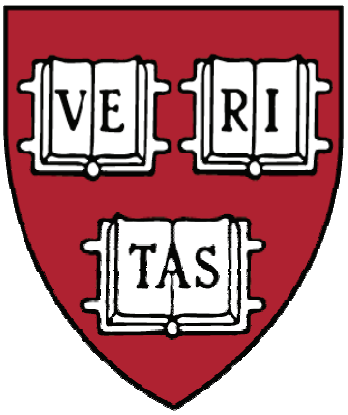

HOUSING PATTERNS OF LOW INCOME FAMILIES WITH CHILDREN: FURTHER ANALYSIS OF DATA FROM THE STUDY OF THE EFFECTS OF HOUSING VOUCHERS ON WELFARE FAMILIES

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EXECUTIVE SUMMARY

Housing Choice Vouchers, Mobility, Homelessness, and Economic Self-Sufficiency

The Housing Choice Voucher Program is the largest federal housing assistance program for low-income families, currently serving about 2 million households at an annual cost of more than $16 billion. Housing vouchers are the "demand-side" part of the mixed system for providing affordable housing for low income families and individuals in the US. The system also includes project-based approaches to subsidizing rental housing: public housing, Section 8 projects, and the Low Income Housing Tax Credit. Unlike project-based approaches, vouchers permit families to choose their own housing from among private market rental units. The family pays, roughly, 30 percent of its income. The difference between that amount and the house or apartment's full rent is the subsidy paid to the owner of the housing unit by the local Public Housing Authority (PHA) or other program administrator.

The voucher program's subsidy standard is based on Fair Market Rents (FMRs) published by HUD for each metropolitan area and for groups of non-metropolitan counties. FMRs are set at about the middle of the local rental housing market and should permit families to choose housing in a broad range of locations, including communities and neighborhoods that have low rates of poverty and low concentrations of minorities.[1] For that reason, ever since the program began in the 1970s, policy makers have been interested the program's potential for overcoming economic and racial segregation, an objective often summarized as "mobility."[2]

Because the voucher program's subsidy formula is based on 30 percent of the family's actual income, however low, the program has been able to serve the poorest and most vulnerable renter households. The program is not an entitlement, but instead has a fixed budget, and enrollment is through waiting lists maintained by PHAs. Most households who place themselves on waiting lists and then receive assistance have incomes below 30 percent of area median income, which varies by location but is roughly the poverty line.[3] For especially vulnerable people among those who are poor, vouchers have been shown to be effective both for preventing homelessness and for helping families and individuals leave homelessness and become stably housed.[4]

The voucher program's focus on poor and vulnerable households means that, although many voucher families with working age adults have an employed person, those using the subsidy

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[1] Devine, Deborah J., Robert W. Gray, Lester Rubin, and Lydia B. Taghavi, *Housing Choice Voucher Location Patterns: Implications for Participants and Neighborhood Welfare.* US Department of Housing and Urban Development, Office of Policy Development and Research, 2003.

[2] For background on vouchers and "mobility", see Orr, Larry, Judith Feins, Robin Jacob, Erik Beecroft, Lisa Sanbonmatsu, Lawrence Katz, Jeffrey Liebman, and Jeffrey Kling. 2003. *Moving to Opportunity Interim Impacts Evaluation: Final Report*. Cambridge, MA: Abt Associates Inc. and the National Bureau of Economic Research; and Turner, Margery Austin, and Kale Williams, *Housing Mobility: Realizing the Promise.* Report from the Second National Conference on Assisted Housing Mobility. Urban Institute, 1998.

[3] Since 1998 voucher program administrators have been required to ensure that at least 75 percent of voucher users have incomes below 30 percent of area median. Most PHAs already met or exceeded that standard before it became a requirement.

[4] For a summary of the literature on vouchers and homelessness, see Jill Khadduri, "Housing Vouchers are Critical for Ending Family Homelessness," National Alliance to End Homelessness, Homelessness Research Institute, 2008.

typically do not "rise out" of the subsidy by attaining earnings at a level at which their income-based rent payment approaches the FMR. Nonetheless, many families leave the program, even though retaining the subsidy would be financially beneficial for them, a fact that has puzzled researchers and policy-makers.[5] At the same time, there has been a growing interest among program administrators in making the voucher program transitional rather than permanent assistance through such approaches as phasing up the share of the rent paid by the family over time, regardless of what happens to the family's income.[6]

A recent study commissioned by HUD with some additional support from foundations has produced important new evidence on these issues. Summarized here are the policy implications that flow from additional analysis of data from the experimental design study of the Effects of Housing Vouchers on Welfare Families, which for simplicity we will refer to as the Housing Voucher Evaluation.[7] After presenting the policy implications, we then summarize the findings from the additional analysis of Housing Voucher Evaluation data.

[5] Lubell, Jeffrey M., Mark Shroder, and Barry Steffen. 2003. "Work Participation and Length of Stay in HUD-Assisted Housing," Cityscape: A Journal of Policy Development and Research 6 (2): 207-223.

[6] A demonstration program called Moving to Work has permitted a few PHAs to experiment with this type of "stepped down" voucher subsidy. That experience has not been evaluated systematically.

[7] The final report of the Housing Voucher Evaluation is Mills, Gregory, Daniel Gubits, Larry Orr, David Long, Judith Feins, Bulbul Kaul, Michelle Wood, Amy Jones and Associates, Cloudburst Consulting, and the QED Group. 2006. *Effects of Housing Vouchers on Welfare Families: Final Report*. Prepared for the U.S. Department of Housing and Urban Development, Office of Policy Development and Research. Cambridge, MA: Abt Associates Inc. Key results from the impact evaluation and from intensive interviews with a subsample of treatment group families were summarized in Wood, Turnham, and Mills, "Housing Affordability and Family Well-Being: Results from the Housing Voucher Evaluation, *Housing Policy Debate*, 19:2, 2008. HUD's Office of Policy Development and Research gave permission for the further use of the evaluation data reported here.

The Housing Voucher Evaluation

An experimental evaluation of the effects of housing vouchers on welfare families completed in 2006 provided a unique opportunity to measure the impacts of housing choice vouchers. This study was able, for the first time, to measure the impacts of housing assistance using a randomly assigned control group of families without housing assistance. As implemented, the housing vouchers studied in the evaluation were the same as the mainstream Housing Choice Voucher program. Although the original intention of the evaluation intervention was to deliver housing- and employment-related program services to families in addition to the vouchers, these were not implemented. Experimental impacts can be attributed to housing vouchers alone.

Further Analysis of Housing Voucher Evaluation Data

The analysis presented here was supported by the Harvard Joint Center for Housing Studies and the MacArthur Foundation and makes use of the Housing Voucher Evaluation's rich data set to conduct further analysis and to explore implications for the use and design of housing assistance programs. The analysis uses experimental and non-experimental methods in analyzing the rich quantitative data. In addition, we use in-depth interviews conducted with voucher holders during the evaluation to better understand how vouchers are used and why voucher holders sometimes relinquish them.

Policy Implications of Further Analysis of Housing Voucher Evaluation Data

Using Vouchers for "Mobility"

The voucher program has some effect on reducing the percentage of families with children that live in highly concentrated poverty and for permitting particular families to move away from the neighborhoods with the greatest poverty concentrations. However, the effects are modest in size, and further analysis of data from the Housing Voucher Evaluation finds that the effects are concentrated among families who lived in the most concentrated poverty to begin with—in particular, in public housing. The neighborhoods to which families move are not low poverty neighborhoods, just neighborhoods with somewhat lower poverty concentrations.

The voucher program also has some effect on diminishing racial concentration, by enabling African-American families to move to somewhat more racially diverse neighborhoods. But again, the effects are modest in size, and the change is concentrated among black families who start in the poorest and most racially concentrated neighborhoods.

Therefore, we cannot rely on vouchers by themselves and as currently implemented to reduce racial concentrations and increase access to high opportunity neighborhoods. Other "mobility" efforts are needed and might include changes to the way the voucher program is administered, counseling programs to help families use their vouchers to move to better neighborhoods, or use of vouchers in combination with supply-side rental subsidy programs.

The focus of mobility programs should not be primarily on current residents of public housing, but instead on users of the voucher program who begin in privately owned, unassisted rental housing. (The historical focus of mobility programs on public housing leavers stems from their association with litigation to overcome the institutional segregation of public housing.)

Using vouchers to prevent homelessness

The Housing Voucher Evaluation provided strong confirmation that vouchers prevent homelessness and also documented very high rates of homelessness and housing instability for control group families—that is, for families without vouchers. Additional analysis of data from the study confirms the findings of other research that African Americans are at higher risk of homelessness than whites or Hispanics are.[8] Programs designed to prevent homelessness should be concentrated—explicitly or indirectly—on communities with high proportions of African Americans.

The best predictor of homelessness as revealed by this study is previous housing instability: not having a place of one's own or moving frequently. Those who are living with friends or relatives at baseline are at risk of being homeless at a later point, particularly of having to stay with friends or relatives in the future. Programs that attempt to target families at highest risk of homelessness should look for these patterns in screening interviews.

Using vouchers to protect families against hardship

The voucher is an important source of income support for poor families with children, because of its substantial maximum benefit level and because the subsidy formula provides the greatest benefits to the poorest families and creates a safety net against job loss or loss of another source of income. Additional analysis of Housing Voucher Evaluation data shows that those who succeed in using their vouchers start in more vulnerable positions (less likely to have work experience, lower reservation wage, and more distressed neighborhoods). Thus, the program does not need to be redesigned to make sure it can serve the most vulnerable.

We also find that those who continue to hold vouchers at follow-up are faring better than those who have relinquished them. These patterns point toward the effectiveness of vouchers as a source of income support for poor families for children.

However, families with vouchers often give them up because of the program's administrative failures or because of lack of information, and families who give vouchers up end up in worse circumstances that those who go on using vouchers. The program's rules do need to be redesigned to help families keep their assistance.

[8] For findings based on administrative data on homelessness, see *The 2008 Annual Homeless Assessment Report to Congress.* US Department of Housing and Urban Development, Office of Community Planning and Development, July 2009.

Using vouchers to foster economic improvement for families

The Housing Voucher Evaluation found that vouchers enable families with children to form independent households with their own housing units rather than continuing to live with parents, siblings, or other relatives. While parents value this housing independence, we found from additional analysis of the Housing Voucher Evaluation data that those who use vouchers to become independent remain in precarious circumstances—for example, they have more food insecurity.

We also find, by looking at what happens to families after they relinquish their vouchers, that vouchers do not seem to create a platform on which families with children can build to a point at which they can afford to rent on their own without an excessive rent burden.

These findings imply that additional work supports (perhaps an expanded Earned Income Tax Credit) are needed. They also imply that time limiting vouchers or creating a voucher subsidy that "steps down" or phases out would leave formerly assisted voucher families in precarious economic circumstances.

Findings from Data Analysis

Housing Vouchers and Housing Location

While neighborhood improvement for voucher users is modest for the Housing Voucher Evaluation sample as whole, we find that the effects on neighborhood quality are concentrated among families who lived in the poorest neighborhoods to begin with, in particular those who initially lived in public housing. The overall effect on neighborhood poverty rate results from a lowering of residence in the poorest neighborhoods (an 11 percentage point reduction, compared to the control group, in neighborhoods with over 30 percent poverty), an increase of residence in moderately poor neighborhoods (a 6 percentage point increase in 20-30 percent poverty neighborhoods), and a 7 percentage point increase in 10-20 percent poverty neighborhoods.[9]

The voucher had the largest effect on neighborhood choice for the subgroup who lived in public or assisted housing at baseline (compared to those who rented their own apartment or who lived with friends or relatives or in shelters at baseline). This is the subgroup of families who started off in the poorest neighborhoods at baseline and, therefore, had the most opportunity for neighborhood improvement. For this subgroup, the voucher lowered the proportion residing in greater than 30 percent poverty neighborhoods by 49 percentage points and increased the proportion residing in 20-30 percent poverty neighborhoods by 28 percentage points. For African American families, a group that started off in poorer neighborhoods than whites or Hispanics, the voucher lowered the proportion residing in greater than 30 percent poverty

[9] These effects are "treatment on the treated" (TOT) impacts. The TOT impact is calculated by adjusting the "intent-to-treat" (ITT) impact, which is the regression-adjusted difference in mean outcomes between the treatment and control groups. The TOT impact assumes that there is no effect of the voucher on those who do not use vouchers and that the effect of the voucher on control group members who obtain a voucher is the same as if they had been in the treatment group. The TOT impact is thus interpreted as the effect on those treatment group members who used a voucher who would not have used a voucher had they been assigned to the control group.

neighborhoods by 18 percentage points and increased the proportion residing in 10-20 percent poverty neighborhoods by 12 percentage points.

The Housing Voucher Evaluation found that families using vouchers lived in slightly better quality neighborhoods than those without vouchers. On average, the families who used vouchers lived in neighborhoods with poverty rates 1.9 percentage points lower than the neighborhoods of comparable control group members four years after random assignment.[10] Statistically significant impacts on other neighborhood characteristics such as the employment rate, the proportion of families receiving welfare, and the proportion of families headed by single females were of similar modestly-sized magnitude.

In this further analysis of Housing Voucher Evaluation data, we re-examine the data to find a more detailed picture of how vouchers are used to move between different types of neighborhoods. Given that voucher use results in only modest neighborhood improvement on average, we first look at whether effects on neighborhood quality might be larger for some subgroups than others, particularly for those families who initially reside in the poorest neighborhoods. Second, we explore where in the neighborhood poverty distribution the voucher is having effects. Put another way, this second analysis looks at the types of neighborhoods vouchers holders are moving into, and where they are moving away from, compared to control group families. Third, we investigate how impacts on a range of end period neighborhood characteristics differ by race. This third analysis allows us to measure the effect of the voucher on racial segregation. Although these are three distinct analyses, they offer different windows on the same underlying phenomena, and so we discuss their results together. Below, we describe briefly the three methodological approaches and then summarize our findings.

In the first analysis, we define subgroups based on the poverty rate of each family's *baseline* census tract. We estimate experimental impacts (differences between the treatment and control groups) on a wide range of outcomes using a regression model that includes control variables that measure baseline individual and family characteristics. (Controlling for baseline characteristics increases the precision of the impact estimates.) This approach allows us to look at whether impacts differed according to where families initially resided.

In the second analysis, we turn our focus from the poverty rate of the families' baseline census tracts to the poverty rates of their *end period* census tracts. We define four outcomes based on the last period census tract poverty rate: greater than 30 percent poverty, 20-30 percent poverty, 10-20 percent poverty, and less than 10 percent poverty. Then we estimate experimental impacts[11] on the probability of living in each of these types of neighborhoods four years after random assignment, for the sample as a whole and for subgroups.

The third analysis looks at characteristics of the end period census tracts for four racial and ethnic subgroups: African Americans, whites, Hispanics, and "other race and ethnicity" (American Indian or Alaskan Native, Asian, Native Hawaiian or Pacific Islander). We estimate experimental impacts on a number of last period neighborhood characteristics for each subgroup. Among the characteristics are proportion of residents who are black and proportion of residents

[10] Mills et al. (2006), Exhibit 3.6, TOT impact.
[11] In this analysis, we use a linear probability model that controls for baseline characteristics.

who are Hispanic. Impacts on these outcomes allow us to examine how housing vouchers may contribute to racial desegregation.

Overall, we find that positive impacts of the voucher on the quality of the neighborhood in which a family lived four years after random assignment were greater for those who started in the poorer neighborhoods. This result is unsurprising, as poorer neighborhoods afford greater opportunity for improvement and more incentive for moving between neighborhoods. Among the subgroup who initially resided in greater than 30 percent poverty census tracts, the effect of the voucher on families who used them was to decrease the poverty rate of the last period census tract by 5.8 percentage points.

Two other findings from subgroup analysis also demonstrate that the voucher had the greatest effect on neighborhood quality for those families who initially resided in more distressed neighborhoods. Of the baseline housing status subgroups (rents or owns apartment or house; lives with friends or relatives or in a shelter; and resides in public or assisted housing), those who reside in public or assisted housing at baseline initially reside in the poorest neighborhoods. The voucher has the largest effect on neighborhood quality for this subgroup, an impact on last period poverty rate of -15.4 percentage points for those families that use vouchers. Of the racial and ethnic subgroups, African Americans start off in the highest poverty neighborhoods. Correspondingly, the voucher has the largest effect on last period poverty rate for African Americans, an impact of -5.0 percentage points for those families who use vouchers.

For the sample as a whole, the overall effect on neighborhood poverty rate for voucher users results from a lowering of residence in the poorest neighborhoods (an 11.0 percentage point reduction, compared to the control group, in the probability of living in neighborhoods with over 30 percent poverty), an increase of residence in moderately poor neighborhoods (a 6.2 percentage point increase in 20-30 percent poverty neighborhoods), and a 7.3 percentage point increase in 10-20 percent poverty neighborhoods). The voucher had no effect on the probability of living in low (less than 10 percent) poverty neighborhoods.

Examining the probability of living in certain types of neighborhoods gives us another view of the phenomenon that those families who initially reside in the poorest neighborhoods experience the largest effect of the voucher on last period neighborhood quality. From this view, the impacts for those initially residing in public or assisted housing are particularly stark: for families who use vouchers in this subgroup, the voucher lowered the proportion residing in greater than 30 percent poverty neighborhoods by 48.5 percentage points and increased the proportion residing in 20-30 percent poverty neighborhoods by 27.9 percentage points. These large effects may be related to the fact that public housing treatment group families would have been *more* likely to move than other treatment group families (for them to use the voucher, renting in place was not an option), and that public housing control group families would have been *less* likely to move than other control families (if they moved, they would lose their housing assistance).

For African American families, the voucher's impacts on other neighborhood characteristics are consistent with the impact on the poverty rate. Along with the modest reduction in the poverty rate, the last period neighborhoods of black treatment families also have modestly lower welfare receipt, fewer female-headed households, and modestly higher employment compared to the last

period neighborhoods of black control families. The voucher also modestly reduces racial segregation. African-American families who use vouchers live in census tracts with 6 percentage points fewer minorities than control families who do not use vouchers. No significant effects on neighborhood characteristics are found for whites or Hispanics.

Other than affecting the characteristics of the neighborhood in which the family lives, for the most part the voucher does not have different impacts for families starting in different types of neighborhoods. We tested this for a large number of potential impacts on employment and use of public assistance, as well as for dimensions of family well-being and self-sufficiency measured by a follow-up survey. Those who initially reside in poorer neighborhoods have impacts on these other outcomes no different from those starting off in less poor neighborhoods.

Predictors of Homelessness for Low-Income Families

An analysis of homelessness among the study's control group families confirms that African-Americans are at greater risk of becoming literally homeless than white or Hispanic families. White families are less likely than black families to experience living on the streets in a shelter, but are no less likely to experience the necessity of staying with friends or relatives.

The analysis also reveals that, perhaps unsurprisingly, the strongest predictor of future homelessness is not having a place of one's own at baseline. Those who are living with friends or relatives at baseline are at risk of being homeless at a later point, particularly of having to stay with friends or relatives in the future.

The Housing Voucher Evaluation made an important contribution to our understanding of homelessness by confirming that the use of housing assistance reduces homelessness. The experimental design of the study made it possible to demonstrate conclusively that rates of homelessness are lower for those who are offered vouchers compared with those who are not and dramatically lower for those who use vouchers compared with those who do not. For families who used vouchers, the voucher reduced the probability of experiencing homelessness (either on the streets, in shelters, or staying with friends or relatives) in the year prior to follow-up by 35.5 percentage points.[12]

In this further analysis of the Housing Voucher Evaluation data, we take advantage of these unique data to analyze whether any baseline characteristics are associated with experiencing homelessness at a later point in time. This non-experimental analysis uses only the control group families. The follow-up survey of the Housing Voucher Evaluation asked respondents whether there was ever a time in the past year when the family did not have its own place to stay. If the response was yes, respondents were asked if the family stayed with a relative, a friend, in a shelter, or on the street. We use three definitions of homelessness based on these responses: 1) did not have a place on one's own to stay at some point during the past year, 2) on the streets or living in shelters at some point during past year, and 3) living with friends or relatives at some point during past year. We model each of these three outcomes on several sets of explanatory baseline variables.

[12] Mills et al. (2006), Exhibit 5.3, TOT impact.

On the whole, the models provide some suggestive, but by no means definitive, results. Those who are living with friends or relatives at baseline are at risk of being homeless at a later point, particularly of having to stay with friends or relatives in the future. Not having a place of one's own at baseline is associated with an increase of 8.7 percentage points in the probability of being homeless (broad definition) at some point in the year before follow-up. Those receiving TANF at baseline with at least 18 months of eligibility left are less likely to be homeless at a later point, compared to those with less eligibility and those who are not receiving TANF. This is evidence that TANF has some role in preventing homelessness. When multiple characteristics are controlled for, white families are less likely than black families to experience living on the streets or in a shelter, but are no less likely to experience the necessity of staying with friends or relatives. Low earning capability also is a risk factor for later homelessness, as is a previous pattern of moving frequently. While these may not be surprising results, it appears that targeting the neediest families would do the most in terms of preventing homelessness.

Vouchers and Preventing Hardship

We examine patterns of voucher usage and find that those who start in more vulnerable positions are more likely to use their vouchers, and those who continue to hold vouchers at follow-up are faring better than those who have relinquished them. These patterns point toward the effectiveness of vouchers as a source of income support for poor families for children. On the whole, the correlations with baseline characteristics suggest that those who lease up are in somewhat more distressed situations (in terms of both individual characteristics and neighborhood quality) than those who do not use the voucher. Also, we find that those families who still hold their vouchers are faring better at follow-up than those who relinquished their vouchers. Although relinquishers have higher earnings, they receive less TANF and Food Stamps, are more likely to have experienced homelessness in the past year, are more likely to be in poverty when both cash and near cash income are considered, and have less monthly food per person.

In-depth interviews with voucher holders revealed that the voucher program is a complex program that requires some initiative on the part of the participant—to find suitable housing, to interact with landlords, to turn in the required paperwork on time, and to comply with other obligations set by the program and housing authority. For many of the women interviewed, especially those who had lived with parents or other family members prior to receiving a voucher, meeting the requirements of the program presented a challenge. Some program participants lost their vouchers inadvertently as a result of misinformed decisions when trying to navigate program rules.

In the Housing Voucher Evaluation, a substantial fraction of treatment group families never used their voucher. Three and a half years after baseline, 67 percent of treatment group families had successfully leased up with a voucher since random assignment. This percentage is consistent with other studies on voucher usage.[13] Also, some of these families who had used their vouchers had left the voucher program by the time of follow-up. Those who were no longer using a voucher were asked on the follow-up survey to provide the main reason they stopped receiving housing assistance. The three most common reasons were "My income was too high to qualify

[13] Finkel, Meryl and Larry Buron, *Study on Section 8 Voucher Success Rates. Volume I: Quantitative Study of Success Rates in Urban Areas.* Abt Associates Inc., 2001.

for assistance" (25 percent), "Told no longer eligible, for non-income reasons" (23 percent), and "Moved and could not use assistance in new place" (22 percent).

Despite a series of studies on voucher "success rates," many questions remain about why some families who receive housing vouchers off waiting lists never end up using them. Also unresolved is what drives the decisions and actions of families who relinquish housing vouchers. In this report, we examine these questions in two different ways. First, we look at the baseline characteristics that are associated with leasing up among those who have been offered a voucher and at the characteristics associated with relinquishing among those who have ever used a voucher. Second, we look at the follow-up outcomes for those who have relinquished their vouchers compared to the outcomes for those who still hold vouchers and those who never leased up.

We depart from the experimental framework and focus solely on the treatment group in these analyses. First, we regress the outcome of leasing up with a voucher on baseline characteristics using the entire treatment group. Then, looking only at those treatment group families who have used a voucher, we regress the outcome of relinquishing the voucher on baseline characteristics. In these regressions, we look for significant correlations which will allow us to characterize the families who are choosing to lease up and who leave the voucher program.

After looking at baseline characteristics, we perform a second non-experimental analysis that looks at the *follow-up outcomes* for three groups: those who have relinquished their voucher, those who never used their voucher, and those who continue to lease up with their voucher at the end of the observation period. We regress outcomes on group identifier variables while controlling for baseline individual and household characteristics. Coefficients on the group identifier variables represent the average difference between groups once individual and household characteristics have been accounted for.

The correlations with baseline characteristics suggest that those who leased up are somewhat worse off than those who do not use the voucher. Having ever worked and having a high reservation wage make it less likely that a family will lease up. This indicates that those with higher earning capability are less likely to use the voucher, holding other factors constant. White and Hispanic families are less likely than black families to take advantage of the voucher offer.

Among those who lease up, it is unclear whether those who give up their vouchers started in a stronger or in a more distressed position relative to those who continue to use their vouchers. White and Hispanic families using vouchers are more likely than black families to give them up.

In the in-depth interviews with voucher holders, many women described the process of finding housing and getting it approved as difficult, especially when they first received the voucher. Those whose pre-move situations were precarious (for example, those being evicted, domestic abuse situations, and those who had overstayed their welcome with other families) were particularly challenged by time constraints and a fear of ending up homeless. The most common barriers to moving included: lack of funds for up-front costs, such as security deposits and moving expenses; poor credit and other family issues that would be unappealing to landlords; and lack of housing search and negotiation skills. Also important were issues directly related to the voucher program rules and HA policies: difficulty using the listings of units provided by the

HA; problems with the voucher time limits and payment standards; and overcoming negative public perceptions of the voucher program.

The analysis of follow-up outcomes reveals that those families who give up their vouchers are worse off at follow-up than those who continue to use vouchers. Although relinquishers have higher earnings, their lower receipt of public assistance (including housing assistance) leaves them a step down in terms of material well-being and more susceptible to homelessness. This is a surprising finding, because one might expect that families would not relinquish their vouchers if it made them worse off. However, the finding is consistent with the in-depth interviews (described in Section 6 of this report) which provide anecdotal evidence that involuntary loss of vouchers is a fairly frequent occurrence. The interviews suggest that some of the most needy program participants lose their vouchers because of limited ability to advocate for themselves and as a result of naïve or misinformed decisions.

Vouchers, Housing Independence, and Economic Self-Sufficiency

While vouchers allow families to establish or maintain independent households (which is highly valued by voucher holders), the vouchers do not create a platform for housing self-sufficiency within a 4-5 year time frame. In the fifth year after random assignment, the voucher has a neutral effect on the long-term goal of self-sufficiency in independent housing with a reasonable rent burden. That is, having been issued a voucher makes it neither more nor less likely that the family will be living on its own and able to afford the rent without a subsidy.

While the housing voucher increases the proportion of families who rent or own their own home or apartment at follow-up by 23 percentage points for the sample as a whole, we do not find statistically significant differences across subgroups based on initial living situations (in own apartment, live with friends or relatives, or in public housing). Overall, the families who use the voucher to become independent (that is, to not live in someone else's household) do not differ strikingly at follow-up from those who remain independent. The "became independent" group has smaller households at the time of survey follow-up, receives somewhat less public assistance, and reports greater food insecurity. The difference in food security hints that the "became independent" group remains in a more precarious situation years later.

In addition to the findings on homelessness, the Housing Voucher Evaluation also found striking effects on housing independence and household composition for voucher holders. The voucher allowed families who were doubled up with family or friends to move into their own residences. The voucher had the effect of increasing the proportion of families who rented or owned their own housing at follow-up by 23.4 percentage points for the families who used vouchers.[14] The effects on household composition reflected the increase in housing independence: a reduction of 20.3 percentage points in the proportion of families who lived in multigenerational households and an increase of 24.3 percentage points in the proportion of families whose households were single parent with children (no others present) for families who used vouchers.[15]

[14] Mills et al. (2006), Exhibit 5.3, TOT impact.
[15] Mills et al. (2006), Exhibit 3.10, TOT impacts.

In this further analysis of Housing Voucher Evaluation data, we investigate further the large effects of housing vouchers on housing independence, in search of a fuller picture of how families' lives are changed through the use of vouchers. Given the effects on independence and household composition, we examine whether the effect of the voucher on the lives of families who become able to have their own place is qualitatively different than the effect for those who simply have their rent burden eased. First, we look at the impacts of vouchers on work, child well-being, and health for those voucher holders originally living with friends or relatives versus for those living independently at time of voucher receipt. Next, we explore the similarities and differences at follow-up between treatment group families who lived independently at baseline and families who used vouchers to achieve housing independence. Lastly, we look at the ability of the voucher to assist families in reaching housing self-sufficiency, i.e., to maintain their own residence with a reasonable rent burden without housing assistance.

In the first analysis, we estimate experimental impacts on outcomes from a large number of domains (including employment, pubic assistance receipt, child well-being, health, material hardship, and mobility) for each of three subgroups that are defined by baseline housing status: (1) rents or owns apartment or house, (2) lives with friends or relatives or in a shelter, and (3) resides in public or assisted housing. The method is the same as that described above for neighborhood quality: we estimate the difference between treatment and control group outcomes using a regression model that controls for baseline individual and household characteristics. Our main concern here is not whether impacts for individual subgroups are statistically significant, but rather whether impacts across the three subgroups are significantly different from each other. We perform an F-test for each outcome to determine if impacts across the subgroups are statistically distinct.

In the second analysis, we depart from the experimental framework and look only at the data of treatment group members, those families who were offered a voucher at baseline. We identify each family as fitting into one of four categories: "remained independent" (independent housing at both baseline and follow-up), "became independent" (non-independent housing at baseline, independent at follow-up), "remained non-independent" (non-independent at both baseline and follow-up), and "became non-independent" (independent at baseline, non-independent at follow-up). We regressed outcomes on identifying dummy variables (omitting the "remained independent" dummy) and a vector of baseline characteristics, looking for significant associations between the group identifiers and the outcomes. We are primarily concerned with comparing the "became independent" group with the "remained independent" group.

In the third approach, we estimate experimental impacts for the whole sample and for subgroups on a new follow-up outcome: having independent housing at follow-up with a reasonable rent burden (under 40 percent of income) without receiving housing assistance. Using our standard approach, we control for baseline characteristics to increase the precision of estimates. The impacts on this outcome reveal the voucher's ability to help families reach desirable self-sufficiency in the fifth year after baseline.

The housing voucher increases the proportion of families who rent or own their own home or apartment at follow-up by 23 percentage points for the sample as a whole, and we expected that this impact in the subgroup who lived with friends or relatives or in shelters would be even

larger. This subgroup seems to afford the greatest opportunity for the voucher to make a difference in housing independence. Thus, we were surprised to find that the impacts on this outcome are not statistically different across subgroups based on initial living situations (in own apartment, live with friends or relatives or in shelter, or in public housing). The beneficial effect on housing independence among those who initially rent their own apartment is in the same range as among those who initially live with friends or relatives. This shows that housing vouchers allow some families to continue living independently who might otherwise have to give up their own residences. For only one notable outcome were we able to detect statistically distinct impacts across the three subgroups: number of moves since random assignment. The voucher increases housing stability for those who start in their own units, reducing the number of moves by 1.3 moves over a 4-5 year time frame for families who use their vouchers.

In the non-experimental analysis, we find that the families who use the voucher to become independent do not differ strikingly from those who remain independent. The "became independent" group has smaller households at the time of survey follow-up, receives somewhat less public assistance, and reports greater food insecurity. There is no difference between the groups in neighborhood quality at follow-up. The difference in food security hints that the "became independent" group remains in a more precarious situation years later. However, we do not see other evidence of greater instability—for example, no negative contrast in what parents said about how their children were faring—and so are unable to draw strong distinctions between the groups.

As for the voucher's effect on long-term self-sufficiency, we were uncertain about whether to expect a positive impact. We find that in the fifth year after random assignment, the voucher has had a neutral effect on the long-term goal of self-sufficiency in independent housing with a reasonable rent burden. That is, having been issued a voucher makes it neither more nor less likely that the family will be living on its own and able to afford the rent without a subsidy. While it is disappointing that the voucher has not provided a platform for families to reach unassisted self-sufficiency, we also learn that the voucher has not delayed the achievement of self-sufficiency.

1. INTRODUCTION

An experimental design evaluation of the effects of housing vouchers on welfare families (the Housing Voucher Evaluation) was completed in 2006. This HUD-sponsored study was conducted by Abt Associates, Inc., and, over a five-year period between 2000 and 2005, collected a rich data set about families who had been randomly assigned to a treatment group that received Housing Choice Vouchers and a control group that did not receive housing assistance. The final report of the study, Mills et al., *Effects of Housing Vouchers on Welfare Families,* September 2006, made use of the experimental design of the study to report the impacts of receiving a housing voucher in a wide range of domains, including housing location, household composition, employment, means-tested benefits, homelessness, food insecurity, and child well-being. Key results from the impact evaluation and from intensive interviews with a subsample of treatment group families were summarized in Wood, Turnham, and Mills, "Housing Affordability and Family Well-Being: Results from the Housing Voucher Evaluation, *Housing Policy Debate*, 19:2, 2008.

The Housing Voucher Evaluation was able, for the first time, to measure the impacts of housing assistance using a randomly assigned control group.[16] As implemented, the housing vouchers studied in the evaluation were the same as the mainstream Housing Choice voucher program. No special mobility counseling helped these families move to particular types of neighborhoods, and no special services helped them with education or jobs, other than whatever services these and other welfare families had access to in the community, despite the name of the set-aside of vouchers used for the program, which was "Welfare –to-Work Vouchers." The evaluation focused on outcomes related to employment, with the important finding that use of housing assistance does not discourage work effort, despite a benefit formula that "taxes" income at 30 cents on the dollar and a subsidy that provides a substantial supplement to income.

Many of the most interesting findings of the Housing Voucher Evaluation were in domains other than employment: housing location, housing independence, homelessness, and patterns of voucher use. The evaluation found that vouchers produce a substantial reduction in homelessness and housing insecurity, that vouchers often are used to create independent housing units and reduce crowding (but without reducing cohabitation by parents), and that, compared with unassisted families, those who use vouchers live in neighborhoods with somewhat higher quality on a number of measures. The evaluation also found that many families who successfully use vouchers give them up and become unassisted, apparently not because their income has grown to a level at which they no longer need help paying their housing costs. This report, supported by the Harvard Joint Center for Housing Research and the MacArthur Foundation, makes use of the Housing Voucher Evaluation's rich data set to conduct further analysis of these findings and to explore their implications for the use and design of housing assistance programs.[17]

[16] The Moving to Opportunity Demonstration (MTO) was designed to test the impact of moving to neighborhoods with low poverty rates for families who started out in distressed, high poverty, public housing developments (Orr, et al., date). MTO did not have a control group of families without housing assistance.

[17] HUD's Office of Policy Development and Research gave permission for this further use of the evaluation data.

The questions addressed by this report include:

- Do the modest increases in neighborhood quality for a program without mobility counseling have implications for reducing concentrations of poverty and race?
- What are the implications for family well-being of the extensive use of vouchers to create independent households?
- Given the finding that a high percentage of families who did not use vouchers experienced homelessness, can the study's data on such families be used to help understand risk factors for homelessness?
- Why do families give up their vouchers, and should program administration focus on keeping this from happening?

To answer these and related questions, we use analysis that makes use of the study's experimental design (that is, retains the comparison between randomly assigned experimental and control households), as well as non-experimental analysis that tracks the path of particular groups of families over time. We also use information from the intensive interviews conducted with a subsample of families who received vouchers.

1.1 Design of the Housing Voucher Evaluation

The Welfare to Work (WtW) Voucher program was initiated in fiscal year (FY) 1999 when Congress appropriated $283 million for tenant-based rental assistance to help families make the transition from welfare to work. The appropriation funded 50,000 new rental assistance vouchers (P.L. 105–276). HUD awarded these vouchers to local and state housing agencies that presented reasonable plans for matching eligible families with the available assistance and for coordinating these efforts with existing welfare reform and welfare transition efforts.

At the time the funding for the WtW voucher program was appropriated, Congress authorized a controlled experiment to evaluate the effects of receiving tenant-based rental assistance on families' ability to find and keep employment, their receipt of public assistance, housing mobility and neighborhood location, housing quality, material hardship, and various other measures of family well being. The evaluation of the WtW voucher program, conducted by Abt Associates under contract to HUD's Office of Policy Development and Research, used an experimental research design featuring random assignment. Six sites participated in the evaluation: Atlanta, Augusta (GA), Los Angeles, Fresno (CA), Houston, and Spokane (WA). At each site, program-eligible families were randomly assigned to either a treatment group that received the WtW voucher or to a control group that did not receive the WtW voucher.

The rental assistance provided through the WtW voucher program was essentially the same as that available through the regular Housing Choice Voucher (HCV) program, with three differences. First, the WtW voucher program was limited to current and former recipients of TANF benefits and services or those eligible to receive such assistance. Second, the final rule governing the operations of the regular HCV program (24 CFR Parts 888 and 982) requires that not less than 75 percent of new admissions to the program have incomes at or below 30 percent of the area median income. This requirement could be reduced for WtW voucher programs if the

housing agency (HA) demonstrated that complying with the targeting rule for WtW voucher admissions would interfere with the objectives of the WtW voucher program.[18] In addition, HAs that operated a WtW voucher program could terminate rental assistance if a family violated obligations established by the HA under the WtW voucher program, such as work requirements or requirements to participate in employment and training programs. Under regular HCV rules a family can be terminated from rental assistance only for fraudulent or criminal behavior or after eviction by the landlord for a serious lease violation.[19] The first of the three differences limits the study population in the Housing Voucher Evaluation and in this paper to welfare families. The other two differences turned out to be less important, as they were rarely used by the study sites participating in the evaluation.

Other than the differences just described, the rental assistance provided through a WtW voucher was the same as that available through a regular voucher. Participants were free to use the voucher to rent a housing unit of their choice in the private rental market as long as it met HUD's Housing Quality Standards (HQS) and had a rent that was reasonable compared with the rents of unassisted units in the same housing market. The voucher assistance subsidized the monthly rent for the unit, and the value of the subsidy, as in the HCV program, was the payment standard established by the HA (or the unit's actual rent, if lower) minus 30 percent of the family's adjusted monthly income.[20]

1.2 Data Sources

Following are the sources of data from the Housing Voucher evaluation that can be used to study the housing patterns of low-income families with children:

- ***Baseline survey***—To obtain basic descriptive, identifying, and locating information on the research sample upon entry into the demonstration, a baseline survey was administered to all sample members immediately prior to random assignment, covering employment status, satisfaction with the housing unit and neighborhood, receipt of public assistance, household composition, and information on contact persons.

- ***Follow-up survey***—Approximately 4½ to 5 years after random assignment, interviews were conducted with a subset of the research sample to collect information on outcomes that is not available from administrative data sources. The follow-up survey instrument collected information about housing assistance and services, housing mobility and neighborhood environment, adult employment, education and training, household income, public assistance, food security,[21] and family and child well-being. The survey instrument consisted of a Core Module and a Parent-on-Child/Youth module. The Core Module was administered to the adult in each household who

[18] Such an exception was requested only by one evaluation site, Fresno, where the HA believed the income targeting rules severely impinged on the ability to serve underemployed TANF recipients. The Fresno request was approved.
[19] 24 CFR Parts 888 and 982 "Section 8 Tenant-Based Assistance; Statutory Merger of Section 8 Certificate and Voucher Programs; Housing Choice Voucher Program; Final Rule". Federal Register, October 21, 1999. 24 CFR 982.552(c) (1) (x).
[20] Payment standards are adjusted for the number of bedrooms in the unit. The actual rent includes an estimate of the cost of utilities paid for by the tenant.
[21] The assessment of food insecurity was based on two Department of Agriculture's "short form" metrics, which are scores assigned to household based on answers to six survey questions. These questions were provided to us by the USDA and included in the follow-up survey.

applied to the experimental housing voucher program. The Parent-on-Child/Youth module was also administered to the adult respondent for up to two children who were present in the household and age 15 or younger at the time of random assignment and who thus had reached the target age range of 4 to 19 years at the time of the survey. Follow-up survey data were collected for a total of 2,481 sample members. Many of the analyses in this paper examine a wide range of adult outcomes derived from the Follow-up survey. This set of adult outcomes is listed in Exhibit 1.

- ***Unemployment insurance wage records***—To measure the effects of receiving a voucher on the employment and earnings of participants, quarterly employer-reported earnings records were collected from the employment security agencies of the four states participating in the evaluation for the period January-March 1999 (i.e., at least one year prior to random assignment) through December 2004.

- ***TANF data files***—To measure the effects of vouchers on public assistance, information from state or local welfare agencies was collected on the receipt of Temporary Assistance for Needy Families (TANF) and Food Stamp benefits, for a time period beginning at least one year prior to random assignment and extending through December 2004.

- ***PIC data files***—To monitor the receipt of housing assistance through the Housing Choice Voucher and public housing programs by sample members, data from HUD's Public Housing Information Center (PIC) System were collected in five extracts (May 2001, December 2001, September 2002, March 2004, and December 2004).

- ***Participant tracking***—To obtain current address information on sample members, active tracking measures (i.e., periodic mail outs to sample members requesting updated address and telephone information on sample members and contact persons) and passive tracking measures (i.e., periodic extracts from administrative and commercial databases to obtain updated address and telephone information) were implemented.

- ***2000 Census data***—To construct measures of neighborhood quality, data from the Census Bureau's Summary File 3 were assembled for the Census tracts in which participants resided during the follow-up period, by geocoding the addresses collected at the time of random assignment and the updated addresses gathered from the follow-up survey, PIC, TANF data, and from the participant tracking efforts. Measures of neighborhood quality based on Census data include:

    - Racial and ethnic composition;
    - Percentage of persons living in poverty;
    - Percentage of civilian labor force that is employed;
    - Levels of adult educational attainment;
    - Percentage of youths not in school and not in the labor force;
    - Percentage of female-headed households; and,
    - Percentage of households with public assistance.

- ***In-depth interviews.*** Using funding provided through the HUD contract and grants from the Annie E. Casey Foundation, the Rockefeller Foundation, and the Fannie Mae Foundation, in-depth interviews were conducted with 141 individuals in the treatment group who had completed the follow-up survey. These interviews were conducted in 2005 in the respondents' homes and collected information about the experiences of voucher recipients with respect to housing mobility and neighborhood location, sources of income, employment, education, health, and child well-being. The interviews were designed to solicit more detailed and nuanced information than was possible

through the follow-up survey about how voucher recipients make decisions about housing, education, employment, child care, and use of the family's resources and the role the voucher plays in this decision making. Information from these interviews is integrated with the findings from the quantitative impact analysis in the subsequent chapters of this report.

Exhibit 1

Follow-up Survey Outcomes

1. Number of moves during follow-up period
2. Average hours worked per week since random assignment (calculated from survey job history
3. Received Food Stamp benefits in month prior to the survey
4. Food Stamp benefits received in prior month
5. Received Supplemental Security Income (SSI) in month prior to the survey
6. SSI amount received in prior month
7. Received TANF cash assistance in month prior to the survey
8. TANF cash amount received in prior month
9. Number of birth children in current household
10. Number of elders in household
11. Number of misc. non-relatives in household
12. Number of children in household
13. Number of misc. other relatives in household
14. Number of adult's siblings in household
15. Total current household size
16. Respondent or someone in household experienced any of the below 5 types of crime in the past six months
17. During the past six months, respondent or someone in household had a break-in (or attempted break-in) to home
18. Housing is crowded at time of survey (Defined as less than one room per person if 5 rooms or less. If 6 or more rooms, crowding exists if 8 or more people live in the household.)
19. Working at time of follow-up survey
20. Number of food related hardships in the past 30 days
21. Household was food insecure during the past 30 days
22. Household type is multigenerational
23. Household type is "other"
24. Household type is single parent with children, no other relatives or non-relatives
25. Household type is 2 parents with children, no other relatives or non-relatives
26. Did not have a place of one's own to stay or living with others at some point during the past year
27. On the streets or living in shelters at some point during past year
28. Living with friends, relatives, or others at some point during past year
29. Rents or owns home or apartment
30. Food expenditures per person in the month before the survey
31. Food expenditures in the month before the survey
32. "Big problem" with any of below 5 neighborhood conditions
33. "Big problem" or "small problem" in neighborhood with abandoned buildings
34. …with people drinking in public
35. …with graffiti or writing on the walls
36. …with groups of people just hanging out
37. …with litter or trash on the streets or sidewalk
38. Number of workers in the household
39. Cash income below poverty threshold
40. Cash income below 75% of poverty threshold
41. Cash and near-cash income below poverty threshold
42. Cash and near-cash income below 75% of poverty threshold
43. Amount spent in rent, including utilities, in month before survey
44. Number of rooms at time of survey

1.3 Estimation Methods

The analyses in this paper include both experimental and non-experimental approaches. All the experimental analyses are performed in the same manner, which is described in this section. The non-experimental specifications vary by analysis and will be described in the sections of the paper in which they are used.

In this paper, as in the final report of the Housing Voucher Evaluation, we present two sets of experimental estimates—the "intent to treat", or ITT, estimate, and the estimated impact of the "treatment on the treated," or TOT estimate. The ITT estimates measure the impact of the treatment on the entire treatment group that the program *intended* to assist, regardless of whether individual members of the treatment group *actually* received the treatment and whether control group members may have received the treatment. Simply stated, the ITT estimates show the difference in outcomes between the entire treatment group and the entire control group, including those treatment group members who never used their voucher and those control group members who did manage to obtain and use a voucher.

The TOT impacts present the impact of the treatment on *those treatment group members who were actually treated*—those treatment group members who received a voucher and successfully leased up—relative to comparable control group members who received no voucher assistance. The TOT impacts thus adjust for treatment group member nonparticipation in the program. The TOT impacts also adjust for the fact that some control group members came off housing voucher waiting lists, received vouchers, and leased up with their vouchers. Thus, the TOT estimates control for both treatment group nonparticipation and control group crossover.

In a randomized experiment, the difference in mean outcomes for the treatment and control groups provides an estimate of the impact of being offered the treatment. This estimate captures the average Intent-to-Treat (ITT) effect across all of the individuals included in the study, regardless of whether or not an individual assigned to the treatment actually complied with the treatment. Using a linear regression model, we can estimate the effect of Intent-to-Treat on outcome (Y) using whether an individual (indexed by *i*) was randomly assigned to the group offered the treatment (Z=1) or to the group not offered the treatment (Z=0):

$$(1.3.1)\quad Y_i = \alpha + Z_i\pi_{ITT} + \varepsilon_i$$

where Z_i indicates assignment status and π_{ITT} (the coefficient on Z_i) captures the ITT effect.

To reduce the residual variation and thereby increase the precision of our estimate, we include in our regression models individual and household characteristics observed prior to random assignment (i.e., baseline characteristics):

$$(1.3.2)\quad Y_i = \alpha + Z_i\pi_{ITT} + X_i\beta + \varepsilon_i$$

where X represents a vector of characteristics for each individual (indexed by *i*), β represents the vector of coefficients for X, and α represents a constant. For all analyses using data pooled across sites, X includes fixed-effects or dummy variables for each of the sites (with Fresno

serving as the omitted or reference category). We use a linear regression model for continuous outcomes and a linear model for dichotomous outcomes. Huber-White heteroscedasticity-robust standard errors are estimated with both models due to the complex sampling design of the study.

We include the following covariates, measured in the baseline survey, in every experimental specification:

- income earned in the past year (earnings), earnings squared, and earnings cubed;[22]
- whether the respondent was working at baseline;
- the respondent's reservation wage per hour,[23] a variable asked only of persons who were not working at baseline (categories: $3 to $5.99; $6 to $8.99; $9 to $12.99; $13 to $15.99; not asked if person was working);
- education variables (whether respondent was in school; whether respondent had a high school diploma; whether respondent had a GED);
- training variables (respondent was enrolled in a job training program; respondent was enrolled in a job training program but had not yet started training; respondent was not enrolled in a training program);
- race/ethnicity (respondent was White non-Hispanic; Black non-Hispanic; Hispanic; Other non-Hispanic; or missing, in mutually exclusive categories);
- gender (male, female, missing);
- whether the respondent had, at baseline, a car that ran, and whether the respondent had a current driver's license;
- whether the respondent was on TANF at baseline;
- whether the respondent had ever been a recipient of TANF/AFDC;
- for respondents on TANF at baseline, the amount of time until TANF benefits were due to expire (categories: within 6 months; 6 to 12 months; 12 to 18 months; more than 18 months);
- whether anyone in the respondent's household received food stamps, Supplemental Security Income (SSI), or Medicaid at baseline;
- whether the respondent was ever married;
- whether the respondent had any dependent children;
- age of the youngest person in the household (age categories: less than 6 years; 6 years or more but less than 18; 18 years or older);
- household size (categories: 1 person; 2 people; 3 people; 4 people; 5 people; 6 people; 7 people; 8 or more people);
- respondent's age, age squared, and age cubed;[24]
- the ratio of monthly household rent payment to monthly household income;
- whether the respondent desired to move for employment reasons;
- respondent's baseline housing situation (categories: respondent rents or owns his/her own apartment or house; respondent is in public or other assisted housing; respondent lives with friends or relatives or in a homeless shelter or transitional housing)

[22] Squared and cubed terms for a respondent's baseline earnings and age are included as covariates to control for possible non-linear effects of earnings and age on outcome measures.

[23] The "reservation wage" is the lowest wage rate at which an individual will accept a job. Sample members were asked their reservation wage in the baseline survey.

[24] Squared and cubed terms for a respondent's baseline earnings and age are included as covariates to control for possible non-linear effects of earnings and age on outcome measures.

- whether the respondent was a frequent mover (had moved more than three times in the past five years);
- site in which the respondent lived (Atlanta, Augusta, Fresno, Houston, Los Angeles, or Spokane); and
- the monthly Metropolitan Statistical Area (MSA)-level unemployment rate for the site where the respondent lived, averaged over the twelve months prior to the respondent's random assignment date.

In addition to this set of common covariates, the experimental specifications also control for baseline values of the outcome variable where possible. This adds to the explanatory power of the model, which increases the precision with which treatment effects are estimated. For example, in impacts on last period neighborhood characteristics, regressions include the baseline value of the particular outcome variable in question. Regressions of administrative employment and earnings include control variables for the total amount of UI earnings and the number of quarters employed in the four quarters prior to random assignment. Those regressions measuring impacts on TANF receipt contain a control variable for the number of quarters the respondent had received TANF in the four quarters prior to random assignment, and those measuring impacts on food stamps receipt contain a control variable for the number of quarters the respondent had received food stamps in the four quarters prior to random assignment.

2. VOUCHERS, POVERTY CONCENTRATIONS, AND RACE

One of the pathways through which the effects of using a housing voucher on employment were hypothesized to flow was through a change in neighborhood. Mills et al. (2006) describe how location change could lead to increased employment through proximity, neighborhood support, and safety. Living in an area close to potential employers may reduce job search costs and the expectation of lower commuting costs may reduce the reservation wage. Community norms in lower poverty neighborhoods may be more supportive of work, leading to increased job search and employment. And living in a safer neighborhood may reduce family stress and improve health, enabling more active job search and employment. However, the Housing Voucher Evaluation found that neighborhood change was modest (1 percent lower census tract poverty rate for treatment group families compared to control families), and the use of a voucher had no effect on employment over a 3.5 year time frame. The lack of employment impacts was consistent with the results of the Moving to Opportunity (MTO) Demonstration (Orr et al., 2003), which found no effects on employment after four years. MTO did find other effects from changing neighborhoods, however, such as improvements safety and in mental and physical health for those who moved away from neighborhoods with highly concentrated poverty. Given the positive impacts that changing neighborhoods can have, as well as the substantial literature on the negative effects of poverty concentrations (Massey and Denton, 1993; Ellen and Turner, 1997; Jargowski, 1997), we explore further the neighborhood change that took place in the Housing Voucher Evaluation. We perform a series of analyses to explore the extent to which the voucher program may be helping to reduce concentrations of poor people and minorities in certain neighborhoods.

2.1 Are Neighborhood Change and Other Impacts of the Voucher Larger for Families Who Start in High-Poverty Neighborhoods?

The first analysis we perform addresses the question of whether housing vouchers have different impacts for voucher users whose pre-program housing was in particular types of neighborhoods. If vouchers have a beneficial effect by allowing holders to live in better neighborhoods, we might think vouchers would have a larger effect on those who reside in poorer neighborhoods at baseline. Although the Welfare-to-Work Voucher experiment was not designed to test directly for neighborhood effects, larger impacts for those starting off in poorer neighborhood could be indirect evidence of neighborhood effects.[25] We analyze the effect of the voucher for subgroups based on the baseline neighborhood poverty rate. Creating subgroups using a *neighborhood* characteristic differs from Mills et al. (2006), where all subgroup definitions were based on *individual* or *household* characteristics.

In this analysis, we create two sets of subgroups that are defined by the poverty rate of the census tract in which the treatment or control household lived at baseline. The first set of subgroups is created by finding the median within-sample baseline poverty rate in each city and classifying each family's baseline neighborhood as either below or above the median poverty rate for its city. All below-median poverty families are combined into a single subgroup, as are

[25] If households who live in different types of neighborhoods at baseline fundamentally differ from each other, the effects could be associated with those differences rather than either the disadvantage of living in a poorer neighborhood or the advantage gained by leaving it. However, the finding that vouchers have differential effects for those living in different neighborhoods at baseline might still have policy importance.

all above-median poverty families. This approach has the virtue of creating two equally sized subgroups, which allow for the precision of estimates to be relatively high for each subgroup. Also, these subgroups take account of the fact that the same numeric neighborhood poverty rate can describe two very different neighborhoods in different cities.

In some ways, the families starting in relatively higher or lower poverty census tracts compared to the median poverty rate for the sample do not differ. However, the percentage who lived in public or assisted housing was much higher for the group living relatively higher poverty (18 percent) compared with the group in relatively lower poverty (7 percent). Those in relatively higher poverty tracts were more likely to be black (52 vs. 46 percent) and less likely to be white (16 vs. 22 percent). The percentage with a valid driver's license was lower for the group in relatively higher poverty tracts: 54 percent compared to 64 percent. Another notable difference is the percentage who were staying with friends, relatives, or in shelters, which is *higher* for the groups with relatively lower poverty (33 percent versus 23 percent for the higher poverty group); (Appendix Exhibit A1 compares the subgroups on these and other baseline individual characteristics.)

The second set of subgroups is created by applying a single set of poverty rate cutoffs to all cities. This divides the sample into four subgroups: those living in a census tract with less than 10 percent poverty at baseline (7 percent of the sample), 10-20 percent poverty (23 percent of the sample), 20-30 percent poverty (29 percent of the sample), and greater than 30 percent poverty (42 percent of the sample). This method assumes that the poverty cutoffs capture similar neighborhoods along a number of dimensions across the six cities. Such categories have been used extensively in other research on housing policies and programs.[26] Tracts with greater than 30 percent poverty are considered to have high concentrations of poverty; those with poverty rates below 10 percent are considered low-poverty neighborhoods; those rates between 10 and 30 percent are considered to have moderate levels of poverty.

For subgroups defined in this way, differences in individual characteristics are more striking. In the subgroup living in a tract more than 30 percent poor, only 48 percent of heads of families have either a high school diploma or GED, compared to about 71 percent in the group living in tracts with less than 10 percent poor people. Among the group in the highest poverty tracts, 21 percent were living in public housing, compared to 4 percent of those in the lowest poverty tracts. The racial composition is also markedly different across the groups, with the group living in the highest poverty neighborhoods substantially more likely to identify themselves as black or Hispanic, and a lower percentage identifying themselves as whites. It is important to keep in mind that the entire sample is composed of low-income families who are eligible for TANF. The differences reflect, among other things, the greater concentration of African Americans and public housing in the highest poverty neighborhoods in U.S. cities. When the subgroups are defined in this way, the percentage of families in the *lowest* poverty tracts that were staying with friends, relatives, or in shelters at baseline rather than in their own housing unit is even higher, 42 percent compared with 22 percent in the highest poverty tracts. (Appendix Exhibit A2 compares the four subgroups on the baseline individual characteristics of the heads of families.)

[26] For example, Galster, Cutsinger, and Malega, 2008; Devine, Gray, Rubin, and Taghavi, 2003; Newman and Schnare, 1997; Khadduri, Buron, and Climaco, 2006.

For each of these two sets of subgroups defined by the poverty levels of the tracts in which they lived at baseline, we estimate experimental treatment effects to find out how they differ for those who started in different types of neighborhoods.[27] For this analysis, we use a long list of outcomes, including the characteristics of the neighborhoods in which treatment and control group members lived at a later time; employment, earnings, and receipt of benefits at a later time; and other dimensions of family well-being and self-sufficiency reported by family heads to a follow-up survey.

The neighborhood outcomes are characteristics of the neighborhood, as measured by the Census, for the last period of time observed for each family: percentage of persons in the census tract living in poverty, percentage of civilian labor force that is employed, percentage of persons with less than 9th grade education, percentage of youths not in school and not in the labor force, percentage of female-headed households, percentage of persons who are black, percentage of persons who are Hispanic, and percentage of households with public assistance.

Employment and receipt of benefits are measured through matching sample members to state administrative records and include earnings, TANF benefits, and Food Stamps benefits. The follow-up survey outcomes for which impacts are estimated are listed in Exhibit 1.

Exhibit 2 shows selected estimates of the impact of a voucher for the below and above median poverty subgroups. (Full results are shown in Appendix Exhibit A3.[28]) Asterisks denote the level of statistical significance for impacts. The superscript "a" denotes that the difference in impacts across subgroups is statistically significant (i.e., that the F-statistic is significant at the 0.10 level). If impacts are significantly different across subgroups, then the division of the sample into these particular subgroups gives us deeper insight into the overall result. In contrast, if the difference across subgroups is not significant, then the subgroup results add no additional information to the full sample result.[29]

[27] Specifically, for each subgroup, we estimate π_{ITT} in Equation 1.3.2 for each of the various outcomes.
[28] The exhibit also indicates for what period of time after random assignment the results were measured. Random assignment was performed in Los Angeles several months after the other sites. Therefore, we are able to observe a longer follow-up period in the other five sites compared to Los Angeles.
[29] For example, both subgroups have a significant positive ITT impact on the percentage of employed persons residing in the Census tract. However, these impacts are not significantly different from one another and so do not tell us something more than the full sample impact.

Exhibit 2: Selected Impacts for Subgroups in Tracts with Poverty Below and Above Within-Sample Medians for Each City

Outcome	Sample/ Qtrs	Below within-city sample median poverty rate			Above within-city sample median poverty rate		
		Control Mean	ITT Impact	TOT Impact	Control Mean	ITT Impact	TOT Impact
Percent below poverty level	6 sites/ 16Q[a]	20.6	-0.086	-0.295	33.6	-1.222***	-5.288***
			(0.288)	(0.986)		(0.368)	(1.592)
Percent of households with public assistance	6 sites/ 16Q[a]	7.3	0.042	0.143	12.8	-0.505***	-2.184***
			(0.138)	(0.472)		(0.184)	(0.795)
Percent of households with single female heads	6 sites/ 16Q[a]	19.4	0.014	0.049	25.1	-0.653***	-2.825***
			(0.194)	(0.665)		(0.239)	(1.034)
Number of quarters with receipt of Food Stamps	4 sites/ 16Q[a]	13.9	0.791***	2.960***	15.5	0.051	0.254
			(0.200)	(0.750)		(0.189)	(0.943)
Total Food Stamp benefits	4 sites/ 16Q[a]	$10,984	858***	3213***	$13,081	172	857
			(219)	(822)		(217)	(1082)

Notes:
ITT = "Intent-to-Treat". TOT = "Treatment-on-Treated". Robust standard errors in parentheses.
*** indicates p < .01, ** indicates p < .05, * indicates p < .10
[a]An F-test on the equality of treatment effects between subgroups indicates that ITT impacts differ significantly between subgroups at p<.10
Sample sizes: Below median (6 sites) = 4,303; (4 sites) = 2,469. Above median (6 sites) = 4,354; (4 sites) = 2,532.

For the neighborhood characteristic outcomes, we find that it is the group that started in higher poverty neighborhoods for whom the voucher has the effect of improving last period neighborhood quality. The voucher holders (the ITT impact) and the actual users of vouchers (the TOT impact) who started in higher poverty neighborhoods experienced a greater difference in the characteristics of their last-period neighborhoods, compared with the control group, than the voucher holders that started in relatively lower poverty neighborhoods. For example, for voucher families starting in relatively higher poverty neighborhoods, the last period tracts have fewer households with single female heads by 2.8 percentage points, compared with the control group also starting in relatively higher poverty neighborhoods (the TOT estimate). In contrast, for those in the relatively lower poverty neighborhoods, the difference between voucher users and the control group is insignificant and close to zero. The greater treatment effects for voucher families starting in higher poverty neighborhoods include lower poverty rates in the last period census tract, a lower percentage of single female-headed households, and a lower percentage in the tract of households receiving welfare. The last period neighborhoods for treatment group families in the subgroup that started in relatively higher poverty neighborhoods also have a higher percentage of Hispanics on average than the neighborhoods for control group families (not shown on the exhibit). These significant differences are all modest in size, about 1 percentage point in each case between treatment group and control group for the ITT estimate. The TOT impacts are about 4 times larger, though still modest in size.

No significant differences in treatment effects were found between subgroups that started in neighborhoods with relatively high or low poverty rates compared with the sample median in the city for employment, earnings, or TANF receipt. However, significant differences in treatment effects were found for Food Stamps receipt and the value of the Food Stamps benefits.

Somewhat surprisingly, for the below median poverty subgroup, the voucher has a positive significant impact on Food Stamps receipt and value 16 quarters after random assignment. The TOT estimate shows that voucher users in this group received $3,213 more in Food Stamps during the four years of follow-up. We know that 33 percent of the families in this subgroup were staying with friends, relatives, or in shelters at baseline. For this subgroup, the voucher has the effect of reducing total household size and reducing by 8 percentage points (versus the control group) the proportion who stayed with friends or relatives at some point during the year (see Appendix Exhibit A5). In other words, the voucher had the effect of facilitating the formation of independent households in this subgroup. While the voucher may have allowed housing independence, it also may have increased the need for food assistance, as the new households ceased relying on friends and relatives for food as well as for housing.

Exhibit 3 shows the selected impacts for the four subgroups based on absolute levels of the poverty rate of the census tract in which the families lived at baseline. For families living in the highest poverty neighborhood, greater than 30 percent poor, the voucher has significantly greater treatment effects on Census-measured neighborhood characteristics four years after random assignment than for families starting in lower poverty neighborhoods. Sixteen quarters after random assignment, families starting in tracts with more than 30 percent poor people are in tracts with 1.4 percentage points (the TOT impact is 5.8 percentage points) less poverty than the control group of families starting in such tracts. Their neighborhoods also have a lower percentages of single female-headed households, a lower percentage of persons receiving public assistance, and a higher percentage of employed persons compared with controls (for full results, see Appendix Exhibit A4). Those who initially reside in the poorest neighborhoods experience much greater gains in neighborhood quality from the voucher, compared with those starting in relatively lower poverty locations.

The voucher has a negative impact on neighborhood quality for the subgroup that initially resides in neighborhoods less than 10 percent poor. An explanation may be that the search for landlords who will accept the housing voucher leads to a slight decline in neighborhood quality, compared to where they were living and paying for housing on their own. In the in-depth interviews, some women mentioned that voucher-friendly properties on housing authority lists were in poor areas of town (see Section 6.2). Although it is possible that some voucher holders traded off neighborhood quality in exchange for a larger unit, this explanation is not supported by the results of the survey, which show no impact on numbers of rooms in the unit for this subgroup (Exhibit A6).

Exhibit 3: Selected Impacts for Subgroups in Baseline Tracts Defined by Four Poverty Categories

		Baseline Census Tract Poverty Rate			
		Below 10%	10%-20%	20%-30%	Above 30%
	Sample/ Qtrs	ITT Impact	ITT Impact	ITT Impact	ITT Impact
TOT Conversion Factor	6 sites/ 16Q	**3.43**	**3.57**	**3.73**	**4.15**
	4 sites/ 16Q	**3.54**	**3.83**	**4.17**	**5.05**
Outcome					
Percent below poverty level	6 sites/ 16Q[a]	1.588* (0.731)	-0.340 (0.401)	-0.396 (0.383)	-1.395*** (0.432)
Percent of households with public assistance	6 sites/ 16Q[a]	0.588* (0.317)	0.007 (0.181)	-0.124 (0.193)	-0.574*** (0.218)
Percent of households with single female heads	6 sites/ 16Q[a]	0.859* (0.493)	-0.180 (0.290)	-0.287 (0.251)	-0.681** (0.276)
Number of quarters with receipt of Food Stamps	4 sites/ 16Q	1.227** (0.533)	0.665** (0.284)	0.348 (0.267)	0.049 (0.216)
Total Food Stamp benefits	4 sites/ 16Q[a]	$1,050** (527)	$689** (295)	$776** (308)	$21 (255)

Notes:

ITT = "Intent-to-Treat". TOT = "Treatment-on-Treated". Robust standard errors in parentheses.

*** indicates p < .01, ** indicates p < .05, * indicates p < .10

[a]An F-test on the equality of treatment effects between subgroups indicates that ITT impacts differ significantly between subgroups at p<.10

Sample sizes (6 sites): <10% = 597; 10%-20% = 1,964; 20%-30% = 2,489; >30% = 3,607.

Sample sizes (4 sites): <10% = 464; 10%-20% = 1,317; 20%-30% = 1,363; >30% = 1,857.

The results for Food Stamps for the subgroups defined by absolute tract poverty levels at baseline are similar to the results for subgroups defined by above and below median baseline tract poverty. Again, a significant difference in treatment effects among the subgroups was found for Food Stamps receipt 16 quarters after random assignment for sample members in four sites.[30] Voucher holder families starting in the lowest poverty neighborhoods, less than 10 percent poor, received $1050 more in Food Stamps over the four years than control families. In contrast, voucher holders starting in the highest poverty neighborhoods saw their Food Stamps benefits go up by only $21. The explanation for this may again be that smaller, newly independent households are more likely to result from the voucher for those who started in lower poverty neighborhoods, and these independent households have greater need for food assistance than families who continue to live with friends or relatives. The point estimates for impacts on household composition are consistent with this explanation. (See Appendix Exhibit A6.) Again, we found no significant differences in treatment effects between subgroups for employment, earnings, or TANF receipt.

[30] Administrative records for Food Stamps participation were not available in Fresno and Los Angeles.

Few outcomes measured by the follow-up survey differed significantly among subgroups (Exhibits A5 and A6). The number of significant F-statistics in these exhibits is no more than one would expect to find by chance (at 0.10 significance level, 1 in 10 results is expected to be significant by chance alone). Therefore, no strong pattern of results is seen.

Overall, the voucher modestly improves neighborhood quality for the households who initially reside in poorer neighborhoods and does so to a greater extent for these families than for families starting in relatively better off neighborhoods. No other impacts measured for subgroups that started in different types of neighborhood seem related to this neighborhood improvement, however.

The voucher has no effect on rent paid in the above median poverty subgroup, which suggests that families in this subgroup are use the voucher to move to more expensive, perhaps higher quality, units, even if they remain in a neighborhood with a relatively high poverty rate. In contrast, the voucher lowers the actual rent paid for the below median subgroup. Mills et al. (2006) found that the voucher reduced rent paid for the whole sample.[31] Apparently, many households starting in relatively low poverty neighborhoods already have housing units of the quality and in the location they desired. They use their voucher to free up some income for other purposes. The voucher also increases Food Stamps receipt and benefit levels for this subgroup. Given that the voucher has no impact on individual earnings for this subgroup, we suspect that household composition may explain this result. Smaller, newly independent families have greater need for food assistance than those who continue to live with friends or relatives.

The newly independent families may also have a decrease in household income relative to household size. The voucher does have a significant negative impact on total household size for families starting in relatively lower poverty locations, but not on the number of workers in the household for this subgroup. Therefore, we cannot definitively confirm our suspicion that the increase in Food Stamps receipt is due to a reduction in household income compared with household size.

Whether families starting in higher poverty neighborhoods reap whatever benefits may be associated with improving their neighborhood quality as the result of getting a voucher depends on whether they can use the voucher. Therefore, we examined whether rates of lease up with the voucher were related to characteristics of the baseline neighborhood. Exhibit 4 shows the percentages of the treatment and control groups who, at four years after random assignment, had ever leased up with a voucher. Control families were permitted to remain on the voucher waiting list and, over time, many of them received vouchers from their housing authorities and succeeded in using them.

[31] Mills et al. (2006), Exhibit 5.3.

Exhibit 4: Percentage of Families that Had Ever Leased Up, Four Years After Random Assignment, by Poverty Rate of the Baseline Census Tract

		Pct. Ever Leased Up, 4 Years After RA	
Poverty Rate in Baseline Census Tract	**Sample Size**	**Treatment Group**	**Control Group**
<10%	597	0.607	0.315
10-20%	1,964	0.670	0.390
20-30%	2,489	0.689	0.421
> 30%	3,607	0.694	0.452

We see an increase in the percentage of families in the entire study sample who leased up as the baseline neighborhood poverty rate goes up. This contrast is apparent for both treatment and control families, but the contrast (the difference in percentages leasing up by poverty rate of the baseline tact) is stronger for the control group—that is, for families that got their voucher from the regular waiting list rather than from the special allocation of Welfare to Work Vouchers. The Welfare to Work Voucher demonstration did not provide special mobility counseling or other assistance in using the voucher to treatment families. These interesting results for both treatment and control households may show the relatively greater motivation for using a voucher for those in relatively poorer neighborhoods, even in the absence of special interventions targeted to those locations. The result may also show that those starting in relatively higher poverty locations do not have lower capacity, on average, to shop for housing and persuade landlords to accept a voucher.

To further gauge the effect of neighborhood characteristics on the use of the voucher, we modeled voucher use by the treatment group families with a series of specifications of baseline neighborhood characteristics[32]: one neighborhood characteristic at a time without individual covariates; one neighborhood characteristic at a time with covariates for individual family characteristics; all neighborhood characteristics together without the individual covariates; and all neighborhood characteristics together with the individual covariates. The model specifications are as follows:

$$(2.1.1)\quad I(EverLeasedUp)_k = \alpha_0 + \alpha_1 NeighborhoodChar_{jk} + e_k$$

$$(2.1.2)\quad I(EverLeasedUp)_k = \alpha_0 + \alpha_1 NeighborhoodChar_{jk} + X_k\beta + e_k$$

$$(2.1.3)\quad I(EverLeasedUp)_k = \alpha_0 + \sum_{j=1}^{J} \alpha_j NeighborhoodChar_{jk} + e_k$$

$$(2.1.4)\quad I(EverLeasedUp)_k = \alpha_0 + \sum_{j=1}^{J} \alpha_j NeighborhoodChar_{jk} + X_k\beta + e_k,$$

where $I(EverLeasedUp)_k$ is an indicator variable for having leased up with the voucher for family k, $NeighborhoodChar_j$ is a neighborhood characteristic for family k, X_k is a vector of individual and household covariates, and e_k is a random error term.

[32] We restrict the sample to the treatment group since we know that they were offered the voucher when they were living in their baseline neighborhoods. We do not know where control group families are living at the point they were offered a voucher from the waiting list.

The results are shown in Exhibit 5. Neighborhood characteristics suggesting lower neighborhood quality are correlated with the successful use of the voucher when they are entered separately not controlling for individual characteristics. For example, for every percentage point change in the poverty rate of the tract, the likelihood of a voucher holder's leasing up goes up by 0.15 percentage points. When all the neighborhood variables are included together in the model (without controlling for individual characteristics), no characteristic is significantly associated with the use of the voucher. This is probably due to the high correlation among the neighborhood characteristics.

When individual characteristics are added as control variables to the neighborhood characteristics that are entered separately (shown in the second column of model results on the exhibit), the significant associations with neighborhood characteristics go away, except for percentage of the tract population that is black or Hispanic, Both minority tract characteristics have positive effects on leasing up, even when the race and ethnicity of the voucher-holder are controlled for, among other individual characteristics. However, the effects of these tract characteristics are small and the percentage black effect is not strongly significant.

The model results imply that individual characteristics are stronger determinants of successful use of the voucher than the characteristics of the starting neighborhood, which is not surprising. This result leaves open the question of which individual characteristics affect the likelihood of using a voucher. We return to this question in Section 5.1. On the other hand, the model results show that neighborhood characteristics suggesting a lower neighborhood quality at baseline do not impede successful use of the voucher and that vouchers allocated to poorer tracts (or to communities with concentrations of likely voucher recipients in such tracts) are no less likely to be used than other vouchers.

Exhibit 5: Correlations between Voucher Lease-up and Baseline Neighborhood Characteristics

Covariate (×100)	Single Characteristic Models, No Covariates	Single Characteristic Models, With Covariates	All Neighborhood Characteristics, No Covariates	All Neighborhood Characteristics, With Covariates
Percent below poverty level	0.150***	0.037	0.076	-0.067
	(0.048)	(0.052)	(0.107)	(0.109)
Percent of civilians employed	-0.271**	-0.060	-0.030	0.047
	(0.106)	(0.109)	(0.177)	(0.170)
Percent of households with public assistance	0.256***	0.111	0.162	0.038
	(0.088)	(0.104)	(0.181)	(0.198)
Percent of households with single female heads	0.145**	0.145*	-0.030	0.099
	(0.065)	(0.082)	(0.143)	(0.144)
Percent black	0.024	0.067*	0.028	0.016
	(0.020)	(0.036)	(0.042)	(0.054)
Percent Hispanic	0.043*	0.089**	-0.007	0.081
	(0.024)	(0.042)	(0.034)	(0.061)

Notes:
Sample is treatment group, N=4,609. Robust standard errors in parentheses.
*** indicates p < .01, ** indicates p < .05, * indicates p < .10

This section has focused on the differential effects of the voucher for families who start in neighborhoods of different quality. We used the poverty rate of the census tract as a proxy for the quality of the neighborhoods in which families lived at the time that they were randomly assigned to receive a voucher or to be placed in a control group. As expected, we found that positive impacts of the voucher on the quality of the neighborhood in which a family lived four years after random assignment were greater for those who started in the poorer neighborhoods (when the sample was divided into two equal subgroups based on poverty rate) and for those who started in the poorest neighborhoods (when the sample was divided into four subgroups based on the absolute poverty rate of their baseline census tracts).

Families who started in neighborhoods with the smallest percentage of poor people, less than 10 percent, experienced a slight reduction in their neighborhood quality. This somewhat disturbing finding suggests that the administration of the voucher program may focus the housing search process of voucher holders on somewhat lower quality neighborhoods—for example, by providing lists of landlords who are willing to accept vouchers. The survey results offer another—and not inconsistent—explanation. Those who start in relatively better neighborhoods may use the voucher to reduce their rent burden rather than to improve the quality of their housing location. The survey results do not suggest that they were seeking larger housing units and willing to trade unit size for neighborhood quality.

Other than affecting the characteristics of the neighborhood in which the family lives, for the most part the voucher does not have different impacts for families starting in different types of neighborhoods. We tested this for a large number of potential impacts on employment and use of public assistance, as well as for dimensions of family well-being and self-sufficiency measured by the follow-up survey. Only one pattern stands out: the impact of the voucher on whether the family received Food Stamps and on the amount of the Food Stamps benefit, found by the Housing Voucher Evaluation to be positive for the whole sample, was substantially greater for voucher holders who started in relatively *lower* poverty neighborhoods. The explanation appears to be related to changes in household composition. Those who started in relatively lower poverty neighborhoods were more likely to be living with friends, relatives, or in shelters at baseline, and they were more likely than those in relatively higher poverty neighborhoods to use the voucher to establish independent housing units in which the family head was the leaseholder. As a result, their need for the income support provided by Food Stamps may have increased.

We also examined whether a family who starts in a relatively poorer neighborhood is less likely to succeed in using a voucher and found that the opposite is the case. The rate of lease-up is greater for families who start in poorer neighborhoods, and in neighborhoods of lower quality measured on other dimensions, implying that families in these locations are strongly motivated to use a voucher and that they do not have greater barriers to successful use of the voucher than those who start in relatively better locations. When individual family characteristics, including race and ethnicity, are controlled for, voucher holders who start in neighborhoods with higher rates of blacks and Hispanics remain more likely to lease up than those who start in neighborhoods with lower concentrations of minorities.

Given the modest levels of neighborhood improvement found for families starting in relatively poorer neighborhoods, these findings do not imply that programs that help voucher holders in

high poverty locations search for housing in "opportunity neighborhoods" are not needed, They may, however, have implications for the content of such programs. The next section examines how the use of the voucher affects the type of neighborhoods in which low income families with children live and how this differs by their demographic characteristics, as well as by their housing situation at baseline.

2.2 How Does the Use of a Voucher Change the Poverty Concentration of Neighborhoods in Which Low-Income Families Live?

Mills et al. (2006) find that housing vouchers significantly reduce the poverty rate of the last period Census tract of voucher holders by about 1 percentage point on average (the ITT estimate) and of voucher users by 4 percentage points (the TOT estimate) .[33] In the last section, we examined how that impact differs for families who start in neighborhoods with different poverty rates. In this section, we turn our focus from the poverty rate of the families' *baseline* census tracts to the poverty rates of their *end period* census tracts. We examine how the voucher affects the likelihood that families, four or more years after random assignment, will be living in four types of neighborhoods characterized by absolute levels of poverty: less than 10 percent poverty in last period Census tract, 10-20 percent poverty, 20-30 percent poverty, and greater than 30 percent poverty. We also examine how the impact on the last-period census tract differs for families who are in different types of housing at baseline, how it differs by the race and ethnicity of the family, and how it differs among younger and older family heads.

At baseline, 42 percent of the sample was living in census tracts in which more than 30 percent of all people were poor, while only 7 percent of the sample was living in tracts less than 10 pecent poor. The tracts with intermediate levels of poverty, 10-20 percent and 20-30 percent, contained 23 and 29 percent of the sample respectively. As a control in the estimation model, we included an indicator variable for whether the family lived in the particular type of neighborhood at baseline. This control does not reduce the magnitude of the impact, but it does increase the precision of the comparison between treatment and control families.

Impact estimates are shown in Exhibit 6. Thirty-seven percent of families not issued a voucher at the time of random assignment were living in the highest poverty census tracts (more than 30 percent poor) four years (16 quarters) after random assignment, as shown on the exhibit by the control mean. For those issued a voucher, the percentage in such neighborhoods was about 3 percentage points lower (the ITT impact). For those using vouchers, the percentage in such neighborhoods was about 11 percent lower (the TOT impact).[34] Families living in the moderate poverty neighborhoods, 10-20 percent poor and 20-30 percent poor, increased by about two percentage points (the ITT estimate) or by 6-8 percentage points (the TOT estimate). So the overall effect of the voucher in reducing poverty rate of the last period neighborhood found by Mills et al. is being driven by fairly small movements out of high poverty neighborhoods and fairly small movements into moderate poverty neighborhoods.

[33] Mills et al. (2006), Exhibit 3.7.

[34] We examined the poverty category of the end period census tract for the 16th quarter after random assignment for all six sites and for the 18th quarter for five sites without Los Angeles. For full results of this model, see Appendix Exhibit A7.

Exhibit 6: Impacts on Last Period Census Tract Poverty Rate

Outcome	Control Mean	ITT Impact	TOT Impact
Below 10% poverty in last period tract	0.097	-0.007	-0.026
		(0.005)	(0.021)
10%-20% poverty	0.251	0.019**	0.073**
		(0.008)	(0.031)
20%-30% poverty	0.282	0.016*	0.062*
		(0.009)	(0.033)
Above 30% poverty	0.370	-0.029***	-0.110***
		(0.008)	(0.032)

Notes:
Full sample (6 sites), N=8,657. Last period is 16th quarter after random assignment.
ITT = "Intent-to-Treat". TOT = "Treatment-on-Treated". Robust standard errors in parentheses.
*** indicates p < .01, ** indicates p < .05, * indicates p < .10

We also examine whether this pattern of moves differs for different subgroups that are defined by individual baseline characteristics. Mills et al. (2006) find four subgroup clusters for which impacts on the last period poverty rate, measured as a continuous variable rather than in categories, differ significantly across subgroups[35]: housing status at baseline, race, age at baseline, and school enrollment at baseline.[36] We use these four subgroup clusters to examine the impact of the last period census tract defined by the four poverty categories.

Exhibit 7 shows the ITT impacts. In the cluster based on housing status at the time the treatment group families received a voucher, the biggest treatment effect on the last period census tract measured in poverty categories is for those who resided in public housing at baseline. For those who lived in public or assisted housing at baseline, the offer of a voucher reduces the probability of living in very poor neighborhoods by 10 percentage points and increases the probability of living in 20-30 poor neighborhoods by 6 percentage points. The TOT impacts, which adjust for nonparticipation and crossover, are roughly 5 times as large (indicated on the exhibit by the TOT conversion factor), reducing the likelihood of living in such neighborhoods by a striking 49 percentage points.

[35] Mills et al. (2006), Exhibit D.3.
[36] Although we could have turned to a Chi-Squared test to detect significant differences across subgroups and across outcomes, we chose the simpler path of the F-test for the single outcome of continuous poverty rate to identify where impacts differed significantly across subgroups.

Exhibit 7: Impacts on Last Period Census Tract Poverty Rate, for Selected Subgroups

Subgroup	Sample Size	TOT Conv. Factor	Impact on Having Last Period Census Tract Poverty Rate of: Below 10% ITT Impact	10%-20% ITT Impact	20%-30% ITT Impact	Above 30% ITT Impact
Housing Status at baseline						
Rents or owns apartment or house	4,925	3.715	-0.012*	0.014	0.011	-0.014
			(0.007)	(0.011)	(0.012)	(0.011)
Lives with friends/relatives or in shelter	2,394	3.546	-0.014	0.040**	0.000	-0.028*
			(0.011)	(0.017)	(0.017)	(0.016)
Resides in public or assisted housing	1,086	4.805	0.022	0.023	0.058**	-0.101***
			(0.016)	(0.023)	(0.027)	(0.029)
Race/Ethnicity						
White, Non-Hispanic	1,660	3.459	-0.025*	0.014	0.035*	-0.023
			(0.015)	(0.020)	(0.019)	(0.016)
Black, Non-Hispanic	4,241	4.490	0.001	0.026**	0.012	-0.040***
			(0.008)	(0.012)	(0.013)	(0.013)
Hispanic	1,815	3.239	-0.010	0.015	0.020	-0.025
			(0.009)	(0.017)	(0.020)	(0.020)
Age at baseline						
Less than 24	2,588	3.457	-0.001	0.031*	0.045***	-0.074***
			(0.010)	(0.016)	(0.017)	(0.016)
25-34	3,258	3.738	-0.009	0.021	0.005	-0.017
			(0.010)	(0.014)	(0.014)	(0.014)
35-44	2,015	4.127	-0.007	0.010	0.013	-0.017
			(0.010)	(0.017)	(0.018)	(0.016)
45 or older	687	4.392	-0.007	0.009	-0.020	0.017
			(0.018)	(0.028)	(0.030)	(0.027)
School Enrollment at baseline						
Enrolled in school	1,397	3.792	-0.004	-0.021	0.019	0.008
			(0.015)	(0.021)	(0.023)	(0.022)
Not enrolled in school	6,716	3.717	-0.005	0.026***	0.017*	-0.038***
			(0.006)	(0.009)	(0.010)	(0.010)

Notes:
ITT = "Intent-to-Treat". TOT = "Treatment-on-Treated". Robust standard errors in parentheses.
*** indicates p < .01, ** indicates p < .05, * indicates p < .10

Such a large reduction of the probability of living in the poorest neighborhoods for the public housing subgroup raises the question of whether there is something in particular about public housing that makes families eager to leave, or if it is the neighborhoods where public housing is located that families are eager to move away from. We performed some additional analysis to address this question. The majority (68 percent) of public housing families lived in greater than 30 percent poverty neighborhoods at baseline. (Another 21 percent lived in 20-30 percent poverty neighborhoods, 9 percent in 10-20 percent poverty neighborhoods, and 2 percent in less than 10 percent poverty neighborhoods.) We created two subgroups of the families who resided in greater than 30 percent poverty neighborhoods at baseline: those who lived in public housing and those

who did not. By the last period of follow-up, only 54 percent of the public housing treatment group families still lived in greater than 30 percent poverty neighborhoods. This compares to 68 percent of non-public housing treatment group families who remained in very poor neighborhoods.

Apparently, there is something in particular about public housing, above and beyond the neighborhood, that encourages families to move to better neighborhoods. One reason for this difference may be that public housing families who received a voucher had to move. Renting in place was not an option for them, as it was for the non-public housing families. The large impact for the public housing subgroup also is determined by the behavior of public housing control group families. Here, it makes sense that public housing control group families are less likely to move than non-public housing control group families, as to move would mean giving up their housing assistance. Thus, public housing treatment group families would have been *more* likely to move than other treatment group families (renting in place was not an option), and public housing control group families would have been *less* likely to move than other control families (to retain housing assistance). These two tendencies combined may explain the large impact seen for this subgroup.

Other possible explanations relate to the information and motivations of public housing families. The public housing families may have been less familiar than the non public-housing families with the other housing options in their neighborhoods, which may have made them more likely to look elsewhere for places to use their vouchers. Finally, the treatment group members who were living in public housing made a decision to apply for and accept a voucher even though they already had a housing subsidy that enabled them to pay only 30 percent of income for rent. They may have been highly motivated to change something else about their housing situation, such as its neighborhood.

The results reported in Exhibit 7 show a 3 percentage point decline in residing in the highest poverty neighborhoods for voucher holders who lived with friends or relatives or in shelters at baseline and a 4 percentage point increase for living in 10-20 percent poverty neighborhoods. These results are more difficult to interpret, although again it may reflect the fact that treatment group members had to move in order to use the voucher.

The next impacts shown on Exhibit 7 are for subgroups defined by the family's race and ethnicity. For blacks, the voucher has the effect of allowing movement out of the poorest neighborhoods and into tracts with 10-20 percent poverty. Adjusting for nonparticipation and crossover, the TOT impact of the voucher is an 18 percentage point decrease in the probability of living in the highest poverty neighborhoods. This is a surprisingly large impact for blacks, given the overall 4 percentage point TOT impact on last period poverty rate found by Mills et al. for this subgroup. Thus, the voucher serves to facilitate poverty deconcentration to a greater extent than would have been expected by looking only at the impact on mean poverty rate for blacks.

As for differences in the impact of the voucher on last period neighborhood by age of the family head at baseline, the voucher reduces the probability of living in the poorest neighborhoods by 7 percentage points for the youngest age group, 24 or younger (30 percent of the sample.) The TOT impact is 26 percentage points. The voucher increases the probability of living in 10-20 percent poverty neighborhoods by 3 percentage points and in 20-30 percent poverty neighborhoods by 4 percentage points for this group. This age group is the most mobile, that is,

the highest average number of moves,[37] so we might expect to see the voucher creating the greatest neighborhood change for this group. At baseline, 40 percent of this young subgroup was living with friends/relatives or in shelters, a situation that would encourage moves for both treatment and control group families.

Overall, this analysis shows a more complete picture of neighborhood change. From the Housing Voucher Evaluation final report, we knew that the voucher decreased the mean poverty rate for the whole sample by 1 percentage point, for those in public housing by 3 percentage points, and for those less than 24 years old by 2 percentage points. Here, we see that improvements in neighborhood quality are driven by movements out of the poorest neighborhoods (TOT impact of 11 percentage points) and into moderate poverty neighborhoods. These movements are larger than one might expect based on the change in mean poverty rate. To the extent that these poverty categories capture qualitatively different types of neighborhoods, the voucher facilitated poverty deconcentration to a greater degree than previously thought.

The voucher had the largest effect on neighborhood among those initially residing in public housing. This large effect may stem from the fact that public housing treatment group families would have been *more* likely to move than other treatment group families (renting in place was not an option), and that public housing control group families would have been *less* likely to move than other control families (to retain housing assistance). Also, the bulk of public housing in this sample is located in the poorest neighborhoods. For blacks and for those age 24 or less, the voucher facilitated movements out of the highest poverty neighborhoods. For blacks, this deconcentration of poverty can be understood in relation to the fact that blacks disproportionately lived in the poorest neighborhoods at baseline, affording them the greatest opportunity for change. The subgroup of family heads age 24 or less was the most mobile of the age subgroups, which opened the door for the potential of neighborhood change.

2.3 How Do Impacts for Various Dimensions of Neighborhood Quality Differ by Race?

The next analysis looks at which racial and ethnic groups experience the greatest changes in neighborhood characteristics defined not just by the poverty rate of the end period neighborhood, but by other characteristics as well. The sample is divided into four subgroups based on race and ethnicity: black, non-Hispanic (about 49 percent of the sample); white, non-Hispanic (about 19 percent of the sample); Hispanic (about 21 percent of the sample); and an "other" category comprised of people identifying themselves as American Indian or Alaskan Native, Asian, Native Hawaiian or Pacific Islander (about 8 percent of the sample).[38] This analysis goes beyond Mills et al. (2006) by looking at other neighborhood outcomes besides the poverty rate for racial and ethnic subgroups.

The characteristics of last period Census tracts examined are: percentage of persons living in poverty, percentage of the civilian labor force that is employed, percentage of persons with less than a 9th grade education, percentage of youths not in school and not in the labor force, percentage of female-headed households, percentage of persons who are black, percentage of persons who are Hispanic, and percentage of households with public assistance. The treatment effects are estimated

[37] Mills et al. (2006), Exhibit D.2.
[38] About 3 percent of the sample is missing information on race and ethnicity.

separately for each racial subgroup. The baseline value of the outcome characteristic is included as a control in the estimation to improve the precision of the estimate of the impact.

Results are shown in Exhibit 8 (and in Appendix Exhibit A10). As found by Mills et al. 2006 and shown in on this exhibit and on Exhibit 7 in Section 2.2, African American families who are offered vouchers use this opportunity to move to lower poverty census tracts. These tracts also are characterized by a lower percentage of households headed by single females, a lower percentage of households receiving welfare, and a higher percentage of persons employed compared to the tracts in which the control group lives in the last tracking period. The largest impact is that black families with vouchers reside in Census tracts with lower percentages of minorities compared to the control group. The TOT estimate shows a 6 percentage point reduction in the percentage minority in the last period census track for those who used vouchers. This finding suggests that the voucher program has some effect on reducing racial isolation, although the control group mean, 82 percent, shows that the reduction is from a very high base.

For whites, in contrast, the voucher makes no significant impact on any neighborhood measure. Given that this subgroup of white families in the study is considerably smaller than that of black families, the precision of impact estimates is reduced and the bar of statistical significance is more difficult to meet. However, the point estimates suggest that vouchers have little impact on the characteristics of neighborhoods in which white families choose to live. A look at the baseline neighborhood characteristics (not shown) for whites finds essentially no change from baseline for either treatment or control group families. Thus, the lack of impact was the result of no change for both treatment and controls, rather than some change for both.

The voucher also makes no difference for the neighborhood characteristics of Hispanics. The small sample size for this group means that these impacts, like those for whites, are imprecisely estimated for Hispanics compared to blacks. A look at baseline neighborhood characteristics for Hispanics (not shown) reveals that Hispanic control group families move to neighborhoods with 1 percentage point less welfare receipt on average over the 4 year tracking period.

An unexpected result is found for the racial subgroup that includes all those who consider themselves American Indians, Alaskan Natives, Asians, Native Hawaiian or Pacific Islanders. When offered vouchers, this subgroup moves to Census tracts with a higher percentage of households receiving welfare. This finding is difficult to interpret. Although the estimate has statistical significance, the small size of this subgroup—only 8 percent of the sample—may mean that unusual features of particular census tracts are driving the results.

Overall, this analysis provides a more complete picture of the voucher impact on neighborhood quality for blacks. Along with a modest reduction in the poverty rate, the last period neighborhoods of black treatment families also have modestly lower welfare receipt, fewer female-headed households, and modestly higher employment compared to the last period neighborhoods of black control families. The voucher also modestly reduces racial segregation of blacks. Since blacks initially reside in more distressed neighborhoods (compared to whites), there is greater opportunity for the voucher to have a positive effect on neighborhood quality. No effects on neighborhood characteristics are seen for whites or Hispanics.

Exhibit 8: Impacts on Characteristics of Last Period Neighborhood, by Racial Subgroup

Outcome	All Sites, Outcomes at 16th Qtr.		
	Control Mean	ITT Impact	TOT Impact
Percent below poverty level			
White, Non-Hispanic[a]	20.63	0.06	0.20
		(0.42)	(1.45)
Black, Non-Hispanic[a]	28.02	-1.11***	-5.01***
		(0.36)	(1.63)
Hispanic[a]	30.64	-0.78	-2.53
		(0.51)	(1.67)
Other[a]	27.18	1.42	4.15
		(0.88)	(2.57)
Percent of households with public assistance			
White, Non-Hispanic[a]	8.65	-0.11	-0.38
		(0.22)	(0.75)
Black, Non-Hispanic[a]	8.84	-0.39**	-1.75**
		(0.16)	(0.71)
Hispanic[a]	12.86	-0.34	-1.11
		(0.30)	(0.96)
Other[a]	12.55	1.10**	3.22**
		(0.54)	(1.58)
Percent of households with single female heads			
White, Non-Hispanic[a]	14.86	-0.02	-0.07
		(0.22)	(0.75)
Black, Non-Hispanic[a]	27.21	-0.67**	-3.01**
		(0.27)	(1.22)
Hispanic[a]	18.92	0.27	0.87
		(0.25)	(0.81)
Other[a]	18.59	0.29	0.84
		(0.40)	(1.16)
Percent minority			
White, Non-Hispanic[a]	37.03	0.14	0.49
		(0.60)	(2.07)
Black, Non-Hispanic[a]	82.17	-1.34***	-6.04***
		(0.47)	(2.11)
Hispanic[a]	73.34	-0.55	-1.79
		(0.67)	(2.19)
Other[a]	61.77	2.13*	6.25*
		(1.15)	(3.37)

Notes:

Sample sizes: White, Non-Hispanic = 1,660; Black, Non-Hispanic = 4,241; Hispanic = 1,815; Other = 680.

"Other" subgroup includes American Indian/Alaska Native, Asian, and Native Hawaiian/Pacific Islander.

ITT = "Intent-to-Treat". TOT = "Treatment-on-Treated". Robust standard errors in parentheses.

*** indicates p < .01, ** indicates p < .05, * indicates p < .10

[a] An F-test on the equality of treatment effects between subgroups indicates that ITT impacts for outcomes at the 16th qtr. differ significantly between subgroups at p<.10

2.4 Additional Analysis of Outcomes for Families Who Start in Different Types of Housing

In Section 2.2, we looked at the probability of living in certain types of neighborhoods, described by poverty rate, for three subgroups with different housing situations at the time families were randomly assigned to receive a voucher or be placed in a control group: families that rented or owned their own residence at baseline (about 57 percent of the sample),[39] families who were staying with friends, relatives, or in a shelter (about 28 percent of the sample), and families who were living residing in public or assisted housing (about 13 percent of the sample).[40] We found a large reduction in the probability of living in the poorest neighborhoods for families who started in public housing, a moderate reduction for those who started without their own housing unit, and no such impact for those who, at baseline, rented their own housing without a subsidy.

Here, we look at a wide range of outcomes for these subgroups to see how other impacts might differ by baseline housing status. For example, we might expect that the effect of the voucher on the lives of families who become able to have their own place would be qualitatively different than the effect for those who simply are able to rent a better unit or to have their rent eased.

The list of outcomes we examine for the three subgroups includes neighborhood quality as measured by census tract characteristics, employment and use of income benefits as measured by matching the sample to state administrative data, and the outcomes for dimensions of family well-being and self-sufficiency measured by the follow-up survey and listed in Exhibit 1. We estimated impacts for survey-measured outcomes relating to both adults and children. Mills et al. (2006) found essentially no statistically significant impacts on child well-being for the sample as a whole. We test the hypothesis that outcomes for children might be detected for families who do not have independent housing units at baseline or who live in public housing at baseline.

Exhibit 9 is the starting point for understanding what happened to families who were in different types of housing at baseline. Four years after random assignment, at least half of the families in each subgroup had moved to a different census tract. For those who started in their own apartment or house, about 52 percent of those who received vouchers changed census tracts, and so did about 52 percent of control group members. In contrast, for families without their own housing unit and for families living in public housing, a larger percentage of the treatment group changed census tracts: 8 percentage points more for the public housing families and 5 percentage points more for the families who started without their own housing.

Exhibit 9: Percent Ever Moved From Initial Census Tract, By Baseline Housing Status

	Pct. Ever Moved From Initial Census Tract, 4 Yrs. After RA		
Baseline Housing Status	**Sample Size**	**Treatment Group**	**Control Group**
Rents or owns apartment or house	4,925	52.3%	52.1%
Lives with friends/relatives or in shelter	2,394	59.1%	53.6%
Resides in public or assisted housing	1,086	68.7%	60.8%

[39] The vast majority of this subgroup rented their own place, rather than owned. Only 0.7 percent of the sample owned their own place, while 56.3 percent of the sample rented their own place.
[40] About 3 percent of the sample is missing information on baseline housing status.

The results of this greater out-of-tract mobility for those who started in public housing or without their own units are shown on Exhibit 10. (For more detailed results, see Appendix Exhibit A11.) Significant F-statistics indicate when impact estimates are statistically distinct across the subgroups. Over time, control group families from public housing move to lower poverty neighborhoods than they initially resided in (not shown), but these neighborhoods' poverty rates (on average) are still above those that treatment group families move to. In Section 2.2, we reported a substantial impact on living in the highest poverty tract for the public housing subgroup. Exhibit 10 reports a 3 percentage difference in the average poverty rate of the neighborhoods of public housing families issued vouchers, compared with control families who started in public housing, and a TOT impact of 15 percentage points for public housing families who leased up with their vouchers. For those initially residing in public housing, the voucher also allows treatment group families on average to find neighborhoods with lower poverty, fewer single female-headed households, less welfare receipt, and more employed residents than the neighborhoods that control group families choose.

Exhibit 10: Selected Neighborhood Impacts by Baseline Housing Status Subgroups

	All Sites, Outcomes at 16th Qtr.		
Outcome	**Control Mean**	**ITT Impact**	**TOT Impact**
Percent below poverty level			
Rents or owns apartment or house[a]	26.99	-0.09 (0.29)	-0.32 (1.09)
Lives with friends/relatives or in shelter[a]	25.03	-0.45 (0.43)	-1.58 (1.54)
Resides in public or assisted housing[a]	32.63	-3.20*** (0.88)	-15.36*** (4.24)
Percent of civilians employed			
Rents or owns apartment or house[a]	87.50	0.03 (0.14)	0.09 (0.53)
Lives with friends/relatives or in shelter[a]	88.35	0.42** (0.21)	1.49** (0.73)
Resides in public or assisted housing[a]	85.72	0.97** (0.40)	4.64** (1.90)
Percent of households with public assistance			
Rents or owns apartment or house[a]	10.86	-0.06 (0.16)	-0.21 (0.59)
Lives with friends/relatives or in shelter[a]	7.98	-0.11 (0.19)	-0.39 (0.67)
Resides in public or assisted housing[a]	10.79	-1.07*** (0.40)	-5.12*** (1.92)
Percent of households with single female heads			
Rents or owns apartment or house[a]	20.36	-0.09 (0.17)	-0.33 (0.63)
Lives with friends/relatives or in shelter[a]	22.54	0.03 (0.31)	0.11 (1.11)
Resides in public or assisted housing[a]	30.48	-1.95*** (0.65)	-9.39*** (3.13)

Notes:
Sample sizes: Rents or owns = 4,925; Lives with friends/relatives = 2,394; Public housing = 1,086.
ITT = "Intent-to-Treat". TOT = "Treatment-on-Treated". Robust standard errors in parentheses.
*** indicates p < .01, ** indicates p < .05, * indicates p < .10
[a]An F-test on the equality of treatment effects between subgroups indicates that ITT impacts for outcomes at the 16th qtr. differ significantly between subgroups at p<.10

For those who lived with friends, relatives or in a shelter at baseline, the voucher allows treatment group families to move out of baseline Census tract at a higher rate than control group families and to move to neighborhoods with higher percentages of employed persons than those chosen by control group families.

For those in their own housing units at baseline, the voucher had no effect on neighborhood quality. This finding points to the importance of directing efforts to encourage voucher families to seek better neighborhoods, through incentives or counseling, to this largest group of families issued vouchers and not just to families moving out of public housing.

For families who started in different types of housing at baseline, the impact on outcomes other than neighborhood quality might operate through the influence of neighborhood characteristics. On the other hand, the families who left public housing or used the voucher to establish independent housing units on average moved to neighborhoods that still had substantial percentages of poor people. The voucher increased the likelihood that public housing families would live in census tracts between 20 and 30 percent poor (Section 2.2). We know from the Moving to Opportunity demonstration and evaluation that the effects of moving from *highly distressed* public housing to neighborhoods *less than 10 percent poor* are modest and only show up in a few domains such as mental health, at least when measured over a small number of years (Orr et al., 2003).

Vouchers might have a greater impact on families starting in public housing or without their own housing units for other reasons than change of neighborhoods, however. For example, in the in-depth interviews conducted for the Housing Voucher Evaluation, women frequently stated that they believed establishing independent households made them better able to provide a supportive family environment for their children. A potential negative impact of leaving public housing could be higher housing costs—for example, because of utilities costs that exceed the estimates built into the voucher subsidy (Buron et al., 2007).

What we found is that there was essentially no difference on measures of employment, benefits receipt, or family well-being for families starting in different housing situations. For the employment and benefits outcomes (e.g., employment, receipt of TANF, receipt of Food Stamps) measured through state administrative data, although some of the impact estimates are individually significant, no outcome has impacts for the three subgroups that are significantly different *from each other* (i.e., no F-statistic is significant at the 0.10 level). Impact estimates for administrative outcomes are shown in Exhibit A12.

Estimates differ significantly across the subgroups for one estimate of family well-being measured by the follow-up survey of family heads: "Number of moves during follow-up period" (Exhibit A13). Mills et al. (2006) found that for the full sample, the voucher had the effect of both increasing the likelihood of moving from baseline census tract and decreasing the total number of moves over the follow-up period.[41] Wood et al. (2008) offer several explanations of these somewhat contradictory results. First, they suggest that voucher users may have experienced fewer evictions for non-payment of rent. Second, control group members may have been more likely to move within baseline census tract. Third, voucher users may have been

[41] Mills et al. (2006), Exhibit 3.5.

satisfied with the improvement in their housing situation, while control group members made repeated moves in attempting to improve their situation. Our additional analysis reveals a fourth explanation. As shown in Exhibit 9, the voucher has the effect of encouraging out of census tract moves for those who lived with friends or relatives or in a shelter at baseline and for those who lived in public housing at baseline. But no effect is apparent for the largest subgroup, those who rented or owned their own apartment or house at baseline. The survey results show that it is only this group that experiences a reduced number of moves as a result of the voucher, compared to the control group of families who rented or owned their own units at baselines. The two results—moved out of baseline census tract and reduced number of moves during follow-up—are driven by different subgroups, with no subgroup experiencing both effects.

Why would the reduction in number of moves occur only for those who rent or own their own place? For them, the voucher may have made a big difference during difficult financial patches, allowed them to stay in their housing unit during hard times. For the other two subgroups, treatment group families could not rent in place and were forced to have at least one move. One might expect that the voucher would have the effect of increasing the total number of moves. The fact that there was no effect on the total number of moves (compared to the control group of families without a voucher) suggests that the stabilizing effect of the voucher over time balanced out the initial destabilizing effect of forcing a move. The estimates for adult outcomes from the survey are shown in Exhibit A13.

Although the voucher significantly reduced household size for those were staying with others at baseline, it did so for families who had their own housing units at baseline as well. F-tests of differences in impact across the two subgroups show that we cannot definitively say that these groups had different household composition effects or that effects for these groups differed from effects for public housing families.

For child outcomes, we found no differences in impact estimates across subgroups, disproving the idea that the absence of child outcomes for the whole sample may have masked significant outcomes for children for those starting in different types of housing. The estimates for child outcomes from the survey are presented in Exhibit A14.

Overall, we find few differences in the effect of the voucher on the three subgroups, families that rent or own their own residence at baseline, families who are staying with friends, relatives, or in a shelter at baseline, and families who are residing in public or assisted housing at baseline. The voucher does not have a significant effect on neighborhood quality for those who rent or own their own place at baseline, and these families are no more likely than control families to move away from the census tract where they started. These findings suggest that "mobility" initiatives to encourage families to seek different neighborhoods should be focused on families who start in their own, unsubsidized units and not just on public housing families. The voucher does increase housing stability for those who start in their own units, reducing the number of moves during follow-up for treatment group families (the TOT impact is about 1.3 fewer moves over 4.5 years).[42] The voucher has a positive effect on neighborhood quality for those initially residing in public or assisted housing, with decreases in poverty rate, people receiving welfare, percentage

[42] The TOT conversion factor for those who rent or own is 3.7 and the ITT impact is -0.341. Multiplying the two numbers gives the TOT impact of -1.3.

of households with single female heads, and an increase in percentage of people employed. The voucher has no effect on stability for this group, however.

The voucher's effect on those who initially lived with friends, relatives, or in a shelter lies somewhere in between the effects on the other two subgroups. The voucher increases the percentage of people employed in this group's end period census tracts, indicating some neighborhood improvement, but has no effect on any other neighborhood characteristic. The voucher does not reduce the total number of moves for this group, but also does not increase the number. For many other outcomes, including child outcomes and measures of family well-being such as housing cost burden and food insecurity, the effect of the voucher does not significantly vary across the three subgroups. Thus, we found less evidence than we expected that the effect of the voucher would be qualitatively different for those who became able to have their own place compared to those who simply were able to afford better housing or to have their rent eased.

3. HOUSING INDEPENDENCE

Housing vouchers allow families who previously had been living with friends, relatives, or in a shelter to rent live independently. The Housing Voucher Evaluation found that families using vouchers were 34 percent more likely than control group members to be living in housing that they themselves rented or owned (Wood, Turnham, and Mills, 2008). This is one of the most striking findings of the study. The common use of tenant-based rental assistance to form independent households has long been known. Leger and Kennedy (1990) found that more than a third of households issued either a housing voucher or a housing certificate were sharing their "pre-enrollment" housing unit with other people. But that study did not have a control group of families without vouchers and was not able to determine the type of larger household that families would have been part of had they not used housing assistance. The Housing Voucher Evaluation found that vouchers reduced the number of elders, siblings, and other relatives living in the household but did not reduce the likelihood that the voucher user was a nuclear family—that is, two parents with children.

Qualitative interviews with housing voucher recipients reveal that voucher users place very high value on having their own place and often describe that as the most important outcome of the use of a voucher. At the same time, the women interviewed described the challenges they faced in taking care of their children and dealing with health issues, and while trying to hold a job and become financially independent. We perform two analyses here related to housing independence. The first examines various measures of family well-being measured four years after vouchers were issued for families who use the voucher to become independent compared to families who are already independent before receiving a voucher and remain independent. This analysis differs from the comparison of impacts on subgroups defined by their housing status at baseline (reported in Section 2.4) in that it is non-experimental. Instead of looking for a differential effect of the voucher on families who were or were not in their own housing units at baseline, it describes what happens to families who followed different paths after receiving the voucher. While the results cannot be interpreted as the effects of the voucher program, they may be useful for assessing the policy implications of the frequent use of vouchers for establishing independent housing units: for understanding better who these families are and the challenges they face.

The second analysis takes advantage of the experimental design of the Housing Voucher Evaluation, exploring dimensions of housing independence and long-term self-sufficiency not included the final report of the evaluation (Mills et al., 2007). The analysis tests whether the voucher has an effect on the likelihood that, four years after receiving the voucher, families will rent housing without a subsidy and will do so without an excess rent burden.

3.1 How do Families Who Use Voucher Assistance to Form Independent Households Fare?

This analysis explores which outcomes are associated with voucher-driven formation of independent households.[43] While voucher-holders expressed satisfaction about forming independent households in in-depth interviews, fewer household members may mean fewer earners

[43] Independent families are defined here as those that rent or own their own residences, including those who rent in public and assisted housing. Non-independent families live with friends or relatives, or in shelters.

and less help with raising children. This analysis looks at what some of the trade-offs may be for voucher holders in forming independent households. The comparisons are among groups of families that are all within the treatment group—that is, those who were issued vouchers. The analysis uses baseline covariates to make the groups comparable on some observable characteristics, but they may differ in ways that are not observable from the baseline survey.

The sample is divided into four groups based on housing independence at baseline and at follow-up. Figure 1 presents the four groups that are the subject of this analysis.

Figure 1

Housing Independence Groups

		At Follow-Up	
		Independent	**Non-Independent**
At Baseline	**Independent**	Independent at baseline and Independent at follow-up	Independent at baseline and Non-independent at follow-up
	Non-Independent	Non-independent at baseline and Independent at follow-up	Non-independent at baseline and Non-independent at follow-up

The structure of the regressions in this section is:

$$Y_j = \alpha_0 + \alpha_1 I_{ni,j} + \alpha_2 I_{nn,j} + \alpha_3 I_{in,j} + X_j \beta + e_j$$

where

Y_j: outcome for person j

$I_{ni,j}, I_{nn,j}, I_{in,j}$: indicator (dummy) variables for person j,

ni denotes non-independent at baseline, independent at follow-up
nn denotes non-independent at baseline, non-independent at follow-up
in denotes independent at baseline, non-independent at follow-up

X_j: vector of individual baseline covariates for person j

$\alpha_0, \alpha_1, \alpha_2, \alpha_3, \beta$: regression coefficients

e_j: error term for person j

The coefficients of interest are α_1, α_2, and α_3, which compare the housing independence groups while holding individual baseline covariates constant. Of particular interest is α_1, which is the difference in the outcome between those who were non-independent at baseline and became independent ("became independent" group) compared to those who were independent at baseline and remained so ("remained independent" group), because this provides a clear contrast between those who used the voucher to form their own households and those that did not.

The "remained independent" and the "became independent" groups differed at the time they received their vouchers. As one might expect, the families who were already in their own housing were in a better economic position at baseline, with higher annual earnings ($6,300 compared to $4,900), more employment (45 percent working versus 35 percent), and better transportation (44 percent with a car that runs versus 33 percent). The group that was not independent at baseline but then become so was younger than the "remained independent" group, with 46 percent of the group age 24 or less, compared to 29 percent for the "remained independent" group. The racial composition of the two groups are different, as well, with the "became independent" group more likely to be black (67 percent compared to 47 percent) and less likely to be Hispanic (13 percent compared to 25 percent). Exhibit A15 compares the four housing independence groups on the baseline individual characteristics of the heads of families. These differences in observable individual characteristics are controlled for in the regressions in order to focus on differences related to becoming independent (rather than what can be explained by initial differences).

This analysis examines a wide range of outcomes, including neighborhood quality as measured by census tract characteristics, employment and benefits receipt measured through state administrative data, and outcomes related to family well-being and self-sufficiency measured through the follow-up survey.. Exhibit 11 presents selected results for outcomes measured by the follow-up survey. The treatment mean is the outcome on each measure for those who had independent housing at baseline and continued to have independent housing at follow-up. The next column, the group of most interest, shows the difference between the "became independent" and "remained independent" groups. For example, the "became independent" group reported experiencing on average 2.2 food-related hardships during the month before the survey was taken. The "became independent" group on average reported an additional .5 food-related hardships, and this difference was statistically significant. (For full results, see Appendix Exhibit A16.)

Exhibit 11: Correlations Between Selected Outcomes and Changes in Housing Independence

		Housing Independence Change Status:		
		Nonindependent at baseline TO Independent at follow-up	Nonindependent at baseline REMAIN Nonind. at followup	Independent at baseline TO Non-independent at follow-up
Outcome	Treatment Mean	Coefficient	Coefficient	Coefficient
Number of moves during follow-up period	1.73	0.21*	0.59**	1.27***
		(0.13)	(0.27)	(0.26)
Received Food Stamp benefits in month prior to the survey	0.66	-0.07*	-0.13**	-0.12*
		(0.04)	(0.06)	(0.07)
Food Stamp benefits received in prior month	220	-43***	-66***	-42
		(16)	(24)	(28)
TANF cash amount received in prior month	108	-30*	-27	-57**
		(16)	(24)	(27)
Number of birth children in current household	2.6	-0.4***	-0.7***	-0.1
		(0.1)	(0.1)	(0.2)
Number of children in household	2.8	-0.3***	-0.6***	-0.1
		(0.1)	(0.2)	(0.1)
Total current household size	4.2	-0.4***	0.5**	0.8***
		(0.1)	(0.2)	(0.2)
Number of food related hardships in the past 30 days	2.2	0.5***	0.3	0.3
		(0.2)	(0.3)	(0.3)
Household food insecurity scale score	3.1	0.7***	0.4	0.4
		(0.2)	(0.5)	(0.4)
"Big problem" or "small problem" in neighborhood with litter or trash on the streets or sidewalk	0.46	-0.08*	-0.20***	-0.05
		(0.04)	(0.07)	(0.07)
Number of workers in the household	0.69	0.01	0.28**	0.25**
		(0.05)	(0.12)	(0.11)
Amount spent in rent, including utilities, in month before survey	484	42*	307***	109**
		(24)	(78)	(55)

Notes:
*** indicates p < .01, ** indicates p < .05, * indicates p < .10. Robust standard errors in parentheses.

The "became independent" group has greater food hardship, greater food insecurity, and lower Food Stamp benefits, than the "remained independent group." The "became independent" group also has fewer own children in the household, fewer total children in the household, and smaller total household size than the "remain independent" group. Results that are significant at a less strict standard ($p<0.10$) for the "became independent" group include more moves during follow-up, higher rent plus utility at follow-up, lower rates of receiving Food Stamps, and lower TANF benefits in the last month than the "remain independent" group.

Results for neighborhood quality, as measured by census tract characteristics, show no statistically significant differences between the "became independent" and "remain independent" groups. Nor did the administrative data show any differences in employment or earnings. These results are reported in Appendix Exhibit A17.

The greater number of moves result is intuitive, because the "became independent" group could not rent in place and so needed at least one move in order to use the voucher, compared to the "remain independent" group, which could have leased in place with a voucher. The food hardship and food insecurity outcomes refer to food security within the last 30 days before the survey. The results on these two outcomes are evidence that the "became independent" group remains in a more precarious position at follow-up, compared to the "remain independent" group.

The finding that the "became independent" group paid more than $42 on average for rent and utilities is puzzling and could be interpreted in a number of ways. The "became independent" group may place more importance on unit quality or unit safety that is reflected in the rent but not visible in our other outcome measures. Or there may be neighborhood amenities, such as proximity to parks, that are not reflected in census measured tract characteristics. Alternatively, those who previously were living with other people may be less experienced in managing their budgets and less savvy about finding good deals on apartment or house rentals. The lower Food Stamps receipt, Food Stamps value, and TANF value probably reflect the lower household size and fewer children for the "became independent" group.

The absence of any significant differences for employment and earnings are interesting, as they allow us to attribute the greater food insecurity of the "became independent" group entirely to the difference in benefits receipt. Clearly there are unmet needs that accompany the move to independence.

We examined a number of outcomes for children reported by parents to the follow-up survey, including: child has ever repeated a grade; in past year, parent worked with youth group or other activity outside of school; child not in school due to a problem (health problems, financial problems, incarceration, mental health etc.); child in activities at school at 3:45 pm; child could be seen/heard by adult at 3:45 pm; child had problems involving police contacting parent since random assignment; and child hangs around with kids who get into trouble. No significant differences are seen in child outcomes, the results for which are shown in Exhibit A18.

Overall, the "became independent" group does not differ strikingly from the "remain independent" group. The "became independent" group has smaller households at the time of survey follow-up, receives somewhat less public assistance, and is more food insecure. There is no difference between the groups in neighborhood quality at follow-up. The difference in food security hints that the "became independent" group remains in a more precarious situation years later. However, we do not see other evidence of greater instability—for example, no negative contrast in what parents said about their children—-and so are unable to draw strong distinctions between the groups.

3.2 Longer-Term Housing Independence and Housing Self-Sufficiency

This analysis looks at the effect of the voucher in promoting long-term housing independence and self-sufficiency of families. The premise of this analysis is that the ideal outcome for a family from a societal perspective is to pay for the family to pay for its own affordable residence without housing assistance and without an excess cost burden. As above, housing independence is defined as owning or renting one's own place, while self-sufficiency is defined as no longer

receiving housing assistance. As in Sections 2.1–2.4, we take advantage of the experimental nature of the data and estimate treatment effects on independent self-sufficiency.

We create two closely related outcomes for this analysis: (1) having independent housing while not receiving housing assistance and (2) having independent housing while not receiving housing assistance *and* having a rent burden of less than 40 percent of income. The rent burden of 40 percent of income is essentially arbitrary, as are other social norms such as 30 percent of income or 25 percent of income. Voucher program rules prohibit a family from paying more than 40 percent of income when the family first rents a housing unit with a voucher.

We then estimate experimental impacts on these two outcomes for the full sample and for subgroups defined by baseline individual characteristics. Selected estimates are shown in Exhibit 12. (For full results, see Appendix Exhibit A19.) The voucher has a significant negative effect on being a non-assisted, independent household. A simple interpretation of this result is that treatment group families continue to use vouchers, so they continue to receive housing assistance and are less likely to be in a non-assisted state. When the affordability criterion is added to the outcome (rent burden under 40 percent), we find that there is no significant impact of the voucher. Taking these results together, we conclude that, while the control group includes more families than the treatment group who live independently without housing assistance, these families live under the weight of high rent burdens. While the voucher does not have the effect of allowing more families to achieve affordable, self-sufficient, housing independence, it has also not prevented families from achieving this.

Exhibit 12: Impacts of the Voucher on Long Term Housing Independence and Self Sufficiency

	Independent and Non-assisted at Follow-up				Independent, Non-assisted, with Low Rent-Burden at Follow-up			
	Sample Size	Control Mean	ITT Impact	TOT Impact	Sample Size	Control Mean	ITT Impact	TOT Impact
All Follow-up Sample	2,474	0.369	-0.058***	-0.230***	2,286	0.084	0.005	0.019
			(0.020)	(0.081)			(0.013)	(0.053)

Notes:

ITT = "Intent-to-Treat". TOT = "Treatment-on-Treated". Robust standard errors in parentheses.

*** indicates p < .01, ** indicates p < .05, * indicates p < .10

Reflecting the result for the full sample of families responding to the follow-up survey and presented in Exhibit 12, many subgroups defined by baseline characteristics have negative impacts for the first outcome, unassisted housing independence, without the rent burden criterion. When the rent burden criterion is added, most of the negative impacts become insignificant.

Overall, in the fifth year after random assignment, the voucher has had a neutral effect on the long-term goal of independent self-sufficiency with a reasonable rent burden. Many social programs, particularly TANF (formerly AFDC), have been accused of actually having detrimental effects on the groups they are designed to assist. While we hope that at a follow-up point in the future, the effect of the voucher on independent self-sufficiency with a reasonable rent burden will be positive, it is reassuring to find that it does not have a negative effect on this desirable goal.

4. HOMELESSNESS

The Housing Voucher Evaluation made an important contribution to our understanding of homelessness by confirming that the use of housing assistance reduces homelessness. Earlier studies used cross-sectional data to show that geographical variations of the rate of homelessness were related to housing market characteristics such as vacancy rates (more homelessness in places with low vacancies), rent levels (more homelessness in places with high rents), and the percentage of housing assistance targeted to poor households (Quiqley, Raphael, and Smolensky, 2001; Honig and Filer, 1993; Early and Olsen, 2002; O'Flaherty, 2004). The experimental design of the Housing Voucher Study made it possible to demonstrate conclusively that rates of homelessness are lower for those who are offered vouchers compared with those who are not and dramatically lower for those who use vouchers compared with those who do not.

The Voucher Study provides a valuable dataset with which to examine further the topic of homelessness, because the follow-up survey asked questions on homelessness during the year before the survey was administered, which was between 4 and 5 years after the study collected baseline characteristics. The longitudinal nature of the data allows us to examine what baseline characteristics may be associated with later homelessness, adding to the extensive literature on what distinguishes families who are poor from the 4 percent of poor families who are homeless during a year's time (Rog and Buckner, 2007; HUD, 2008). The experimental setting allows us to investigate the effectiveness of vouchers in preventing homelessness for young parents, a group thought to be particularly vulnerable to becoming homeless.

4.1 Predicting Subsequent Homelessness

This non-experimental analysis looks at whether homelessness can be predicted by the family's baseline characteristics. The ability to predict later homelessness would allow social service agencies—and perhaps housing programs—to target assistance to those most at risk for homelessness. The follow-up survey of the Housing Voucher Evaluation asked respondents whether there was ever a time in the past year when the family did not have its own place to stay. If the response was yes, respondents were asked if the family stayed with a relative, a friend, in a shelter, or on the street. We use three definitions of homelessness based on these responses: 1) did not have a place on one's own to stay at some point during the past year, 2) on the streets or living in shelters at some point during past year, and 3) living with friends or relatives at some point during past year.

We use only the control group to investigate the predictors of homelessness, since so few families in the treatment group reported that they had been homeless. Using a linear model, we regressed homelessness on baseline characteristics, using a number of different specifications. Selected results for the broadest definition of homelessness, which comprises the other two measures, are shown in Exhibit 13. (For full results, see Appendix Exhibit A20.) The first specification has all the covariates that serve as control variables for the experimental impact estimates[44]. We see that living in Atlanta, Augusta, Houston, or Spokane all lower one's risk for homelessness compared to living in Fresno.

[44] These covariates are listed in Section 1.3.

Exhibit 13: Baseline Characteristics Correlated with Not Having One's Own Place Four Years Later

Outcome	Model 1[a]	Model 2	Model 3	Model 4	Model 5	Model 6
Race/ethnicity is white, non-Hispanic	-0.06	-0.08**				
	(0.06)	(0.04)				
Ethnicity is Hispanic	-0.063	-0.03				
	(0.046)	(0.03)				
Race/ethnicity is non-black, non-white, non-Hispanic	-0.08	-0.09				
	(0.08)	(0.07)				
Race/ethnicity—response is missing	-0.06	0.09				
	(0.13)	(0.16)				
Age of youngest person in the household is 6-17 years	-0.02		-0.07**			
	(0.04)		(0.03)			
Age of youngest person—response is missing	-0.99		0.34			
	(0.68)		(0.34)			
Marital status is never married	0.03			0.07**		
	(0.03)			(0.03)		
Marital status—response is missing	0.09			0.10		
	(0.09)			(0.07)		
Lives with friends or relatives, in homeless shelter, or in transitional housing at baseline	0.09**				0.09*	
	(0.04)				(0.03)	
Lives in public or assisted housing at baseline	-0.051				-0.02	
	(0.042)				(0.04)	
Type of housing at baseline—response is missing	0.13				0.20	
	(0.16)				(0.17)	
Knows when TANF benefits expire, 6-12 months after RA	-0.04					0.02
	(0.07)					(0.07)
... 12-18 months after RA	-0.09					-0.04
	(0.07)					(0.07)
… more than 18 months after RA	-0.12**					-0.08
	(0.06)					(0.06)
Not receiving TANF/AFDC at baseline, or does not know when TANF benefits expire, or no response missing	-0.07					-0.04
	(0.05)					(0.04)
Had moved more than three times in 5 years before baseline	0.06*					
	(0.03)					
Unemployed with reservation wage of $3—$5.99	0.22**					
	(0.09)					
Rent burden at baseline	0.48***					
	(0.15)					
Lives in Atlanta area at baseline	-10.66*					
	(5.46)					
Lives in Augusta area at baseline	-8.81**					
	(4.44)					
Lives in Houston at baseline	-9.14*					
	(4.65)					
Lives in Spokane area at baseline	-8.39**					
	(4.26)					
MSA-level unemployment rate	-1.06*					
	(0.54)					

Notes:

*** indicates p < .01, ** indicates p < .05, * indicates p < .10. Robust standard errors in parentheses.

[a] Model 1 includes full set of covariates, a subset of which are shown above.

A baseline characteristic that seems to have a positive effect on not having a place of one's own four years later is the average unemployment rate in the metropolitan area in the year prior to random assignment. However, this covariate seems to be capturing some quality of Fresno that we do not understand, rather than being a reliable finding about the influence of the unemployment rate on homelessness. When Fresno families are removed from the control group sample, the unemployment rate no longer is significantly correlated with later homelessness. The size and significance of the other coefficients does not change much, however.

Other significant results from this model make intuitive sense. There are positive correlations with living with friends or relatives or in a shelter at baseline, having moved more than three times in the five years prior to baseline, and being unemployed with a reservation wage of only $3-5 (versus having a reservation wage of $6-8). Families with these characteristics at baseline were more likely to be homeless during the year before the survey was taken, using the broad definition for which results are reported on the exhibit. We would expect that living with friends or relatives or in a shelter at baseline would be an excellent predictor of not having a place of one's own at a later time. Moving frequently may be the result of having difficulty holding on to one's place or of being housed by a series of relatives or friends, a pattern likely to continue after a family was randomly assigned to the control group.

Being willing to accept a job at the low wage of $3-5 may be a marker of low human capital. Weak earning ability would make it more difficulty to afford the costs of having one's own place. A high rent burden makes it more difficult for the family to hold on to its baseline housing and, therefore, more likely that the family will be without a place of its own at follow-up.

Families who reported at baseline that they had more than 18 months of TANF eligibility left were 12 percentage points less likely to report that they had been without a place of their own at some point during the previous year. This makes intuitive sense, as TANF assistance can be used to help pay the rent.

In our other models of homelessness, we entered only a few related covariates at a time. These models provide less definitive results and are best interpreted as simple correlations. We did this to identify broad populations at risk for homelessness and to permit comparisons with results from for other studies with fewer available covariates. A model that uses just race shows that whites are less likely than blacks to experience homelessness, when other individual characteristics are not controlled for. This finding is consistent with other studies that have shown that African American families have a much higher rate of homelessness than other poor families (Rog and Buckner, 2007; HUD 2008).

Household receipt of SSI at baseline is positively correlated with later homelessness, defined as not having a place of one's own. While SSI provides income, it may be that the strain of caring for a disabled household member—even with some income support from a public program—contributes to housing instability and homelessness. The result may also imply that SSI benefits are not large enough to prevent homelessness, at least not for a family population.

Never having been married at the time the baseline survey was taken increases the risk of homelessness, and working for pay at baseline decreases the risk. Having a youngest child of age 6-17—versus having a youngest child under age 6—decreases the risk of homelessness.

These findings are consistent with the literature that shows that young children and lack of employment history are risk factors for homelessness (Rog and Buckner, 2007).

Appendix Exhibits A21 and A22 show the results for models of the two separate ways in which surveyed families reported that they were without a place of their own: on the streets or living in shelters at some point during the past year, and living with friends or relatives at some point during the past year. In general, fewer baseline characteristics are correlated with these narrower definitions. In the model of living on the streets or in a shelter that includes all of the baseline covariate, whites are significantly less likely than blacks to experience this condition. In the model of living with friends or relatives that includes all covariates, three characteristics have marginal significance (at the $p<0.10$ level): never having been married at baseline and living with friends or relatives at baseline are positively correlated to this condition, and having TANF benefits expire in more than 18 months is negatively correlated. Whites are not less likely than blacks to experience living with friends or relatives in the year before the survey, but they are less likely to be on the streets or in a shelter.

On the whole, the models of homelessness provide some suggestive, but by no means definitive, results. As might be expected, our model can only explain a relatively small fraction of the variation in homelessness across the control group families. (The R-squared statistics for these models are in the 0.11-0.12 range.) Those who are living with friends or relatives at baseline are at risk of being homeless at a later point, particularly of having to stay with friends or relatives in the future. Those receiving TANF at baseline with at least 18 months of eligibility left are less likely to be homeless at a later point, compared to those with less eligibility and those who are not receiving TANF. This is evidence that TANF has some role in preventing homelessness. When multiple characteristics are controlled for, whites are less likely than blacks to experience living on the streets in a shelter, but are no less likely to experience the necessity of staying with friends or relatives. Low earning capability also is also a risk factor for later homelessness, as seen by the significant positive coefficients on being unemployed with a reservation wage of $3-5 (vs. a reservation wage of $6-8) in the model of homelessness that uses the broad definition and in the model that predicts having to stay with friends or relatives. While these may not be surprising results, it appears that targeting the neediest families would do the most in terms of preventing homelessness.

4.2 Effect of the Voucher on Homelessness for Young Parents

In another look at homelessness, we estimate the impact of receiving a voucher on later homelessness for the subgroup of young parents, because young parents have been shown by other research to be at particular risk of becoming homeless.[45] We define the subgroup of young parents as those age 24 or less. We estimate impacts for the three definitions of homelessness described above. Results are shown in Exhibit 14. Receiving a voucher reduces homelessness (using the broad definition of staying with friends or relatives or living in a shelter or on streets) by 6 percentage points for young parents who receive vouchers. The TOT impact of the voucher is that it reduces homelessness for this group by 23 percentage points, compared to the control mean that shows that 25 percent of young parents did not have a place of their own at some point during the year before the follow-up survey. These impacts are quite large, and statistically similar to the impact on the entire sample.

[45] Personal communication with Dennis P. Culhane. Results are not yet published.

Exhibit 14: Voucher Impacts on Homelessness for Young Parents

Outcome	Control Mean	ITT Impact	TOT Impact
Did not have a place of one's own to stay or living with others at some point during the past year	0.246	-0.056*	-0.230*
		(0.032)	(0.130)
On the streets or living in shelters at some point during past year	0.055	-0.034**	-0.138**
		(0.015)	(0.060)
Living with friends, relatives, or others at some point during past year	0.188	-0.023	-0.096
		(0.030)	(0.121)

Notes:
Sample size = 749.
ITT = "Intent-to-Treat". TOT = "Treatment-on-Treated". Robust standard errors in parentheses.
*** indicates p < .01, ** indicates p < .05, * indicates p < .10

The ITT impact for the voucher on the narrow definition of homelessness (staying in a shelter or on the streets) shows that having a voucher reduces literal homelessness by about 3 percentage points. The TOT impact is correspondingly larger, and shows a reduction of about 14 percentage points.

Overall, a housing voucher lowers homelessness for young parents, particularly the incidence of living on the streets or in shelters. While the magnitudes of the effects are statistically similar to those of the full sample, the voucher's effect is relatively more pronounced in preventing street homelessness versus living with friends or relatives for young parents, compared to the full sample.

5. LEASING UP WITH A VOUCHER AND RELINQUISHING A VOUCHER

Despite a series of studies on voucher "success rates,"[46] many questions remain about why some families who receive housing vouchers off waiting lists never end up using them. Even less clear is what drives the decisions and actions of families who relinquish housing vouchers. This section examines these questions in two different ways. First, we look at the baseline characteristics that are associated with leasing up among those who have been offered a voucher and at the characteristics associated with relinquishing among those who have ever used a voucher. Second, we look at the follow-up outcomes for those who have relinquished their vouchers compared to the outcomes for those who still hold vouchers and those who never leased up.

5.1 Who Uses Vouchers and Who Gives Them Up?

Who Uses Vouchers?

This non-experimental analysis explores why some families do not use vouchers when they have received them and why some families relinquish vouchers after they have used them for some time. Finkel and Buron (2001) found that relatively poorer households leased up at higher rates and that race did not affect the likelihood of leasing up. The Housing Voucher Evaluation dataset allows us to examine a richer set of explanatory variables than was available to Finkel and Buron. On the one hand, it could be that those who do not lease up with the voucher are worse off than those that lease up and are not able to organize themselves to take advantage of this valuable opportunity. On the other hand, those who do not lease up may be comparatively well off and do not feel as compelling a need for the assistance of a voucher.

In order to examine whether those who lease up with a voucher differ from those who do not, we estimate a linear model on the outcome "ever leased up" for the treatment group sample. Every family in the treatment group sample was offered a voucher and most families, but not all (68 percent) proceeded to use the voucher. We regress "ever leased up" on baseline individual characteristics in order to explain the decision to lease up with the voucher.

Selected estimation results are shown in Exhibit 15. (For full results, see Appendix Exhibit A23.) Overall, the results suggest that those who did not lease up are somewhat better off than those who do use the voucher. Families more likely to lease up were more likely to receive TANF at baseline, receive Food Stamps at baseline, having a valid driver's license, and have at least 12-18 months of TANF eligibility remaining. Families less likely to lease up more likely to have work experience, if currently unemployed were more likely to have a reservation wage of $13-15 (compared with a reservation wage of $6-8), were more likely to be white and not Hispanic, to be Hispanic, or to identify their race as "other" (compared with being black), and were more likely to receive SSI benefits at baseline.[47]

The most unambiguous results are the negative correlations of leasing up with ever having worked and with having a reservation wage of $13-15. Those with work experience were 6

[46] Earlier studies are summarized in Finkel and Buron (2001).

[47] They also were more likely to be in the small groups of treatment families who did not have dependent children or who were headed by an adult male.

percentage points less likely to lease up, and those with a $13-15 reservation wage were 10 percentage points less likely to lease up. Such a high reservation wage indicates comparatively high human capital and confidence in earning potential. This result can be seen as consistent with Finkel and Buron's (2001) finding that relatively poorer households lease up at higher rates. Those with higher earning capacity have potentially less to gain from using the housing voucher. The negative correlation with having ever worked can be thought of in the same manner.

The negative correlations of leasing up with being white or Hispanic are at odds with Finkel and Buron's (2001) finding that race did not affect the likelihood of leasing up. However, based on an earlier study of voucher success rates, Finkel and Kennedy (1992) provide a potential explanation for the lower likelihood of whites leasing up with the voucher found among the families studied in the Housing Voucher Evaluation. Finkel and Kennedy find that in sites where most voucher holders are minority, whites are less successful than blacks in using housing vouchers. If most housing voucher holders are minority, then segregated housing patterns lead whites to seek rental units outside the a racially identifiable "Section 8 submarket" and to have difficulty finding participating landlords. In the Housing Voucher Evaluation, 4 of the 6 cities had high African-American populations (Atlanta, August, Houston, and Los Angeles). Our finding that Hispanics are less likely to lease up than blacks is a departure from both Finkel and Buron (2001) and Finkel and Kennedy (1992) and also may be related to the particular demographic and housing market characteristics of the Housing Voucher Evaluation study sites. The finding reported in Section 2 that families who started in relatively poorer neighborhoods were more likely to lease up seems to add to the evidence that the voucher program operates within a submarket defined by location and race.

Exhibit 15: Selected Coefficients for "Ever Leased-Up With a Voucher"

Covariate	Coefficient	Robust S.E.	t-Statistic
Had ever worked for pay at baseline	-0.055***	(0.021)	-2.68
Unemployed and has reservation wage of $13—$15.99 at baseline	-0.102**	(0.039)	-2.59
Race/ethnicity is white, non-Hispanic	-0.111***	(0.025)	-4.39
Ethnicity is Hispanic	-0.150***	(0.022)	-6.85
Race/ethnicity is non-black, non-white, non-Hispanic	-0.107***	(0.033)	-3.27
Respondent is male	-0.066**	(0.028)	-2.38
Has valid driver's license at baseline	0.030*	(0.016)	1.93
Receiving TANF/AFDC at baseline	0.051**	(0.024)	2.18
Knows when TANF benefits expire, 12-18 months after baseline date	0.064*	(0.033)	1.90
Someone in household receiving Food Stamps at baseline	0.043*	(0.023)	1.85
Someone in household receiving Supplemental Security Income (SSI) at baseline	-0.041*	(0.023)	-1.78
Is responsible for children living at home at baseline	0.062**	(0.024)	2.56

Notes:
Sample size = 4,690.
*** indicates p < .01, ** indicates p < .05, * indicates p < .10

The positive correlations with successful lease-up of receiving TANF and Food Stamps benefits do not indicate clearly whether those who lease up are better or worse off than those who do not lease up. Receiving public assistance could mean that families are more in need of these benefits and so are in a more distressed state. On the other hand, receiving these forms of assistance could indicate that these families are savvy about taking advantage of benefits they qualify for, rather than more distressed.

Who Relinquishes Vouchers?

We know very little about reasons for relinquishing vouchers other than that HUD administrative data on the voucher program suggest that many people who do so have not "risen out" of the subsidy.[48] Why someone would give up a very large benefit (larger than TANF) has been puzzling. Those who relinquish vouchers may lose them inadvertently through inability to navigate housing authority rules and the housing market, or they may have comparatively high earnings and desire to let others take advantage of the voucher.[49] Mills et al. (2006) and Wood,

[48] The family's income when last certified is so far from the subsidy phase-out point that an increase to the subsidy phase out point by the time the voucher is reliquished is not credible.

[49] Gwen, a voucher holder profiled in Appendix B, expressed her desire to let others have a chance with the voucher. In an in-depth interview, she said, "That's the biggest thing the voucher did for me ... The voucher gave me the safety net that I needed to keep my sanity. It freed up a part of the brain power so I could do the things I needed to do... That's why it was important for me, when I was able to do it on my own, to go ahead and get off it because somebody else needed it more than I did."

Turnham, and Mills (2008) report results of interviews suggesting that many families give the voucher up involuntarily, because of misunderstandings or issues with the administration of the voucher program. We explore this further, first by estimating a linear model for "ever relinquished,"[50] using a sample of the treatment group members who have used their voucher.

Selected estimates for the "ever relinquished" model are shown in Exhibit 16. (For full results, see Appendix Exhibit A24.) Families more likely to relinquish the voucher also are more likely to have relatively older children (the youngest member of household was age 6-17 when the voucher was issued), are more likely to be white or Hispanic, are more likely to have had a driver's license at baseline, and are more likely to have been receiving Medicaid at baseline. Families less likely to relinquish the voucher also were more likely to have a high reservation wage ($13-15), more likely to have been enrolled in a training program at baseline, more likely to have been living in public or assisted housing at baseline, and more likely to have received TANF at baseline. These results do not speak clearly about whether relinquishers are better or worse off than those who continue to use their vouchers. Some relinquishers may be are unable to navigate housing authority rules and inadvertently lose their vouchers, while others simply "grow" out of using them. It appears that families who are more attuned to or more dependent on assistance are less likely to give up the voucher: those who received public housing or TANF at baseline are less likely to relinquish a voucher once they receive it. We are unable to distinguish clearly between these two profiles of voucher holders: "savvy consumers of benefits" on the one hand versus "distressed, needy households" on the other. The marginally significant high reservation wage is an indication of higher human capital and could be seen as support for the "savvy benefits consumers" profile of voucher holders.

On the whole, the correlations with baseline characteristics suggest that those who did not lease up are somewhat better off than those who do use the voucher. Among those who lease up, it is unclear whether relinquishers are in a stronger or more distressed position relative to those who continue to hold vouchers. Having ever worked and having a high reservation wage are negatively associated with leasing up. This indicates that those with higher earning capability are less likely to use the voucher, holding other factors constant. Whites and Hispanics are both less likely than blacks to take advantage of the voucher offer and more likely to relinquish the voucher if they do lease up. As one might expect, prior receipt of housing assistance in the form of public housing is associated with continued use of the voucher.

[50] Ever relinquished a voucher is measured as of 18 quarters after random assignment, as this is the longest period of follow-up for families in Los Angeles. Families in other cities who relinquished the voucher after 18 quarters are not coded as relinquishers here.

Exhibit 16: Selected Coefficients for "Relinquished a Voucher"

Covariate	Coefficient	Robust S.E.	t-Statistic
Unemployed and has reservation wage of $13 - $15.99 at baseline	-0.073*	(0.045)	-1.65
Enrolled in (and attending) a job training program at baseline	-0.049*	(0.026)	-1.92
Lives in public or assisted housing at baseline	-0.060**	(0.024)	-2.53
Age of youngest person in the household is 6-17 years	0.056**	(0.022)	2.53
Race/ethnicity is white, non-Hispanic	0.158***	(0.035)	4.52
Ethnicity is Hispanic	0.121***	(0.026)	4.61
Has valid driver's license at baseline	0.038**	(0.018)	2.07
Receiving TANF/AFDC at baseline	-0.051*	(0.027)	-1.89
Someone in household receiving Medicaid at baseline	0.037*	(0.019)	1.93

Notes:
Sample size = 3,167.
*** indicates p < .01, ** indicates p < .05, * indicates p < .10

5.2 How Do Relinquishers Fare compared with Families Who Never Lease Up and Families Who Use Vouchers?

In Section 5.1, we looked at how *baseline characteristics* were correlated with the choices of leasing up and with relinquishing. Here we seek to understand the family circumstances at the time of and subsequent to making these choices. This non-experimental analysis looks at the *follow-up outcomes* of three groups: those who have relinquished their voucher, those who never used their voucher, and those who continue to lease up with their voucher at the end of the observation period. Our default assumption is that households are making their own choices about when to relinquish vouchers, and we assume that these households are doing well: otherwise they would not relinquish the vouchers. We expect to see households who relinquish vouchers with better outcomes than those who still hold vouchers. If, on the other hand, households who have given up vouchers are faring worse than those who still hold them, we would be interested in whether their relinquishing was strictly voluntary. In the in-depth interviews, we heard stories of former voucher holders losing their vouchers while trying to move. Section 6 provides additional detail on what sample members interviewed in depth as part of the Housing Voucher Evaluation said about their experiences with attempting to continue to use their vouchers.

We also compare relinquishes to those who never leased up. Presumably both groups have made choices not to be voucher holders. We assume those who never leased up are relatively well-off, as implied by the analysis just reported in Section 5.1. Do those who hold vouchers for a time and then later relinquish come to resemble those who choose not to use the vouchers at all? Or do those who give up the voucher fare worse than others in the treatment group, including those who never leased up?

Several baseline characteristics differ across the groups, including: resided in public or assisted housing at baseline (12 percent for never leased up, 17 percent for still leased up, and 6 percent for relinquished); racial composition (44 percent black and 20 percent white for never leased up,

61 percent black and 11 percent white for still leased up, and 37 percent black and 30 percent white for relinquished); someone in household received Medicaid at baseline (62 percent for never leased up, 67 percent for still leased up, and 57 percent for relinquished); and had moved more than three times in five years before receiving the voucher at baseline (35 percent for never leased up, 33 percent for still leased up, and 45 percent for relinquished). Appendix Exhibit A25 compares the three groups on these and other baseline characteristics.

In order to compare the three groups, we regress a broad range of outcomes measured by the follow-up survey on two specifications for the treatment group sample.

$$Y_j = \alpha_0 + \alpha_1 I_{relinquisher,j} + \alpha_2 I_{neverleasedup,j} + X_j\beta + e_j$$
$$Y_j = \gamma_0 + \gamma_1 I_{relinquisher,j} + \gamma_2 I_{stillhold,j} + X_j\Gamma + \upsilon_j$$

where

Y_j: outcome for person j

$I_{relinquisher,j}, I_{neverleasedup,j}, I_{stillhold,j}$: indicator (dummy) variables for person j,
relinquisher denotes someone who has relinquished voucher
neverleasedup denotes someone who has never used voucher
stillhold denotes someone who still uses the voucher at follow-up

X_j: vector of individual baseline covariates for person j

$\alpha_0, \alpha_1, \alpha_2, \gamma_0, \gamma_1, \gamma_2, \beta, \Gamma$: regression coefficients

e_j, υ_j: error terms for person j

The coefficients of interest are α_1, α_2, and γ_1, which compare the three groups with each other.[51] Estimates of these coefficients are shown in Exhibits 17 and 18. (For full results, see Appendix Exhibit A26.)

While the results are mixed, overall, it appears that those families who continue to hold vouchers are better off at follow-up compared both with those who never leased up and with those who relinquished their vouchers. In addition, those who never leased up seem to be doing better than those who used a voucher at one point and then relinquished it.

[51] γ_2 is simply the inverse of α_2.

Exhibit 17: Comparison of Selected Follow-up Survey Adult Outcomes for Relinquishers vs. Holders vs. Never-leasers

Outcome	Sample Size	Treatment Mean	Relinquishers (compared to Still Holders) Coefficient	Never Leased Up (compared to Still Holders) Coefficient	Relinquishers (compared to Never Leased Up) Coefficient
Number of moves during follow-up period	1216	1.7	0.9***	0.4***	0.5***
			(0.2)	(0.1)	(0.2)
Received Food Stamp benefits in month prior to the survey	1223	0.66	-0.24***	-0.11***	-0.13**
			(0.04)	(0.03)	(0.05)
Food Stamp benefits received in prior month	1209	220	-80***	-34**	-46**
			(17)	(14)	(19)
Received TANF cash assistance in month prior to the survey	1223	0.25	-0.10***	-0.05*	-0.05
			(0.04)	(0.03)	(0.04)
TANF cash amount received in prior month	1215	108	-39**	-43***	4
			(19)	(14)	(20)
Number of elders in household	1229	0.02	0.03**	0.03**	0.01
			(0.01)	(0.01)	(0.02)
Number of misc. other relatives in household	1229	0.25	0.40***	0.27***	0.14
			(0.09)	(0.06)	(0.10)
Number of adult's siblings in household	1229	0.03	0.07**	0.02	0.05
			(0.03)	(0.02)	(0.04)
Total current household size	1229	4.2	0.5***	0.4***	0.1
			(0.1)	(0.1)	(0.1)
Housing is crowded at time of survey	1212	0.35	0.10**	0.07**	0.03
			(0.04)	(0.03)	(0.05)
Household type is multigenerational	1229	0.10	0.12***	0.11***	0.02
			(0.03)	(0.02)	(0.04)
Household type is single parent with children, no other relatives or non-relatives	1229	0.68	-0.30***	-0.26***	-0.04
			(0.04)	(0.03)	(0.05)
Household type is 2 parents with children, no other relatives or non-relatives	1229	0.20	0.14***	0.14***	0.00
			(0.04)	(0.03)	(0.04)
Did not have a place of one's own to stay or living with others at some point during the past year	1227	0.157	0.311***	0.135***	0.176***
			(0.040)	(0.028)	(0.045)
On the streets or living in shelters at some point during past year	1227	0.039	0.113***	0.033**	0.079***
			(0.027)	(0.014)	(0.030)
Living with friends, relatives, or others at some point during past year	1227	0.113	0.180***	0.096***	0.085**
			(0.035)	(0.025)	(0.040)
Rents or owns home or apartment	1228	0.890	-0.231***	-0.151***	-0.080*
			(0.036)	(0.025)	(0.042)
Food expenditures per person in the month before the survey	1142	32	-5**	-1	-4*
			(2)	(2)	(2)
Number of workers in the household	1199	0.69	0.25***	0.25***	0.00
			(0.06)	(0.05)	(0.07)
Cash and near-cash income below poverty threshold	1218	0.609	0.255***	0.170***	0.085*
			(0.040)	(0.036)	(0.046)
Cash and near-cash income below 75% of poverty threshold	1218	0.411	0.350***	0.269***	0.082
			(0.045)	(0.036)	(0.051)
Amount spent in rent, including utilities, in month before survey	1084	484	295***	198***	97***
			(30)	(23)	(35)

Notes:

Robust standard errors in parentheses.

*** indicates p < .01, ** indicates p < .05, * indicates p < .10

Exhibit 18: Comparison of Neighborhood and Administrative Outcomes for Relinquishers vs. Holders vs. Never-leasers

Outcome	Treatment Mean	Relinquishers (compared to Still Holders) Coefficient	Never Leased Up (compared to Still Holders) Coefficient	Relinquishers (compared to Never Leased Up) Coefficient
Percent moved from baseline Census tract	61.6	-3.4	-24.5***	21.1***
		(2.1)	(1.8)	(2.3)
Percent below poverty level	26.4	0.8*	2.6***	-1.8***
		(0.5)	(0.4)	(0.5)
Percent of civilians employed	87.8	-0.3	-1.2***	0.9***
		(0.2)	(0.2)	(0.3)
Percent of households with public assistance	9.5	0.2	0.8***	-0.7***
		(0.2)	(0.2)	(0.3)
Percent of households with single female heads	22.2	0.7**	1.0***	-0.3
		(0.3)	(0.3)	(0.3)
Percent of adults with less than 9th grade education	15.0	0.0	0.9***	-0.9**
		(0.4)	(0.3)	(0.4)
Percent of youths not in school and not in the labor force	9.3	0.0	0.3	-0.3
		(0.3)	(0.2)	(0.3)
Percent minority	67.5	1.2*	0.3	0.9
		(0.7)	(0.6)	(0.7)
Percent black	33.4	2.5***	1.5**	1.1
		(0.7)	(0.7)	(0.7)
Percent Hispanic	26.2	-1.2**	-0.7	-0.5
		(0.6)	(0.5)	(0.6)
Number of quarters with positive (>0) earnings	10.6	0.3	-0.1	0.4*
		(0.2)	(0.2)	(0.3)
Total earnings over 16 quarters	27680	4222***	3190***	1032
		(1079)	(837)	(1218)
Number of quarters with receipt of TANF	11.1	-1.5***	-1.3***	-0.2
		(0.2)	(0.2)	(0.2)
Total TANF cash benefits	11943	-1763***	-2075***	311
		(332)	(222)	(346)
Number of quarters with receipt of Food Stamps	15.0	-2.0***	-2.1***	0.1
		(0.3)	(0.2)	(0.3)
Total Food Stamp benefits	12665	-1990***	-1793***	-197
		(323)	(246)	(341)

Notes:
Sample Size = 4,645 (neighborhood outcomes); 4,653 (earnings); 4,042 (TANF); 2,658 (Food Stamps).
Robust standard errors in parentheses. Neighborhood outcomes are for the 18th quarter after random assignment.
Administrative outcomes are cumulative over 16 quarters.
*** indicates p < .01, ** indicates p < .05, * indicates p < .10

Compared to those who still hold vouchers, those who relinquished a voucher report that they: have more earnings, receive less TANF and Food Stamps, have larger households, live in similar neighborhoods (slightly poorer), are more likely to have experienced homelessness in the past

year, are more likely to be in poverty when both cash and near cash income are considered[52] and have less monthly food per person. Even though relinquishers have more earnings than those who still hold vouchers, they seem to be somewhat worse off at the point of follow-up. Based on comments from the in-depth interviews, families value being able to live independently from their extended family. Therefore, we interpret the larger households of relinquishers as less desirable than the smaller households of voucher holders.

Compared to those who never leased up, those who leased up and then relinquished a voucher: have similar earnings, have similar TANF and Food Stamps receipt, have similar household size, reside in better neighborhoods (less poverty and welfare with more people employed), are more likely to have experienced homelessness in the past year, are more likely to be in poverty, and have less monthly food per person. Even though the relinquishers reside in better neighborhoods, they do not appear to be faring as well as the group who never leased up in the first place.

The final comparison measures the circumstances of those who never leased up against those who continue to rent with vouchers. Compared to those who still hold vouchers, those who never leased: have more earnings, receive less TANF and Food Stamps, have larger households, live in worse neighborhoods (more poverty and welfare with fewer people employed), are more likely to experience homelessness, are more likely to be in poverty (when cash and near cash income are combined), and have similar monthly food per person. Even though those who never leased up have more earnings than voucher users, they do not appear to be doing as well at the time of follow-up.

Overall, it appears that those families who relinquished their vouchers are worse off at follow-up than those who continue to hold vouchers. Although relinquishers have higher earnings, their lower receipt of public assistance (including housing assistance) leaves them a step down in terms of material well-being, and more susceptible to homelessness. This is a surprising finding because we expected that families would not relinquish their vouchers if it made them worse off. However, it is consistent with the in-depth interviews discussed below in Section 6.11 which provide anecdotal evidence that involuntary loss of vouchers is a fairly frequent occurrence. In many cases, it may be inaccurate to frame relinquishing of vouchers as a "choice" made by families. We also find that those who continue to hold vouchers are better off those who never leased up. In addition, those who never leased up seem to be doing better than those who relinquished a voucher.

[52] Our measure of cash and near cash combined includes the value of the housing voucher. The result that relinquishers are more likely to be in poverty using this measure of income shows that the value of the voucher more than offsets the higher earnings of the relinquishers.

6. FINDINGS FROM THE IN-DEPTH INTERVIEWS ON VOUCHER USERS' EXPERIENCES WITH VOUCHER PROGRAM RULES AND HA PRACTICES

This section discusses how participants in the Effects of Housing Choice Vouchers on Welfare Families study experienced and interpreted the rules of the WtW voucher program and the policies of their local HAs. The section is based on the findings from in-depth interviews conducted with a non-random sample of 141 voucher users in five of the six study sites (all but Los Angeles) in 2006, approximately five years after random assignment.

The interview respondents were all women, ranging in age from 23 to 74 with an average age of 35 years. All but one of the women had dependent children living in the household at the time of the interview, and nearly one third had four or more children in the home. A little over half (53 percent) had youngest children age six or younger, and the rest had youngest children over the age of six, or school age. Sixty-five percent of the women interviewed were African American, 16 percent were white, and 14 percent were Hispanic.[53] Most had moved at least once since receiving the WtW voucher, and nearly 35 percent had moved more than three times. Prior to receiving the voucher, nearly half of the women interviewed were renting housing on the private market, 36 percent were living with friends or relatives, and 17 percent were living in subsidized housing. One person was homeless when she received the WtW voucher.

The interviews ranged in length from 45 minutes to two hours, with most lasting between 1 and 1 ½ hours and focused on the choices that families make after receiving rental assistance. The main purpose of the interviews was to learn how voucher users make important family decisions and how those decisions could be influenced by the receipt of housing assistance. However, the interviews also provided information on how voucher recipients experience the rules of the voucher program and how they interact with HAs. In particular, the women interviewed talked about program rules and HA practices with respect to finding a unit to rent and getting approval to use the voucher in that unit and also with respect to complying with the rules of the program on an ongoing basis. The first part of this paper focuses on interview findings related to the housing search and approval process and the second part discusses ongoing compliance with program rules and communication between voucher users and their HAs.

6.1 Housing Search and Approval Process

Like the HCV program, the WtW voucher program allowed families to use the voucher to rent a housing unit of their choice in the private rental market as long as it met HUD's HQS and had a rent that the HA determined was reasonable for the market and did not exceed the HA's payment standard for a unit of that size. WtW voucher families were not required to move; they could also use the voucher to subsidize the rent in their existing unit. However, all but one of the women interviewed moved after receiving the voucher. Most moved more than once and some moved four or more times. Underlying the decisions about when and where to move was a desire to improve the quality of life for their children. Some movers were more successful than others, but the desire to place their children in a better living environment was virtually universal.

[53] Six respondents identified themselves as belonging to other racial groups and race was missing for two respondents.

In order to move, WtW voucher users had to complete the same series of steps required of current HCV participants. First, they had to find a suitable rental unit with an owner who was willing to rent under the program. The housing search process took place largely without assistance from the HA. Once they found a unit with a willing owner, they had to submit to the HA a request for tenancy approval and an unexecuted copy of the lease, including a tenancy addendum for the voucher program. And they had to do so no later than the expiration date on the voucher, which for most of the women interviewed was 60 to 120 days after the voucher was issued.

Many women described the process of finding housing and getting it approved as difficult, especially when they first received the voucher. Those whose pre-move situations were precarious (for example, those being evicted, domestic abuse situations, and those who had overstayed their welcome with other families) were particularly challenged by time constraints and a fear of ending up homeless. The most common barriers to moving included: lack of funds for up-front costs, such as security deposits and moving expenses; poor credit and other family issues that would be unappealing to landlords; and lack of housing search and negotiation skills. Also important were issues directly related to the voucher program rules and HA policies: difficulty using the listings of units provided by the HA; problems with the voucher time limits and payment standards; and overcoming negative public perceptions of the voucher program. Each of these issues is discussed below.

6.2 Finding a Unit Using HA Lists

Housing agencies operating the HCV program are required to provide voucher recipients with an oral briefing that covers how the voucher program works, family and owner responsibilities, and where the family may lease a unit, including inside or outside the PHA's jurisdiction (24CFR982.301). HAs are not required to provide voucher program participants with a list of current landlords and available units, but many do provide this as part of the briefing materials given to new voucher recipients.

In the five study sites where in-depth interviews were conducted, the HAs did provide listings of available units and many of the voucher users interviewed used these lists.[54] Some found satisfactory units from the HA lists, and those that did generally found the housing search process to be quite easy. Their comments suggest that it was a source of relief to them that they knew in advance that the owners on the list would be willing to accept vouchers. However, a small number of those interviewed erroneously thought that they had to choose a unit from the HA list and did not realize they had other options. Moreover, more women expressed dissatisfaction with the lists than reported finding them helpful. The most common complaints about HA lists were related to the quality of units represented on the lists and suspicions that these landlords might "take advantage" of low-income families with vouchers. As two of the women put it:

> *Down there at the housing authority, they have a lot of—they have a list with, you know, two or three or four bedroom homes. The problem is, they have them in areas of town—you'd better not go there after six o'clock! And, they won't fix nothin'. They'll fix just enough to pass, but not enough.*

[54] The HAs in the study did not provide any specialized housing search assistance or mobility counseling to WtW voucher recipients.

No, I did not use the list from Housing. Their list was actually in the ghetto. So, no, I didn't use their list. I kind of like got on the Internet, called around, riding around. I just went out on my own. I didn't look on their list at all.

Several women interviewed started with the HA list but then turned to people they knew for help with the housing search. This included seeking out units recommended by friends or family members, hearing about potential locations from co-workers, and considering complexes where they had visited acquaintances. Relying on family and friends represented the path of least resistance for some and reflected a lack of search skills for others. For those who wanted to remain in their current neighborhoods, this strategy may have met the need; but it was often ineffective for those who were hoping to find a better environment.

One of the women interviewed, a 34-year-old mother of four, started with the HA list but ultimately found a unit by asking friends and family and driving around:

I started with the housing choice list. But things I found on the list were trash. And, they were misrepresented. And, because you're new and landlords know you're new, they tell you anything. So, basically, I would call, get directions, how to go look at the place, and it's nothing like you told me it was. And, at that time, I didn't have any transportation, so I was on the bus. And, I was irritated by the time I got to the house and, you know, "You told me it was this and that, and I told you what I was looking for." Because, you know, we don't have these great, big dreams, but we don't want to live in an infested house, either, the roaches and rats and a bad neighborhood, or whatever. So, when I got there, the houses just weren't up to par. So, I stopped looking on the list and I started just riding around. I'm getting friends to take me, whoever, "Look, I need to go look at this area, here, for a house." Or, "Can you take me to this area? Can you tell me about that area?" (Alma, 34-year-old mother of four)

The unit that this person ultimately rented was not what she had hoped for, but was tolerable:

I mean, it wasn't my ideal neighborhood, but I could deal with it. There weren't people, literally across the street, selling crack. I could deal with it. I mean, it was down the street, around the corner, but it wasn't directly in my eyesight.

6.3 Search Time

The HCV program sets a limit on the amount of time a voucher recipient can search for a unit before signing a lease. The initial term of the must be at least 60 days (24CFR982.303). HAs are required to state the term on the voucher and the term of the voucher must be provided to new voucher recipients at the required briefing for all voucher participants. At its discretion, a HA can grant a family one or more extensions of the initial voucher term in accordance with the HA policy as described in the HA administrative plan.

Many of the women interviewed for the study felt the pressure of time when searching for housing. As one mother of three put it:

120 days is a long time, it seems, but not when there's nobody to rent to you.

For some of the women, the time pressure came from their own life circumstances—the voucher came at a time of transition for them and although they wanted to use the voucher to move, they found it difficult to make time to search for new housing. Others felt that voucher program rules did not give them enough time or flexibility to search, and still others found slow landlord responses frustrating. The words of this 45-year-old mother of three highlight the challenges described by many of the women interviewed:

> *I found this place on my last day. Because I had to turn the papers in on that Monday. So it was hard. Because I had to go to work and I don't have a car; I have to take the bus, looking for a place. And then I was given a credit check, more credit checks than I was getting for a place, that I was getting no response from. And so it was kind of hard. I was getting kind of frustrated.*

Several women talked about feeling "blessed" after receiving the voucher but then worrying that they would have to accept "anything" because of the time pressure. Several of the people interviewed requested multiple extensions on their voucher from the HA in order to find the right unit in the right neighborhood. As one woman put it:

> *You're trying to find something you like, you're trying to find the area that you like you're trying to get in an area were you think the neighbors… everything is cool so, …with all those [considerations] it takes a little bit longer.*

Other respondents failed to find a unit (or turn in the required paperwork) in time and as a result lost the voucher. Many commented on the refusal of HA staff to grant extensions on the voucher, even in extenuating circumstances. This could happen on subsequent moves as well as the first move using the voucher. For example, one of the women interviewed lost her voucher assistance after she was raped and failed to find a new unit in which she felt safe within the housing agency's required timeframe. To bolster her sense of personal safety she got a dog for protection, but having a pet complicated her search.

Another person interviewed had used the voucher to move to successively nicer apartments but then experienced a personal crisis, ruined her credit, and was asked to leave her apartment. She stayed with her parents while searching for another unit, but it took her four months to find a landlord who would accept her given her credit history. She lost the voucher because she exceeded the 60-day time limit. At the time of the interview, she had moved into the new apartment, although she was not satisfied with it, and was appealing to the HA to reinstate her assistance:

> *It was actually my credit and everything that I went through and this was the only place that I could get into. I applied to about 20 places and a fee of $30 every time. I tried for four months to get a new place. The landlord worked with me…. I have had really nice houses and in the last year I when through a lot of things. I overdose. I was in a coma. I lost everything when I moved. I got real bad into drugs right after I graduate medical school. I am not satisfied with it. I am starting all over. It's only been a month in a half. It is better than my parents' couch.*

Another person lost her voucher because she was late turning in her paperwork to the HA, having not expected the landlord to do a criminal background check:

> *I was a day late turning the information in because the apartment I was moving to had to do a criminal background check or something. And they was late gettin' it, so that made me late turnin' it in. And it was only like—as a matter of fact, it was only, like, a couple hours late, and they wouldn't accept it. So, I had to move back home with my parents. Then, after I got, like, on my feet, saved up some money, I got my own place again, which I'm paying full rent now.*

Several women interviewed failed to understand the process of getting a unit approved for the voucher program. They were anxious to move away from difficult housing situations, and moved into their new units before they had been inspected by the HA. For example, Helena[55] lost her voucher assistance after moving into an apartment that she claims was never inspected. She lived in that apartment for six months before being evicted for non-payment of rent. When asked why she chose to move to that apartment, she responded:

> *Because my kids were getting bigger and it was—she's like more of a sister to me, who was the owner of the property, and she came to me with a house and I didn't have to pay no deposits, and you know, so I went on the deal, three bedrooms, it was convenient. But, it didn't turn out the way it was supposed to, any type of way it was supposed to. Actually, I went to court twice on that house. Twice.*

Although Helena claimed that the HA had never inspected the unit, she suggested that the unit would have failed had it been inspected: "*I don't think the inspectors ever get out there. They could have, because it wouldn't have passed. Ain't no way it would have passed."* It is possible that the HA did inspect the unit but the owner refused to make the necessary repairs and Helena was not notified or did not understand the situation.

Hermione described a similar experience in that she moved into a new apartment to get away from a neighborhood where there was a lot of drug activity. She found a unit, paid a $100 deposit, and gave the owner her voucher program paperwork. However, the owner never let Hermione move in:

> *And then she [the owner] kept on saying that she was waitin' on housing to come out. And housing said they were waitin' on her. (Hermione, 33-year-old mother of four)*

By the time Hermione realized she was not going to move into the unit, her voucher had expired and she was not successful in getting a new one. At the time of the interview, Hermione was paying $555 per month in rent, compared to just over $100 when she had the voucher.

[55] Names used in this paper have been changed and no actual names of interview respondents are presented.

6.4 Voucher Payment Standards

In most instances, the voucher users interviewed in-depth were able to find units within the payment standards approved by their HAs.[56] When this was not the case, landlords often agreed to reduce the rent. Several of the women reported that their landlords were willing to reduce their rents to an amount the HA would approve, even if it was well below what they would charge unassisted market-rate tenants. However, in two sites—Augusta and Houston—the HA reduced its payment standards during the study period. In those locations, the interviews suggest that both the fear and reality of reduced payment standards presented barriers to moving for voucher recipients. In both places, people spoke of being afraid to try to move because they were "grandfathered" into the higher payment standard at their current location and would be constrained by the lower payment standard if they moved. This issue, coupled with the concern that an unsuccessful search might lead to losing the voucher altogether, made a compelling justification for staying where they were.

6.5 Out-of-Jurisdiction Moves

Typically, in the HCV program, participants are allowed to move out of the jurisdiction of the HA that initially issued their voucher after they have lived for a year in the original jurisdiction (24CFR982.353). This is referred to as "porting-out," and each HA establishes policies and procedures for how this process is conducted. An important exception for this study was the Atlanta Housing Authority, which did not allow WtW vouchers to be used outside its jurisdiction, the city of Atlanta. The restriction on out-of-jurisdiction moves in Atlanta posed a problem for several of the women interviewed, because they had hoped to use the voucher to make moves to suburban locations that they felt offered better housing choices and better schools. One of the women interviewed was especially disappointed. This person, a 30-year-old mother of three, needed the financial help the voucher provided because she had physical impairments that prevented her from working. However, she did not understand the restrictions that would be placed on where she could live as a consequence of accepting voucher assistance:

> *Because, like I said, I got MS. I was getting disability and I needed the help. So when I heard it [about the voucher], I just jumped on it. I was like okay, this will help me, without thinking that it was going to have me in the 'hood and can't move out of the 'hood.*

At the time of the interview, this person was very unhappy in her city neighborhood and wanted to move to a suburban area outside the city limits, but could not do so without giving up the voucher. Her situation was further complicated by a misunderstanding about the program's occupancy rules, discussed further in the next section. Before she received the voucher, a male friend lived with her and helped to take care of her. He did not move with her because (she understood) *"the vouchers don't allow nobody else to stay here but your children and yourself if you're not married"* (see discussion of who can live in the household below.) While not all situations were this challenging,

[56] HA payment standards are based upon HUD-published Fair Market Rents but HAs have latitude to adopt payment standards both higher and lower than HUD's estimate of rents for "modest" housing in the market area. Payment standards are adjusted for the number of bedrooms in the unit and include an estimate of the cost of utilities paid for by the tenant. The subsidy the family receives is generally speaking the difference between the payment standard and 30 percent of the family's adjusted income. Payment standards are addressed at 24CFR982.503.

a number of Atlanta respondents expressed regret that they could not use the voucher in suburban Atlanta where they perceived neighborhoods and schools to be better.

Although voucher users in the other sites could in theory use the voucher to move outside the HA's jurisdiction, some of the women interviewed ended up losing their voucher after moving out of state and failing to file the necessary paperwork. For example, one woman was using her voucher in Fresno but decided to move to Mississippi where she thought she could make a better life for herself and her children. When she decided to move, she thought she could keep the voucher, but she failed to file the requisite paperwork: *"I thought I could [take the voucher with me], but I had… there was some other things here I didn't care of right, you know?"* She lived in Mississippi for two years, but found she could not support herself and her family without housing assistance, despite working two jobs. At the time of the interview she was on the HCV program waiting list.

6.6 Landlord Perceptions of the Voucher Program

The women interviewed in-depth said that they had seen both positive and negative perceptions of the voucher program. Many noted that landlords find the program attractive because a significant share (sometimes all) of the rent comes regularly from the HA rather than the tenant and is therefore perceived as more reliable. Landlords who had previous experience with the program and understood how it worked were often glad to accept voucher holders. As one person described it:

> *If you do find someone that accepts Section 8, normally they would just rent to you. They won't even ask for a credit check or anything like that. So that's kind of easy because they know that they are guaranteed their rent. So they basically like whatever, okay. I think basically that's the best thing about it.*

On the other hand, other respondents reported that poor perceptions of "Section 8 tenants" were sometimes hard to overcome. One of the women interviewed, a 34-year-old mother of four, talked about how she had to overcome landlord concerns about herself and about voucher holders in general:

> *They [owners] had the stigma about everybody that's on Section 8 are nasty, the children tear up the house, that type of thing. So, I ran into a lot of issues with that. And I told her I did not know anything about that's how Section 8 people lived, because I wasn't brought up that way. So, I had to talk to people and they'd give me a try, basically –until I started building a reputation. After that, then you get your letter of recommendation that you paid your rent on time and you kept the house up and this and that. So, it was easier later on. But, at first, it was not easy.*

6.7 Ongoing Compliance with Program Rules and HA Policies

The women interviewed in-depth were generally able to comply with program rules. Only three of the 141 women interviewed were terminated from the program during the study period as a

result of clear violations of program rules or HA policies.[57] This suggests that in general, the voucher users interviewed understood and were able to meet the obligations of the program.

However, the interviews also revealed several instances in which women misunderstood the rules of the program, and in some cases these misunderstandings led them to give up their voucher assistance. The most important areas of misunderstanding and confusion were around who was eligible to live in the household and whether it was possible to give up the voucher temporarily to enter a drug treatment facility or to serve a short jail sentence. In addition, respondents in the Atlanta site reported feeling anxious about complying with the HA's requirement that program participants be employed or enrolled in an educational institution within 60 days of using their voucher. Each of these issues is discussed below, followed by a brief discussion of other issues that caused the women interviewed to lose or give up their voucher.

6.8 Who Can Live in the Household

In general, the voucher program does not place restrictions on who can live in the household of a voucher participant, as long as all permanent household members (and permanent additions to the household) are declared to the housing agency so that their income can be taken into account in calculating the amount of the voucher subsidy. An exception is that a HA may deny assistance to an applicant or terminate assistance to a participant household if any household member commits drug-related criminal activity or violent criminal activity (24CFR982.553). The HA is required to conduct a reexamination of household income and composition at least annually (24CFR982.516). In addition, at any time the HA may conduct an interim reexamination of household income and composition or the household may request a reexamination. The HA is also required to adopt policies prescribing when and under what conditions the household must report a change in income or composition.

Erroneously, many of the women interviewed said that they believed that the voucher program prohibited males who were unrelated to the leaseholder from living in a voucher-assisted unit. As they put it, you could not have "a man in the house" and keep your assistance. The source of this confusion is not clear. It could be that a statement made by a HA staff person or another program participant like "you can't have a man in the house without risking that the amount of the voucher will go down" got translated into "you can't have a man in the house." Some people may also have been confused about the voucher program rule that allows HAs to deny voucher assistance to persons involved in drug-related crime or violent crime.

The perception that it was against the rules to have unrelated males living in the unit sometimes led to the break-up of two-parent families, causing fathers of children and boyfriends to move back in with their own parents or to establish separate households. As one mother of three explained it:

> *I'm actually engaged to be married, and you know, on the Section 8 program you can't have anybody staying with you. So if, you know, it's hard when you have a child, you*

[57] A fourth woman lost her assistance after failing to comply with her HA's recertification requirements. However, it was apparent from the interview that the woman suffered from serious mental and physical illnesses and found it very difficult to comply with even the most basic requirements of the program. Her problems also caused her to lose track of the status of her appeal of the termination.

know, his child, and you know, he's like, "I want my daddy," you know, in the middle of the night, and trying to explain to him why daddy has to go home.

Another woman interviewed gave up her voucher because she understood from the HA that she could not let her adult son or her boyfriend move into the unit. She felt that she was given a choice between having housing assistance and having her family. Her son was returning from incarceration and conceivably could have been rejected because of his criminal record, but this is not what the woman understood:

We went to these classes; they told us there was to be no men, no husband, no boyfriend, no nothing like that.

When told that the program required only that she report the existence and incomes of additional household members, she said:

Had I known that, it would have been different. But I'm just going by what these people were telling us in these classes that we had to go to. Strictly no men. Trying to make it seem like, well, if you have a man—what do you need us [voucher assistance] for? Hey, the man doesn't always make top dollars.

Another example of misunderstanding the program rules about who can live in the household is Fern, who reported that she lost her voucher in November 2004 because her older daughter came back to live with her. Her understanding of the voucher rules was that: *"whenever someone lives with you for more than two weeks you cannot continue receiving the voucher."* It is unclear whether the daughter's move made household income too high to receive assistance or if they became ineligible for another reason. It may be that the HA's policy required voucher users to report anyone who lives in the household for more than two weeks as an addition to the household, and that had Fern notified the HA of the change in household composition she would not have been terminated from the program. However, this is not how Fern described it.

6.9 Temporary Absences

HAs must establish policies with respect to whether someone who needs to move out of a voucher assisted unit for a certain period of time can resume receiving voucher assistance at a later date without reapplying (24CFR982.203). These policies are generally specified in the HA's administrative plans but may or may not be well-understood by program participants. Our interviews suggest that women in different study sites had different experiences with respect to temporary absences:

- Fenella hoped to reconcile with her estranged husband and agreed to move in with him at his parents' home and to care for him while he recovered from an illness. She knew she could not use the voucher at her in-laws' home and voluntarily relinquished it. The reconciliation failed within a few months, leaving her without housing assistance and in need of locating new housing. In retrospect, she wishes that she had checked with the HA about the possibility of retaining her voucher during a temporary absence to care for her husband.

- Sandra reported that she "gave up" her voucher to go into a drug treatment program for six months. She knew the treatment was necessary and it did not occur to her that it might be possible to retain the voucher: *"Most people don't give it up, you know what I mean? I wouldn't have; if there was a way I could have had them hold it but you can't really when there are thousands of other people waiting to get on the housing, you can't really say well can you hold my voucher for six months while I'm in treatment."*
- Gina also lost voucher assistance while in a six-month drug rehabilitation program, but was reinstated when she returned.
- Hertie lost her voucher temporarily when she was incarcerated for cashing out food stamps but was able to use it again when she returned.
- Alison lost her voucher after being charged with aggravated assault against her abusive boyfriend. She went through counseling and the charge was dismissed, at which point she was able to resume receiving voucher assistance.

The interviews illustrate differences in HA policies (and in levels of awareness of those policies) can result in different treatment for individuals in similar circumstances. Gina was able to regain her assistance after an absence to attend drug treatment, but Sandra was not. And some HAs would not have allowed a participant like Hertie, who had been convicted of a misdemeanor and was incarcerated, to regain assistance after her release.

6.10 Work Requirements in Atlanta

One of the HAs in the study, the Atlanta Housing Authority, imposed a requirement that WtW voucher recipients work a minimum of 25 hours per week or become involved in a training or education program within 60 days of using their WtW voucher to lease a housing unit and informed program participants that failure to comply with these requirements could result in termination from the voucher program. Atlanta Housing Authority staff reported that it was difficult to monitor compliance with the employment requirement over time, and in the end they did not terminate any WtW voucher participants for failure to adhere to the employment requirement. However, information from the in-depth interviews with Atlanta voucher users suggests that some program participants believed that their assistance would be terminated if they failed to comply with the employment requirement, and many pursued employment and/or training activities to avoid termination from the voucher program. As a result, even if the termination policy was not actually exercised by the housing authority, it still may have influenced participant behavior.

While we do not have any quantitative evidence that the termination policy in Atlanta influenced participant behavior, all of the respondents who reported that fear of losing the voucher was a source of stress were in the Atlanta site. Respondents were particularly anxious about the HA's work requirements, because they did not see themselves as having many job opportunities. As one 30-year-old mother of four put it:

> *People who have been on this program two years, four years, six years, 10 years, you don't tell people who just really, probably, ain't been doing that, but you don't tell them in a year, no, earlier this year, the first of this year, "Well, well,*

you don't do the Good Neighbor Program, because the government's running out of money. So, we're giving everybody 'til July first to have a job." Okay, it's not—all these people out here on Section 8, there are not jobs out there like that. You know? I can go—I done been to churches, I've done been to McDonald's. I've got applications in everywhere "We're accepting applications." I can't just do nothing wait on them to call me back. I don't want no fast food job. If I have to take one to keep my Section 8, I've got to take one.

Another mother with four young children was working at the time of the interview but was nevertheless anxious that her voucher might be taken away if she lost her job. For this reason, she wished she could earn enough that she no longer needed the assistance:

I wish I could give it [the voucher] up tomorrow because you know, with the new changes and stuff, when I was in between jobs, it really stressed me out. It really did because you know, it was like if you don't find a job you got this much time and you're out and my whole thing is I try to stay in compliance with everything, especially when it comes to where I've got to a roof over my head and stuff like that. But it kind of had me depressed because I'm not in compliance and at any time they could take it. So that really stressed me out and I'm like, you know, if I could get better, get a better job, I'll give it up. I'd rather pay on my own because that kind of stuff I know I wouldn't have to worry about it too much which now I won't have to worry about it either because you know, if I get a job then it's not too much to worry about but they want everybody to become self sufficient anyway, you know, because with the government now, we wake up tomorrow there may not even be any.

6.11 Reasons for Losing the Voucher

Of the 141 women interviewed in depth, a total of 30 reported losing or giving up their voucher temporarily or permanently during the study period. Several of the reasons for voucher loss have already been discussed:

- Four women failed to find units within the specified time;
- Three women moved into units that were never approved by the HA;
- One woman lost her voucher after moving out of state;
- Four women violated program rules;[58]
- One woman gave up the voucher in order to be remain living with her boyfriend and adult son; and
- Five women lost their vouchers (two permanently) due to temporary absences.

[58] Three women lost the voucher permanently: Susan was evicted (no other details provided); Fern failed to report an addition to her household; and Helaine, who suffered from serious mental illness, failed to show up for her annual recertification appointment and was later unable to complete the appeal process. A third woman temporarily lost her voucher when she was unable to pay her electric bill, the electricity was shut off, and the unit failed inspection as a result. She regained the voucher some time later when she moved to another unit.

In addition, rental assistance ended for eight women interviewed because assistance was no longer required as a result of increases in household income. In five cases, household income increased as a result of the addition of a second earner.

The remaining four women who lost their voucher assistance did so as a result of unfortunate decisions. Some decisions were made impulsively, without thinking through the implications. Others made decisions that were reasonably considered but even so did not have positive outcomes:

- Fergie successfully used the voucher for a few months. Then her mother moved to another state. Because her mother was concerned about renting the family home to strangers, Fergie moved into her mother's house, unaware that she would not be able to use the voucher in a unit owned by a relative. After she lost the voucher, additional siblings moved into the family home, making the situation crowded and untenable. Having lost housing assistance, she had to move to another unit without assistance. She regrets the choices she made: "*And sometimes I wish, you know what, I should have moved from my mom's so I could have my Section 8, but we just didn't want no one to move into her house and I was thinking of my mom's house cause that was our family house where we all grew up in."*
- Salome said that she didn't understand the value of the voucher until she lost it. She impulsively "*didn't turn in my paperwork*" at recertification because she "*didn't need*" the assistance (or thought she didn't at that moment). She candidly admitted that her younger self had *"taken advantage"* of both housing and unemployment insurance assistance to work less than full time and that she had been financially irresponsible. She reports that she is working now and is more mature than in the past, but is barely getting by financially. She regrets not having used the HCV program to help stabilize her finances. "*There's just so many things now that I look back, that was easy then and I just pretty much took advantage. I had an opportunity to better myself... I would [should] have done different things with my money when I had the voucher."*
- Hortence was living with her boyfriend (now husband) when she got the voucher, but her name was not on the lease. The landlord would not add her name to the lease unless she paid a $250 security deposit, something she felt she could not do. Thus she gave up the potential of long-term housing assistance for the lack of the security deposit. She never used the voucher. She and her boyfriend subsequently were evicted for non-payment. He went to live with his family, and she was without a permanent home for several years, instead living temporarily with friends. She and her former boyfriend are now married and living together in marginal housing without assistance.
- Heather made an initial move with the voucher and then left the unit without HA approval because of a problem with the landlord. She moved to her boyfriend's home and lived there without voucher assistance for a period of time. When her boyfriend died, she was able to resume her voucher assistance at his address. It is not clear if she was reinstated as part of the WtW voucher program or received a new voucher.

6.12 Conclusion

The voucher program is a complex program that requires some initiative on the part of the participant—to find suitable housing, to interact with landlords, to turn in the required paperwork on time, and to comply with other obligations set by the program and HA. For many of the women interviewed, especially those who had lived with parents or other family members prior to receiving a voucher, meeting the requirements of the program presented a challenge. The interviews suggest that the voucher recipients who were most successful in using the voucher to move to better quality housing and neighborhoods or to advance their educational or career goals were those who were able to advocate for themselves with landlords and HA staff and who could attend to the responsibilities associated with voucher program participation.

In particular, the data on reasons for losing the voucher or leaving the program argue against the suggestion that those who leave the program do so either because they no longer need assistance or because they are in flagrant violation of program rules. Rather, they suggest that some of the most needy program participants lose their vouchers because of limited ability to advocate for themselves and as a result of naïve or misinformed decisions.

In many cases, the challenges and personal crises that participants encountered were exacerbated by poor communication with HA staff. While some of the women interviewed appear to have developed strong and trusting relationship with HA staff, in general the women described communication with the HA as difficult (due to overburdened staff, staff turnover, etc.) and many viewed the role of the HA as punitive. Some of the women interviewed who lost the voucher due to a misunderstanding of program rules or impulsive decisions might have been able to retain the voucher had they been willing and able to talk to HA staff in times of crisis, but this would require HA staff to provide more intensive (or any) housing search assistance and counseling to voucher participants, something that many HAs are unable to do given resource constraints.

7. CONCLUDING THOUGHTS

7.1. Mobility and Neighborhood Quality

In 1997 Newman and Schnare concluded that "housing [assistance] programs fail to deliver on neighborhood quality." Comparing the census tract characteristics of assisted housing units with the characteristics of places where welfare families live generally, they found that assisted housing locations were inferior on many dimensions. The one "hopeful note," they concluded, was the tenant-based housing voucher program, which seemed to be placing program participants renters in slightly better locations than they those in which they would have rented without a subsidy. However, Khadduri, Shroder, and Stephen subsequently found that, if one looks at the census tracts in which voucher-assisted families with children live—rather than at the locations of all voucher users including elderly people and other childless households—Newman and Schare's hopeful note disappears.[59]

The Housing Voucher Evaluation study provides more definitive evidence on the neighborhood quality of voucher users because, instead of comparing the locations of voucher-assisted housing to the locations of all poor renters, it uses an experimental design with random assignment to a control group of welfare families known to be eligible for vouchers and interested in using a voucher. In the final report of the study, Mills et al. (2007) reports that voucher families live in neighborhoods slightly better than control families as measured by census tract characteristics.

This reanalysis of the voucher evaluation data finds that virtually all of the improvement in neighborhood quality brought about by the voucher is among families who start in public housing in very high poverty locations, tracts where more than 30 percent of the population is poor, and that on average these families change locations by moving to tracts that still have relatively high concentrations of poverty, 20-30 percent of people in the tract. The voucher program has the effect of *reducing*, albeit slightly, the percentage of families living in low poverty tracts, those with poverty rates below 10 percent. Voucher families that, at the time they join the program, rent or own unsubsidized housing units are no more likely than control families in the same starting-point housing situation to move away from their starting point census tract. For these families, the overwhelming majority of voucher users, participating in the voucher program has no effect on neighborhood quality.

The one "hopeful note" we found in the analysis presented in this report is that vouchers reduce the extent to which low-income African American families with children live in racially concentrated neighborhoods. Black families who use vouchers live in census tracts with 6 percentage points fewer minorities than control families who do not use vouchers.

The overall implication of these findings is that the administration of the voucher program should change in ways that encourage and enable families with children to use their vouchers to move to better neighborhoods. A variety of tools for implementing a greater program focus on "mobility" are possible, including performance incentives for voucher program administrators

[59] Khadduri, Jill, Mark Shroder, and Barry Steffen, "Can Housing Assistance Support Welfare Reform?" in Barbara Sard and Amy S. Bogdon, eds., *A Place to Live, a Means to Work: How Housing Assistance Can Strengthen Welfare Policy,* Fannie Mae Foundation, 2003.

and housing search assistance for families. Higher subsidy payment standards may or may not be needed. Some metropolitan areas have Fair Market Rents set at the 50th percentile of local rents rather than the 40th percentile, and this policy does not seem to have made a difference for the range of neighborhoods in which voucher users locate.[60] The administrative practices of housing authorities should be the first place to look. For example, the in-depth interviews conducted for this study suggest that the lists of willing landlords that housing authorities provide to voucher holders have the effect of steering families to a "submarket" of less desirable housing units in less desirable locations. Our analysis of who leased up among families issued a voucher provides further support for the idea that the voucher program operates within a submarket defined by housing location and race.

The analysis presented in this report also suggests that families often give up their vouchers prematurely—at a time when they cannot yet afford private rental housing. The in-depth interviews suggest that this can happen when a family already using a voucher is trying to move to another location—precisely the time when program administrators should be encouraging moves to better neighborhoods. New practices—or the identification and dissemination of successful practices—are needed for the help provided to voucher families who are thinking about changing their housing.

These findings also suggest that the primary focus of housing search assistance for voucher holders should not be on families moving away from public housing. Families leaving public housing are likely to make some improvement to their neighborhoods even when, as was the case for the Welfare to Work voucher allocation used by the families in this study, the voucher assistance comes with no special mobility counseling or assistance.

Finally, the analysis presented in this report shows that families who start in the highest poverty locations are more likely to use their vouchers than those who start in places with relatively lower poverty locations. The apparent high motivation of families starting in high poverty locations suggests that focusing allocations of vouchers on neighborhoods—and cities—with poverty concentrations would not impede the administration of the program or make it more expensive by requiring housing authorities to issue larger number of vouchers in order to use their subsidy resources.

7.2 Forming Independent Households

The experimental contrast permitted by the Housing Voucher Evaluation makes it possible to conclude that, not only do many young parents use vouchers to move away from larger households headed by other adults (something already known from earlier research), but that the voucher causes this to happen. More voucher families than control families are living in their own, independent housing units four years after random assignment. Mills et al. (2007) found that the voucher had no effect, one way or the other, on whether a family head was living with a spouse or partner. Whether living independent of other adults (parents, adult siblings, etc.) is a positive outcome of the voucher is difficult to assess. Certainly, the women interviewed in depth thought it was positive for their own maturation and for the well-being of their children (Wood et al., 2008).

[60] Unpublished analysis of HUD administrative data by Carissa Climaco and Jill Khadduri.

The additional analysis of the voucher evaluation data presented in this report shows that families who use the voucher to create independent households do not fare worse than other voucher users on a number of key dimensions. For example, while their earnings were smaller at the time the voucher was issued, at follow-up these "non independent to independent" families are earning just as much as the families who both started and ended in independent housing. However, some of the results of the follow-up survey administered four years after random assignment suggest families who use the voucher to move away from larger households remain fragile. They are more likely to report food insecurity. They also pay higher rents, and these higher rents do not appear to reflect greater housing or neighborhood quality. Perhaps when housing authorities issue vouchers to young women intending to become leaseholders for the first time, they should provide additional advice on shopping for housing and on overall budget management.

7.3 Homelessness and Housing Insecurity

The additional analysis of the housing voucher evaluation data presented in this report uses baseline characteristics of control group families to try to predict later homelessness and housing insecurity. The results are consistent with earlier research and show that lack of experience as a leasehold and an earlier pattern of moving often (perhaps "couch surfing" with a number of different relatives or friends) is a strong predictor of future housing insecurity. So is receipt of SSI benefit income, and this suggests that needing to care for a disabled family member can be part of the stress that prevents a young family from maintaining stable housing. The analysis shows that, for young families (those with a family head 24 or younger), as well as for others, the voucher has a strong effect on preventing both future housing insecurity (living temporarily with friends or relatives) and literal homelessness (living in a shelter or on the street).

Another way to look at housing insecurity is not being able to afford housing. A particularly disturbing finding presented in this report is that families with vouchers give them up prematurely, long before they are able to afford to rent private market housing without a severe rent burden. The qualitative interviews suggest that relinquishing a voucher before income growth has made it possible can result from poor judgment on the part of the family head, but can also result from misunderstanding of voucher program rules. Here, again, changes in housing authority administrative practices should be considered.

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APPENDIX A: FULL SET OF RESULTS

Exhibit A1: Characteristics of Subgroups in Tracts with Poverty Below and Above Within-Sample Medians for Each City

Baseline Characteristic	Below Median Poverty	Above Median Poverty
N	**4,303**	**4,354**
Annual earnings at baseline	$6,521	$5,816
Working for pay at baseline	46.2%	41.1%
Working for pay at baseline - response is missing	5.0%	5.8%
Had ever worked for pay at baseline	85.0%	82.0%
Looking for paying work at baseline and has reservation wage of $3 - $5.99 for a job that also provided benefits like health insurance	2.7%	3.2%
Looking for paying work at baseline and has reservation wage of $9 - $12.99 for a job that also provided benefits like health insurance	13.2%	11.6%
Looking for paying work at baseline and has reservation wage of $13 - $15.99 for a job that also provided benefits like health insurance	3.7%	3.1%
Has high school diploma at baseline	43.7%	34.4%
Has G.E.D. at baseline	17.2%	16.5%
Enrolled in (and attending) a job training program at baseline	12.2%	12.7%
Enrolled in (but not yet started) a job training program at baseline	6.9%	6.7%
Lives with friends or relatives, in homeless shelter, or in transitional housing at baseline	32.8%	22.6%
Lives in public or assisted housing at baseline	7.3%	17.7%
Age of youngest person in the household is 0-6 years	63.7%	64.0%
Age of youngest person in the household is 6-17 years	31.7%	31.2%
Age of youngest person in the household is 18 or more years	4.7%	4.8%
In school at baseline	16.1%	16.1%
Race/ethnicity is black, non-Hispanic	45.6%	52.3%
Race/ethnicity is white, non-Hispanic	22.4%	15.8%
Ethnicity is Hispanic	22.2%	19.9%
Race/ethnicity is non-black, non-white, non-Hispanic	7.0%	8.7%
Race/ethnicity - response is missing	2.7%	3.3%
Age at baseline	31.3	31.2
Age less than 24 years	30.0%	29.9%
Age is 25-34 years	37.9%	37.3%
Age is 35-44 years	22.4%	24.0%
Age is more than 45 or older	8.7%	7.2%
Respondent is male	7.8%	7.4%
Has a car that runs at baseline	45.2%	34.9%
Has valid driver's license at baseline	64.5%	53.7%
Receiving TANF/AFDC at baseline	74.2%	77.5%
Had ever received TANF/AFDC for own children at baseline	94.5%	94.3%
Knows when TANF benefits expire, 6-12 months after baseline date	6.2%	6.4%
Knows when TANF benefits expire, 12-18 months after baseline date	4.3%	4.4%
Knows when TANF benefits expire, more than 18 months after baseline date	7.5%	8.7%
Not receiving TANF/AFDC at baseline, or does not know when TANF benefits expire, or no response to expiration question	70.5%	68.8%

Exhibit A1: Characteristics of Subgroups in Tracts with Poverty Below and Above Within-Sample Medians for Each City

Baseline Characteristic	Below Median Poverty	Above Median Poverty
N	**4,303**	**4,354**
Someone in household receiving Food Stamps at baseline	82.1%	86.1%
Someone in household receiving Supplemental Security Income (SSI) at baseline	10.8%	11.2%
Someone in household receiving Medicaid at baseline	65.2%	64.4%
Marital status is never married	51.3%	54.6%
Is responsible for children living at home at baseline	89.6%	87.4%
Household size is 1 or 2 people	19.7%	19.5%
Household size is 4 people	24.3%	22.9%
Household size is 5 people	13.8%	13.8%
Household size is 6 people	7.3%	7.7%
Household size is 7 people	3.7%	4.0%
Household size is 8 or more people	4.0%	5.4%
Main reason or second most important reason for wanting to move is to be near a job or to get a job	16.0%	12.6%
Had moved more than three times in 5 years before baseline	33.8%	31.5%
Lives in Atlanta area at baseline	13.0%	12.9%
Lives in Augusta area at baseline	9.0%	8.2%
Lives in Fresno area at baseline	30.2%	30.0%
Lives in Houston at baseline	23.4%	23.2%
Lives in Los Angeles area at baseline	12.3%	11.9%
Lives in Spokane area at baseline	12.0%	13.9%
Monthly Metropolitan Statistical Area (MSA)-level unemployment rate for the site where the respondent lived, averaged over the twelve months prior to the respondent's baseline date	7.1	7.1

Exhibit A2: Characteristics of Poverty Category Subgroups

Baseline Characteristic	<10% Poverty in Baseline Tract	10-20% Poverty in Baseline Tract	20-30% Poverty in Baseline Tract	>30% Poverty in Baseline Tract
N	**597**	**1,964**	**2,489**	**3,607**
Annual earnings at baseline	$7,084	$6,768	$6,392	$5,532
Working for pay at baseline	49.5%	47.0%	45.4%	39.7%
Had ever worked for pay at baseline	86.7%	86.1%	84.4%	81.0%
Looking for paying work at baseline and has reservation wage of $3 - $5.99 for a job that also provided benefits like health insurance	1.6%	2.3%	3.0%	3.5%
Looking for paying work at baseline and has reservation wage of $9 - $12.99 for a job that also provided benefits like health insurance	13.1%	14.6%	12.3%	11.2%
Looking for paying work at baseline and has reservation wage of $13 - $15.99 for a job that also provided benefits like health insurance	3.6%	3.8%	3.7%	3.0%
Has high school diploma at baseline	47.7%	47.1%	40.1%	32.4%
Has G.E.D. at baseline	22.8%	18.5%	16.8%	15.1%
Enrolled in (and attending) a job training program at baseline	14.4%	11.1%	11.8%	13.2%
Enrolled in (but not yet started) a job training program at baseline	5.1%	6.4%	7.1%	7.2%
Lives with friends or relatives, in homeless shelter, or in transitional housing at baseline	41.7%	35.2%	26.8%	21.8%
Lives in public or assisted housing at baseline	3.5%	4.7%	9.2%	20.6%
Age of youngest person in the household is 0-6 years	62.4%	62.9%	63.1%	65.1%
Age of youngest person in the household is 6-17 years	31.1%	32.3%	32.1%	30.5%
Age of youngest person in the household is 18 or more years	6.4%	4.7%	4.8%	4.4%
In school at baseline	18.3%	15.7%	16.3%	15.8%
Race/ethnicity is black, non-Hispanic	42.8%	44.8%	44.1%	55.5%
Race/ethnicity is white, non-Hispanic	38.3%	30.0%	22.0%	8.0%
Ethnicity is Hispanic	9.8%	15.9%	23.5%	24.1%
Race/ethnicity is non-black, non-white, non-Hispanic	6.2%	6.9%	7.6%	8.8%
Race/ethnicity - response is missing	2.9%	2.4%	2.8%	3.5%
Age at baseline	30.7	31.3	31.5	31.1
Age less than 24 years	31.3%	29.6%	29.8%	30.0%
Age is 25-34 years	40.5%	38.1%	36.3%	37.8%
Age is 35-44 years	19.3%	23.1%	23.8%	23.6%
Age is more than 45 or older	8.1%	8.3%	9.1%	6.9%
Respondent is male	6.7%	7.8%	8.1%	7.3%

Exhibit A2: Characteristics of Poverty Category Subgroups

Baseline Characteristic	<10% Poverty in Baseline Tract	10-20% Poverty in Baseline Tract	20-30% Poverty in Baseline Tract	>30% Poverty in Baseline Tract
N	**597**	**1,964**	**2,489**	**3,607**
Has a car that runs at baseline	55.3%	48.0%	41.4%	32.2%
Has valid driver's license at baseline	75.7%	66.7%	59.1%	52.1%
Receiving TANF/AFDC at baseline	65.8%	70.0%	78.1%	79.2%
Had ever received TANF/AFDC for own children at baseline	92.6%	93.8%	94.7%	94.9%
Knows when TANF benefits expire, 6-12 months after baseline date	4.8%	5.3%	6.7%	6.7%
Knows when TANF benefits expire, 12-18 months after baseline date	2.4%	3.5%	4.6%	4.9%
Knows when TANF benefits expire, more than 18 months after baseline date	9.2%	6.9%	8.4%	8.4%
Not receiving TANF/AFDC at baseline, or does not know when TANF benefits expire, or no response to expiration question	73.8%	73.4%	68.3%	67.7%
Someone in household receiving Food Stamps at baseline	75.7%	80.6%	85.1%	86.8%
Someone in household receiving Supplemental Security Income (SSI) at baseline	10.4%	9.5%	10.7%	12.0%
Someone in household receiving Medicaid at baseline	62.1%	63.6%	64.6%	66.0%
Marital status is never married	49.5%	49.5%	51.3%	56.6%
Is responsible for children living at home at baseline	90.7%	89.9%	88.2%	87.6%
Household size is 1 or 2 people	21.9%	20.6%	20.4%	18.1%
Household size is 4 people	26.4%	24.2%	24.3%	22.3%
Household size is 5 people	11.6%	14.0%	14.0%	13.9%
Household size is 6 people	7.1%	6.9%	6.9%	8.3%
Household size is 7 people	1.9%	3.6%	3.8%	4.3%
Household size is 8 or more people	3.3%	2.8%	3.9%	6.5%
Main reason or second most important reason for wanting to move is to be near a job or to get a job	17.5%	16.3%	13.7%	13.0%
Had moved more than three times in 5 years before baseline	40.1%	36.9%	32.0%	29.5%
Lives in Atlanta area at baseline	20.9%	12.4%	8.9%	14.8%
Lives in Augusta area at baseline	14.0%	13.5%	7.5%	5.8%
Lives in Fresno area at baseline	11.4%	17.9%	29.4%	40.4%
Lives in Houston at baseline	11.5%	20.3%	25.1%	25.6%
Lives in Los Angeles area at baseline	11.1%	15.1%	15.9%	8.0%
Lives in Spokane area at baseline	31.1%	20.9%	13.2%	5.4%
Monthly Metropolitan Statistical Area (MSA)-level unemployment rate for the site where the respondent lived, averaged over the twelve months prior to the respondent's baseline date	5.6	6.2	7.2	7.9

Exhibit A3: Impacts for Subgroups in Tracts with Poverty Below and Above Within-Sample Medians for Each City

	Below Within-City Sample Median Poverty Rate				Above Within-City Sample Median Poverty Rate			
Outcome	**Sample /Qtrs**	**Sample Size**	**Control Mean**	**ITT Impact**	**Sample /Qtrs**	**Sample Size**	**Control Mean**	**ITT Impact**
Moved from baseline census tract	6 sites/ 16Q	4,303	0.522	0.023	6 sites/ 16Q	4,354	0.546	0.035**
				(0.015)				(0.015)
	5 sites/ 18Q	3,777	0.577	0.023	5 sites/ 18Q	3,837	0.611	0.029*
				(0.016)				(0.015)
Percent below poverty level	6 sites/ 16Q[a]	4,303	20.623	-0.086	6 sites/ 16Q	4,354	33.630	-1.222***
				(0.288)				(0.368)
	5 sites/ 18Q[a]	3,777	20.998	-0.136	5 sites/ 18Q	3,837	33.507	-1.460***
				(0.321)				(0.415)
Percent of civilians employed	6 sites/ 16Q	4,303	89.892	0.233	6 sites/ 16Q	4,354	85.175	0.301*
				(0.132)				(0.177)
	5 sites/ 18Q	3,777	89.755	0.218	5 sites/ 18Q	3,837	85.156	0.346*
				(0.150)				(0.201)
Percent of households with public assistance	6 sites/ 16Q[a]	4,303	7.282	0.042	6 sites/ 16Q	4,354	12.759	-0.505**
				(0.138)				(0.184)
	5 sites/ 18Q[a]	3,777	7.157	-0.033	5 sites/ 18Q	3,837	12.427	-0.582***
				(0.150)				(0.203)
Percent of households with single female heads	6 sites/ 16Q[a]	4,303	19.370	0.014	6 sites/ 16Q	4,354	25.111	-0.653***
				(0.194)				(0.239)
	5 sites/ 18Q[a]	3,777	19.775	-0.085	5 sites/ 18Q	3,837	25.416	-0.880***
				(0.218)				(0.272)
Percent of adults with less than 9th grade education	6 sites/ 16Q	4,303	13.309	-0.175	6 sites/ 16Q	4,354	19.214	-0.130
				(0.239)				(0.279)
	5 sites/ 18Q	3,777	12.716	-0.239	5 sites/ 18Q	3,837	18.166	-0.196
				(0.261)				(0.302)
Percent of youths not in school and not in the labor force	6 sites/ 16Q	4,303	8.135	0.184	6 sites/ 16Q	4,354	10.563	-0.222
				(0.173)				(0.203)
	5 sites/ 18Q	3,777	8.197	0.091	5 sites/ 18Q	3,837	10.498	-0.181
				(0.187)				(0.225)
Percent minority	6 sites/ 16Q	4,303	64.940	-0.506	6 sites/ 16Q	4,354	74.838	-0.703*
				(0.469)				(0.412)
	5 sites/ 18Q	3,777	64.146	-1.284	5 sites/ 18Q	3,837	73.288	-0.867*
				(0.534)				(0.467)
Percent black	6 sites/ 16Q	4,303	28.911	-0.470	6 sites/ 16Q	4,354	36.134	-1.130**
				(0.493)				(0.511)
	5 sites/ 18Q	3,777	30.998	-1.021	5 sites/ 18Q	3,837	37.373	-1.120*
				(0.558)				(0.577)

Exhibit A3: Impacts for Subgroups in Tracts with Poverty Below and Above Within-Sample Medians for Each City

	Below Within-City Sample Median Poverty Rate				Above Within-City Sample Median Poverty Rate			
Outcome	**Sample /Qtrs**	**Sample Size**	**Control Mean**	**ITT Impact**	**Sample /Qtrs**	**Sample Size**	**Control Mean**	**ITT Impact**
Percent Hispanic	6 sites/ 16Q[a]	4,303	27.428	-0.276 (0.397)	6 sites/ 16Q	4,354	29.653	0.765* (0.419)
	5 sites/ 18Q	3,777	25.572	-0.276 (0.425)	5 sites/ 18Q	3,837	27.190	0.440 (0.450)
Number of quarters with positive (>0) earnings	6 sites/ 14Q	4,278	10.193	-0.093 (0.135)	6 sites/ 14Q	4,315	9.589	-0.010 (0.132)
	5 sites/ 16Q	3,753	10.927	-0.114 (0.162)	5 sites/ 16Q	3,801	10.122	0.016 (0.158)
Total earnings	6 sites/ 14Q	4,278	$27,852	-$340 (636.537)	6 sites/ 14Q	4,315	$24,089	$39 (565.337)
	5 sites/ 16Q	3,753	$29,848	-$688 (755.132)	5 sites/ 16Q	3,801	$25,122	-$54 (672.856)
Number of quarters with receipt of TANF	6 sites/ 14Q	3,753	9.671	0.419 (0.140)	6 sites/ 14Q	3,801	10.985	0.241* (0.136)
	5 sites/ 16Q	3,753	10.185	0.438 (0.154)	5 sites/ 16Q	3,801	11.568	0.260* (0.150)
Total TANF cash benefits	6 sites/ 14Q	3,753	$10,145	$389 (189.191)	6 sites/ 14Q	3,801	$12,311	$283 (192.300)
	5 sites/ 16Q	3,753	$10,639	$405 (207.399)	5 sites/ 16Q	3,801	$12,882	$332 (212.178)
Number of quarters with receipt of Food Stamps	6 sites/ 14Q[a]	2,469	12.674	0.695 (0.177)	6 sites/ 14Q	2,532	14.130	0.053 (0.167)
	5 sites/ 16Q[a]	2,469	13.853	0.791 (0.200)	5 sites/ 16Q	2,532	15.462	0.051 (0.189)
Total Food Stamp benefits	6 sites/ 14Q[a]	2,469	$9,958	$757 (191.442)	6 sites/ 14Q	2,532	$11,872	$132 (188.876)
	5 sites/ 16Q[a]	2,469	$10,984	$858 (219.398)	5 sites/ 16Q	2,532	$13,081	$172 (216.759)

ITT = "Intent-to-Treat". Robust standard errors in parentheses.

*** indicates p < .01, ** indicates p < .05, * indicates p < .10

[a]An F-test on the equality of treatment effects between subgroups indicates that ITT impacts differ significantly between subgroups at p<.10

Exhibit A4: Impacts for Subgroups in Baseline Tracts Defined by Four Poverty Categories

		Baseline Census Tract Poverty Rate			
		Below 10%	10%-20%	20%-30%	Above 30%
Outcome	Sample/Qtrs	ITT Impact	ITT Impact	ITT Impact	ITT Impact
Moved from baseline census tract	6 sites/ 16Q	0.093**	0.034	0.002	0.034**
		(0.042)	(0.023)	(0.020)	(0.016)
	5 sites/ 18Q	0.048	0.039	0.010	0.021
		(0.046)	(0.024)	(0.021)	(0.017)
Percent below poverty level	6 sites/ 16Q[a]	1.588**	-0.340	-0.396	-1.395***
		(0.731)	(0.401)	(0.383)	(0.432)
	5 sites/ 18Q[a]	0.973	0.080	-0.919**	-1.486***
		(0.806)	(0.467)	(0.441)	(0.470)
Percent of civilians employed	6 sites/ 16Q	-0.263	0.293	0.255	0.366*
		(0.360)	(0.189)	(0.179)	(0.206)
	5 sites/ 18Q	-0.223	0.107	0.433**	0.379*
		(0.409)	(0.228)	(0.210)	(0.224)
Percent of households with public assistance	6 sites/ 16Q[a]	0.588**	0.007	-0.124	-0.574***
		(0.317)	(0.181)	(0.193)	(0.218)
	5 sites/ 18Q[a]	0.464	0.128	-0.403*	-0.574**
		(0.342)	(0.200)	(0.214)	(0.234)
Percent of households with single female heads	6 sites/ 16Q[a]	0.859*	-0.180	-0.287	-0.681**
		(0.493)	(0.290)	(0.251)	(0.276)
	5 sites/ 18Q[a]	0.626	-0.105	-0.596**	-0.860***
		(0.565)	(0.349)	(0.287)	(0.303)
Percent of adults with less than 9th grade education	6 sites/ 16Q	0.709	-0.421	0.116	-0.254
		(0.471)	(0.303)	(0.334)	(0.332)
	5 sites/ 18Q	0.384	-0.126	-0.277	-0.227
		(0.442)	(0.339)	(0.371)	(0.351)
Percent of youths not in school and not in the labor force	6 sites/ 16Q	0.691	0.021	0.073	-0.188
		(0.434)	(0.234)	(0.253)	(0.228)
	5 sites/ 18Q	0.052	0.118	-0.124	-0.086
		(0.515)	(0.259)	(0.279)	(0.246)
Percent minority	6 sites/ 16Q	2.033	-0.776	-0.868	-0.788*
		(1.383)	(0.705)	(0.565)	(0.468)
	5 sites/ 18Q	0.554	-1.074	-2.009***	-0.801
		(1.532)	(0.833)	(0.659)	(0.519)
Percent black	6 sites/ 16Q	0.584	-0.306	-1.508**	-1.090*
		(1.335)	(0.737)	(0.634)	(0.577)
	5 sites/ 18Q	0.011	-0.689	-2.256***	-0.986
		(1.558)	(0.866)	(0.744)	(0.630)
Percent Hispanic	6 sites/ 16Q	0.687	-0.791	0.511	0.755
		(0.810)	(0.538)	(0.555)	(0.480)
	5 sites/ 18Q	0.372	-0.482	0.188	0.462
		(0.781)	(0.603)	(0.602)	(0.509)
Number of quarters with positive (>0) earnings	6 sites/ 14Q	-0.852**	-0.047	-0.102	0.080
		(0.386)	(0.202)	(0.177)	(0.144)
	5 sites/ 16Q	-0.802*	-0.092	-0.116	0.066
		(0.478)	(0.245)	(0.217)	(0.168)

Exhibit A4: Impacts for Subgroups in Baseline Tracts Defined by Four Poverty Categories

		Baseline Census Tract Poverty Rate			
		Below 10%	10%-20%	20%-30%	Above 30%
Outcome	Sample/Qtrs	ITT Impact	ITT Impact	ITT Impact	ITT Impact
Total earnings	6 sites/ 14Q	-$2,975	-$877	-$30	$405
		(1944)	(939)	(820)	(610)
	5 sites/ 16Q	-$2,938	-$1,454	-$457	$264
		(2450)	(1108)	(1001)	(714)
Number of quarters with receipt of TANF	6 sites/ 14Q	1.015***	0.460**	0.144	0.253*
		(0.386)	(0.208)	(0.192)	(0.146)
	5 sites/ 16Q	1.129***	0.496**	0.181	0.243
		(0.426)	(0.226)	(0.212)	(0.162)
Total TANF cash benefits	6 sites/ 14Q	$892*	$685**	$57	$248
		(497)	(270)	(258)	(214)
	5 sites/ 16Q	$987*	$726**	$120	$261
		(546)	(292)	(282)	(238)
Number of quarters with receipt of Food Stamps	6 sites/ 14Q	1.136**	0.582**	0.281	0.065
		(0.472)	(0.252)	(0.236)	(0.190)
	5 sites/ 16Q	1.227**	0.665**	0.348	0.049
		(0.533)	(0.284)	(0.267)	(0.216)
Total Food Stamp benefits	6 sites/ 14Q[a]	$929**	$617**	$673**	$5
		(461)	(259)	(268)	(222)
	5 sites/ 16Q[a]	$1,050**	$689**	$776**	$21
		(527)	(295)	(308)	(255)

ITT = "Intent-to-Treat". Robust standard errors in parentheses

*** indicates p < .01, ** indicates p < .05, * indicates p < .10

[a]An F-test on the equality of treatment effects between subgroups indicates that ITT impacts differ significantly between subgroups at p<.10

Exhibit A5: Survey Impacts for Subgroups in Tracts with Poverty Below and Above Within-Sample Medians for Each City

	Below Within-City Sample			Above Within-City Sample		
Outcome	**Sample Size**	**Control Mean**	**ITT Impact**	**Sample Size**	**Control Mean**	**ITT Impact**
Number of moves during follow-up period	1,215	2.144	-0.327***	1,237	1.836	-0.114
			(0.112)			(0.101)
Average hours worked per week since random assignment	1,118	11.264	0.717	1,140	9.622	-0.185
			(0.890)			(0.877)
Received Food Stamp benefits in month prior to the survey	1,221	0.585	0.037	1,241	0.713	-0.012
			(0.031)			(0.028)
Food Stamp benefits received in prior month	1,209	$188	$5	1,232	$244	-$0.49
			(12.233)			(11.697)
Received Supplemental Security Income (SSI) in month prior to the survey	1,215	0.215	-0.034	1,237	0.233	-0.025
			(0.023)			(0.024)
SSI amount received in prior month	1,190	$119	$16	1,217	$146	-$11
			(29.139)			(18.269)
Received TANF cash assistance in month prior to the survey	1,222	0.229	-0.017	1,240	0.283	0.014
			(0.026)			(0.027)
TANF cash amount received in prior month	1,219	$86	-$2	1,229	$121	$22
			(13.354)			(13.571)
Number of birth children in current household	1,226	2.399	0.001	1,246	2.800	0.007
			(0.073)			(0.070)
Number of elders in household	1,226	0.040	-0.028***	1,246	0.030	-0.011
			(0.011)			(0.011)
Number of misc. non-relatives in household	1,226	0.047	-0.027*	1,246	0.047	-0.014
			(0.016)			(0.020)
Number of children in household	1,226	2.617	-0.067	1,246	2.860	0.034
			(0.065)			(0.071)
Number of misc. other relatives in household	1,226	0.444	-0.209***	1,246	0.326	-0.076
			(0.060)			(0.051)
Number of adult's siblings in household	1,226	0.090	-0.070***	1,246	0.063	-0.029*
			(0.021)			(0.016)
Total current household size	1,226	4.229	-0.278***	1,246	4.451	-0.107
			(0.090)			(0.085)
Respondent or someone in household experienced crime in the past six months	1,223	0.153	-0.003	1,243	0.146	0.035
			(0.023)			(0.023)
Respondent had a break-in (or attempted break-in) to home[a]	1,226	0.089	-0.003	1,246	0.079	0.043**
			(0.018)			(0.019)
Housing is crowded at time of survey	1,214	0.343	-0.060**	1,229	0.432	-0.047
			(0.029)			(0.029)
Working at time of follow-up survey	1,225	0.488	0.025	1,245	0.460	0.018
			(0.030)			(0.030)
Number of food related hardships in the past 30 days	1,224	2.287	-0.145	1,245	2.174	0.100
			(0.134)			(0.134)

Exhibit A5: Survey Impacts for Subgroups in Tracts with Poverty Below and Above Within-Sample Medians for Each City

	Below Within-City Sample			Above Within-City Sample		
Outcome	**Sample Size**	**Control Mean**	**ITT Impact**	**Sample Size**	**Control Mean**	**ITT Impact**
Household food security scale score	1,224	3.203	-0.204	1,245	3.044	0.140
			(0.188)			(0.187)
Household type is multigenerational	1,226	0.155	-0.051**	1,246	0.136	-0.057***
			(0.021)			(0.020)
Household type is "other"	1,226	0.032	-0.013	1,246	0.025	-0.002
			(0.010)			(0.010)
Household type is single parent with children, no other relatives or non-relatives	1,226	0.623	0.049*	1,246	0.644	0.056**
			(0.029)			(0.028)
Household type is 2 parents with children, no other relatives or non-relatives	1,226	0.190	0.015	1,246	0.196	0.002
			(0.025)			(0.023)
Did not have a place of one's own to stay or living with others at some point during the past year	1,224	0.275	-0.123***	1,246	0.224	-0.062**
			(0.026)			(0.025)
On the streets or living in shelters at some point during past year	1,224	0.071	-0.039***	1,246	0.065	-0.025
			(0.015)			(0.015)
Living with friends, relatives, or others at some point during past year	1,224	0.198	-0.083***	1,246	0.155	-0.038*
			(0.023)			(0.021)
Rents or owns home or apartment	1,226	0.814	0.072***	1,245	0.845	0.056***
			(0.023)			(0.022)
Food expenditures per person in the month before the survey	1,149	$27.90	$3.33**	1,163	$28.41	$3.29***
			(1.630)			(1.619)
Food expenditures in the month before the survey	1,151	$100.44	$10.43**	1,165	$110.80	$8.00
			(4.838)			(5.315)
"Big problem" with any of below 5 neighborhood conditions	1,222	0.265	-0.003	1,239	0.304	0.008
			(0.028)			(0.029)
"Big problem" or "small problem" in neighborhood with abandoned buildings	1,223	0.189	-0.034	1,244	0.207	-0.010
			(0.024)			(0.024)
"Big problem" or "small problem" in neighborhood with people drinking in public	1,222	0.322	-0.041	1,240	0.391	-0.052*
			(0.029)			(0.030)
"Big problem" or "small problem" in neighborhood with graffiti or writing on the walls	1,225	0.277	-0.041	1,243	0.309	-0.046
			(0.028)			(0.028)
"Big problem" or "small problem" in neighborhood with groups of people just hanging out	1,223	0.392	-0.032	1,243	0.425	-0.053*
			(0.031)			(0.031)

Exhibit A5: Survey Impacts for Subgroups in Tracts with Poverty Below and Above Within-Sample Medians for Each City

	Below Within-City Sample			Above Within-City Sample		
Outcome	**Sample Size**	**Control Mean**	**ITT Impact**	**Sample Size**	**Control Mean**	**ITT Impact**
"Big problem" or "small problem" in neighborhood with litter or trash on the streets or sidewalk	1,225	0.457	-0.025	1,245	0.535	-0.045
			(0.032)			(0.031)
Number of workers in the household	1,186	0.768	-0.023	1,222	0.708	-0.074*
			(0.042)			(0.044)
Cash income below poverty threshold	1,212	0.808	0.023	1,231	0.879	-0.006
			(0.023)			(0.020)
Cash income below 75% of poverty threshold	1,212	0.746	-0.010	1,231	0.800	-0.014
			(0.026)			(0.025)
Cash and near-cash income below poverty threshold	1,212	0.617	-0.036	1,231	0.672	-0.056*
			(0.030)			(0.031)
Cash and near-cash income below 75% of poverty threshold	1,212	0.455	-0.057*	1,231	0.450	-0.052
			(0.032)			(0.032)
Amount spent in rent, including utilities, in month before survey[a]	1,066	$589	-$106***	1,099	$477	-$8
			(41)			(19)
Number of rooms at time of survey	1,215	4.014	0.139	1,231	3.977	0.140*
			(0.085)			(0.082)

ITT = "Intent-to-Treat". Robust standard errors in parentheses.

*** indicates p < .01, ** indicates p < .05, * indicates p < .10

[a]An F-test on the equality of treatment effects between subgroups indicates that ITT impacts differ significantly between subgroups at p<.10

Exhibit A6: Survey Impacts for Subgroups in Baseline Tracts Defined by Four Poverty Categories

	Baseline Census Tract Poverty Rate			
	Below 10%	10%-20%	20%-30%	Above 30%
Outcome	ITT Impact	ITT Impact	ITT Impact	ITT Impact
Number of moves during follow-up period	-0.560 (0.394)	-0.070 (0.166)	-0.252* (0.143)	-0.254** (0.112)
Average hours worked per week since random assignment	1.835 (3.360)	-0.060 (1.565)	1.280 (1.205)	-0.116 (0.939)
Received Food Stamp benefits in month prior to the survey	-0.004 (0.107)	0.066 (0.049)	0.047 (0.039)	-0.019 (0.030)
Food Stamp benefits received in prior month	$30.28 (38.932)	$15.02 (17.303)	$16.16 (16.406)	-$9.26 (12.371)
Received Supplemental Security Income (SSI) in month prior to the survey	-0.015 (0.087)	-0.042 (0.035)	0.004 (0.032)	-0.037 (0.026)
SSI amount received in prior month	-$32.05 (56.376)	$31.91 (48.481)	$18.06 (22.345)	-$16.63 (20.483)
Received TANF cash assistance in month prior to the survey	0.143** (0.071)	-0.018 (0.037)	-0.018 (0.039)	0.007 (0.029)
TANF cash amount received in prior month	$39.62 (24.982)	$11.44 (21.509)	-$2.70 (18.044)	$21.00 (15.277)
Number of birth children in current household[a]	0.061 (0.157)	0.123 (0.097)	0.069 (0.095)	-0.046 (0.077)
Number of elders in household	-0.041 (0.037)	-0.002 (0.015)	-0.022* (0.012)	-0.019 (0.013)
Number of misc. non-relatives in household	-0.145 (0.136)	-0.011 (0.021)	-0.013 (0.019)	-0.018 (0.019)
Number of children in household	0.080 (0.177)	0.100 (0.098)	0.004 (0.091)	-0.022 (0.078)
Number of misc. other relatives in household	-0.099 (0.150)	-0.077 (0.078)	-0.168** (0.069)	-0.077 (0.057)
Number of adult's siblings in household	-0.047 (0.038)	-0.034 (0.032)	-0.058*** (0.020)	-0.028* (0.017)
Total current household size[a]	-0.242 (0.280)	-0.044 (0.121)	-0.088 (0.111)	-0.173* (0.093)
Respondent or someone in household experienced crime in the past six months	-0.066 (0.077)	-0.006 (0.037)	0.037 (0.032)	0.014 (0.026)
Respondent had a break-in (or attempted break-in) to home	-0.074 (0.071)	-0.027 (0.023)	0.043 (0.027)	0.033 (0.020)
Housing is crowded at time of survey	-0.041 (0.094)	-0.055 (0.044)	-0.009 (0.038)	-0.058* (0.031)
Working at time of follow-up survey	-0.072 (0.109)	0.089* (0.048)	-0.026 (0.043)	0.016 (0.032)
Number of food related hardships in the past 30 days	-0.526 (0.438)	0.098 (0.200)	-0.080 (0.188)	0.015 (0.140)
Household food security scale score	-0.737 (0.613)	0.137 (0.280)	-0.112 (0.263)	0.021 (0.196)
Household type is multigenerational	-0.017 (0.069)	-0.001 (0.031)	-0.051* (0.027)	-0.060*** (0.021)
Household type is "other"		-0.006 (0.017)	-0.002 (0.014)	-0.009 (0.010)
Household type is single parent with children, no other relatives or non-relatives	0.039 (0.098)	0.029 (0.046)	0.030 (0.039)	0.056* (0.029)
Household type is 2 parents with children, no other relatives or non-relatives	0.033 (0.076)	-0.021 (0.041)	0.023 (0.034)	0.013 (0.023)
Did not have a place of one's own to stay or living with others at some point during the past year	0.021 (0.096)	-0.071* (0.041)	-0.103*** (0.035)	-0.094*** (0.027)
On the streets or living in shelters at	0.054	-0.048**	-0.014	-0.043***

Exhibit A6: Survey Impacts for Subgroups in Baseline Tracts Defined by Four Poverty Categories

	Baseline Census Tract Poverty Rate			
	Below 10%	**10%-20%**	**20%-30%**	**Above 30%**
Outcome	**ITT Impact**	**ITT Impact**	**ITT Impact**	**ITT Impact**
some point during past year	(0.049)	(0.023)	(0.019)	(0.017)
Living with friends, relatives, or others at some point during past year	-0.029	-0.026	-0.095***	-0.049**
	(0.086)	(0.036)	(0.030)	(0.023)
Rents or owns home or apartment[a]	0.051	0.004	0.067**	0.063***
	(0.082)	(0.035)	(0.030)	(0.023)
Food expenditures per person in the month before the survey	-$3.08	$3.04	$3.78**	$2.90
	(3.224)	(3.397)	(1.586)	(1.800)
Food expenditures in the month before the survey	-$7.03	$17.09*	$13.27***	$5.03
	(12.706)	(9.554)	(5.012)	(6.007)
"Big problem" with any of below 5 neighborhood conditions	-0.004	0.002	-0.018	0.015
	(0.072)	(0.042)	(0.040)	(0.032)
"Big problem" or "small problem" in neighborhood with abandoned buildings	0.017	-0.049	-0.019	-0.019
	(0.081)	(0.037)	(0.033)	(0.026)
"Big problem" or "small problem" in neighborhood with people drinking in public	-0.126	-0.051	-0.040	-0.047
	(0.085)	(0.045)	(0.042)	(0.032)
"Big problem" or "small problem" in neighborhood with graffiti or writing on the walls	-0.094	-0.080**	-0.002	-0.056*
	(0.098)	(0.040)	(0.037)	(0.031)
"Big problem" or "small problem" in neighborhood with groups of people just hanging out	0.009	-0.033	-0.063	-0.041
	(0.102)	(0.047)	(0.043)	(0.033)
"Big problem" or "small problem" in neighborhood with litter or trash on the streets or sidewalk	-0.078	0.018	-0.072*	-0.057*
	(0.107)	(0.050)	(0.043)	(0.034)
Number of workers in the household	-0.061	0.072	-0.114**	-0.045
	(0.126)	(0.067)	(0.058)	(0.048)
Cash income below poverty threshold	0.146*	0.029	-0.010	-0.003
	(0.087)	(0.040)	(0.029)	(0.020)
Cash income below 75% of poverty threshold	0.154	-0.018	-0.014	-0.003
	(0.105)	(0.045)	(0.034)	(0.026)
Cash and near-cash income below poverty threshold	0.015	-0.066	-0.011	-0.045
	(0.118)	(0.049)	(0.042)	(0.032)
Cash and near-cash income below 75% of poverty threshold	-0.031	-0.070	-0.032	-0.038
	(0.117)	(0.049)	(0.044)	(0.033)
Amount spent in rent, including utilities, in month before survey[a]	-$132.97	-$57.94*	-$39.31	-$13.07
	(151.861)	(32.393)	(26.979)	(20.585)

Exhibit A6: Survey Impacts for Subgroups in Baseline Tracts Defined by Four Poverty Categories

	Baseline Census Tract Poverty Rate			
	Below 10%	**10%-20%**	**20%-30%**	**Above 30%**
Outcome	**ITT Impact**	**ITT Impact**	**ITT Impact**	**ITT Impact**
Number of rooms at time of survey	0.085	0.258*	0.210*	0.082
	(0.234)	(0.132)	(0.116)	(0.086)

Notes:
ITT = "Intent-to-Treat". Robust standard errors in parentheses.
*** indicates p < .01, ** indicates p < .05, * indicates p < .10
[a]An F-test on the equality of treatment effects between subgroups indicates that ITT impacts differ significantly between subgroups at p<.10

Exhibit A7: Impacts on Last Period Census Tract Defined by Poverty Rate (16 and 18 Quarters)

Outcome	Sample Size	Control Mean	ITT Impact
6 sites/16Q			
Below 10% poverty in last period tract	8,657	0.097	-0.007
			(0.005)
10%-20% poverty	8,657	0.251	0.019**
			(0.008)
20%-30% poverty	8,657	0.282	0.016*
			(0.009)
Above 30% poverty	8,657	0.370	-0.029***
			(0.008)
5 sites/18Q			
Below 10% poverty in last period tract	7,614	0.106	-0.005
			(0.006)
10%-20% poverty	7,614	0.246	0.019**
			(0.009)
20%-30% poverty	7,614	0.278	0.015
			(0.010)
Above 30% poverty	7,614	0.371	-0.029***
			(0.009)

Notes:
ITT = "Intent-to-Treat". Robust standard errors in parentheses.
*** indicates p < .01, ** indicates p < .05, * indicates p < .10

Exhibit A8: Impacts on Last Period Census Tract Defined by Poverty Rate, Without Los Angeles

Outcome	Sample Size	Control Mean	ITT Impact
5 sites/16Q			
Below 10% poverty in last period tract	7,614	0.099	-0.007
			(0.006)
10%-20% poverty	7,614	0.242	0.024***
			(0.009)
20%-30% poverty	7,614	0.272	0.020**
			(0.009)
Above 30% poverty	7,614	0.386	-0.037***
			(0.009)

Notes:
ITT = "Intent-to-Treat". Robust standard errors in parentheses.
*** indicates p < .01, ** indicates p < .05, * indicates p < .10

Exhibit A9: Impacts on Last Period Census Tract Defined by Poverty Rate, by Subgroup

		Impact on Having Last Period Census Tract Poverty Rate of:			
		Below 10%	10%-20%	20%-30%	Above 30%
Subgroup	Sample Size	ITT Impact	ITT Impact	ITT Impact	ITT Impact
Age at baseline					
Less than 24	2,588	-0.001	0.031*	0.045***	-0.074***
		(0.010)	(0.016)	(0.017)	(0.016)
25-34	3,258	-0.009	0.021	0.005	-0.017
		(0.010)	(0.014)	(0.014)	(0.014)
35-44	2,015	-0.007	0.010	0.013	-0.017
		(0.010)	(0.017)	(0.018)	(0.016)
45 or older	687	-0.007	0.009	-0.020	0.017
		(0.018)	(0.028)	(0.030)	(0.027)
Race/Ethnicity					
White, Non-Hispanic	1,660	-0.025*	0.014	0.035*	-0.023
		(0.015)	(0.020)	(0.019)	(0.016)
Black, Non-Hispanic	4,241	0.001	0.026**	0.012	-0.040***
		(0.008)	(0.012)	(0.013)	(0.013)
Hispanic	1,815	-0.010	0.015	0.020	-0.025
		(0.009)	(0.017)	(0.020)	(0.020)
Education at baseline					
High school diploma	3,372	-0.005	0.029**	-0.002	-0.022*
		(0.009)	(0.014)	(0.014)	(0.013)
GED only	1,460	-0.015	0.001	0.060***	-0.045**
		(0.017)	(0.022)	(0.023)	(0.021)
Neither high school diploma nor GED	3,016	-0.002	0.008	0.029*	-0.036**
		(0.008)	(0.013)	(0.015)	(0.015)
School Enrollment at baseline					
Enrolled in school	1,397	-0.004	-0.021	0.019	0.008
		(0.015)	(0.021)	(0.023)	(0.022)
Not enrolled in school	6,716	-0.005	0.026***	0.017*	-0.038***
		(0.006)	(0.009)	(0.010)	(0.010)
Presence of children at baseline					
Any dependent children	7,661	-0.006	0.018**	0.016*	-0.028***
		(0.006)	(0.009)	(0.009)	(0.009)
No dependent children	804	-0.013	0.029	0.041	-0.059**
		(0.016)	(0.027)	(0.030)	(0.030)
Youngest Household Member at baseline					
Youngest household member less than 6	5,371	-0.001	0.017	0.023**	-0.040***
		(0.007)	(0.011)	(0.011)	(0.011)
Youngest household member 6-17	2,717	-0.017*	0.018	0.010	-0.011
		(0.009)	(0.014)	(0.016)	(0.015)
Youngest household member 18 or more	408	-0.047*	0.055	0.006	-0.015
		(0.028)	(0.038)	(0.045)	(0.043)

Exhibit A9: Impacts on Last Period Census Tract Defined by Poverty Rate, by Subgroup

		Impact on Having Last Period Census Tract Poverty Rate of:			
		Below 10%	10%-20%	20%-30%	Above 30%
Subgroup	**Sample Size**	**ITT Impact**	**ITT Impact**	**ITT Impact**	**ITT Impact**
Employment Status at baseline					
Employed	3,777	-0.014	0.032**	0.012	-0.031**
		(0.009)	(0.013)	(0.013)	(0.012)
Not employed, with reservation wage of:					
$3.00 to $5.99	254	-0.054	0.023	0.050	-0.021
		(0.034)	(0.062)	(0.063)	(0.062)
$6.00 to $8.99	2,258	0.008	-0.001	0.021	-0.026
		(0.010)	(0.016)	(0.018)	(0.017)
$9.00 to $12.99	1,070	-0.001	0.008	0.048*	-0.056**
		(0.018)	(0.024)	(0.025)	(0.024)
$13.00 to $15.99	301	-0.001	-0.008	0.048	-0.041
		(0.035)	(0.050)	(0.056)	(0.059)
Total not employed	4,413	0.002	0.005	0.016	-0.023*
		(0.007)	(0.012)	(0.012)	(0.012)
Employment Background at baseline					
Ever employed	7,225	-0.009	0.028***	0.013	-0.032***
		(0.006)	(0.009)	(0.010)	(0.009)
Never employed	1,220	0.015	-0.025	0.020	-0.010
		(0.015)	(0.022)	(0.024)	(0.024)
Job Training Status at baseline					
Enrolled in job training	1,076	0.002	0.013	-0.008	-0.004
		(0.017)	(0.025)	(0.026)	(0.024)
Enrolled in (but yet to start) job training	591	0.007	0.023	0.009	-0.029
		(0.021)	(0.033)	(0.035)	(0.037)
Not enrolled in job training	6,764	-0.009	0.022**	0.021**	-0.034***
		(0.006)	(0.009)	(0.010)	(0.010)
Moving for Employment Reasons at baseline					
Desired to move for employment reasons	1,234	-0.022	0.043*	0.051**	-0.075***
		(0.015)	(0.023)	(0.024)	(0.023)
Did not desire to move for employment reasons	7,246	-0.004	0.015*	0.009	-0.020**
		(0.006)	(0.009)	(0.010)	(0.009)
Housing Status at baseline					
Rents or owns apartment or house	4,925	-0.012*	0.014	0.011	-0.014
		(0.007)	(0.011)	(0.012)	(0.011)
Lives with friends/relatives or in shelter	2,394	-0.014	0.040**	0.000	-0.028*
		(0.011)	(0.017)	(0.017)	(0.016)
Resides in public or assisted housing	1,086	0.022	0.023	0.058**	-0.101***
		(0.016)	(0.023)	(0.027)	(0.029)

Exhibit A9: Impacts on Last Period Census Tract Defined by Poverty Rate, by Subgroup

		Impact on Having Last Period Census Tract Poverty Rate of:			
		Below 10%	10%-20%	20%-30%	Above 30%
Subgroup	**Sample Size**	**ITT Impact**	**ITT Impact**	**ITT Impact**	**ITT Impact**
TANF Receipt at baseline					
Not receiving TANF	1,598	0.009	0.036*	0.006	-0.053***
		(0.015)	(0.021)	(0.020)	(0.018)
Receiving TANF, expiring in:					
Less than 6 months	1,012	-0.011	0.045*	0.007	-0.041
		(0.017)	(0.025)	(0.026)	(0.026)
6 to 12 months	542	-0.012	0.058	0.031	-0.077**
		(0.020)	(0.035)	(0.038)	(0.036)
12 to 18 months	377	0.005	0.001	-0.029	0.022
		(0.024)	(0.045)	(0.047)	(0.048)
More than 18 months	702	0.001	0.028	0.037	-0.065**
		(0.021)	(0.031)	(0.032)	(0.033)
Total receiving TANF	6,564	-0.009	0.015	0.019*	-0.024**
		(0.006)	(0.009)	(0.010)	(0.010)

Notes:
ITT = "Intent-to-Treat". Robust standard errors in parentheses.
*** indicates p < .01, ** indicates p < .05, * indicates p < .10

Exhibit A10: Impacts on Characteristics of Last Period Neighborhood, by Racial Subgroup

	All Sites, Outcomes at 16th Qtr.			All Sites Except Los Angeles, Outcomes at 18th Qtr.		
	Sample Size	Control Mean	ITT Impact	Sample Size	Control Mean	ITT Impact
Percent below poverty level						
White, Non-Hispanic[a,b]	1,660	20.627	0.058	1,322	20.738	0.138
			(0.419)			(0.508)
Black, Non-Hispanic[a,b]	4,241	28.022	-1.115***	3,883	27.762	-1.621***
			(0.363)			(0.394)
Hispanic[a,b]	1,815	30.644	-0.782	1,630	30.816	-0.584
			(0.515)			(0.571)
Other[a,b]	680	27.178	1.419	551	28.617	2.169**
			(0.879)			(1.091)
Percent of civilians employed						
White, Non-Hispanic[b]	1,660	89.721	0.167	1,322	89.404	0.128
			(0.221)			(0.274)
Black, Non-Hispanic[b]	4,241	87.612	0.390**	3,883	87.829	0.508***
			(0.165)			(0.182)
Hispanic[b]	1,815	85.373	0.309	1,630	85.138	0.322
			(0.258)			(0.285)
Other[b]	680	87.781	-0.632	551	87.187	-1.182**
			(0.393)			(0.481)
Percent of households with public assistance						
White, Non-Hispanic[a,b]	1,660	8.655	-0.110	1,322	8.352	-0.160
			(0.218)			(0.257)
Black, Non-Hispanic[a,b]	4,241	8.840	-0.389**	3,883	8.366	-0.604***
			(0.157)			(0.165)
Hispanic[a,b]	1,815	12.857	-0.344	1,630	13.007	-0.285
			(0.296)			(0.325)
Other[a,b]	680	12.548	1.101**	551	13.308	1.628**
			(0.540)			(0.655)
Percent of households with single female heads						
White, Non-Hispanic[a,b]	1,660	14.855	-0.021	1,322	15.124	0.041
			(0.217)			(0.263)
Black, Non-Hispanic[a,b]	4,241	27.206	-0.670**	3,883	27.327	-1.035***
			(0.272)			(0.298)
Hispanic[a,b]	1,815	18.919	0.268	1,630	18.966	0.191
			(0.251)			(0.274)
Other[a,b]	680	18.586	0.286	551	18.941	0.508
			(0.397)			(0.482)

Exhibit A10: Impacts on Characteristics of Last Period Neighborhood, by Racial Subgroup

	All Sites, Outcomes at 16th Qtr.			All Sites Except Los Angeles, Outcomes at 18th Qtr.		
	Sample Size	Control Mean	ITT Impact	Sample Size	Control Mean	ITT Impact
Percent minority						
White, Non-Hispanic[a,b]	1,660	37.028	0.140	1,322	31.775	0.092
			(0.598)			(0.702)
Black, Non-Hispanic[a,b]	4,241	82.171	-1.345***	3,883	81.076	-2.027***
			(0.469)			(0.528)
Hispanic[a,b]	1,815	73.342	-0.553	1,630	72.108	-0.784
			(0.675)			(0.761)
Other[a,b]	680	61.766	2.135*	551	58.333	2.153
			(1.152)			(1.344)
Percent Black						
White, Non-Hispanic[b]	1,660	6.081	0.139	1,322	6.609	0.232
			(0.361)			(0.454)
Black, Non-Hispanic[b]	4,241	56.891	-1.451**	3,883	58.223	-2.162***
			(0.663)			(0.721)
Hispanic[b]	1,815	9.714	0.134	1,630	9.293	0.459
			(0.456)			(0.494)
Other[b]	680	8.741	-0.084	551	9.316	-0.206
			(0.541)			(0.654)

Notes:
ITT = "Intent-to-Treat". Robust standard errors in parentheses.
*** indicates p < .01, ** indicates p < .05, * indicates p < .10
[a]An F-test on the equality of treatment effects between subgroups indicates that ITT impacts for outcomes at the 16th qtr differ significantly between subgroups at p<.10
[b]An F-test on the equality of treatment effects between subgroups indicates that ITT impacts for outcomes at the 18th qtr differ significantly between subgroups at p<.10

Exhibit A11: Neighborhood Impacts by Baseline Housing Status Subgroups

	All Sites, Outcomes at 16th Qtr.			All Sites Except Los Angeles, Outcomes at 18th Qtr.		
	Sample Size	Control Mean	ITT Impact	Sample Size	Control Mean	ITT Impact
Moved from baseline census tract						
Rents or owns apartment or house[a]	4,925	0.521	0.007 (0.014)	4,059	0.588	0.005 (0.015)
Lives with friends/relatives or in shelter[a]	2,394	0.536	0.047** (0.021)	2,279	0.579	0.049** (0.021)
Resides in public or assisted housing[a]	1,086	0.608	0.078*** (0.029)	1,041	0.667	0.046 (0.029)
Percent below poverty level						
Rents or owns apartment or house[a,b]	4,925	26.987	-0.087 (0.293)	4,059	27.510	-0.283 (0.347)
Lives with friends/relatives or in shelter[a,b]	2,394	25.025	-0.447 (0.433)	2,279	24.819	-0.504 (0.458)
Resides in public or assisted housing[a,b]	1,086	32.632	-3.197*** (0.882)	1,041	31.985	-3.066*** (0.913)
Percent of civilians employed						
Rents or owns apartment or house[a,b]	4,925	87.504	0.025 (0.142)	4,059	87.249	0.003 (0.168)
Lives with friends/relatives or in shelter[a,b]	2,394	88.346	0.420** (0.207)	2,279	88.417	0.452** (0.220)
Resides in public or assisted housing[a,b]	1,086	85.719	0.967** (0.396)	1,041	85.965	0.990** (0.430)
Percent of households with public assistance						
Rents or owns apartment or house[a,b]	4,925	10.860	-0.057 (0.158)	4,059	10.826	-0.129 (0.183)
Lives with friends/relatives or in shelter[a,b]	2,394	7.976	-0.110 (0.188)	2,279	7.762	-0.154 (0.195)
Resides in public or assisted housing[a,b]	1,086	10.787	-1.066*** (0.399)	1,041	10.308	-1.133*** (0.399)
Percent of households with single female heads						
Rents or owns apartment or house[a,b]	4,925	20.356	-0.089 (0.170)	4,059	20.719	-0.254 (0.203)
Lives with friends/relatives or in shelter[a,b]	2,394	22.537	0.032 (0.312)	2,279	22.556	-0.141 (0.333)
Resides in public or assisted housing[a,b]	1,086	30.480	-1.954*** (0.652)	1,041	30.383	-2.038*** (0.681)
Percent of adults with less than 9th grade education						
Rents or owns apartment or house	4,925	17.462	0.055 (0.254)	4,059	16.679	-0.027 (0.289)
Lives with friends/relatives or in shelter	2,394	14.092	-0.457 (0.313)	2,279	13.403	-0.433 (0.324)
Resides in public or assisted housing	1,086	15.371	-0.295 (0.558)	1,041	14.893	-0.466 (0.576)

Exhibit A11: Neighborhood Impacts by Baseline Housing Status Subgroups

	All Sites, Outcomes at 16th Qtr.			All Sites Except Los Angeles, Outcomes at 18th Qtr.		
	Sample Size	Control Mean	ITT Impact	Sample Size	Control Mean	ITT Impact
Percent of youths not in school and not in the labor force						
Rents or owns apartment or house	4,925	8.884	-0.117	4,059	8.825	-0.159
			(0.158)			(0.179)
Lives with friends/relatives or in shelter	2,394	9.268	0.346	2,279	9.296	0.323
			(0.268)			(0.283)
Resides in public or assisted housing	1,086	11.616	-0.002	1,041	11.507	0.026
			(0.495)			(0.502)
Percent minority						
Rents or owns apartment or house	4,925	65.767	0.071	4,059	63.711	-0.556
			(0.395)			(0.468)
Lives with friends/relatives or in shelter	2,394	71.001	-0.848	2,279	69.847	-1.308*
			(0.616)			(0.670)
Resides in public or assisted housing	1,086	85.888	-1.800*	1,041	85.518	-1.890*
			(0.944)			(0.992)
Percent black						
Rents or owns apartment or house	4,925	22.913	-0.291	4,059	23.908	-0.514
			(0.375)			(0.445)
Lives with friends/relatives or in shelter	2,394	41.278	-1.061	2,279	41.749	-1.614*
			(0.783)			(0.831)
Resides in public or assisted housing	1,086	57.599	-1.946	1,041	58.632	-2.082
			(1.412)			(1.454)
Percent Hispanic						
Rents or owns apartment or house	4,925	32.036	0.305	4,059	29.780	0.015
			(0.365)			(0.399)
Lives with friends/relatives or in shelter	2,394	23.659	0.131	2,279	22.086	0.260
			(0.544)			(0.571)
Resides in public or assisted housing	1,086	22.855	0.374	1,041	21.729	0.223
			(1.032)			(1.045)

Notes:
ITT = "Intent-to-Treat". TOT = "Treatment-on-Treated". Standard errors in parentheses.
*** indicates p < .01, ** indicates p < .05, * indicates p < .10
[a]An F-test on the equality of treatment effects between subgroups indicates that ITT impacts for outcomes at the 16th qtr differ significantly between subgroups at p<.10
[b]An F-test on the equality of treatment effects between subgroups indicates that ITT impacts for outcomes at the 18th qtr differ significantly between subgroups at p<.10

Exhibit A12: Administrative Impacts by Baseline Housing Status Subgroups

	All Sites, Outcomes at 14th Qtr.			All Sites Except Los Angeles, Outcomes at 16th Qtr.		
	Sample Size	Control Mean	ITT Impact	Sample Size	Control Mean	ITT Impact
Number of quarters with positive (>0) earnings						
Rents or owns apartment or house	4,932	10.041	0.108	4,068	10.669	0.067
			(0.126)			(0.155)
Lives with friends/relatives or in shelter	2,410	9.440	-0.225	2,295	10.084	-0.167
			(0.176)			(0.204)
Resides in public or assisted housing	1,091	10.437	-0.477*	1,046	11.163	-0.351
			(0.261)			(0.299)
Total earnings						
Rents or owns apartment or house	4,932	$27,755	$379	4,068	$29,031	$322
			(576.169)			(697.100)
Lives with friends/relatives or in shelter	2,410	$22,870	-$1,083	2,295	$24,799	-$1,268
			(780.683)			(898.618)
Resides in public or assisted housing	1,091	$25,548	-$1,816	1,046	$27,807	-$2,096
			(1153.411)			(1325.052)
Number of quarters with receipt of TANF						
Rents or owns apartment or house	4,068	10.838	0.245*	4,068	11.395	0.297**
			(0.132)			(0.146)
Lives with friends/relatives or in shelter	2,295	9.794	0.370**	2,295	10.332	0.371*
			(0.179)			(0.196)
Resides in public or assisted housing	1,046	9.703	0.385	1,046	10.241	0.340
			(0.264)			(0.288)
Total TANF cash benefits						
Rents or owns apartment or house	4,068	$13,850	$394*	4,068	$14,480	$471**
			(211.679)			(233.233)
Lives with friends/relatives or in shelter	2,295	$8,534	$144	2,295	$8,968	$142
			(199.897)			(218.475)
Resides in public or assisted housing	1,046	$7,415	$323	1,046	$7,784	$287
			(262.125)			(284.856)
Number of quarters with receipt of Food Stamps						
Rents or owns apartment or house	2,164	13.364	0.209	2,164	14.534	0.257
			(0.193)			(0.219)
Lives with friends/relatives or in shelter	1,874	13.233	0.421**	1,874	14.536	0.463**
			(0.205)			(0.232)
Resides in public or assisted housing	851	13.866	0.587**	851	15.218	0.644**
			(0.248)			(0.281)
Total Food Stamp benefits						
Rents or owns apartment or house	2,164	$10,361	$332	2,164	$11,350	$388
			(206.538)			(236.117)
Lives with friends/relatives or in shelter	1,874	$10,629	$456**	1,874	$11,774	$536**
			(219.395)			(252.197)
Resides in public or assisted housing	851	$12,916	$287	851	$14,283	$333
			(333.929)			(383.902)

Notes:
ITT = "Intent-to-Treat". Robust standard errors in parentheses.
*** indicates p < .01, ** indicates p < .05, * indicates p < .10
[a]An F-test on the equality of treatment effects between subgroups indicates that ITT impacts for outcomes at the 16th qtr differ significantly between subgroups at p<.10
[b]An F-test on the equality of treatment effects between subgroups indicates that ITT impacts for outcomes at the 18th qtr differ significantly between subgroups at p<.10

Exhibit A13: Follow-up Survey Impacts on Adult Outcomes by Baseline Housing Status Subgroups

	Baseline Housing Status of:		
	Rents or owns apartment or house	Lives with friends/ relatives or in shelter	Resides in public or assisted housing
Outcome	ITT Impact	ITT Impact	ITT Impact
Number of moves during follow-up period[a]	-0.341***	-0.128	0.026
	(0.094)	(0.165)	(0.159)
Average hours worked per week since random assignment	0.073	-0.514	2.217
	(0.939)	(1.076)	(1.684)
Received Food Stamp benefits in month prior to the survey	0.032	-0.028	0.051
	(0.029)	(0.039)	(0.051)
Food Stamp benefits received in prior month	$9.64	-$2.03	$15.04
	(11.044)	(16.108)	(23.317)
Received Supplemental Security Income (SSI) in month prior to the survey	-0.033	-0.004	-0.064
	(0.025)	(0.026)	(0.042)
SSI amount received in prior month	$1.70	$29.72	-$56.24*
	(28.502)	(18.867)	(29.532)
Received TANF cash assistance in month prior to the survey	0.014	-0.005	-0.063
	(0.027)	(0.032)	(0.045)
TANF cash amount received in prior month	$20.76	$6.39	-$12.55
	(14.522)	(15.959)	(16.170)
Number of birth children in current household	0.024	-0.006	0.053
	(0.068)	(0.088)	(0.106)
Number of elders in household	-0.026**	-0.007	-0.017
	(0.012)	(0.013)	(0.014)
Number of misc. non-relatives in household	-0.029	-0.020	-0.010
	(0.019)	(0.024)	(0.016)
Number of children in household	0.029	-0.028	-0.012
	(0.069)	(0.092)	(0.110)
Number of misc. other relatives in household	-0.112**	-0.153*	-0.089
	(0.048)	(0.086)	(0.073)
Number of adult's siblings in household	-0.033*	-0.063***	-0.015
	(0.019)	(0.024)	(0.023)
Total current household size	-0.150*	-0.255**	-0.016
	(0.082)	(0.121)	(0.125)
Respondent or someone in household experienced crime in the past six months	0.024	0.012	-0.028
	(0.022)	(0.030)	(0.046)
Respondent had a break-in (or attempted break-in) to home	0.018	-0.001	0.029
	(0.018)	(0.022)	(0.037)
Housing is crowded at time of survey	-0.038	-0.041	-0.078
	(0.027)	(0.039)	(0.056)
Working at time of follow-up survey	0.026	0.008	0.005
	(0.030)	(0.040)	(0.054)
Number of food related hardships in the past 30 days	-0.126	0.086	-0.255
	(0.129)	(0.187)	(0.247)

Exhibit A13: Follow-up Survey Impacts on Adult Outcomes by Baseline Housing Status Subgroups

Outcome	Baseline Housing Status of: Rents or owns apartment or house ITT Impact	Lives with friends/ relatives or in shelter ITT Impact	Resides in public or assisted housing ITT Impact
Household food security scale score	-0.175	0.121	-0.357
	(0.180)	(0.261)	(0.346)
Household type is multigenerational	-0.031	-0.068**	-0.044
	(0.020)	(0.029)	(0.029)
Household type is "other"	-0.006	-0.009	-0.011
	(0.009)	(0.013)	(0.012)
Household type is single parent with children, no other relatives or non-relatives	0.026	0.085**	0.027
	(0.028)	(0.037)	(0.045)
Household type is 2 parents with children, no other relatives or non-relatives	0.011	-0.008	0.027
	(0.024)	(0.028)	(0.036)
Did not have a place of one's own to stay or living with others at some point during the past year	-0.075***	-0.134***	-0.065
	(0.023)	(0.036)	(0.041)
On the streets or living in shelters at some point during past year	-0.036***	-0.032	-0.010
	(0.014)	(0.022)	(0.021)
Living with friends, relatives, or others at some point during past year	-0.037*	-0.107***	-0.051
	(0.020)	(0.032)	(0.034)
Rents or owns home or apartment	0.063***	0.073**	-0.006
	(0.019)	(0.033)	(0.033)
Food expenditures per person in the month before the survey	$1.31	$5.08**	$6.44*
	(1.534)	(2.273)	(3.581)
Food expenditures in the month before the survey	$7.19	$12.56*	$19.80
	(4.667)	(6.813)	(12.436)
"Big problem" with any of below 5 neighborhood conditions	-0.008	0.001	0.093
	(0.027)	(0.037)	(0.058)
"Big problem" or "small problem" in neighborhood with abandoned buildings	-0.035	0.002	-0.040
	(0.023)	(0.032)	(0.056)
"Big problem" or "small problem" in neighborhood with people drinking in public	-0.032	-0.037	-0.087
	(0.029)	(0.040)	(0.058)
"Big problem" or "small problem" in neighborhood with graffiti or writing on the walls	-0.051*	-0.025	0.024
	(0.027)	(0.036)	(0.049)
"Big problem" or "small problem" in neighborhood with groups of people just hanging out	-0.045	-0.041	0.046
	(0.030)	(0.041)	(0.061)
"Big problem" or "small problem" in neighborhood with litter or trash on the streets or sidewalk	-0.016	-0.074*	-0.062
	(0.031)	(0.042)	(0.059)
Number of workers in the household	-0.071	-0.058	0.006
	(0.043)	(0.055)	(0.071)
Cash income below poverty threshold[a]	-0.011	0.043	0.069*
	(0.022)	(0.030)	(0.038)
Cash income below 75% of poverty threshold	-0.017	-0.017	0.058
	(0.025)	(0.034)	(0.047)
Cash and near-cash income below poverty threshold	-0.047	-0.036	0.013
	(0.030)	(0.040)	(0.057)

Exhibit A13: Follow-up Survey Impacts on Adult Outcomes by Baseline Housing Status Subgroups

	Baseline Housing Status of:		
	Rents or owns apartment or house	Lives with friends/ relatives or in shelter	Resides in public or assisted housing
Outcome	ITT Impact	ITT Impact	ITT Impact
Cash and near-cash income below 75% of poverty threshold	-0.053*	-0.063	0.030
	(0.031)	(0.042)	(0.059)
Amount spent in rent, including utilities, in month before survey	-$55.19**	-$45.92	-$58.88*
	(27.716)	(29.515)	(31.757)
Number of rooms at time of survey	0.177**	0.117	0.097
	(0.083)	(0.107)	(0.154)

Notes:
ITT = "Intent-to-Treat". Robust standard errors in parentheses.
*** indicates p < .01, ** indicates p < .05, * indicates p < .10
[a]An F-test on the equality of treatment effects between subgroups indicates that ITT impacts differ significantly between subgroups at p<.10

Exhibit A14: Follow-up Survey Impacts on Child Outcomes by Baseline Housing Status Subgroups

	Baseline Housing Status of:		
	Rents or owns apartment or house	Lives with friends/ relatives or in shelter	Resides in public or assisted housing
Outcome	ITT Impact	ITT Impact	ITT Impact
Child has ever repeated a grade	0.035*	0.020	-0.006
	(0.020)	(0.028)	(0.035)
In past year, parent worked with youth group or other activity outside of school	-0.008	-0.066*	-0.059
	(0.028)	(0.037)	(0.047)
Child not in school due to a problem (health problems, financial problems, incarceration, mental health etc.	-0.010	-0.008	-0.011
	(0.008)	(0.008)	(0.013)
Child in activities at school at 3:45 PM	-0.027	-0.009	0.014
	(0.020)	(0.027)	(0.041)
Child could be seen/heard by adult at 3:45 PM	-0.003	0.039**	-0.015
	(0.016)	(0.016)	(0.020)
Child had problems involving police contacting parent since random assignment	-0.015	0.014	-0.057
	(0.029)	(0.055)	(0.079)
Child hangs around with kids who get into trouble	0.017	0.011	-0.041
	(0.018)	(0.027)	(0.034)

Notes:
ITT = "Intent-to-Treat". Robust standard errors in parentheses.
*** indicates p < .01, ** indicates p < .05, * indicates p < .10
[a]An F-test on the equality of treatment effects between subgroups indicates that ITT impacts differ significantly between subgroups at p<.10

Exhibit A15: Characteristics of Baseline Housing Status Subgroups

Baseline Characteristic	Independent at baseline REMAIN Independent at follow-up	Non-independent at baseline TO Independent at follow-up	Independent at baseline TO Non-independent at follow-up	Non-independent at baseline REMAIN Non-ind. at follow-up
N	**1,526**	**594**	**170**	**161**
Annual earnings at baseline	$6,289	$4,908	$5,475	$5,369
Working for pay at baseline	44.6%	35.4%	39.5%	40.2%
Working for pay at baseline - response is missing	3.0%	3.9%	5.0%	5.7%
Had ever worked for pay at baseline	84.9%	89.4%	82.7%	87.8%
Looking for paying work at baseline and has reservation wage of $3 - $5.99 for a job that also provided benefits like health insurance	3.6%	3.0%	6.0%	0.3%
Looking for paying work at baseline and has reservation wage of $9 - $12.99 for a job that also provided benefits like health insurance	12.3%	14.0%	10.9%	17.3%
Looking for paying work at baseline and has reservation wage of $13 - $15.99 for a job that also provided benefits like health insurance	3.6%	3.3%	1.2%	3.5%
Has high school diploma at baseline	37.3%	39.9%	30.6%	43.3%
Has G.E.D. at baseline	18.2%	21.8%	20.9%	17.6%
Have HS diploma or GED at baseline - response is missing	6.3%	7.1%	10.2%	7.5%
Enrolled in (and attending) a job training program at baseline	12.8%	15.7%	13.0%	14.6%
Enrolled in (but not yet started) a job training program at baseline	6.7%	7.2%	8.6%	7.7%
Enrollment in job training program - response is missing	0.9%	0.3%	0.0%	0.3%
Lives with friends or relatives, in homeless shelter, or in transitional housing at baseline	0.0%	100.0%	0.0%	100.0%
Lives in public or assisted housing at baseline	20.4%	0.0%	19.2%	0.0%
Type of housing at baseline - response is missing	0.0%	0.0%	0.0%	0.0%
Age of youngest person in the household is 0-6 years	66.6%	78.0%	68.8%	67.0%
Age of youngest person in the household is 6-17 years	33.4%	22.0%	31.2%	33.0%
Age of youngest person in the household is 18 or more years	0.0%	0.0%	0.0%	0.0%
In school at baseline	16.7%	19.3%	12.8%	14.6%
In school at baseline - response is missing	3.7%	4.0%	4.1%	2.6%
Race/ethnicity is black, non-Hispanic	47.2%	67.4%	43.6%	65.5%
Race/ethnicity is white, non-Hispanic	18.3%	16.0%	16.1%	7.9%
Ethnicity is Hispanic	25.0%	13.4%	29.1%	23.5%
Race/ethnicity is non-black, non-white, non-Hispanic	8.8%	2.3%	7.3%	3.1%
Race/ethnicity - response is missing	0.7%	0.8%	4.0%	0.0%
Age at baseline	30.9	27.8	31.7	29.2
Age less than 24 years	29.0%	46.4%	27.1%	36.0%
Age is 25-34 years	41.6%	35.8%	39.7%	39.5%
Age is 35-44 years	23.3%	14.8%	23.5%	20.1%
Age is more than 45 or older	6.1%	3.0%	9.7%	4.5%
Respondent is male	7.5%	2.7%	11.2%	3.0%
Gender of respondent is unknown	0.4%	0.0%	1.7%	0.0%
Has a car that runs at baseline	43.8%	32.8%	38.4%	33.7%
Has a car that runs at baseline - response is missing	0.1%	0.2%	0.0%	1.0%
Has valid driver's license at baseline	61.0%	58.7%	52.7%	62.9%

Exhibit A15: Characteristics of Baseline Housing Status Subgroups

Baseline Characteristic	Independent at baseline REMAIN Independent at follow-up	Non-independent at baseline TO Independent at follow-up	Independent at baseline TO Non-independent at follow-up	Non-independent at baseline REMAIN Non-ind. at follow-up
N	**1,526**	**594**	**170**	**161**
Has valid driver's license at baseline - response is missing	0.2%	0.2%	0.0%	0.0%
Receiving TANF/AFDC at baseline	78.1%	71.8%	81.0%	68.1%
Receiving TANF/AFDC at baseline - response is missing	2.9%	5.1%	2.2%	8.6%
Had ever received TANF/AFDC for own children at baseline	97.3%	95.3%	98.1%	91.4%
Had ever received TANF/AFDC for own children at baseline - response is missing	0.1%	0.0%	0.0%	1.7%
Knows when TANF benefits expire, 6-12 months after baseline date	6.5%	7.2%	10.4%	6.9%
Knows when TANF benefits expire, 12-18 months after baseline date	4.4%	6.4%	5.7%	6.9%
Knows when TANF benefits expire, more than 18 months after baseline date	8.5%	11.6%	6.2%	7.5%
Not receiving TANF/AFDC at baseline, or does not know when TANF benefits expire, or no response to expiration question	68.0%	62.8%	59.6%	65.6%
Someone in household receiving Food Stamps at baseline	88.7%	79.4%	90.3%	74.3%
Someone in household receiving Food Stamps at baseline - response is missing	0.3%	0.7%	0.8%	0.3%
Someone in household receiving Supplemental Security Income (SSI) at baseline	11.2%	11.0%	11.3%	12.4%
Someone in household receiving Supplemental Security Income (SSI) at baseline - response is missing	2.9%	4.5%	6.3%	4.1%
Someone in household receiving Medicaid at baseline	62.1%	70.3%	60.5%	70.7%
Someone in household receiving Medicaid at baseline - response is missing	1.2%	1.2%	4.1%	0.3%
Marital status is never married	52.5%	66.7%	50.0%	67.7%
Marital status - response is missing	4.1%	4.9%	6.1%	1.6%
Is responsible for children living at home at baseline	93.2%	90.5%	90.4%	88.3%
Is responsible for children living at home at baseline - response is missing	0.3%	0.1%	0.6%	0.3%
Household size is 1 or 2 people	18.1%	20.0%	21.3%	20.0%
Household size is 4 people	23.9%	21.5%	21.8%	20.9%
Household size is 5 people	15.1%	15.1%	12.5%	11.8%
Household size is 6 people	7.1%	9.0%	10.4%	10.2%
Household size is 7 people	3.7%	4.9%	6.6%	5.3%
Household size is 8 or more people	4.2%	5.0%	3.1%	8.3%
Type of housing at baseline - response is missing	0.0%	0.0%	0.0%	0.0%
Rent burden at baseline (calculated as (12*x_rent)/x_hhdinc)	21.7%	19.2%	21.6%	20.0%
Rent burden at baseline - response is missing	58.8%	76.1%	63.1%	73.8%
Main reason or second most important reason for wanting to move is to be near a job or to get a job	13.4%	14.5%	16.5%	25.9%
Main reason or second most important reason for wanting to move is to be near a job or to get a job - response is missing	0.1%	0.4%	0.0%	0.0%

Exhibit A15: Characteristics of Baseline Housing Status Subgroups

Baseline Characteristic	Independent at baseline REMAIN Independent at follow-up	Non-independent at baseline TO Independent at follow-up	Independent at baseline TO Non-independent at follow-up	Non-independent at baseline REMAIN Non-ind. at follow-up
N	**1,526**	**594**	**170**	**161**
Had moved more than three times in 5 years before baseline	34.8%	40.5%	34.7%	30.8%
Had moved more than three times in 5 years before baseline - response is missing	0.4%	0.8%	0.0%	1.0%
Lives in Atlanta area at baseline	13.3%	17.1%	10.3%	18.8%
Lives in Augusta area at baseline	7.7%	15.8%	8.7%	10.6%
Lives in Fresno area at baseline	41.9%	16.5%	41.9%	24.7%
Lives in Houston at baseline	21.1%	36.0%	28.5%	38.9%
Lives in Los Angeles area at baseline	0.0%	0.0%	0.0%	0.0%
Lives in Spokane area at baseline	16.0%	14.7%	10.6%	7.1%
Monthly Metropolitan Statistical Area (MSA)-level unemployment rate for the site where the respondent lived, averaged over the twelve months prior to the respondent's baseline date	8.1	5.9	8.1	6.5

Exhibit A16: Correlations Between Follow-up Survey Adult Outcomes and Changes in Housing Independence

Outcome	Treatment Mean	Housing Independence Change Status: Non-independent at baseline TO Independent at follow-up Coefficient	Non-independent at baseline REMAIN Non-ind. at follow-up Coefficient	Independent at baseline TO Non-independent at follow-up Coefficient
Number of moves during follow-up period	1.729	0.215*	0.592**	1.274***
		(0.130)	(0.265)	(0.260)
Average hours worked per week since random assignment	10.550	-0.659	-3.038	-0.602
		(1.111)	(1.983)	(1.837)
Received Food Stamp benefits in month prior to the survey	0.656	-0.066*	-0.128**	-0.124*
		(0.037)	(0.065)	(0.069)
Food Stamp benefits received in prior month	$219.81	-$43.38***	-$65.75***	-$42.28
		(15.766)	(24.457)	(28.490)
Received Supplemental Security Income (SSI) in month prior to the survey	0.188	-0.010	-0.072*	0.019
		(0.027)	(0.043)	(0.047)
SSI amount received in prior month	$127.17	$4.55	-$51.78	-$39.83
		(25.791)	(31.759)	(32.945)
Received TANF cash assistance in month prior to the survey	0.247	-0.044	-0.038	-0.141***
		(0.032)	(0.057)	(0.053)
TANF cash amount received in prior month	$107.83	-$29.90*	-$26.57	-$57.47**
		(15.763)	(23.659)	(27.491)
Number of birth children in current household	2.635	-0.385***	-0.690***	-0.067
		(0.088)	(0.131)	(0.177)
Number of elders in household	0.016	0.001	0.099**	0.136**
		(0.006)	(0.040)	(0.056)
Number of misc. non-relatives in household	0.025	-0.014	0.200**	0.080
		(0.009)	(0.079)	(0.060)
Number of children in household	2.766	-0.313***	-0.650***	-0.082
		(0.091)	(0.153)	(0.146)
Number of misc. other relatives in household	0.255	-0.021	1.133***	0.809***
		(0.048)	(0.199)	(0.178)
Number of adult's siblings in household	0.033	-0.005	0.094**	0.195**
		(0.015)	(0.041)	(0.078)
Total current household size	4.190	-0.400***	0.485**	0.772***
		(0.105)	(0.233)	(0.244)
Respondent or someone in household experienced crime in the past six months	0.162	-0.005	-0.023	0.051
		(0.030)	(0.056)	(0.061)
Respondent had a break-in (or attempted break-in) to home	0.100	-0.034	-0.015	-0.009
		(0.023)	(0.046)	(0.047)
Housing is crowded at time of survey	0.345	-0.054	0.114	0.115*
		(0.037)	(0.072)	(0.068)
Working at time of follow-up survey	0.500	-0.021	-0.101	-0.072
		(0.039)	(0.071)	(0.062)
Number of food related hardships in the past 30 days	2.219	0.512***	0.294	0.270
		(0.175)	(0.343)	(0.288)
Household food security scale score	3.108	0.717***	0.411	0.376
		(0.245)	(0.481)	(0.403)
Household type is multigenerational	0.099	0.010	0.286***	0.312***
		(0.020)	(0.065)	(0.064)
Household type is "other"	0.021	-0.016**	0.109**	0.010
		(0.007)	(0.043)	(0.022)

Exhibit A16: Correlations Between Follow-up Survey Adult Outcomes and Changes in Housing Independence

Outcome	Treatment Mean	Housing Independence Change Status: Non-independent at baseline TO Independent at follow-up Coefficient	Non-independent at baseline REMAIN Non-ind. at follow-up Coefficient	Independent at baseline TO Non-independent at follow-up Coefficient
Household type is single parent with children, no other relatives or non-relatives	0.678	0.039	-0.298***	-0.254***
		(0.034)	(0.076)	(0.068)
Household type is 2 parents with children, no other relatives or non-relatives	0.202	-0.033	-0.098**	-0.069
		(0.029)	(0.044)	(0.051)
Did not have a place of one's own to stay or living with others at some point during the past year	0.157	-0.012	0.444***	0.451***
		(0.026)	(0.070)	(0.064)
On the streets or living in shelters at some point during past year	0.039	-0.006	0.211***	0.154***
		(0.012)	(0.056)	(0.050)
Living with friends, relatives, or others at some point during past year	0.113	-0.007	0.233***	0.295***
		(0.023)	(0.067)	(0.063)
Rents or owns home or apartment				
Food expenditures per person in the month before the survey	$31.50	$0.89	-$2.79	-$3.09
		(2.686)	(3.287)	(3.840)
Food expenditures in the month before the survey	$116.21	-$9.57	$4.60	$14.14
		(8.102)	(11.898)	(19.113)
"Big problem" with any of below 5 neighborhood conditions	0.284	-0.047	-0.144**	-0.061
		(0.037)	(0.061)	(0.062)
"Big problem" or "small problem" in neighborhood with abandoned buildings	0.178	-0.028	-0.055	0.012
		(0.032)	(0.057)	(0.055)
"Big problem" or "small problem" in neighborhood with people drinking in public	0.310	0.010	-0.083	0.069
		(0.038)	(0.062)	(0.073)
"Big problem" or "small problem" in neighborhood with graffiti or writing on the walls	0.246	-0.005	-0.105*	-0.058
		(0.036)	(0.058)	(0.063)
"Big problem" or "small problem" in neighborhood with groups of people just hanging out	0.370	-0.047	-0.137**	-0.064
		(0.039)	(0.067)	(0.066)
"Big problem" or "small problem" in neighborhood with litter or trash on the streets or sidewalk	0.459	-0.076*	-0.200***	-0.051
		(0.041)	(0.066)	(0.071)
Number of workers in the household	0.690	0.012	0.276**	0.251**
		(0.050)	(0.117)	(0.109)
Cash income below poverty threshold	0.854	0.003	0.066	0.053
		(0.026)	(0.042)	(0.046)
Cash income below 75% of poverty threshold	0.761	-0.028	0.077	0.060
		(0.034)	(0.054)	(0.052)
Cash and near-cash income below poverty threshold	0.609	0.016	0.249***	0.237***
		(0.042)	(0.062)	(0.054)
Cash and near-cash income below 75% of poverty threshold	0.411	0.019	0.389***	0.395***
		(0.040)	(0.065)	(0.064)
Amount spent in rent, including utilities, in month before survey	$483.71	$41.98*	$307.10***	$108.91**
		(23.845)	(77.700)	(54.519)
Number of rooms at time of survey	4.142	-0.051	0.189	-0.149
		(0.102)	(0.231)	(0.209)

Notes: Robust Standard errors in parentheses.
*** indicates p < .01, ** indicates p < .05, * indicates p < .10

Exhibit A17: Correlations Between Follow-up Neighborhood and Administrative Outcomes and Changes in Housing Independence

Outcome	Treatment Mean	Housing Independence Change Status: Non-independent at baseline TO Independent at follow-up Coefficient	Non-independent at baseline REMAIN Non-ind. at follow-up Coefficient	Independent at baseline TO Non-independent at follow-up Coefficient
Moved from baseline Census tract	0.692	-0.024	-0.320***	-0.026
		(0.036)	(0.071)	(0.067)
Percent below poverty level	25.583	-0.953	1.480	-1.148
		(0.887)	(1.620)	(1.742)
Percent of civilians employed	87.907	0.508	-0.374	0.035
		(0.415)	(0.695)	(0.785)
Percent of households with public assistance	9.124	-0.281	0.319	-0.932
		(0.400)	(0.642)	(0.842)
Percent of households with single female heads	21.768	-0.072	-0.809	-0.586
		(0.643)	(1.178)	(1.281)
Percent of adults with less than 9th grade education	14.922	-0.974	2.450*	-0.418
		(0.706)	(1.284)	(1.158)
Percent of youths not in school and not in the labor force	9.148	0.400	-0.105	-1.599*
		(0.568)	(0.768)	(0.879)
Percent minority	66.993	-1.016	4.420*	-0.294
		(1.323)	(2.294)	(2.134)
Percent black	32.440	-0.030	1.546	1.905
		(1.580)	(2.818)	(1.983)
Percent Hispanic	26.698	-0.607	3.373	-1.804
		(1.217)	(2.182)	(2.091)
Number of quarters with positive (>0) earnings	11.026	-0.073	-0.761	-0.006
		(0.370)	(0.654)	(0.621)
Total earnings	$29,475	$38	-$2,786	-$2,886
		(1661.871)	(3039.520)	(2483.118)
Number of quarters with receipt of TANF	11.350	0.342	-0.725	-1.712***
		(0.392)	(0.653)	(0.645)
Total TANF cash benefits	$12,192	-$136	-$600	-$2,049**
		(528.422)	(781.140)	(923.610)
Number of quarters with receipt of Food Stamps	15.308	0.523	-1.110	-0.977
		(0.453)	(0.745)	(0.957)
Total Food Stamp benefits	$13,280	$538	-$1,042	-$584
		(524.864)	(738.410)	(1096.897)

Notes:
Robust standard errors in parentheses.
*** indicates p < .01, ** indicates p < .05, * indicates p < .10

Exhibit A18: Correlations Between Follow-up Survey Child Outcomes and Changes in Housing Independence

Outcome	Treatment Mean	Housing Independence Change Status: Non-independent at baseline TO Independent at follow-up	Non-independent at baseline REMAIN Non-ind. at follow-up	Independent at baseline TO Non-independent at follow-up
		Coefficient	Coefficient	Coefficient
Child has ever repeated a grade	0.199	-0.001 (0.028)	0.001 (0.061)	0.017 (0.055)
In past year, parent worked with youth group or other activity outside of school	0.178	0.013 (0.035)	-0.057 (0.069)	0.038 (0.070)
Child not in school due to a problem (health problems, financial problems, incarceration, mental health etc.	0.015	0.007 (0.008)	0.005 (0.014)	0.009 (0.015)
Child in activities at school at 3:45 PM	0.141	-0.037 (0.026)	-0.051 (0.044)	-0.039 (0.044)
Child could be seen/heard by adult at 3:45 PM	0.944	0.014 (0.016)	-0.001 (0.036)	0.002 (0.022)
Child had problems involving police contacting parent since random assignment	0.161	0.030 (0.050)	0.140 (0.090)	-0.033 (0.063)
Child hangs around with kids who get into trouble	0.150	0.000 (0.029)	-0.002 (0.052)	-0.034 (0.040)

Notes:
Robust standard errors in parentheses.
*** indicates p < .01, ** indicates p < .05, * indicates p < .10

Exhibit A19: Impacts of the Voucher on Long Term Housing Independence and Self Sufficiency (Subgroups)

	Independent and Non-assisted at Follow-up			Independent, Non-assisted, with Low Rent-Burden at Follow-up		
	Sample Size	Control Mean	ITT Impact	Sample Size	Control Mean	ITT Impact
All Follow-up Sample	2,474	0.369	-0.058*** (0.020)	2,286	0.084	0.005 (0.013)
Age at baseline						
Less than 24	841	0.336	-0.036 (0.036)	792	0.082	0.005 (0.021)
25-34	985	0.357	-0.037 (0.033)	902	0.085	0.027 (0.022)
35-44	504	0.438	-0.063 (0.049)	462	0.094	-0.021 (0.034)
45 or older	143	0.391	-0.382*** (0.130)			
Race/Ethnicity						
White, Non-Hispanic	385	0.586	-0.111* (0.062)	356	0.133	0.030 (0.046)
Black, Non-Hispanic	1,414	0.255	-0.024 (0.025)	1,303	0.060	0.006 (0.015)
Hispanic	530	0.440	-0.113** (0.049)	499	0.080	-0.006 (0.027)
Education at baseline						
High school diploma	967	0.389	-0.034 (0.034)	914	0.091	0.031 (0.023)
GED only	482	0.414	-0.062 (0.048)	436	0.069	0.018 (0.030)
Neither high school diploma nor GED	852	0.345	-0.093*** (0.034)	777	0.087	-0.036* (0.022)
School Enrollment at baseline						
Enrolled in school	404	0.422	-0.069 (0.052)	378	0.126	0.035 (0.035)
Not enrolled in school	1,970	0.358	-0.061*** (0.023)	1,816	0.074	0.008 (0.014)
Presence of children at baseline						
Any dependent children	2,275	0.377	-0.062*** (0.021)	2,104	0.083	0.007 (0.014)
No dependent children	184	0.297	-0.026 (0.073)	167	0.097	-0.010 (0.049)
Youngest Household Member at baseline						
Youngest household member less than 6	1,714	0.351	-0.060** (0.024)	1,598	0.082	0.004 (0.016)
Youngest household member 6-17	754	0.412	-0.071* (0.039)	682	0.088	0.013 (0.025)
Youngest household member 18 or more						
Employment Status at baseline						
Employed	1,026	0.418	-0.052 (0.033)	956	0.095	0.033 (0.025)
Not employed, with reservation wage of:						
$3.00 to $5.99	75	0.466	-0.498** (0.203)			
$6.00 to $8.99	705	0.316	-0.067* (0.038)	665	0.095	-0.026 (0.025)
$9.00 to $12.99	316	0.351	-0.058 (0.055)	292	0.051	0.027 (0.034)
$13.00 to $15.99	82	0.398	-0.134 (0.209)			
Total not employed	1,348	0.341	-0.063** (0.028)			
Employment Background at baseline						
Ever employed	2,139	0.394	-0.063*** (0.022)	1,988	0.088	0.010 (0.015)
Never employed	310	0.221	-0.031 (0.057)	274	0.060	-0.014 (0.025)

Exhibit A19: Impacts of the Voucher on Long Term Housing Independence and Self Sufficiency (Subgroups)

	Independent and Non-assisted at Follow-up			Independent, Non-assisted, with Low Rent-Burden at Follow-up		
	Sample Size	**Control Mean**	**ITT Impact**	**Sample Size**	**Control Mean**	**ITT Impact**
Job Training Status at baseline						
Enrolled in job training	344	0.344	-0.081 (0.053)	319	0.082	0.041 (0.039)
Enrolled in (but yet to start) job training	187	0.322	-0.059 (0.084)	180	0.072	-0.024 (0.043)
Not enrolled in job training	1,921	0.380	-0.057** (0.023)	1,768	0.086	0.005 (0.016)
Moving for Employment Reasons at baseline						
Desired to move for employment reasons	362	0.313	-0.056 (0.051)	339	0.084	0.009 (0.038)
Did not desire to move for employment reasons	2,102	0.379	-0.061*** (0.022)	1,938	0.082	0.003 (0.015)
Housing Status at baseline						
Rents or owns apartment or house	1,317	0.427	-0.060** (0.029)	1,219	0.104	0.008 (0.021)
Lives with friends/relatives or in shelter	753	0.323	-0.051 (0.038)	703	0.071	-0.002 (0.023)
Resides in public or assisted housing	375	0.241	-0.068 (0.045)	339	0.034	-0.008 (0.021)
TANF Receipt at baseline						
Not receiving TANF	506	0.384	-0.029 (0.046)	471	0.102	0.041 (0.036)
Receiving TANF, expiring in:						
Less than 6 months	329	0.281	0.052 (0.054)	301	0.046	0.033 (0.031)
6 to 12 months	183	0.335	-0.093 (0.074)	168	0.056	0.111 (0.055)
12 to 18 months	142	0.262	-0.114 (0.092)	136	0.080	-0.035 (0.077)
More than 18 months	231	0.430	-0.003 (0.074)	224	0.077	-0.007 (0.050)
Total receiving TANF	1,852	0.372	-0.076*** (0.024)	1,704	0.081	-0.011 (0.014)

Notes:
ITT = "Intent-to-Treat". Robust standard errors in parentheses.
*** indicates p < .01, ** indicates p < .05, * indicates p < .10

Exhibit A20: Baseline Correlates of Subsequent Homelessness (Broad Definition)

Outcome	Model 1[a]	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Race/ethnicity is white, non-Hispanic	-0.064	-0.077**						
	(0.059)	(0.038)						
Ethnicity is Hispanic	-0.063	-0.033						
	(0.046)	(0.035)						
Race/ethnicity is non-black, non-white, non-Hispanic	-0.079	-0.093						
	(0.084)	(0.065)						
Race/ethnicity - response is missing	-0.061	0.093						
	(0.125)	(0.157)						
Someone in household receiving Supplemental Security Income (SSI) at baseline	0.054		0.074					
	(0.046)		(0.046)					
Someone in household receiving Supplemental Security Income (SSI) at baseline - response is missing	0.069		0.151*					
	(0.085)		(0.083)					
Working for pay at baseline	0.025			-0.069**				
	(0.263)			(0.030)				
Working for pay at baseline - response is missing	-0.133			-0.044				
	(0.141)			(0.080)				
Had ever worked for pay at baseline	0.040			0.052				
	(0.045)			(0.043)				
Had ever worked for pay at baseline - response is missing	0.261			0.306				
	(0.204)			(0.193)				
Age of youngest person in the household is 6-17 years	-0.019				-0.067**			
	(0.038)				(0.029)			
Age of youngest person in the household - response is missing	-0.989				0.338			
	(0.682)				(0.339)			
Marital status is never married	0.032					0.067**		
	(0.035)					(0.029)		
Marital status - response is missing	0.089					0.099		
	(0.087)					(0.066)		
Lives with friends or relatives, in homeless shelter, or in transitional housing at baseline	0.087**						0.089*	
	(0.038)						(0.033)	
Lives in public or assisted housing at baseline	-0.051						-0.021	
	(0.042)						(0.037)	
Type of housing at baseline - response is missing	0.133						0.202	
	(0.159)						(0.170)	
Knows when TANF benefits expire, 6-12 months after baseline date	-0.035							0.021
	(0.066)							(0.067)
Knows when TANF benefits expire, 12-18 months after baseline date	-0.091							-0.037
	(0.072)							(0.071)
Knows when TANF benefits	-0.116**							-0.078

Exhibit A20: Baseline Correlates of Subsequent Homelessness (Broad Definition)

Outcome	Model 1[a]	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
expire, more than 18 months after baseline date	(0.059)							(0.056)
Not receiving TANF/AFDC at baseline, or does not know when TANF benefits expire, or no response to expiration question	-0.070							-0.037
	(0.047)							(0.043)
Had moved more than three times in 5 years before baseline	0.058*							
	(0.032)							
Looking for paying work at baseline and has reservation wage of $3 - $5.99 for a job that also provided benefits like health insurance	0.221**							
	(0.095)							
Looking for paying work at baseline and has reservation wage of $9 - $12.99 for a job that also provided benefits like health insurance	-0.030							
	(0.045)							
Looking for paying work at baseline and has reservation wage of $13 - $15.99 for a job that also provided benefits like health insurance	-0.037							
	(0.077)							
Rent burden at baseline	0.477***							
	(0.148)							
Lives in Atlanta area at baseline	-10.657*							
	(5.456)							
Lives in Augusta area at baseline	-8.808**							
	(4.444)							
Lives in Houston at baseline	-9.139*							
	(4.649)							
Lives in Spokane area at baseline	-8.389**							
	(4.264)							
Monthly Metropolitan Statistical Area (MSA)-level unemployment rate for the site where the respondent lived, averaged over the twelve months prior to the respondent's baseline date	-1.059*							
	(0.541)							

Notes:
Robust standard errors in parentheses.
*** indicates p < .01, ** indicates p < .05, * indicates p < .10
[a] Model 1 includes full set of covariates, a subset of which are shown above.

Exhibit A21: Baseline Correlates of Subsequent Homelessness (On the Streets or In a Shelter)

Outcome	Model 1[a]	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Race/ethnicity is white, non-Hispanic	-0.087**	-0.025						
	(0.042)	(0.021)						
Ethnicity is Hispanic	-0.041	-0.010						
	(0.030)	(0.021)						
Race/ethnicity is non-black, non-white, non-Hispanic	-0.061	-0.016						
	(0.054)	(0.041)						
Race/ethnicity - response is missing	-0.155***	0.089						
	(0.057)	(0.144)						
Someone in household receiving Supplemental Security Income (SSI) at baseline	0.001		-0.002					
	(0.024)		(0.024)					
Someone in household receiving Supplemental Security Income (SSI) at baseline - response is missing	-0.023		0.041					
	(0.052)		(0.056)					
Working for pay at baseline	0.025			-0.025				
	(0.122)			(0.018)				
Working for pay at baseline - response is missing	-0.152			-0.020				
	(0.100)			(0.045)				
Had ever worked for pay at baseline	-0.004			-0.007				
	(0.029)			(0.027)				
Had ever worked for pay at baseline - response is missing	0.098			0.214				
	(0.149)			(0.177)				
Age of youngest person in the household is 6-17 years	-0.004				-0.008			
	(0.019)				(0.018)			
Age of youngest person in the household - response is missing	0.483				0.537			
	(0.429)				(0.338)			
Marital status is never married	-0.024					-0.005		
	(0.020)					(0.017)		
Marital status - response is missing	0.030					0.043		
	(0.045)					(0.050)		
Lives with friends or relatives, in homeless shelter, or in transitional housing at baseline	0.036						0.027	
	(0.023)						(0.020)	

Exhibit A21: Baseline Correlates of Subsequent Homelessness (On the Streets or In a Shelter)

Outcome	Model 1[a]	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Lives in public or assisted housing at baseline	0.007						-0.017	
	(0.024)						(0.019)	
Type of housing at baseline - response is missing	0.063						0.192	
	(0.091)						(0.146)	
Knows when TANF benefits expire, 6-12 months after baseline date	-0.045							-0.051*
	(0.032)							(0.031)
Knows when TANF benefits expire, 12-18 months after baseline date	0.002							-0.005
	(0.043)							(0.046)
Knows when TANF benefits expire, more than 18 months after baseline date	-0.016							-0.028
	(0.035)							(0.036)
Not receiving TANF/AFDC at baseline, or does not know when TANF benefits expire, or no response to expiration question	-0.010							-0.018
	(0.028)							(0.029)

Notes:
Robust standard errors in parentheses.
*** indicates p < .01, ** indicates p < .05, * indicates p < .10
[a] Model 1 includes full set of covariates, a subset of which are shown above.

Exhibit A22: Baseline Correlates of Subsequent Homelessness (Living with Friends or Relatives)

Outcome	Model 1[a]	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Race/ethnicity is white, non-Hispanic	0.025	-0.057*						
	(0.044)	(0.033)						
Ethnicity is Hispanic	-0.016	-0.023						
	(0.038)	(0.031)						
Race/ethnicity is non-black, non-white, non-Hispanic	-0.001	-0.072						
	(0.069)	(0.055)						
Race/ethnicity - response is missing	0.101	0.010						
	(0.106)	(0.116)						
Someone in household receiving Supplemental Security Income (SSI) at baseline	0.048		0.069*					
	(0.042)		(0.043)					
Someone in household receiving Supplemental Security Income (SSI) at baseline - response is missing	0.076		0.106					
	(0.075)		(0.076)					
Working for pay at baseline	0.012			-0.044*				
	(0.256)			(0.026)				
Working for pay at baseline - response is missing	0.017			-0.017				
	(0.095)			(0.071)				
Had ever worked for pay at baseline	0.050			0.062*				
	(0.038)			(0.036)				
Had ever worked for pay at baseline - response is missing	0.167			0.095				
	(0.171)			(0.157)				
Age of youngest person in the household is 6-17 years	-0.014				-0.059**			
	(0.034)				(0.025)			
Age of youngest person in the household - response is missing	-1.507***				-(0.193)***			
	(0.571)				(0.015)			
Marital status is never married	0.050*					0.071***		
	(0.029)					(0.025)		
Marital status - response is missing	0.040					0.047		
	(0.080)					(0.051)		
Lives with friends or relatives, in homeless shelter, or in transitional housing at baseline	0.058*						0.070**	
	(0.034)						(0.029)	
Lives in public or assisted housing at baseline	-0.053						0.002	
	(0.037)						(0.033)	
Type of housing at baseline - response is missing	0.083						0.019	
	(0.148)						(0.152)	
Knows when TANF benefits expire, 6-12 months after baseline date	0.013							0.073
	(0.058)							(0.062)
Knows when TANF benefits expire, 12-18 months after baseline date	-0.084							-0.028
	(0.064)							(0.060)
Knows when TANF benefits expire, more than 18 months after baseline date	-0.083*							-0.038
	(0.050)							(0.048)
Not receiving TANF/AFDC at baseline, or does not know when TANF benefits expire, or no response to expiration question	-0.049							-0.012
	(0.039)							(0.036)

Notes: Robust standard errors in parentheses.
*** indicates p < .01, ** indicates p < .05, * indicates p < .10
[a] Model 1 includes full set of covariates, a subset of which are shown above.

Exhibit A23: Model Coefficients for "Ever Leased-Up With a Voucher"

Covariate	Coefficient	Robust S.E.	t-Statistic	p-value
Annual earnings at baseline	0.000	(0.000)	1.190	0.235
Annual earnings at baseline, squared	0.000	(0.000)	-1.410	0.160
Annual earnings at baseline, cubed	0.000	(0.000)	1.000	0.315
Not working for pay at baseline or response to earnings questions is missing	0.023	(0.066)	0.350	0.729
Working for pay at baseline	-0.041	(0.109)	-0.370	0.710
Working for pay at baseline - response is missing	-0.089	(0.079)	-1.120	0.261
Had ever worked for pay at baseline	-0.055	(0.021)	-2.680	0.007
Had ever worked for pay at baseline - response is missing	-0.010	(0.102)	-0.090	0.926
Looking for paying work at baseline and has reservation wage of $3 - $5.99 for a job that also provided benefits like health insurance	0.009	(0.039)	0.240	0.813
Looking for paying work at baseline and has reservation wage of $9 - $12.99 for a job that also provided benefits like health insurance	-0.010	(0.023)	-0.420	0.671
Looking for paying work at baseline and has reservation wage of $13 - $15.99 for a job that also provided benefits like health insurance	-0.102	(0.039)	-2.590	0.010
Not looking for paying work at baseline or response to reservation wage question is missing	-0.017	(0.017)	-1.000	0.315
Has high school diploma at baseline	-0.021	(0.017)	-1.290	0.198
Has G.E.D. at baseline	0.013	(0.020)	0.660	0.509
Have HS diploma or GED at baseline - response is missing	0.031	(0.037)	0.840	0.402
Enrolled in (and attending) a job training program at baseline	-0.015	(0.023)	-0.650	0.514
Enrolled in (but not yet started) a job training program at baseline	0.030	(0.026)	1.150	0.251
Enrollment in job training program - response is missing	0.042	(0.084)	0.500	0.617
Lives with friends or relatives, in homeless shelter, or in transitional housing at baseline	-0.020	(0.018)	-1.090	0.274
Lives in public or assisted housing at baseline	0.002	(0.024)	0.100	0.918
Type of housing at baseline - response is missing	0.021	(0.061)	0.350	0.730
Age of youngest person in the household is 6-17 years	-0.027	(0.018)	-1.520	0.130
Age of youngest person in the household is 18 or more years	0.028	(0.035)	0.780	0.435
In school at baseline	-0.003	(0.020)	-0.140	0.885
In school at baseline - response is missing	0.002	(0.048)	0.030	0.973
Race/ethnicity is white, non-Hispanic	-0.111	(0.025)	-4.390	0.000
Ethnicity is Hispanic	-0.150	(0.022)	-6.850	0.000
Race/ethnicity is non-black, non-white, non-Hispanic	-0.107	(0.033)	-3.270	0.001
Race/ethnicity - response is missing	-0.111	(0.071)	-1.570	0.118
Age at baseline	-0.011	(0.023)	-0.460	0.643
Age at baseline, squared	0.000	(0.001)	0.030	0.978
Age at baseline, cubed	0.000	(0.000)	0.280	0.776

Exhibit A23: Model Coefficients for "Ever Leased-Up With a Voucher"

Covariate	Coefficient	Robust S.E.	t-Statistic	p-value
Age at baseline - response is missing	-0.148	(0.089)	-1.670	0.095
Respondent is male	-0.066	(0.028)	-2.380	0.017
Gender of respondent is unknown	-0.001	(0.102)	-0.010	0.996
Has a car that runs at baseline	0.017	(0.016)	1.050	0.293
Has a car that runs at baseline - response is missing	0.023	(0.155)	0.150	0.879
Has valid driver's license at baseline	0.030	(0.016)	1.930	0.054
Has valid driver's license at baseline - response is missing	-0.026	(0.151)	-0.170	0.866
Receiving TANF/AFDC at baseline	0.051	(0.024)	2.180	0.030
Receiving TANF/AFDC at baseline - response is missing	-0.013	(0.156)	-0.080	0.933
Had ever received TANF/AFDC for own children at baseline	0.089	(0.160)	0.560	0.576
Had ever received TANF/AFDC for own children at baseline - response is missing	0.017	(0.201)	0.090	0.932
Knows when TANF benefits expire, 6-12 months after baseline date	0.038	(0.032)	1.180	0.237
Knows when TANF benefits expire, 12-18 months after baseline date	0.064	(0.033)	1.900	0.057
Knows when TANF benefits expire, more than 18 months after baseline date	-0.014	(0.031)	-0.460	0.647
Not receiving TANF/AFDC at baseline, or does not know when TANF benefits expire, or no response to expiration question	0.035	(0.023)	1.490	0.137
Someone in household receiving Food Stamps at baseline	0.043	(0.023)	1.850	0.065
Someone in household receiving Food Stamps at baseline - response is missing	0.074	(0.100)	0.730	0.463
Someone in household receiving Supplemental Security Income (SSI) at baseline	-0.041	(0.023)	-1.780	0.075
Someone in household receiving Supplemental Security Income (SSI) at baseline - response is missing	0.048	(0.046)	1.040	0.298

Exhibit A23: Model Coefficients for "Ever Leased-Up With a Voucher"

Covariate	Coefficient	Robust S.E.	t-Statistic	p-value
Someone in household receiving Medicaid at baseline	-0.010	(0.016)	-0.610	0.541
Someone in household receiving Medicaid at baseline - response is missing	-0.050	(0.082)	-0.610	0.543
Marital status is never married	0.013	(0.017)	0.780	0.436
Marital status - response is missing	-0.040	(0.050)	-0.800	0.422
Is responsible for children living at home at baseline	0.062	(0.024)	2.560	0.011
Is responsible for children living at home at baseline - response is missing	0.131	(0.128)	1.020	0.306
Household size is 1 or 2 people	-0.009	(0.020)	-0.450	0.651
Household size is 4 people	-0.019	(0.019)	-1.020	0.310
Household size is 5 people	0.002	(0.022)	0.110	0.914
Household size is 6 people	-0.050	(0.028)	-1.770	0.077
Household size is 7 people	-0.050	(0.040)	-1.240	0.215
Household size is 8 or more people	-0.047	(0.035)	-1.340	0.181
Type of housing at baseline - response is missing	-0.090	(0.341)	-0.260	0.791
Rent burden at baseline (calculated as (12*x_rent)/x_hhdinc)	-0.024	(0.090)	-0.270	0.791
Rent burden at baseline - response is missing	0.026	(0.035)	0.730	0.467
Main reason or second most important reason for wanting to move is to be near a job or to get a job	0.016	(0.019)	0.850	0.393
Main reason or second most important reason for wanting to move is to be near a job or to get a job - response is missing	-0.058	(0.141)	-0.410	0.680
Had moved more than three times in 5 years before baseline	0.000	(0.015)	0.030	0.977
Had moved more than three times in 5 years before baseline - response is missing	-0.071	(0.093)	-0.760	0.447
Lives in Atlanta area at baseline	4.979	(2.024)	2.460	0.014
Lives in Augusta area at baseline	4.298	(1.656)	2.600	0.009
Lives in Houston at baseline	4.337	(1.725)	2.510	0.012
Lives in Los Angeles area at baseline	3.884	(1.596)	2.430	0.015
Lives in Spokane area at baseline	3.971	(1.583)	2.510	0.012
Monthly Metropolitan Statistical Area (MSA)-level unemployment rate for the site where the respondent lived, averaged over the twelve months prior to the respondent's baseline date	0.517	(0.201)	2.580	0.010

Notes:
*** indicates p < .01, ** indicates p < .05, * indicates p < .10

Exhibit A24: Model Coefficients for "Relinquished a Voucher"

Covariate	Coefficient	Robust S.E.	t-Statistic	p-value
Annual earnings at baseline	0.000	(0.000)	0.010	0.992
Annual earnings at baseline, squared	0.000	(0.000)	-0.040	0.969
Annual earnings at baseline, cubed	0.000	(0.000)	0.070	0.940
Not working for pay at baseline or response to earnings questions is missing	-0.055	(0.071)	-0.780	0.435
Working for pay at baseline	0.019	(0.149)	0.130	0.896
Working for pay at baseline - response is missing	-0.040	(0.079)	-0.510	0.613
Had ever worked for pay at baseline	0.013	(0.024)	0.530	0.595
Had ever worked for pay at baseline - response is missing	0.107	(0.075)	1.430	0.153
Looking for paying work at baseline and has reservation wage of $3 - $5.99 for a job that also provided benefits like health insurance	0.019	(0.047)	0.410	0.684
Looking for paying work at baseline and has reservation wage of $9 - $12.99 for a job that also provided benefits like health insurance	-0.026	(0.027)	-0.960	0.336
Looking for paying work at baseline and has reservation wage of $13 - $15.99 for a job that also provided benefits like health insurance	-0.073	(0.045)	-1.650	0.099
Not looking for paying work at baseline or response to reservation wage question is missing	-0.023	(0.020)	-1.110	0.267
Has high school diploma at baseline	0.014	(0.020)	0.720	0.473
Has G.E.D. at baseline	-0.004	(0.023)	-0.180	0.860
Have HS diploma or GED at baseline - response is missing	0.058	(0.047)	1.250	0.210
Enrolled in (and attending) a job training program at baseline	-0.049	(0.026)	-1.920	0.055
Enrolled in (but not yet started) a job training program at baseline	-0.034	(0.029)	-1.150	0.249
Enrollment in job training program - response is missing	0.065	(0.101)	0.640	0.519
Lives with friends or relatives, in homeless shelter, or in transitional housing at baseline	0.032	(0.022)	1.470	0.142
Lives in public or assisted housing at baseline	-0.060	(0.024)	-2.530	0.012
Type of housing at baseline - response is missing	-0.049	(0.061)	-0.810	0.418
Age of youngest person in the household is 6-17 years	0.056	(0.022)	2.530	0.011
Age of youngest person in the household is 18 or more years	0.032	(0.041)	0.770	0.442
In school at baseline	0.004	(0.024)	0.190	0.852
In school at baseline - response is missing	-0.073	(0.048)	-1.510	0.131
Race/ethnicity is white, non-Hispanic	0.158	(0.035)	4.520	0.000
Ethnicity is Hispanic	0.121	(0.026)	4.610	0.000
Race/ethnicity is non-black, non-white, non-Hispanic	0.030	(0.042)	0.710	0.481
Race/ethnicity - response is missing	-0.018	(0.062)	-0.290	0.775
Age at baseline	0.017	(0.026)	0.630	0.530
Age at baseline, squared	-0.001	(0.001)	-0.740	0.462

Exhibit A24: Model Coefficients for "Relinquished a Voucher"

Covariate	Coefficient	Robust S.E.	t-Statistic	p-value
Age at baseline, cubed	0.000	(0.000)	0.690	0.491
Age at baseline - response is missing	0.123	(0.112)	1.100	0.270
Respondent is male	0.059	(0.038)	1.560	0.119
Gender of respondent is unknown	0.247	(0.143)	1.730	0.084
Has a car that runs at baseline	-0.022	(0.019)	-1.140	0.256
Has a car that runs at baseline - response is missing	-0.076	(0.132)	-0.580	0.565
Has valid driver's license at baseline	0.038	(0.018)	2.070	0.038
Has valid driver's license at baseline - response is missing	-0.025	(0.142)	-0.170	0.861
Receiving TANF/AFDC at baseline	-0.051	(0.027)	-1.890	0.058
Receiving TANF/AFDC at baseline - response is missing	0.122	(0.177)	0.690	0.493
Had ever received TANF/AFDC for own children at baseline	0.122	(0.183)	0.670	0.505
Had ever received TANF/AFDC for own children at baseline - response is missing	-0.143	(0.063)	-2.270	0.023
Knows when TANF benefits expire, 6-12 months after baseline date	-0.020	(0.036)	-0.540	0.587
Knows when TANF benefits expire, 12-18 months after baseline date	0.010	(0.040)	0.240	0.810
Knows when TANF benefits expire, more than 18 months after baseline date	-0.035	(0.035)	-1.000	0.317
Not receiving TANF/AFDC at baseline, or does not know when TANF benefits expire, or no response to expiration question	-0.023	(0.026)	-0.890	0.372
Someone in household receiving Food Stamps at baseline	-0.020	(0.027)	-0.740	0.457
Someone in household receiving Food Stamps at baseline - response is missing	-0.122	(0.085)	-1.430	0.152
Someone in household receiving Supplemental Security Income (SSI) at baseline	0.032	(0.027)	1.180	0.238
Someone in household receiving Supplemental Security Income (SSI) at baseline - response is missing	0.017	(0.044)	0.390	0.695
Someone in household receiving Medicaid at baseline	0.037	(0.019)	1.930	0.054
Someone in household receiving Medicaid at baseline - response is missing	0.093	(0.082)	1.140	0.256
Marital status is never married	0.006	(0.020)	0.300	0.767
Marital status - response is missing	0.025	(0.062)	0.410	0.684
Is responsible for children living at home at baseline	-0.003	(0.029)	-0.090	0.926
Is responsible for children living at home at baseline - response is missing	-0.156	(0.063)	-2.470	0.013
Household size is 1 or 2 people	-0.006	(0.024)	-0.260	0.793
Household size is 4 people	-0.008	(0.023)	-0.360	0.718
Household size is 5 people	-0.025	(0.027)	-0.950	0.344
Household size is 6 people	0.008	(0.033)	0.250	0.799
Household size is 7 people	-0.033	(0.041)	-0.820	0.412
Household size is 8 or more people	-0.004	(0.041)	-0.090	0.931
Type of housing at baseline - response is missing	0.140	(0.275)	0.510	0.610
Rent burden at baseline (calculated as	0.027	(0.122)	0.220	0.825

Exhibit A24: Model Coefficients for "Relinquished a Voucher"

Covariate	Coefficient	Robust S.E.	t-Statistic	p-value
(12*x_rent)/x_hhdinc)				
Rent burden at baseline - response is missing	0.036	(0.040)	0.880	0.377
Main reason or second most important reason for wanting to move is to be near a job or to get a job	-0.007	(0.023)	-0.300	0.764
Main reason or second most important reason for wanting to move is to be near a job or to get a job - response is missing	-0.067	(0.092)	-0.720	0.469
Had moved more than three times in 5 years before baseline	0.017	(0.017)	1.010	0.315
Had moved more than three times in 5 years before baseline - response is missing	0.063	(0.133)	0.470	0.637
Lives in Atlanta area at baseline	-0.443	(2.506)	-0.180	0.860
Lives in Augusta area at baseline	-0.286	(2.051)	-0.140	0.889
Lives in Houston at baseline	-0.334	(2.135)	-0.160	0.876
Lives in Los Angeles area at baseline	(dropped)			
Lives in Spokane area at baseline	-0.077	(1.960)	-0.040	0.969
Monthly Metropolitan Statistical Area (MSA)-level unemployment rate for the site where the respondent lived, averaged over the twelve months prior to the respondent's baseline date	-0.030	(0.249)	-0.120	0.905

Notes:
*** indicates p < .01, ** indicates p < .05, * indicates p < .10

Exhibit A25: Descriptive Statistics of Voucher Usage Groups

Baseline Characteristic	Treatment Members Who Never Leased Up	Treatment Members Who Are Still Leased Up	Treatment Members Who Relinquished Voucher
N	**3,193**	**3,447**	**974**
Annual earnings at baseline	$5,878	$5,336	$5,318
Working for pay at baseline	41.2%	39.3%	38.9%
Working for pay at baseline - response is missing	7.4%	5.1%	3.2%
Had ever worked for pay at baseline	83.3%	82.2%	84.0%
Looking for paying work at baseline and has reservation wage of $3 - $5.99 for a job that also provided benefits like health insurance	2.7%	3.4%	4.4%
Looking for paying work at baseline and has reservation wage of $9 - $12.99 for a job that also provided benefits like health insurance	11.9%	12.3%	11.5%
Looking for paying work at baseline and has reservation wage of $13 - $15.99 for a job that also provided benefits like health insurance	3.3%	3.1%	1.6%
Has high school diploma at baseline	37.3%	36.4%	38.7%
Has G.E.D. at baseline	17.3%	18.6%	20.3%
Have HS diploma or GED at baseline - response is missing	10.5%	8.5%	7.2%
Enrolled in (and attending) a job training program at baseline	11.9%	13.9%	12.9%
Enrolled in (but not yet started) a job training program at baseline	6.2%	8.5%	7.4%
Enrollment in job training program - response is missing	3.8%	1.9%	1.3%
Lives with friends or relatives, in homeless shelter, or in transitional housing at baseline	30.1%	28.9%	32.8%
Lives in public or assisted housing at baseline	12.0%	17.4%	5.6%
Type of housing at baseline - response is missing	4.0%	2.6%	1.4%
Age of youngest person in the household is 0-6 years	63.5%	70.6%	66.6%
Age of youngest person in the household is 6-17 years	30.6%	25.6%	29.3%
Age of youngest person in the household is 18 or more years	5.9%	3.9%	4.1%
In school at baseline	15.2%	16.3%	17.7%
In school at baseline - response is missing	7.7%	5.7%	3.4%
Race/ethnicity is black, non-Hispanic	44.2%	61.3%	36.5%
Race/ethnicity is white, non-Hispanic	20.0%	11.4%	29.5%
Ethnicity is Hispanic	22.9%	19.0%	25.8%
Race/ethnicity is non-black, non-white, non-Hispanic	8.5%	6.1%	6.7%
Race/ethnicity - response is missing	4.3%	2.1%	1.5%
Age at baseline	31.2	29.9	29.7
Age less than 24 years	29.2%	35.4%	36.9%
Age is 25-34 years	38.6%	39.1%	37.5%
Age is 35-44 years	22.8%	18.2%	20.0%
Age is more than 45 or older	7.3%	6.6%	5.0%
Respondent is male	8.3%	5.5%	7.4%
Gender of respondent is unknown	3.5%	1.6%	1.4%
Has a car that runs at baseline	39.2%	36.1%	42.0%
Has a car that runs at baseline - response is missing	3.6%	1.6%	0.8%
Has valid driver's license at baseline	57.1%	56.3%	58.2%
Has valid driver's license at baseline - response is missing	3.5%	1.5%	0.9%
Receiving TANF/AFDC at baseline	70.8%	75.3%	78.1%
Receiving TANF/AFDC at baseline - response is	8.0%	5.1%	4.5%

Exhibit A25: Descriptive Statistics of Voucher Usage Groups

Baseline Characteristic	Treatment Members Who Never Leased Up	Treatment Members Who Are Still Leased Up	Treatment Members Who Relinquished Voucher
N	**3,193**	**3,447**	**974**
missing			
Had ever received TANF/AFDC for own children at baseline	92.1%	95.0%	95.9%
Had ever received TANF/AFDC for own children at baseline - response is missing	3.4%	1.4%	0.7%
Knows when TANF benefits expire, 6-12 months after baseline date	5.6%	7.2%	6.8%
Knows when TANF benefits expire, 12-18 months after baseline date	3.5%	5.3%	5.7%
Knows when TANF benefits expire, more than 18 months after baseline date	8.4%	8.8%	8.9%
Not receiving TANF/AFDC at baseline, or does not know when TANF benefits expire, or no response to expiration question	70.2%	65.7%	66.7%
Someone in household receiving Food Stamps at baseline	80.3%	85.2%	86.6%
Someone in household receiving Food Stamps at baseline - response is missing	3.8%	1.7%	1.0%
Someone in household receiving Supplemental Security Income (SSI) at baseline	12.0%	10.8%	10.5%
Someone in household receiving Supplemental Security Income (SSI) at baseline - response is missing	7.1%	5.0%	3.4%
Someone in household receiving Medicaid at baseline	62.2%	66.8%	57.0%
Someone in household receiving Medicaid at baseline - response is missing	4.6%	2.4%	1.2%
Marital status is never married	50.7%	60.3%	52.4%
Marital status - response is missing	8.3%	6.4%	4.4%
Is responsible for children living at home at baseline	85.8%	89.3%	90.2%
Is responsible for children living at home at baseline - response is missing	3.6%	1.6%	0.8%
Household size is 1 or 2 people	20.4%	19.3%	22.4%
Household size is 4 people	22.1%	22.4%	21.5%
Household size is 5 people	12.7%	14.7%	13.9%
Household size is 6 people	7.7%	7.5%	7.2%
Household size is 7 people	4.2%	4.1%	3.1%
Household size is 8 or more people	5.8%	4.7%	4.6%
Type of housing at baseline - response is missing	3.1%	1.2%	0.7%
Rent burden at baseline (calculated as (12*x_rent)/x_hhdinc)	21.0%	20.6%	21.8%
Rent burden at baseline - response is missing	64.1%	67.1%	66.9%
Main reason or second most important reason for wanting to move is to be near a job or to get a job	14.4%	14.7%	15.6%
Main reason or second most important reason for wanting to move is to be near a job or to get a job - response is missing	3.3%	1.4%	0.8%
Had moved more than three times in 5 years before baseline	34.7%	32.9%	44.9%
Had moved more than three times in 5 years before baseline - response is missing	3.8%	1.7%	1.2%
Lives in Atlanta area at baseline	19.4%	13.2%	4.0%
Lives in Augusta area at baseline	6.1%	12.8%	11.3%
Lives in Fresno area at baseline	33.5%	34.0%	38.1%
Lives in Houston at baseline	24.5%	30.7%	17.9%

Exhibit A25: Descriptive Statistics of Voucher Usage Groups

Baseline Characteristic	Treatment Members Who Never Leased Up	Treatment Members Who Are Still Leased Up	Treatment Members Who Relinquished Voucher
N	**3,193**	**3,447**	**974**
Lives in Los Angeles area at baseline	0.0%	0.0%	0.0%
Lives in Spokane area at baseline	16.5%	9.2%	28.7%
Monthly Metropolitan Statistical Area (MSA)-level unemployment rate for the site where the respondent lived, averaged over the twelve months prior to the respondent's baseline date	7.3	7.4	8.0

Exhibit A26: Comparison of Follow-up Survey Adult Outcomes for Relinquishers vs. Holders vs. Never-leasers

Outcome	Treatment Mean	Relinquishers (compared to Still Holders)	Never Leased Up (compared to Still Holders)	Relinquishers (compared to Never Leased Up)
		Coefficient	Coefficient	Coefficient
Number of moves during follow-up period	1.729	0.933***	0.395***	0.538***
		(0.166)	(0.113)	(0.186)
Average hours worked per week since random assignment	10.550	0.765	1.952*	-1.187
		(1.373)	(1.089)	(1.563)
Received Food Stamp benefits in month prior to the survey	0.656	-0.239***	-0.114***	-0.125**
		(0.044)	(0.033)	(0.049)
Food Stamp benefits received in prior month	$219.81	-$80.21***	-$33.96**	-$46.25**
		(17.439)	(13.558)	(19.196)
Received Supplemental Security Income (SSI) in month prior to the survey	0.188	-0.018	-0.020	0.002
		(0.031)	(0.026)	(0.037)
SSI amount received in prior month	$127.17	-$30.16	$14.54	-$44.70
		(30.027)	(41.100)	(59.741)
Received TANF cash assistance in month prior to the survey	0.247	-0.100***	-0.054*	-0.046
		(0.037)	(0.030)	(0.041)
TANF cash amount received in prior month	$107.83	-$39.00**	-$42.97***	$3.97
		(19.401)	(13.857)	(20.114)
Number of birth children in current household	2.635	-0.079	-0.089	0.010
		(0.095)	(0.079)	(0.105)
Number of elders in household	0.016	0.034**	0.028**	0.006
		(0.014)	(0.013)	(0.019)
Number of misc. non-relatives in household	0.025	0.059*	0.020	0.039
		(0.031)	(0.014)	(0.034)
Number of children in household	2.766	-0.051	-0.028	-0.024
		(0.100)	(0.080)	(0.109)
Number of misc. other relatives in household	0.255	0.404***	0.267***	0.138
		(0.089)	(0.063)	(0.100)
Number of adult's siblings in household	0.033	0.067**	0.019	0.047
		(0.030)	(0.018)	(0.035)
Total current household size	4.190	0.494***	0.361***	0.133
		(0.124)	(0.100)	(0.142)
Respondent or someone in household experienced crime in the past six months	0.162	-0.019	0.006	-0.025
		(0.033)	(0.028)	(0.037)
Respondent had a break-in (or attempted break-in) to home	0.100	-0.044*	-0.016	-0.028
		(0.025)	(0.023)	(0.029)
Housing is crowded at time of survey	0.345	0.097**	0.069**	0.028
		(0.042)	(0.034)	(0.048)
Working at time of follow-up survey	0.500	0.033	0.004	0.028
		(0.047)	(0.035)	(0.052)
Number of food related hardships in the past 30 days	2.219	0.177	0.171	0.005
		(0.195)	(0.155)	(0.221)
Household food security scale score	3.108	0.247	0.240	0.007
		(0.272)	(0.218)	(0.309)

Exhibit A26: Comparison of Follow-up Survey Adult Outcomes for Relinquishers vs. Holders vs. Never-leasers

Outcome	Treatment Mean	Relinquishers (compared to Still Holders)	Never Leased Up (compared to Still Holders)	Relinquishers (compared to Never Leased Up)
		Coefficient	Coefficient	Coefficient
Household type is multigenerational	0.099	0.123***	0.106***	0.017
		(0.029)	(0.025)	(0.036)
Household type is "other"	0.021	0.034*	0.018*	0.016
		(0.018)	(0.010)	(0.022)
Household type is single parent with children, no other relatives or non-relatives	0.678	-0.297***	-0.262***	-0.036
		(0.043)	(0.033)	(0.050)
Household type is 2 parents with children, no other relatives or non-relatives	0.202	0.140***	0.138***	0.003
		(0.037)	(0.029)	(0.044)
Did not have a place of one's own to stay or living with others at some point during the past year	0.157	0.311***	0.135***	0.176***
		(0.040)	(0.028)	(0.045)
On the streets or living in shelters at some point during past year	0.039	0.113***	0.033**	0.079***
		(0.027)	(0.014)	(0.030)
Living with friends, relatives, or others at some point during past year	0.113	0.180***	0.096***	0.085**
		(0.035)	(0.025)	(0.040)
Rents or owns home or apartment	0.890	-0.231***	-0.151***	-0.080*
		(0.036)	(0.025)	(0.042)
Food expenditures per person in the month before the survey	$31.50	-$5.13**	-$1.12	-$4.01*
		(2.027)	(2.058)	(2.194)
Food expenditures in the month before the survey	$116.21	-$6.09	-$0.03	-$6.06
		(7.099)	(6.716)	(7.434)
"Big problem" with any of below 5 neighborhood conditions	0.284	-0.005	0.041	-0.046
		(0.041)	(0.035)	(0.047)
"Big problem" or "small problem" in neighborhood with abandoned buildings	0.178	0.086**	0.052*	0.034
		(0.036)	(0.029)	(0.042)
"Big problem" or "small problem" in neighborhood with people drinking in public	0.310	0.016	0.042	-0.027
		(0.043)	(0.035)	(0.047)
"Big problem" or "small problem" in neighborhood with graffiti or writing on the walls	0.246	0.011	0.016	-0.005
		(0.040)	(0.032)	(0.043)
"Big problem" or "small problem" in neighborhood with groups of people just hanging out	0.370	-0.009	0.055	-0.065
		(0.043)	(0.037)	(0.049)
"Big problem" or "small problem" in neighborhood with litter or trash on the streets or sidewalk	0.459	0.032	0.091**	-0.059
		(0.046)	(0.038)	(0.052)
Number of workers in the household	0.690	0.248***	0.246***	0.002
		(0.063)	(0.049)	(0.071)
Cash income below poverty threshold	0.854	0.027	-0.017	0.043
		(0.032)	(0.027)	(0.037)
Cash income below 75% of poverty threshold	0.761	0.026	-0.021	0.046
		(0.039)	(0.031)	(0.044)

Exhibit A26: Comparison of Follow-up Survey Adult Outcomes for Relinquishers vs. Holders vs. Never-leasers

Outcome	Treatment Mean	Relinquishers (compared to Still Holders)	Never Leased Up (compared to Still Holders)	Relinquishers (compared to Never Leased Up)
		Coefficient	Coefficient	Coefficient
Cash and near-cash income below poverty threshold	0.609	0.255***	0.170***	0.085*
		(0.040)	(0.036)	(0.046)
Cash and near-cash income below 75% of poverty threshold	0.411	0.350***	0.269***	0.082
		(0.045)	(0.036)	(0.051)
Amount spent in rent, including utilities, in month before survey	$483.71	$295.06***	$198.09***	$96.97***
		(30.036)	(22.893)	(35.496)
Number of rooms at time of survey	4.142	-0.122	-0.145	0.023
		(0.127)	(0.100)	(0.146)

Notes:
Robust standard errors in parentheses.
*** indicates p < .01, ** indicates p < .05, * indicates p < .10

APPENDIX B: VOUCHER HOLDER PROFILES

Sherrie: Establishing an Independent Household in a New Neighborhood

At the time Sherrie received the voucher, she was living in a rented apartment with her four children (ages 7, 4, 2, and six months) and her mother. Sherrie and her family had been living there for about six years, but in the last six months the neighborhood had deteriorated. Her neighbors were disruptive, throwing beer cans in their driveway, arguing, and swearing, and eventually Sherrie stopped her children from playing outside and began looking for a new apartment. In searching for a new place to live, Sherrie sought out a neighborhood with better neighbors and better schools and an apartment with a yard where her children could play safely. After looking at three or four units, she found an apartment in what she describes as a completely different neighborhood, one where she had never lived before. The voucher did not affect her choice of neighborhood or apartment, but it made it easier financially for her to move.

The new apartment, where Sherrie and her children still lived at the time of the interview, had a yard, friendly neighbors, and is close to a school, bus line, and store. In the interview she described herself as "pretty satisfied" with the apartment and neighborhood and said that the school was much better at accommodating the needs of her children:

> *The other school didn't, to me they didn't really, a lot of the teachers or the ones in the office didn't really, they didn't seem genuine to me, in my own opinion. As far as dealing with the children it was just a job, you know. But here at this school I notice that a lot of the staff, even if it's in the office the secretaries or if it's the teachers or music teacher or gym teacher, if they have concerns then they'll inform you, which give you a leg up so that you can help your children. Or you can take care of things that need to be taken care of or address them before problems arise.*

At the time of the interview Sherrie had no plans to move. Having grown up in a family that moved frequently, stability is very important to her.

When Sherrie first received the voucher and before she moved, she was working more than 40 hours a week at three separate catering jobs. She quit those jobs when she got the voucher and when her mother, who had been providing childcare, moved away. She then went on TANF for three years and during that time trained to become a Certified Nursing Assistant (CNA). At the time of the interview she was working full-time at a retirement community and planning to apply for grants to pursue a nursing degree. The father of her youngest son worked a swing shift and was taking care of the younger children during the day.

The voucher has allowed Sherrie to get ahead financially. Having the rental subsidy freed up money to pay for groceries and other necessities for the children and to pay off some of her bills. Although at the time of the interview she was earning somewhat less than when she held the catering jobs, she described herself as happier and as a positive role model for her children. Most important, she said she had seen a positive effect of the move on her children:

> *I notice how happy the kids are you know, and like I said, it's important for them to be happy… for me it's obvious because they can run, they can play, they can get on their*

bikes and go to the park. And I notice how happy they are, you know, with their school and their friends. My daughter was being able to go in her own room without having to deal with the little siblings. You know? And that's important to her so for them I think that it's really important and it's been a real positive.

Sylvia: Leaving a Doubled-Up Situation and Purchasing a Home

When she applied for the voucher, Sylvia was living in a mobile home on farmland with her four children and a roommate, with whom she shared the rent. She liked the rural setting but found the house too small for six people. Sylvia applied for the voucher primarily so that she could afford to live there without a roommate. The roommate moved out at about the time Sylvia received the voucher, and Sylvia was able to stay in the house for another year.

When she decided to start looking for a bigger place using her voucher, Sylvia said she did not have any trouble finding good quality housing. With steady employment as a medical claims representative and a good rental history, Sylvia was able to find a "very nice" four-bedroom house in a middle class neighborhood. The family stayed there for about four years, during which time Sylvia's income grew and her subsidy decreased. Sylvia's income eventually reached a point where she no longer qualified for the voucher.

Sylvia spent about a year renting on her own then started looking for homes to buy. She looked for about four months before finding a five-bedroom house for $74,000. She purchased the house using $10,000 cashed out of her 401(k). At the time of the interview, Sylvia had been in her new home for about six months. She described the neighborhood as very different from where she had been renting—a "lower class" neighborhood and one that was in transition:

This neighborhood was really horrid few years back and, but they put a police, a police station up there called cop shop… and then people started buying their homes and they cleaned this neighborhood up this used to be a really, really really bad, bad place but its really, really nice now.

Sylvia said that the neighborhood where she purchased was not perfect, but she was very happy there. She also said that she was less worried about living there than she would have been before because her children were older and less easily influenced (her youngest daughter was 16). She credited the voucher program with allowing her to stay in the rural area she loved and then move to a middle class urban setting, both of which she thought were good for her children:

If you live in a bad area it's not a good thing to raise your kids in that area, if they are in a bad area they are gonna see people doing drugs, I'm sorry it's just it's the way it is… and I was able to keep my kids like at first in a rural and then in a middle class neighborhood. Like I said, this neighborhood has its problems but they are older now and they've made their decisions to know who they are… My kids went to school actually with doctors and lawyers and all that kind of thing so their schools were really really good… and you keep kids around kids that are doing something focusing on their lives then they tend to do that too.

What is distinctive about Sylvia's story is her high level of education and steady employment history. She said she had two college degrees, one completed while she had the voucher, and had been working for the same company for 10 years, during which time her wages had increased from approximately $5 to $12 an hour. Because her children were already in school when she started the job and her oldest was 18 and able to watch the little ones, she never had any problems with childcare. But without the voucher, Sylvia said, she was never able to get ahead financially, which is why she needed the roommate. Once on the voucher, Sylvia was able to establish an independent household—which she said was very important for her children—complete her education, and focus more on her work.

Hildie: No Longer Overcrowded but Still Struggling

When she received the voucher Hildie was living with her mother, her sister, and seven children in a three-bedroom apartment. Not surprisingly, things were tense in the cramped quarters. As Hildie describes it:

> *We were getting on each other's nerves. You know how people make accusations about, "I'll be glad when you get your own place" and stuff like that. Yeah, and I got tired of that. That's why I was so glad that I got [the voucher].*

She was able to use the voucher to move to a four bedroom unit with her four children. Once on her own, Hildie's life began to improve:

> *[The apartment] was big. If y'all would've came, it was so pretty at first. It was. It was. I think I stayed there three years, three and a half years… I was working part time, a real job and stuff. Everything just started falling into place for me. And I had got me a car. I did. I was like, I was happy. I was so happy. And my kids was happy. They could have their own rooms. We didn't have pile up and be congested. And then everything just worked out.*

However, about three years later one of her sons got "involved in a fight" and Hildie decided she wanted something different (she did not explain beyond that). She moved to an entirely new neighborhood, in large part because a friend had told her it had a good school. Soon after, she decided she wanted another change and moved again, this time to a small three-bedroom unit. Then her daughter got pregnant and Hildie felt the need to find a larger unit. She was unable to find a four bedroom unit but ultimately found a large three bedroom. Although she had some misgivings, she took the unit because she felt pressured by the landlord and was worried she would not find anything better. The landlord made her pay the outstanding electric bill before moving in. When her case worker asked her why she agreed to do such a thing, Hildie said:

> *I said, because my daughter's pregnant; she's about to have the baby, and she had the baby before Christmas, and we was ready to go, and I was just, okay, let's get in there. You know how some people say, you got to give me the money to hold it before somebody else come to get it? You need to come on because there's a lot of people looking at it. They bluff you like that.*

At the time of the interview, Hildie wanted to move. Serious problems with the water and electric were not being addressed, even though Hildie had notified the housing authority. However, she liked the neighborhood and was satisfied with her children's schools. She said that she never would have been able to afford to live in the area without the voucher.

At the time of the interview, Hildie was living off SSI payments that she received for herself and one of her children, in addition to food stamps and occasional child support payments. Since graduating from high school, Hildie had completed several vocational training programs and held a wide variety of jobs. However, about a year after receiving the voucher she was diagnosed with diabetes and heart problems and unable to work. None of her older children were working, and their fathers were providing little in the way of financial assistance. At the time of the interview, Hildie commented that she was bored of staying home and wanted to work. With outstanding medical bills and a car that needed repairs, she also felt some pressure to increase her income. However, given her limited education, a past stint in jail, and major health limitations, Hildie was not optimistic about her job prospects.

Gwen: From Homelessness to Self-Sufficiency in Six Years

Some two years before receiving the voucher, Gwen walked out on her abusive boyfriend with nothing but the clothes on her back. Not wanting to admit to her family that she had made a mistake with the boyfriend, she slept in a park and in her car for almost a year, selling her plasma to make money. One of her friends agreed to take her in and she pulled herself together, got a job, and moved into a rented house. Shortly after, she had a baby.

When her daughter was born, Gwen vowed she would never be homeless again. She lived in the house for about a year until the landlord decided to sell it. At about the same time, she received the voucher and found an apartment in the same neighborhood, on the same street as her grandparents. Gwen lived in that apartment for two years before an aunt showed her a nearby house for rent. It was a bigger space and Gwen wanted a house, so she took it. Gwen lived in the house about a year and during that time she completed a BS in Psychology and got engaged. But the roof leaked and when the rent increased Gwen decided not to renew her lease. Instead, she got married and found another house in the same neighborhood.

Gwen said that her experience being homeless propelled her to pursue her education. Her progress toward the degree began slowly, with Gwen taking two classes and working nights at a gas station. When she received the voucher and found a friend who could care for her daughter, she began to attend school full-time. She got a work-study job that she greatly enjoyed and worked there until she got married. At that point, she voluntarily gave up the voucher. She said she and her husband still qualified based on income (he was retired from the military and on disability), but she felt that she had benefitted from her time on the voucher and wanted to let someone else have a chance. At the time of the interview, Gwen had held two well-paid jobs and was considering going back to school.

Gwen was clearly thoughtful about her future and the opportunities presented by the voucher. After she started working at the gas station, for example, she voluntarily gave up her TANF in order to save her eligibility for the future should she need assistance again. She also set goals for herself early on:

So my goals were to go to school, complete college, you know, get myself together, get established and that's what I wanted to do and I actually completed my goals.

With this level of motivation, Gwen acknowledged that she might have succeeded without the financial cushion provided by the voucher. However, she said it really helped her get on the right path:

Every time I moved, I moved up… I moved into an apartment and it was my own apartment, two bedroom apartment. I moved from my apartment to a house, from a two bedroom house with leaks to a three bedroom house with no leaks and you know, I'm moving up. I went from just a high school education to a college education… I didn't have to worry about rent, and the reason I keep going back to rent and always having a roof over my head is because of my homeless situation…

I didn't have to worry about having a place to live with the voucher and, because I didn't have that headache it allowed me to do so much more… I wasn't rich but I had enough to be able to do it on my own and having the voucher let me save and put myself in that situation because if I didn't I would probably still be paying: I could have never moved up.

Fanny: Avoiding Homelessness in Times of Adversity

Fanny and her three sons were about to move when she found out she received a voucher. Fanny had only been in her house for a few months but could no longer afford the rent, despite working close to full-time. She expected to move back in with her mother, where she'd lived for a while before finding this house. Living with her mother was very difficult and her children never thought of it as home. But it was better than living in parks and on the streets, which the family had also done for a while:

And you guys have no idea what a feeling it is to see your kids in a stroller and you're watchin' 'em all night to make sure nobody comes up to them or harms them. You know? And I was lucky if I got two hours' sleep. My son was 7 years old when I had my second one. We were sleeping out in parks. And he would sleep during the night and he would watch me sleep for two hours, in the park.

Fanny was overjoyed when she received the voucher. Although she had to persuade the landlord to work with the program, Fanny was able to remain in her house. She described with great emotion the joys of having her own home, where she and her children could do as they pleased and where she did not have to worry about whether she could afford the next month's rent.

Indeed, the voucher played a crucial role in keeping the family housed as Fanny's income fluctuated over time. At the time she received the voucher, Fanny had been working for the IRS on a seasonal basis (up to 10 months a year) for about five years. But about a year later, Fanny was forced to quit that job when two of her sons were diagnosed with serious health conditions. The boys required 3 to 4 doctor's appointments per week, and Fanny was not able to keep up with her job. She went on TANF and her rent was reduced from several hundred to $37/month. Three years later, she went back to work, this time as a TANF case worker, but very soon had a car

accident that put her in a wheelchair for months and left her with a permanent back injury. At the time of the interview, Fanny had regained some of her strength and was again looking for jobs.

Without the voucher, Fanny said she was sure the family would be homeless. She described other benefits of the voucher as well. Fanny took a budgeting and financial literacy class through the housing authority that she credits with getting her out of debt. Equally important, the voucher allowed Fanny to spend more time with her children, particularly her eldest son who needed help deciding whether to join the Navy:

> *I think the voucher gave me enough time to spend with him to talk to him about what he wanted to do in life, because without the voucher then I'd be out there working. I used to work 12 hours a day, seven days a week, in some jobs that I had. I didn't have time with my son. But, having the voucher and then helping me, through the low rent, I was able to stay home and talk to him. And I didn't have to worry about working two or three jobs like most people have to do now, because they're paying, like, $1,200 a month, or $900 a month for rent. I was able to get a 40-hour-a-week job, come home, cook, clean, talk to my kids, spend time with my kids, to help him make his decision.*

Throughout her time on the voucher, Fanny has volunteered with the Salvation Army and other charities on a regular basis. She said she describes this work to her children as "paying back" for the public assistance she has received. Still very happy with her living situation, in which she clearly took a great deal of pride, Fanny planned to stay in her house until her second son moved out, at which point she would look for an apartment in order to save on utilities.

Chantal: From Public Housing to a New Neighborhood

At the time she received her voucher, Chantal and her two young children were living in a public housing development on the north side of the city. Chantal was not especially happy with her living situation, but said it was not terrible:

> *It wasn't, you know, all that bad, but it wasn't all that good. It was just, you know, pretty—I wouldn't say decent, but it was a place to live, like I said. They didn't have no junk everywhere, it wasn't run down, you know, but it just had the building, no carpet and, you know, air condition in the window.*

When Chantal received the voucher, she was anxious to move in order to be closer to her family and friends, who lived on the south side of the city. Also on the south side was the cosmetology school that Chantal had previously attended and hoped to return to. Being away from these resources had been difficult for Chantal, who did not have a car:

> *… the school that I wanted to go to was the school I wanted to go back to. You know, I had been there before. It was on this side of town and I stayed way on the north side. That's, like, 30 minutes from here, maybe longer. And if I wanted to still keep my accredited hours for them—for being in, you know, beauty school, I'd have to go back to that same school. You know, like I said, it was too far. I really didn't have a car.*

After receiving the voucher, Chantal used the housing authority's list of landlords participating in the program to find her first apartment. She recounted how she called several landlords on the list, identified the available unit, and went to visit it before signing the lease. It was the only apartment she looked at. Chantal liked both the neighborhood and apartment:

> *It was a pretty decent neighborhood. The schools were fine, excellent 'cause it was an A-league school district. Uh, the neighborhood was fine. The apartment complex was really, like, one of the best apartment complex on the street, so it was -- it was nice.*

However, the apartment was not as close as Chantal would have liked to her mother's house. After about three years, she moved again because she "wanted to move around in something different and be really close to mom." She stayed within the same school district, but moved into a townhouse around the corner from her mother. At the time of the interview, Chantal had no immediate plans to move. She described being happy in the neighborhood and feeling less isolated than when she lived in public housing:

> *It's better for—a better place to live, a better education, more places to go, more shopping centers, malls and, you know, just recreational things. When I stayed on the north side there was no where to go 'cause it was like the country. And you know how the projects are.*

Chantal said her long-term goal was to get off welfare and buy a house. However, she recognized that she would first need to complete her education and get a full-time job. Chantal was paying less than $50 a month in rent and off TANF and child support payments. Over the years, she said lack of childcare had slowed her progress in completing her cosmetology certification and getting a job. However, at the time of the interview she was cautiously optimistic about her future, having completed her cosmetology required courses and enrolled her youngest son in a community daycare center with a sliding scale fee.