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

Section 8 Rental Voucher and Rental Certificate Utilization Study

Final Report

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Prepared for:
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Office of Policy Development and Research

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We are grateful to the PHAs for participating in the survey and providing the necessary data. We also thank the enrollees and landlords who responded to the surveys.

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Garland E. Allen, HUD's Government Technical Representative for this study, and other HUD staff provided valuable comments on drafts of this report.

FOREWORD

The Section 8 Rental Certificate and Rental Voucher programs are a critical part of the Federal Government's efforts to expand rental housing opportunities for low-income families. These programs directly confront the pivotal imbalance in most local housing markets—high rent burdens for the poor despite an ample supply of moderately priced rental housing—by providing families with rental assistance that they can use to obtain adequate, affordable housing in the private market. The unique flexibility and portability of Section 8 assistance enables recipients to choose the housing and the neighborhood in which they will live. However, the effectiveness of Section 8 has been constrained by the inability of many enrollees to obtain housing using certificates and vouchers. HUD commissioned this study, which surveys a nationwide sample of enrollees and landlords, to begin to identify any procedural, behavioral, or market barriers to the utilization of Section 8 benefits.

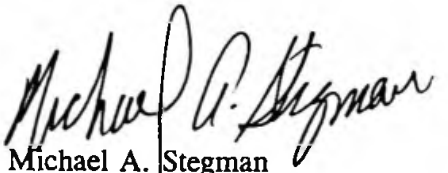
The study provides valuable insights into the housing search experiences and outcomes of Section 8 enrollees who, when they were not homeless or sharing a housing unit, were paying an average of two-thirds of their income in rent. Against this complex of "worst case" housing needs, the benefits of obtaining a qualifying unit with Section 8 are clear—successful enrollees were able to reduce their rent to about a third of their income, and those who moved found housing of much higher quality than they had before entering the program.

The fundamental finding of the study is that 87 percent of sampled enrollees successfully obtained housing with their Section 8 rental assistance, compared with 73 percent in the HUD-sponsored Freestanding Housing Voucher Demonstration of 1985–87. (In New York City—analyzed separately due to its unique market dynamics and enrollee profile—the success rate increased from 33 percent to 62 percent.) This dramatic increase is encouraging, although the extent to which it may reflect a temporarily "loose" rental housing market is not known.

Nonetheless, the failure of at least one in eight enrollees to find housing using Section 8 is troubling and difficult to explain. Although unsuccessful enrollees tended to have somewhat higher incomes and less severe rent burdens, they were just as likely as successful enrollees to experience housing affordability and adequacy problems. Regardless of their circumstances, nearly all of these households actively searched for a suitable qualifying unit. However, this process was demanding and difficult—overall, enrollees qualified in only about one in nine of the units they visited. The report also contributes to the growing evidence suggesting that enrollees search for—and find—qualifying housing primarily in a limited "Section 8 submarket" of units whose landlords are generally familiar with the program and have previously rented to Section 8 tenants.

Although the report's findings do not single out any systemic barriers to utilization or recommend specific remedial actions, they attest to the potential value of a number of new and proposed HUD intiatives intended to expand the residential choices available to low-income families. The Moving to Opportunity (MTO) demonstration and the proposed Choice in Residency program feature intensive counseling to assist Section 8 enrollees in locating, visiting, and applying for qualifying housing in low-poverty areas, where assisted housing opportunities are usually scarce. MTO and HUD's proposed Metropolitan Areawide Strategies demonstration

initiative also feature active outreach to encourage landlords throughout a particular metropolitan area to participate in Section 8 and other housing assistance programs. These initiatives will help make Section 8 an even more effective vehicle for ensuring that low-income families have full access to adequate, affordable housing in the neighborhood they choose.



Michael A. Stegman
Assistant Secretary for
Policy Development and Research

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EXECUTIVE SUMMARY

The Section 8 Rental Voucher and Certificate Utilization Study was commissioned by the U.S. Department of Housing and Urban Development in 1991 with the goal of better understanding why some enrollees fail to find housing under the Section 8 program, and identifying ways to improve success rates of families that enroll in the program.

This congressionally mandated study was motivated by results of earlier studies of the Section 8 program. Analysis of outcomes for a sample of households enrolled in the Section 8 program in large urban Public Housing Agencies (PHAs) between April 1985 and March 1987 as part of the Freestanding Housing Voucher Demonstration found that 39 percent of enrollees in the Certificate program and 35 percent of enrollees in the Voucher program failed to become recipients. Failure rates were clearly lower than the rates found in 1979, when over 50 percent of enrollees failed to qualify for assistance. The major issue posed by these failures is one of equity, a concern that some enrollees are denied assistance while others qualify. In particular, one important question is whether, despite the advantages offered by the Section 8 program's lower costs and greater freedom of choice, it needs to be changed administratively or supplemented by other programs in order to decrease failure rates further.

A second issue emerged during the course of the study. The focus group discussions with landlords and enrollees, conducted at the start of the study, together with evidence from the Housing Voucher Demonstration, suggested that landlord acceptance of Section 8 might be limited to a subset of the units that would theoretically be affordable through the program. Through interviews with enrollees and landlords approached by Section 8 enrollees, the study explores whether there is a Section 8 submarket and, if so, the effect this has on enrollee choice in housing.

This study relies on data obtained from samples of the three main parties involved in the Section 8 program: PHAs that issue Section 8 Rental Vouchers and Certificates, enrollees who search for housing in the Section 8 program, and landlords approached by the Section 8 enrollees in their search for housing.

The first, most obvious, finding from this study is that success rates have increased dramatically since they were last measured in the late 1980s. The Housing Voucher Demonstration found that in 1985-1987, 73 percent of enrollees in large urban PHAs (excluding

the New York City PHA) succeeded in becoming recipients, as did 33 percent of enrollees in New York City. The Section 8 Utilization Study finds that in 1993, 87 percent of the national samples of enrollees succeeded in becoming recipients, as did 62 percent of the sampled enrollees in New York City. Although large, the difference in success rates between the two national samples is not statistically significant. (This is due to the relatively small sample of PHAs (16) included in the National Sample from the Freestanding Housing Voucher Demonstration and the variability of success rates among those PHAs). However, the increase in success rates in New York City and in the five other PHAs included in both studies are both statistically significant.

The reasons for the increase in success rates are not clear. As part of the design of this study, we spoke to a number of Section 8 directors in the PHAs that had participated in the Housing Voucher Demonstration. They indicated that success rates in their cities had increased since 1987 and they generally attributed this to looser markets (higher vacancy rates). Although this explanation seems plausible, the available evidence does not fully support it. We have found that vacancy rates do explain some of the cross site differences in success rates in this study. However, the Census reports that, with the exception of New York City, average rental vacancies in the largest metropolitan areas (which may be considered to reflect the study's sites) have actually stayed the same since 1986. Further, for the five other PHAs included in both studies, success did increase materially whereas average vacancy rates were actually somewhat lower in 1993 than in 1986. It is possible that MSA-wide vacancy rates reported by the Census do not reflect the market for units relevant to the Section 8 program

The study's first analytic goal was to assist policy makers in assessing the need for remedial action. Concerns for unsuccessful enrollees may be mitigated to the extent that they are in less need of assistance or make less of an effort to find housing than successful enrollees. In fact, it appears that we cannot dismiss unsuccessful enrollees as having less need of assistance or making an insufficient effort. While there are some differences between successful and unsuccessful enrollees, they are much more alike than they are different. Unsuccessful enrollees had slightly higher average incomes and lower average rent burdens than successful enrollees, but more striking is the extent to which the two groups overlapped on these and other measures of housing assistance. Both groups often lived in pre-program housing that had inadequate space, was shared with another household, or was physically deficient. Both groups often faced

high pre-program rent burdens. The program's assistance substantially ameliorated both cost and physical burdens for recipients, while unsuccessful enrollees generally remained in their inadequate housing situations.

Further, the vast majority of unsuccessful enrollees did try to find housing that qualifies for Section 8. Only 8 percent of unsuccessful enrollees in the national sample and 7 percent in New York City, did not try to qualify at all. Most enrollees who did not approach their pre-program landlord about participating in the Section 8 program either lived in units that were not eligible for the program or thought they could not qualify in place. Similarly, about 80 percent of unsuccessful enrollees reported that they tried to move, either by calling about or by visiting units. Unsuccessful enrollees who visited units reported visiting an average of nearly 12 units. It is not clear how the search effort of unsuccessful enrollees compares with the effort of successful enrollees because, by definition, successful enrollees stopped searching when they found a qualified unit. We do know, however, that on average unsuccessful enrollees tended to look at more units than successful enrollees. We also know that most stopped looking before their voucher or certificate expired. However, successful enrollees also took breaks in their search, and most did not look every month until they succeeded.

The study's second analytic task was to try to understand why particular enrollees succeeded or failed so that remedial action can be appropriately targeted.

In order to succeed in the Section 8 program, enrollees must find units they want to rent; get the landlord to agree to participate; arrange for the PHA to inspect the unit; and finally, get the landlord to make required repairs, if any, and sign a lease. Enrollees can either qualify in their pre-program unit (which is the way 30 percent of successful enrollees in the national sample succeeded) or they can qualify by moving (which is the way 70 percent of all successful enrollees succeeded). About half the enrollees who tried to qualify in their pre-program unit did so. Among those who tried to qualify by moving, the probability of succeeding in any given unit was quite low. Enrollees in the national sample who qualified by moving looked at 9 units on average before succeeding in becoming a program recipient.

In New York City, the overall success rate was lower than in the other sites and the majority of successful enrollees (61 percent) qualified in their pre-program units. This latter difference appears to reflect differences in enrollees' ability to search for housing. In New York City, the majority of sampled enrollees were elderly or handicapped (76 percent); these groups

may have a difficult time trying to move. In the national sample, these two groups comprised only 13 percent of enrollees.

When we looked at the factors affecting success, regression analysis showed that in the national sample in which qualifying by moving was more prevalent, overall success was driven by factors associated with succeeding by moving. In particular, factors affecting the ability and motivation to search for new units affected overall success: being handicapped, working, and requiring a large unit size all reduced the probability of success, while increases in the expected subsidy increased the probability of success. Factors associated with the enrollee's qualifications as a potential tenant did not generally affect the probability of success. Factors affecting the probability of qualifying in place also did not affect the overall probability of success.

In New York City, on the other hand, where qualifying in place was key, the factors that contributed to success were those that affected an enrollee's eligibility to qualify in place: enrollees living in units with high rents were less likely to qualify, and those living in units with enough bedrooms were more likely to qualify.

One important issue to emerge from this study is the notion that enrollees typically search in a "Section 8 submarket," in which landlords are generally familiar with the program and have experience renting to its enrollees. Indications of a Section 8 submarket first arose from information provided by a sample of successful enrollees in the Housing Voucher Demonstration. The present study includes both successful and unsuccessful enrollees and, for the first time, direct information from landlords who accepted and landlords who rejected Section 8 enrollees.

PHA lists and friends and relatives appear to be the most effective sources for finding units to rent under the program. Units found using these sources are likely to have landlords who are willing to participate in the program. Units referred by friends and relatives are also likely to meet enrollee needs. Newspapers, although a common source for units rented and for units not rented, are not as effective a source of units.

Enrollees who qualified by moving reported that 92 percent of their new landlords were at least somewhat familiar with the Section 8 program. Enrollees also reported that 80 percent of new landlords they approached but did not rent from were at least somewhat familiar with the program. Thus, enrollee reports indicate that they largely confined their search to landlords

who were acquainted with the Section 8 program and that such landlords were, in fact, more likely to accept enrollees.

Although the analysis of landlord acceptance is hampered by the small sample of landlords, findings also support our impressions regarding the submarket. The responding landlords approached by the sampled enrollees were generally familiar with Section 8. Eighty-six percent of accepting landlords and 90 percent of rejecting landlords said they were at least somewhat familiar with Section 8 prior to being approached by the enrollee. In addition, 80 percent of the rejecting landlords reported that they were either currently renting other units under Section 8 or had done so in the past. Finally, most of the units included in the landlord sample were units that the landlord sometimes or often rented under Section 8. In other words, most enrollees look for units in a submarket where landlords are familiar and experienced with Section 8.

This finding in itself does not prove that a submarket exists. If there were widespread penetration of Section 8 throughout the housing market, then we would expect most landlords to report familiarity and experience with the program. At the same time, the impression of a Section 8 submarket is supported by the fact that enrollees were more likely to qualify in units that the landlord normally rented under the Section 8 program. Furthermore, accepting landlords often reported that they had other units that they would not rent under Section 8. The possibility of a Section 8 submarket is particularly important to consider and explore further as HUD goes forward with mobility programs such as the Moving To Opportunity Demonstration.

Because the landlords in our study were essentially "in" the Section 8 program, their decisions about accepting enrollees appear not to be based on their attitudes and feelings about the program or about the market. Rather, the key factor in landlord acceptance is whether the particular unit is generally rented to a Section 8 tenant.

In interpreting these results, it is important to bear in mind that success rates were so high that our sample included relatively few unsuccessful enrollees and accordingly it was difficult to identify factors associated with being unsuccessful. The combination of high success rates, the fact that units and landlords were so often already committed to the program, and problems in the identification of landlords approached by enrollees hampered our ability to investigate the factors that lead an owner to decide that a particular unit is suitable for the Section 8 program.

We suggest that HUD should consider further investigation of these issues in a somewhat different context. First, it seems essential for HUD to establish some ongoing program to monitor success rates in a sample of PHAs rather than relying on occasional studies, often many years apart and involving different PHAs in each study. Such a sample would allow HUD to determine the extent to which success rates vary over time and the factors associated with such variation. This would also allow HUD to construct more powerful studies of the details of the search process by structuring samples to include high and low success rate PHAs and by permitting additional study data to be collected within the framework of an ongoing data system instead of being developed de novo for each effort.

Second, it seems desirable to develop a more extensive study of landlord acceptance. This seems to be the only way to identify steps, if any, that would expand the potential unit and neighborhood access of the Section 8 program. Such a study would require a larger sample of units and owners that were not already committed to the Section 8 program than was obtained through the Utilization Study. One potential way to generate such a sample might be through interviewing samples of owners of apparently affordable units in various jurisdictions. Such samples are, however, difficult to develop and suffer from the drawback of being largely hypothetical. A preferred approach might be to rely on landlord contacts obtained through studies in situations, such as the Moving To Opportunity Demonstrations, in which enrollees are likely to approach landlords outside the normal Section 8 market, and couple this with much more frequent and intensive efforts to encourage enrollees to record landlord contacts than were used in the Utilization Study.

Third, we suggest that HUD consider more frequent use of focus groups as a vehicle for identifying areas for more systematic research or evaluation to be conducted at a later date. The focus groups conducted in the design of this study were invaluable, for example, in focussing attention on the role of landlord acceptance of the enrollee and on the fact that this acceptance was often specific to a particular unit. Properly conducted, focus groups offer a unique opportunity to let enrollees and owners speak directly to their concerns, rather than being restricted to structured interviews designed by the researcher.

Chapter ONE
INTRODUCTION TO THE STUDY

1.1 BACKGROUND OF THE STUDY

The Section 8 Rental Voucher and Certificate Utilization Study was commissioned by the U.S. Department of Housing and Urban Development in 1991 with the goal of better understanding why some enrollees fail to find housing under the Section 8 program, and identifying ways to improve the success rates of families enrolled in the program.

This Congressionally mandated study was motivated by results of earlier studies of the Section 8 program.[1] Analysis of outcomes for a sample of households enrolled in the Section 8 program in large urban Public Housing Agencies (PHAs) between April 1985 and March 1987 as part of the Freestanding Housing Voucher Demonstration found that 39 percent of enrollees in the Certificate program and 35 percent of enrollees in the Voucher program failed to become recipients. Failure rates were clearly lower than the rates found in 1979, when over 50 percent of enrollees failed to qualify for assistance.[2]

The major issue posed by these failures is one of equity, a concern that some enrollees are denied assistance while others qualify. In particular, one important question is whether, despite the advantages offered by the Section 8 program's lower costs and greater freedom of choice, it needs to be supplemented by other programs. Low income housing programs in the United States, including both existing housing programs and units provided through public housing and other subsidized low-income housing construction programs, are currently able to

[1] Section 559 of the Cranston-Gonzalez National Affordable Housing Act of 1990 mandates the study of Section 8 success rates: "*STUDY OF SECTION 8 UTILIZATION RATES. (a) Study.—The Secretary of Housing and Urban Development shall conduct a study of the reasons for success or failure, within the appropriate cities and localities, in utilizing assistance made available by the secretary for such areas under the certificate and voucher programs under Section 8 of the United States Housing Act of 1937. The study shall examine such rates and provide information regarding such rates based on the household size, age of household members, income of households, welfare status of households, number of children in a household.*"

[2] See Kennedy, Stephen D. and Mireille L. Leger, *Final Comprehensive Report of the Freestanding Housing Voucher Demonstration*, Abt Associates, Cambridge, MA, 1990; and Kennedy, Stephen D. and James E. Wallace, *An Evaluation of Success Rates in Housing Assistance Programs Using the Existing Housing Stock*, Abt Associates, Cambridge, MA, 1983.

assist only about one fourth of the eligible population.[3] Concerns for unsuccessful enrollees may be mitigated to the extent that they are in less need of assistance or make less of an effort to find housing than successful enrollees.

A second issue emerged during the course of the study. The focus group discussions with landlords and enrollees, conducted at the start of the study, together with evidence from the Housing Voucher Demonstration, suggested that landlord acceptance of Section 8 might be limited to a subset of the units that, theoretically, would be affordable through the program. This study uses information from successful and unsuccessful enrollees and direct information from landlords approached by Section 8 enrollees in order to further explore the extent of the Section 8 submarket.

This study has two main analytic goals:

- Characterizing the relative need for housing, search intensity and demographic composition of successful and unsuccessful households. This analysis assists policy makers in assessing the need for remedial action.

- Understanding enrollee success and failure—that is, identifying causal relationships and factors that might limit enrollee choice in the housing search process, with the goal of finding ways to increase the probability of success among enrollees.

The remainder of this chapter briefly describes the Section 8 program (Section 1.2) and study samples and data sources (Section 1.3). Chapter 2 discusses factors relating to potential policy interest in remedial action: the level of success rates (Section 2.1), the relative need for housing among successful and unsuccessful enrollees (Section 2.2), their relative search intensity (Section 2.3), and success rates for certain demographic subgroups (Section 2.4). The final section of Chapter 2 presents results for New York City. We then turn, in Chapter 3, to the goal of trying to understand enrollee success. Understanding enrollee success involves three topic areas: the search process (Section 3.1), how enrollee characteristics relate to success (Section 3.2), and the relationship between landlord acceptance and success (Section 3.3). Separate results for New York City are presented in Section 3.4.

[3] *The State of the Nation's Housing, 1993*, Joint Center for Housing Studies of Harvard University, Cambridge, MA, 1993.

1.2 Section 8 Rental Voucher and Certificate Programs

The Section 8 Rental Voucher and Certificate programs are administered by local PHAs under contracts with HUD. Under the Section 8 Program, enrollees rent units in the private market with part of the rent paid by the program. In addition, the program undertakes to reimburse landlords up to certain limits for tenant caused damages or loss of rent due to lease-breaking. In order to qualify for assistance, the enrollee's unit must meet certain housing quality and occupancy requirements, and the landlord must agree to the terms and conditions of the program, including limits on security deposits and various conditions on the lease. In addition, the program may place limits on the allowable rent, depending on which form of the program is involved.

In the Certificate Program, the tenant contribution is fixed at the larger of ten percent of gross income, 30 percent of net income, or welfare rent.[4] The program then pays the difference between this fixed tenant contribution and the unit's gross rent (contract rent plus scheduled allowances for certain utilities if they are not included in the rent). In order to limit the program's liability, gross rents may not exceed the local Fair Market Rent (FMR)—a schedule of rent by number of bedrooms established by HUD for various local areas.[5] In addition, the PHA must certify that the rent charged is reasonable.

In the Housing Voucher Program, the program assistance payment equals the difference between the Payment Standard and 30 percent of tenant income. The Payment Standard is a schedule of rents by number of bedrooms and is established by the local PHA, subject to the requirement that the Payment Standard may not exceed the Fair Market Rent (FMR). The tenant pays the difference between this assistance payment and the unit rent, except that the assistance payment is reduced if necessary to assure that the tenant contribution towards gross rent is at least 10 percent of gross income. With this exception, the assistance payment is fixed, and no

[4] The welfare rent rule applies in certain states in which AFDC payments include an allowance for rent equal to the AFDC family's out-of-pocket expenses for rent up to a maximum amount, called the welfare rent. In these states, housing assistance payments that reduce the tenant contribution of AFDC recipients below the welfare rent would be offset dollar for dollar by a reduction in AFDC payments. Accordingly, in such "as-paid" states, the Certificate program sets the tenant contribution for AFDC recipients equal to the larger of 30 percent of net income, 10 percent of gross income, or the welfare rent.

[5] For each increment of units received, PHAs may approve exception rents that are up to 10 percent above the FMR for no more than 20 percent of the units in the increment.

limit is placed on allowable rents. However, the PHA may elect to require that it certify that unit rents are reasonable.

The guarantees offered to landlords for damages and vacancy losses also differ in the two programs. In the Certificate program, PHAs are liable for damage and unpaid rent claims up to a maximum of two month's contract rent, minus the amount of the security deposit and any interest on the security deposit. In the Voucher program, this liability is limited to one month's contract rent. The two programs also differ in their handling of vacancy losses. In the Certificate program, the owner may keep the program payment for the month in which a tenant vacates, ***and*** may also receive 80 percent of the contract rent for the following month if the apartment cannot be re-rented. In the Voucher program, only the current month's program payment is retained. The security deposits allowed in the two programs also differ. Certificate holders pay the greater of $50 or the family's total Tenant Payment. In the Voucher program, the security deposit is set by the PHA. It can either be set at the same level as in the Certificate program, or at one month's contract rent.

1.3 Study Data and Samples

This study relies on three main data sources: a sample of PHAs that issue Section 8 Rental Vouchers and Certificates, enrollees in the sampled PHAs who search for housing in the Section 8 program, and landlords approached by the sampled Section 8 enrollees in their search for housing.

PHAs

The final sample of 33 participating PHAs is described in Exhibit 1.1. The exhibit provides details on PHA size, expected sample size, and actual sample size as well as response rates and success rates.

Our initial goal was a national sample of enrollees from 40 PHAs outside of New York City. Eight of the 40 PHAs selected for the national sample were excluded from the final sample—three because they issued fewer vouchers and certificates than originally planned; two because they were issuing mostly or only for categories of enrollees not included in the study (public housing demolition or relocation); and three because the PHAs and/or enrollees in those sites were unwilling to participate. The PHA sampling process is described in Appendix I.

Exhibit 1.1
Final Sample of PHAs and Enrollees

PHA name	Expected Issuances (from mailing)	Sample	Forms Received	Survey Response Rate	% Success Among Survey Respondents	% Success Among Enrollee with Known Outcomes	% Success in-place of Success Enrollees
Housing Authority Of The City Of Lake Charles	62	44	43	93%	60%	60%	42%
Housing Authority of the City of Evansville	90	44	41	68%	96%	95%	30%
Orange County Dept. Of Commty Devel & Assisted Housing	95	44	32	81%	96%	94%	24%
Washington County Housing Authority	101	44	17	71%	92%	82%	27%
City Of Santa Monica Dept Commty & Economic Development	106	44	44	70%	100%	93%	32%
Greene Metropolitan Housing Authority	110	44	48	79%	79%	80%	17%
Prince Georges County	118	44	27	74%	90%	92%	28%
Housing Authority Of The City Of Tampa	120	44	46	67%	94%	95%	17%
Metropolitan Council Housing And Redevelopment Authority	125	44	43	79%	94%	86%	13%
Jonesboro Housing Authority	128	44	36	86%	94%	94%	21%
Fort Wayne Housing Authority	130	44	48	85%	95%	94%	33%
Spokane Housing Authority	137	44	37	89%	88%	84%	14%
Memphis Housing Authority	140	44	29	90%	88%	86%	0%
Rochester Housing Authority	150	44	42	83%	74%	69%	54%
Baltimore Cty Dept Of Community Development & Housing	170	44	45	91%	98%	98%	28%
Lane County Housing Authority	162	44	27	89%	96%	85%	61%
Housing Authority Of The City Of San Luis Obispo	171	44	42	95%	95%	93%	34%
Boise City Housing Authority	181	44	45	89%	95%	93%	42%
City Of Phoenix Neighborhood Improvement & Housing Dept.	194	44	44	82%	97%	98%	23%
Housing Authority Of The City Of San Antonio	195	44	39	79%	90%	87%	25%
Housing Authority Of Baltimore City	203	44	23	78%	83%	83%	7%
Dakota County Housing Authority	144	44	39	95%	97%	95%	50%
Montgomery County Housing Authority	213	44	41	85%	89%	83%	32%
Housing Authority Of The City Of Pittsburgh	220	44	44	82%	78%	79%	29%
Housing Authority Of The City Of Atlanta	220	44	20	75%	87%	90%	15%
Housing Authority Of The City Of Tulsa	240	46	46	80%	89%	91%	55%
Omaha Housing Authority	265	51	51	86%	84%	78%	30%
Marion County Housing Authority	269	52	50	86%	70%	66%	40%
Oklahoma City Housing Authority	275	53	54	80%	91%	83%	21%
Columbus Georgia	136	44	49	84%	88%	88%	39%
Orange County Housing Authority	305	58	60	88%	92%	92%	20%
Housing Authority Of The City Of Milwaukee	320	61	61	82%	86%	87%	47%
NYC Housing Authority	900	563	563	70%	65%	62%	61%
Total Excluding NYC	5495	1465	1313	83%	89%	87%	30%
Grand Total	6395	2028	1876	79%	83%	80%	37%

Source: PHA surveys, PHA forms, and Enrollee Surveys

However, as discussed in the appendix, we do not believe that this attrition materially biases the results. As explained there, New York City is self-representing, that is, because of its size and analytic importance, it was selected with certainty. The other PHAs are reasonably representative of the other larger, non-statewide PHAs, excluding Los Angeles.[6]

PHAs were interviewed regarding their practices and procedures that may affect enrollee success in leasing up in the Section 8 Rental Voucher and Certificate programs. Interviews with Section 8 directors or their representatives were conducted by staff from Quadel Consulting Corporation between January and March 1993. The PHA survey on practices and procedures has two purposes. First, we wanted to obtain information on PHA practices that might affect success rates. Second, since PHAs had to provide the enrollee samples, we needed to understand the details of each PHA's issuance process in order to set up appropriate data collection procedures.

ENROLLEES

The final enrollee analysis sample consisted of 1,483 enrollees, as shown in Exhibit 1.2, though some data are available for a slightly larger sample, as described in Appendix I.

Exhibit 1.2

ANALYSIS SAMPLE - ENROLLEES AND OUTCOMES

	National Sample[a]	New York City	Total
Total Enrollees	1,090	393	1,483
Successful in place	27%	40%	30%
Successful in new unit	62%	25%	52%
Unsuccessful	11%	35%	18%

[a] Unweighted tabulations for the sample of larger non-statewide PHAs other than New York City and Los Angeles.

Source: Enrollee Interviews.

[6] Because of its size, Los Angeles was self-representing and selected with certainty. Los Angeles was excluded from the analysis sample because the PHA submitted only 14 of their target 144 Enrollment Data Forms, which defined the enrollee sample. Thus, the national sample can be considered generalizable to all large non-statewide PHAs excluding Los Angeles and New York City.

Our initial goal was a national sample of 1,600 enrollees outside New York City, and a separate sample of 300 enrollees from New York City. However, due to the problems in eight PHAs described above, the national sample is smaller than expected and includes 1,090 enrollees. Enrollee response rates in New York City were higher than expected and the analysis sample in New York City includes 393 enrollees. The smaller than planned enrollee sample increases our error of estimate by about 20 percent.

The enrollee sample was drawn by having each of the sampled PHAs provide lists of all new enrollees until its sample quota was met. The start and end dates for sampling varied among the PHAs, but all enrollees in the sample were enrolled between February and June, 1993.

Information on the enrollee sample served as the primary data source for the study. Data on enrollees were received from both the PHAs and the enrollees themselves. Each PHA completed and submitted ***Enrollment Data Forms*** that provided basic demographic information on the sample enrollees. PHAs also collected and submitted ***Consent and Contact Forms*** completed by enrollees. These provided contact information and indications of enrollee preferences regarding moving or remaining in their pre-program unit.

Enrollees were then contacted once each month until either they signed a Section 8 lease or their voucher or certificate expired. Each interview included a series of questions about search activities during the previous month and requested names of landlords contacted. The first interview also included questions about the enrollee's pre-program housing, program understanding, and expectations with respect to the program. The final interview included additional questions about the final housing achieved. In addition, PHAs submitted a ***Program Unit Data Form*** on each leased unit, containing rent and subsidy information. Telephone interviews with enrollees were conducted between March and November 1993.

Landlord Sample

The final analysis sample of landlords consists of information from 575 landlords on a sample of 626 units that enrollees visited during their housing search and wanted to rent. Exhibit 1.3 shows the distribution of these units in terms of whether they were pre-program units or new units, and whether the enrollee rented the unit or not.

Exhibit 1.3

UNITS IN LANDLORD SAMPLE, BY UNIT TYPE

	National Sample[a]		
	Pre-Program Unit	**New Unit**	**Total**
Leased	144	261	405
Not leased	56	85	141
Total	**200**	**346**	**546**

	New York City		
	Pre-Program Unit	**New Unit**	**Total**
Leased	30	16	46
Not leased	25	9	34
Total	**55**	**25**	**80**

[a] Unweighted tabulations for the sample of larger non-statewide PHAs other than New York City and Los Angeles.

Source: Enrollee Surveys and Landlord Surveys

During their monthly telephone interviews, enrollees were asked for the names (and phone numbers) of:

- their pre-program landlord (if they asked him or her about participating in the program);
- their program landlord (if they were successful);
- the landlord (if any) in the most recent unit they visited and wanted to rent; and
- the landlord (if any) who had most recently turned them down for a unit they wanted to rent, if the most recent unit visited but not rented was not rented for any reason other than an explicit landlord turndown.

We attempted to locate and interview all the landlords identified by enrollees. The landlord sample was much smaller than planned, and this seriously limited analyses of landlord

responses to the program in terms of landlord characteristics and perceptions. The smaller than expected sample is the result of several factors, as described in Appendix A. First, enrollees were often unable to provide usable landlord identifications, especially for landlords from whom they did not rent, even though the information was only requested of the last such encounter. Second, enrollees often misunderstood the question and provided information on units they wanted but were not available for rent (such as units for which they put their name on a waiting list) or units that they did not actually want to rent (such as units which the enrollees did not rent because they changed their mind). Finally, the sample was further decreased by higher than expected success rates (which led to fewer rejecting landlords), a smaller than expected enrollee sample, and the high (though expected) landlord refusal rate.

Landlords were queried regarding the specific units the sample enrollees looked at, as well as their the perceptions about Section 8 and about market conditions in general. Landlord interviews were conducted between November 1993 and January 1994.

Chapter Two

SUCCESS RATES, NEED FOR ASSISTANCE, AND DEMOGRAPHICS

This chapter presents some basic facts reflecting the extent to which concern with success rates may be heightened or mitigated. We consider in turn, the level of success (Section 2.1), the extent to which unsuccessful enrollees appear to be in more or less need of housing assistance than successful enrollees (Section 2.2), the extent to which unsuccessful and successful enrollees search for units (Section 2.3), and finally, the extent to which failure is evenly spread across different demographic groups or places some groups at a special disadvantage (Section 2.4). A separate analysis of New York City is presented in Section 2.5. Section 2.6 summarizes our findings regarding housing needs and efforts to qualify among successful and unsuccessful enrollees.

2.1 Success Rates

The first, most obvious, finding from this study is that success rates have increased dramatically since they were last measured in the late 1980s.

The Freestanding Housing Voucher Demonstration found that in 1985-1987, 73 percent of enrollees in large urban PHAs (excluding New York City) succeeded in becoming recipients, as did 33 percent of enrollees in New York City. The Section 8 Housing Utilization Study finds that in 1993, 87 percent of the national sample of enrollees were successful, as were 62 percent of the sampled enrollees in New York City.[1] Weighting the samples from both the Housing Voucher Demonstration and the current study to reflect sampling probabilities and PHA size yields a national estimate of success rates in large urban PHAs (excluding New York City and Los Angeles) of 86 percent in the current study and 73 percent in the Housing Voucher Demonstration[2] (Exhibit 2.1). Although substantial, the 13 percentage point increase is not statistically significant. This is because of the large standard error in success rates (8 points)

[1] We cannot be sure whether the fact that enrollees knew they were being interviewed affected success rates. We had hoped to collect outcomes for a comparison sample of enrollees in several sites to assess whether the fact that they were being interviewed affected the sample enrollees. However, due to lower than expected issuances in many sites we did not get enough comparison observations to analyze.

[2] This measure is an estimate of success rates for a proportional expansion of slots in all larger PHAs.

Exhibit 2.1

SUCCESS RATE SUMMARY

	Utilization Study[1] (1993)	Voucher Demonstration (1985/87)
Raw rate of national sample	87%[2]	73%
National estimates of success rates in large urban PHAs, outside NYC and LA	86%[3]	73%[4]
Overlapping sites, weighted by Utilization Study proportions	81%	73%
NYC, weighted to reflect Utilization Study racial and demographic composition	62%[5]	42%

Source: Enrollee Surveys and data from the PHA reports on final outcomes for survey non-respondents, Housing Voucher Demonstration.

[1] The Utilization Study does not take separate account of vouchers and certificates. Rates are calculated using all enrollees with known outcomes.

[2] Calculated for all 1,343 enrollees with known outcomes. As indicated in Chapter 1, 89 percent of enrollees in the analysis sample were successful in leasing units under Section 8.

[3] The national estimate for the Utilization Study weights the site results based on PHA size (units under lease) and selection probability.

[4] This is a weighted average between the voucher and certificate rates of 75 and 72 percent respectively. Weights reflect the proportion of vouchers in the current study. Calculations are based on estimates of issuances per recipient.

[5] Calculated for all 521 enrollees with known outcomes. As indicated in Chapter 1, 65 percent of enrollees in the analysis sample were successful in leasing units under Section 8.

found in the 16 urban Housing Voucher Demonstration sites excluding New York City and Los Angeles. However, when we control for sampled PHAs by comparing success rates in the PHAs that were included in both studies, the estimated increases are statistically significant. For this reason, we believe that the estimated increase does reflect a real change in success rates.

Eighty-one percent of the Utilization Study enrollees in the five PHAs other than New York City that were included in both the Housing Voucher Demonstration and the current study (Atlanta, Metro Council Minnesota, Omaha, Pittsburgh, and San Antonio) succeeded in becoming recipients. Weighting the success rates from the Housing Voucher Demonstration to reflect their representation in the current sample yields a success rate estimate of 73 percent. As indicated above, this difference is statistically significant.

The success rate in New York City is also significantly higher now than in the Housing Voucher Demonstration. This large increase is due, in part, to a different mix of enrollees, but even controlling for enrollee characteristics, the increase in New York City is significant. At the time the Utilization Study sample was drawn in early 1993, the NYC Housing Authority was issuing about 80 percent of its vouchers and certificates to the homeless. Our sample included only the remaining 20 percent, who were largely elderly and handicapped, whereas the Housing Voucher Demonstration included a wider range of enrollees. However, weighting the Housing Voucher Demonstration results to reflect the current racial mix and household composition in New York City yields an estimate of 42 percent successful, which is substantially lower than the current rate of 62 percent.[3]

The finding of higher success rates corroborates our preliminary discussions with ten PHAs during the reconnaissance phase of this study. Eight PHAs reported that their real estate market had softened recently and that this had led to increased landlord interest in the program, in terms of both numbers of landlords participating and the range of units being offered to Section 8 participants. Better units and better locations were reportedly opening up to the program as a result of the softening of the market.

[3] A recent report by the Council of Large Public Housing Authorities (CLPHA) indicates that CLPHA members have experienced increases in success rates since the 1980s. CLPHA Research Report #94-1, *Currently Estimated Success Rates for Section 8 Certificates and Vouchers*, January 21, 1994.

It should be noted that while the Section 8 directors we interviewed generally indicated that increased vacancy rates were responsible for the increase in success rates, these assertions are not supported by Census Reports on vacancies.[4] Census reports show that the average vacancy rate in the 61 largest metropolitan areas was 7.2 percent in 1986 and 7.4 percent in 1992. In the five sites outside New York City that participated in both the Housing Voucher Demonstration and the current study, the average vacancy rate, weighted to reflect the distribution of our sample sites, was 8.6 percent in 1986 and 7.1 percent in 1992.[5] This lack of correlation between reported vacancy rates and success rates was also found in the Housing Voucher Demonstration. One possible reason for the discrepancy between the Census report and PHA perceptions is that the Census data are MSA-wide figures, rather than just for the portion of the market relevant for Section 8. In New York City, however, the Census data do confirm a substantial increase in vacancies from 2.5 percent in 1986 to 5.5 percent in 1992.

Although changes in the vacancy rate may not explain changes in success rates *over time*, differences in vacancy rates across sites do explain at least part of the different in success rates ***among*** PHAs in this study.[6]

2.2 The Relative Need for Housing Assistance Among Successful and Unsuccessful Households

The need for housing assistance is usually thought of as involving either excessive shelter costs or housing that is physically inadequate. To determine the relative need for assistance, this section compares both the pre-program and final housing of successful and unsuccessful enrollees on these two measures.

The obvious comparison is between unsuccessful enrollees and all successful enrollees. In addition, however, it might be argued that those who qualify in place tend to represent a different target group (those in better quality units but with high housing cost burdens), so that

[4] The Bureau of the Census, *Housing Vacancies and Homeownership Annual Statistics: 1992*, Table 5 and Table 3.

[5] For Omaha, the Nebraska rental vacancy rate was used, because Omaha is not one of the 61 largest metropolitan areas.

[6] The coefficient of the variable ***1990 Census vacancy rate in the SMSA*** is positive and significant in regression equations of success overall, and success by moving, as shown in Appendix G.

a more appropriate comparison is between unsuccessful enrollees and enrollees who qualify by moving. The tabulations in this report provide both comparisons. Exhibit 2.2 shows the number of enrollees in the analysis sample in each outcome category. All comparisons are based on unweighted numbers of enrollees in each category. Most comparisons are done separately for New York City and the remaining sites. Results for New York City are presented in Section 2.5 below.

Exhibit 2.2

ANALYSIS SAMPLE FOR ENROLLEE OUTCOMES

	National Sample[a]	New York City	Total
Number of enrollees	1,090	393	1,483
Successful in place	294	158	452
Successful by moving	671	99	770
Unsuccessful	125	136	261

[a]Unweighted tabulations for the sample of larger non-statewide PHAs other than New York City and Los Angeles.
Source: Enrollee Interviews.

PRE-PROGRAM AFFORDABILITY

The primary measure used to describe housing affordability is the rent burden, which is the total rent paid by the household (including rent paid to the owner and allowances for utilities not included in the rent) relative to total monthly income.

The majority of both successful and unsuccessful enrollees had high pre-program rent burdens. Sixty-nine percent of successful enrollees and 62 percent of unsuccessful enrollees were spending more than 30 percent of their income on housing (Exhibit 2.3). However, successful enrollees did on average pay more of their income for rent than unsuccessful enrollees. Fifty-five percent of successful enrollees paid over half their income for rent as

Exhibit 2.3

PRE-PROGRAM HOUSING AFFORDABILITY INDICATORS
NATIONAL SAMPLE[a]

Housing Cost Indicator	Successful Enrollees			Un-Successful Enrollees	All Enrollees
	All	In Place	Mover		
Number of enrollees with reported income >0	932	288	644	121	1053
Percent of enrollees with rent burdens:[b]					
0%[c]	15%	0%	21%	21%	15%
≤30%	16	20	15	17	17
30 - ≤50%	14	15	13	26	15
50+%	55	65	51	36	53
Mean burden	57%*	70%	51%*	41%	55%
Standard error	1.69	3.54	1.82	3.17	1.55
Median burden	53%	63%	51%	38%	52%

[a]Unweighted tabulations for the sample of larger non-statewide PHAs other than New York City and Los Angeles.
[b]Gross rent paid by family/total annual income, all families with reported income.
[c]These enrollees paid no cash rent.
*Signifies that the difference between all successful enrollees or successful movers and unsuccessful enrollees is statistically significant at the 0.1 significance level.
Note: Columns may not total 100 percent due to rounding.
Source: Pre-Program Enrollment Data Forms and Enrollee Interviews.

Exhibit 2.4

PRE-PROGRAM HOUSING AFFORDABILITY INDICATORS
NON-SHARERS, NON-HOMELESS ENROLLEES
NATIONAL SAMPLE[a]

Housing Cost Indicator	Successful Enrollees			Un-Successful Enrollees	All Enrollees
	All	In Place	Mover		
Number of enrollees with income > 0	611	275	336	72	683
Percent of enrollees with rent burdens:[b]					
≤30%	18%	21%	16%	18%	18%
30 - ≤50%	16	15	16	33	17
50+%	66	64	68	49	64
Mean burden	67%*	67%	68%	55%	66%
Standard error	1.96	3.08	2.53	3.93	1.81
Median burden	62%	62%	61%	50%	60%

[a]Unweighted tabulations for the sample of larger non-statewide PHAs other than New York City and Los Angeles.
[b]Gross rent paid by family/total annual income, all families with reported income.
*Signifies that the difference between all successful enrollees or successful movers and unsuccessful enrollees is statistically significant at the 0.1 significance level.
Note: Columns may not total 100 percent due to rounding.
Source: Pre-Program Enrollment Data Forms and Enrollee Interviews.

compared with 36 percent of unsuccessful enrollees. The median rent burden for successful enrollees was 53 percent, as compared with 38 percent for unsuccessful enrollees.[7]

The figures shown in Exhibit 2.3 refer to all enrollees with reported income, including those who paid little or no rent because they were doubled up with another family or were homeless. Exhibit 2.4 repeats Exhibit 2.3, excluding sharers and homeless enrollees. The incidence of high rent burdens is even more marked among this group of enrollees. Eighty-two percent of successful and unsuccessful enrollees had rent burdens over 30 percent. Again, very high burdens were more frequent among successful enrollees, with 66 percent paying over half their income for rent, compared with 49 percent of unsuccessful enrollees.

Exhibit 2.5 shows enrollee rents and incomes for all enrollees, including those who paid no cash rent. The higher pre-program rent burdens experienced by successful enrollees result from different factors for those who qualified in place and those who qualified by moving. The higher pre-program rent burdens of enrollees who qualified in place reflect an average income ($7,932) similar to that of unsuccessful enrollees ($8,007), but much higher average pre-program rents (pre-program rents were 70 percent of the Fair Market Rent (FMR) for enrollees qualifying in place as compared with 48 percent of FMR for unsuccessful enrollees). The higher rent burdens for enrollees who qualified by moving, on the other hand, were a result of lower average incomes ($6,485) and similar housing costs (44 percent of the local FMR).

In summary, successful households had higher average rent burdens and a greater incidence of very high rent burdens than unsuccessful households. However, affordability was clearly a problem for most enrollees, whether successful or unsuccessful.

[7] The income used to calculate rent burden is the reported total household income the PHA used to calculate the Section 8 subsidy. It is a measure of the expected income during the coming year. Thus, rent burdens may be over 100 percent, using current rent and expected income. PHAs determined that 52 percent of enrollees were eligible for a federal preference based on high rent burden. Seventy-five percent of enrollees who qualified for a preference reported paying over 50 percent of income for rent. Similarly, 77 percent of those qualifying for a preference based on high rent burdens reported paying over 50 percent of income for rent. This apparent inconsistency could happen for several reasons. For example, an enrollee who qualified for a preference based on high rent may have reported a low rent burden in the survey because they temporarily moved in with another family to reduce housing costs.

Exhibit 2.5

ENROLLEE RENTS AND INCOMES
NATIONAL SAMPLE[a]

Housing Cost Indicator	Successful Enrollees			Un-Successful Enrollees	All Enrollees
	All	In Place	Mover		
Gross rent paid/FMR	52%*	70%*	44%	45%	51%
Mean	1.16	1.82	1.36	3.05	1.09
Standard error	56%	76%	42%	48%	56%
Median					
Total family income					
Mean	$6926*	$7932	$6485*	$8007	$7050
Standard error	130.8	228.8	156.3	393.9	124.7
Median	$6048	$7029	$5640	$7242	$6120

[a]Unweighted tabulations for the sample of larger non-statewide PHAs other than New York City and Los Angeles.

*Signifies that the difference between all successful enrollees or successful movers and unsuccessful enrollees is statistically significant at the 0.1 significance level.

Source: Pre-Program Enrollment Data Forms and Enrollee Interviews.

PHYSICALLY INADEQUATE HOUSING

Housing quality is measured in two ways: first by determining whether the unit has adequate space, and second through indicators of physical deficiencies in the unit. Three indicators of adequate space were considered: number of pre-program unit bedrooms relative to the number of bedrooms required on the voucher or certificate; homelessness; and whether the enrollee was sharing the unit with another family. Physical deficiencies were measured using the enrollee's characterization of pre-program unit quality, enrollee responses to questions regarding presence of plumbing and kitchen facilities and defects in the unit, and the PHA's determination as to whether the household qualified for a federal preference because they were judged to be living in substandard housing.[8]

Overall, pre-program housing quality of successful and unsuccessful enrollees was quite similar (Exhibit 2.6). About half of each group reported at least one indicator of inadequate space (most often sharing their pre-program unit), and about half reported at least one indicator of physical deficiencies (most often unit problems such as evidence of rodents, or peeling paint or plaster).

The similarity in housing quality among successful enrollees and unsuccessful enrollees results from a combination of better housing for enrollees who qualified in place, and worse housing for those who qualified by moving. As expected, enrollees who qualified in place were most likely to live in physically adequate housing, in terms of both having adequate space and having physically adequate units. Only 20 percent had any indicator of inadequate space, and that generally involved reporting fewer bedrooms than were required on the voucher or certificate.[9] Similarly, only 22 percent reported having any physical deficiencies, and those were usually enrollee reports of evidence of rodents, or peeling paint or plaster. The majority of households that either qualified by moving or failed to qualify lived in physically inadequate housing. Sixty-eight percent of enrollees who qualified by moving lived in units with inadequate

[8] Being homeless qualifies as substandard housing, thus the two sets of measures of physically inadequate housing are not totally separable.

[9] Exhibit 2.6 shows that a small fraction of enrollees who succeeded in place lived in units that we think should not have qualified. These tables are based on enrollee responses to the survey. These apparent inconsistencies may be a result of changes in enrollee situations or, in the case of unit size, of different enrollee and PHA interpretations of unit size definitions.

Exhibit 2.6

PRE-PROGRAM HOUSING QUALITY INDICATORS
NATIONAL SAMPLE[a]

Housing Quality Indicator	Successful Enrollees: All	Successful Enrollees: In Place	Successful Enrollees: Mover	Un-Successful Enrollees	All Enrollees
Number of enrollees	965	294	671	125	1090
Percent of enrollees:					
Who were homeless	17%	4%	22%	19%	17%
Who shared their pre-program unit	24	1	34*	27	25
Whose pre-program unit had fewer bedrooms than needed	18	16	19	14	18
With any crowding problem	54	20	68*	54	54
Percent of enrollees:					
Who rated the pre-program unit as "poor"	13%	2%	17%	14%	13%
Who had no private bath/ kitchen in their pre-program unit	6	2	7	9	6
With federal preference due to substandard housing[b]	17	5	22	19	17
Who reported rodents, peeling paint or broken plaster in their pre-program unit	32	17	38	35	32
With any physical deficiencies in their pre-program unit	47	22	59	53	48
Percent of enrollees with any indication of crowding or physical deficiencies	73%*	36%	89%*	80%	74%

[a]Unweighted tabulations for the sample of larger non-statewide PHAs other than New York City and Los Angeles.

[b]Federal preference for substandard housing includes homeless as a reason for substandard housing.

*Signifies that the difference between all successful enrollees or successful movers and unsuccessful enrollees is statistically significant at the 0.1 significance level.

Source: Pre-Program Enrollment Data Forms and Enrollee Interviews.

space and 59 percent lived in units with physical deficiencies. Enrollees who did not succeed were only slightly less likely to be living in situations with inadequate space (54 percent) or physical deterioration (53 percent) compared with those who qualified by moving.

In summary, successful and unsuccessful enrollees lived in similar quality pre-program housing, reflecting the combination of the better housing occupied by successful enrollees who qualified in place and the worse housing occupied by enrollees who qualified by moving.

Final Housing for Successful and Unsuccessful Households

In deciding whether or not we should be concerned with unsuccessful enrollees, we need to see how their final housing situation compares with what they could have achieved had they succeeded in the program. Our concern for unsuccessful households will be mitigated if it turns out that, in spite of not succeeding in the program, they ended up in housing that was as good and affordable as what they could have achieved through Section 8. As a rough proxy for housing they could have achieved through Section 8, we used the housing actually achieved by successful enrollees.[10]

Final housing quality was measured using a subset of the indicators that were used to assess pre-program housing. Namely, to assess affordability we looked at rent burdens; to assess adequate space we looked at whether households shared their units with other families; and to assess physical condition we used the enrollee's assessment of unit quality, as well as responses to questions on specific unit defects.

Unsuccessful enrollees ended up in much worse final housing than successful enrollees (Exhibit 2.7). Unsuccessful enrollees were more likely to live in units they shared with other families, or had fewer bedrooms than they needed. Their units were more likely to have physical defects, to be rated as "fair" or "poor" by the enrollee, and to be in "fair" or "poor" neighborhoods. In addition to poorer housing quality, they also had higher housing cost burdens—with rent burdens averaging 45 percent for those who paid rent (compared with 31 percent for successful enrollees). Although their rent burdens were higher, unsuccessful enrollees lived in less expensive units. Fifty-nine percent of unsuccessful enrollees were living

[10] A total of 28 unsuccessful enrollees reported moving to other units. The characteristics of the units they moved into are included in this analysis.

Exhibit 2.7

FINAL HOUSING CHARACTERISTICS
NATIONAL SAMPLE[a]

Final Housing Characteristic	Successful Enrollees			Un-Successful Enrollees	All Enrollees
	All	In Place	Mover		
Number of enrollees	965	294	671	125	1090
Physical Quality Indicators					
Percent reporting:					
Holes in floor	2%	3%	1%	8%	2%
Broken plaster, peeling paint	8	11	6	33	10
Rodents	4	8	3	10	5
Percent rating unit as:					
Excellent	45%	40%	48%	21%	43%
Good	41	42	40	37	40
Fair	13	17	11	26	14
Poor	1	2	1	16	3
Percent rating neighborhood as					
Excellent	33%	34%	33%	20%	31%
Good	41	37	44	38	41
Fair	21	26	19	31	22
Poor	5	4	5	12	6
Percent sharing final unit	0%	0%	0%	31%	4%
Affordability Indicators					
Rent burden					
Mean	32%*	31%	32%*	52%	34%
Standard error	0.50	0.72	0.66	3.29	0.60
Median	30%	30%	30%	49%	30%
Gross rent/FMR					
Mean	91%*	82%	93%	64%	89%
Standard error	0.46	1.05	0.46	3.21	0.58
Median	91%	86%	94%	68%	91%

[a]Unweighted tabulations for the sample of larger non-statewide PHAs other than New York City and Los Angeles.
*Signifies that the difference between all successful enrollees or successful movers and unsuccessful enrollees is statistically significant at the 0.1 significance level.
Note: Columns may not total 100% due to rounding.
Source: Pre-Program Enrollment Data Forms and Enrollee Interviews.

in units with full gross rents (defined as the rent that the landlord normally charges for the unit plus allowances for utilities not included in the rent) that were less than 75 percent of the FMR by bedroom size. Only 8 percent of successful enrollees lived in such inexpensive units.[11]

In summary, the housing situation that successful enrollees obtained through the program was far superior to that of unsuccessful enrollees.

While there were some differences between successful and unsuccessful enrollees in terms of pre-program unit costs and quality, the two groups were much more alike than they were different. Both groups often lived in pre-program housing that had inadequate space, was shared with another household, or was physically deficient. Both groups often faced high pre-program rent burdens. The program's assistance substantially ameliorated these burdens for recipients, while unsuccessful enrollees generally remained in inadequate housing situations.

2.3 Search Intensity by Successful and Unsuccessful Enrollees

As with pre-program housing quality, we would be less concerned about unsuccessful enrollees if they did not try as hard as successful enrollees did to qualify in the Section 8 program. In fact, it appears that the vast majority of unsuccessful enrollees did try to qualify, though it is difficult to determine whether they tried "as hard" as successful enrollees. This section presents indicators that compare the search intensity for successful and unsuccessful enrollees.

Exhibit 2.8 presents these indicators for successful and unsuccessful enrollees in the national sample. The first indicator of search is whether enrollees search at all. Enrollees in the Section 8 program can adopt one of four search strategies. They can choose to try to qualify in place only, to try to qualify by moving only, to try to qualify in place and by moving, or not to try at all. Enrollees were classified as trying to qualify in their pre-program unit if they asked their landlord about participating. They were classified as trying to move if they called about or visited any new units.

The exhibit shows that most unsuccessful enrollees did, in fact, search for housing. Thirty-eight percent tried to qualify in place, and 82 percent tried to qualify by moving. Twenty-

[11] In order to normalize across bedroom sizes, we compared gross rents relative to the local FMR for the unit's size.

Exhibit 2.8

INDICATORS OF SEARCH INTENSITY NATIONAL SAMPLE[a]

Indicator	Successful Enrollees		Unsuccessful Enrollees
	In Place	Mover	
Number of enrollees	294	671	125
Search strategy: percent of enrollees who:			
Only tried in place	72%	NA	10%
Tried in place and tried to move	28	32%	28
Only tried to move	NA	68	54
Did not try	NA	NA	8
Among those who only tried to move, percent who thought they could not qualify in pre-program unit or were ineligible to qualify in place	NA	93%	96%
Search intensity indicators for households who tried to move:			
Percent who visited:			
no units	8%	0%	6%
1-2 units	22	34	13
3-5 units	24	24	23
6-10 units	23	18	23
11-25 units	13	14	28
26+ units	10	9	8
Average number of units visited by households that visited some units	11	9	12
Percent of enrollees "not yet successful" during the month who searched for units each month:			
Month 1	96%	94%	88%
Month 2	24	64	44
Month 3	11	18	13
Month 4	NA	NA	19

[a]Unweighted tabulations for the sample of larger non-statewide PHAs other than New York City and Los Angeles.
Source: Enrollee Interviews.

eight percent of unsuccessful enrollees adopted both search strategies. Only 8 percent did not try at all.

Enrollees can only qualify in their pre-program unit if their landlord agrees to participate, and if the unit meets program quality and occupancy requirements. As shown in the exhibit, nearly all enrollees who did not try to qualify in place, were either ineligible to do so because they were living in homeless shelters, as subunits with other families, or in public housing), or thought they could not qualify in their pre-program unit. This implies that almost all enrollees who thought they could qualify in their pre-program unit and were eligible to qualify in place did in fact try to qualify in place.

The bottom panel of the exhibit shows indicators of efforts made by those who attempted to qualify by moving. Eighty-two percent of unsuccessful enrollees tried to qualify by moving, which means they reported calling about or visiting potential rental units. Most of those who tried to move (94 percent) actually went and visited units. Unsuccessful enrollees who tried to move typically visited more units than successful movers. Fifty-nine percent looked at six or more units, compared with only 41 percent of movers. The average number visited by unsuccessful enrollees who visited any units was 12, which is higher than the number visited by successful movers (9). Thus, we can say that the unsuccessful enrollees, on average, did not stop searching earlier than successful enrollees. However, we cannot say that unsuccessful enrollees looked "harder," because the search of successful enrollees is truncated when they are successful, so we do not know whether they would have looked at more units had they not succeeded.

Running out of time does not appear to be a major factor in failure to qualify. Nearly all enrollees, regardless of outcome, searched in the first month they had their voucher or certificate. However, only 44 percent of the unsuccessful enrollees looked in the second month of search, and only 13 percent searched in the third month. Nineteen percent of unsuccessful enrollees reported looking for housing (either in their pre-program unit or in other units) in the final month. Sixty-four percent of successful movers who did not qualify by the end of the second month looked for housing in that month. Similarly, 18 percent of successful movers who had not qualified by the end of the third month looked for housing in that month. Here again, it is difficult to know what to make of the comparison. On one hand, it is clear that

unsuccessful enrollees often stopped looking before their time expired; however, successful enrollees also apparently took breaks in their search efforts.[12]

2.4 Success Rates Among Demographic Subgroups

Our concern for unsuccessful households would increase if it turned out that particularly vulnerable groups were over-represented in the unsuccessful population. Therefore, we compared success rates separately by several demographic dimensions: race/ethnicity (non-minority, black, and Hispanic); household composition (elderly, disabled, single adult with children, two or more adults with children, and other); unit size required; primary source of income (mostly welfare, mostly social security, mostly wages, and all others); and whether the enrollee was homeless.

There is a significant difference in success rates by demographic group when we compare sources of income and unit size required. Enrollees who received over half their income from welfare were more likely to succeed and enrollees who received most of their income from wages were less likely to succeed. Enrollees who needed two-bedroom units were most likely to succeed, and those needing larger units (three or more bedrooms) were significanty less likely to succeed. In addition, the probability of qualifying in place or by moving varied among groups; for example, the elderly were more likely to qualify in place than other groups, though their overall success rate was generally similar to others (Exhibit 2.9).

2.5 Successful and Unsuccessful Enrollees in New York City

In this section we present exhibits that summarize our findings for enrollees in New York City and highlight aspects that differ between New York City and the other sites.

Need for Housing Assistance

As in other sites, in New York City successful enrollees were more likely to have higher pre-program rent burdens than unsuccessful enrollees, with a mean rent burden of 69 percent

[12] Three sites reported allowing less than four months for search. One site said they allow only two months, though 20 percent of enrollees in that site reported searching in the third or fourth month. In the two sites that reported allowing three months, 5 percent of enrollees tried in the fourth month.

Exhibit 2.9

SUCCESS RATES BY DEMOGRAPHIC CHARACTERISTIC
NATIONAL SAMPLE[a]

Demographic Characteristic	Sample Size	Percent of Enrollees Who Succeed	Succeed In Place	Succeed By Moving
Number of enrollees	1090	89%	27%	62%
Ethnicity				
Non-minority	469	89%	33%	56%
Black	455	87	22	65
Hispanic	106	92	26	65
Other	27	89	11	78
Household composition				
Elderly (single and couples)	61	86%	62%	26%
Single, disabled	84	87	31	56
Single, with children	772	90	24	66
Two parents, with children	106	84	27	57
Other	67	87	28	58
Unit size required				
0/1 bedroom	229	88%	35%	52%
2 bedrooms	575	91**	23	69
3+ bedrooms	286	84**	29	55
Primary income source (≥50% of total annual income)				
Welfare	539	91%*	20%	71%
Social Security	172	87	44	43
Wages	269	87*	28	58
All other	110	84	30	54
Homeless status				
Homeless	185	87%	8%	80%
Not homeless	905	89	31	58

[a]Unweighted tabulations for the sample of larger non-statewide PHAs other than New York City and Los Angeles.

*Signifies that the difference in success rates between households whose primary source of income is welfare and households whose primary source of income is wages is statistically significant at the 0.1 significance level.

**Signifies that the difference in success rates between households requiring two bedrooms and those requiring three or more bedrooms is statistically significant at the 0.1 significance level.

Note: Rows may not total 100% due to rounding.
Source: Pre-Program Enrollment Data Forms and Enrollee Interviews.

Exhibit 2.10

PRE-PROGRAM HOUSING AFFORDABILITY INDICATORS
NEW YORK CITY

Housing Cost Indicator	Successful Enrollees			Un-Successful Enrollees	All Enrollees
	All	In Place	Mover		
Number of enrollees with reported income >0	253	156	97	131	384
Percent of enrollee with rent burden:[a]					
0[b]	8%	1%	20%	10%	9%
≤30%	7	4	11	7	7
30+ - ≤50%	12	9	18	19	15
50+%	73	87	52	64	70
Mean rent burden	69%*	79%	51%	58%	65%
Standard error	2.15	2.16	3.84	2.84	1.74
Median rent burden	74%	82%	51%	59%	65%

[a]Gross rent paid by family/total annual income, all families with reported income.
[b]These enrollees paid no cash rent.
*Signifies that the difference between all successful enrollees or successful movers and unsuccessful enrollees is statistically significant at the 0.1 percen significance level.
Note: Columns may not total 100 percent due to rounding.
Source: Pre-Program Enrollment Data Forms and Enrollee Interviews.

Exhibit 2.11

PRE-PROGRAM HOUSING AFFORDABILITY INDICATORS
NON-SHARERS, NON HOMELESS ENROLLEES
NEW YORK CITY

Housing Cost Indicator	Successful Enrollees			Un-Successful Enrollees	All Enrollees
	All	In Place	Mover		
Number of enrollees with reported income >0	210	149	61	82	292
Percent of enrollee with rent burden:[a]					
≤30%	6%	3%	13%	2%	5%
30+ - ≤50%	12	9	20	22	15
50+%	82	88	67	76	80
Mean rent burden	76%*	80%	67%	67%	74%
Standard error	1.98	2.14	4.15	2.79	1.64
Median rent burden	79%	82%	62%	63%	75%

[a]Gross rent paid by family/total annual incomes), all families with reported income.
*Signifies that the difference between all successful enrollees or successful movers and unsuccessful enrollees is statistically significant at the 90% confidence level.
Note: Columns may not total 100% due to rounding.
Source: Pre-Program Enrollment Data Forms and Enrollee Interviews.

of income paid for rent among successful enrollees, and 58 percent among unsuccessful enrollees (Exhibit 2.10). While in the national sample, successful movers had higher pre-program rent burdens than unsuccessful enrollees, in New York City, successful movers had lower rent burdens than unsuccessful enrollees, though the differences are not statistically significant.[13]

Exhibit 2.11 shows the pre-program rent burdens for enrollees who were not homeless and did not share their pre-program unit with another family. As in the other sites, pre-program rent burdens for this group of enrollees were extremely high, with 80 percent paying over half their income for rent.

As was the case in the other sites, the higher rent burden for households who qualified in place resulted from higher pre-program rents, rather than lower incomes (Exhibit 2.12 shows rents and incomes for all enrollees). Enrollees who succeeded in place paid on average 78 percent of the FMR for their unit size for rent, compared with 46 percent for enrollees who qualified by moving and 52 percent for unsuccessful enrollees. Average incomes were similar for successful ($7,484) and unsuccessful ($7,480) enrollees.

Physically Inadequate Housing

In contrast to the other sites, in New York City there was a significant difference in pre-program housing quality between successful and unsuccessful enrollees (Exhibit 2.13). Successful enrollees were more likely to live in units with adequate space, and less likely to live in physically deficient units. This difference is largely due to the fact that in New York City a large portion of successful enrollees qualified in place. As with the other sites, enrollees in New York City who qualified in place lived in better pre-program units than enrollees who qualified by moving and enrollees who did not succeed.[14] However, as compared to the other

[13] The sample size of enrollees who qualified by moving in New York City is quite small. Only 99 enrollees qualified by moving. The small sample size contributes to the lack of statistical significance in differences. Twenty-three percent of enrollees in New York City qualified for a federal preference based on the PHA's judgement that they had a rent burden of over 50 percent of income. This is in contrast with enrollee reports. Sixty-eight percent of enrollees reported that they paid over half their income for rent.

[14] Exhibit 2.13 shows that a small fraction of enrollees who succeeded in place lived in units that we thought should not have qualified. These tables are based on enrollee responses to the survey. These apparent inconsistencies may be a result of charges in enrollee situations, or, in the case of unit size, of different enrollee and PHA interpretations of unit size definitions.

Exhibit 2.12

ENROLLEE RENTS AND INCOME
NEW YORK CITY

Housing Cost Indicator	Successful Enrollees			Un-Successful Enrollees	All Enrollees
	All	In Place	Mover		
Full gross rent paid/FMR					
Mean	66%	78%	46%	52%	61%
Standard error	2.13	2.11	3.62	2.82	1.73
Median	71%	81%	44%	52%	63%
Total family income, all enrollees					
Mean	$7484	$7654	$7214	$7480	$7483
Standard error	162.7	204.2	267.6	259.6	139.0
Median	$6240	$6336	$6123	$6127	$6150

Note: Columns may not total 100% due to rounding.
Source: Pre-Program Enrollment Data Forms and Enrollee Interviews.

Exhibit 2.13

PRE-PROGRAM HOUSING QUALITY INDICATORS
NEW YORK CITY

Housing Quality Indicator	Successful Enrollees			Un-Successful Enrollees	All Enrollees
	All	In Place	Mover		
Number of enrollees	257	158	99	136	393
Percent of enrollees:					
Who were homeless	5%	1%	12%	7%	6%
Who shared their pre-program unit	12*	3	25	31	18
Where pre-program unit had fewer bedrooms than needed	8	6	12	9	8
With any crowding problem	25*	10	50	47	33
Percent of enrollees:					
Who rated the pre-program unit as "poor"	13%	3%	27%	22%	16%
Who had no private bath/kitchen in their pre-program unit	7*	2	14	16	10
With federal preference due to substandard housing[a]	73*	61	92	83	76
Who reported rodents, peeling paint or broken plaster in their pre-program unit	30*	17	53	51	37
With any physical deficiencies in their pre-program unit	80*	71	95	94	85
Percent of enrollees with any indication of crowding or physical deficiencies	83%	73%	98%	95%	87%

[a]Federal preference for substandard housing includes homeless as a reason for substandard housing.
*Signifies that the difference with unsuccessful households of the proportion is statistically significant at the 0.1 confidence level.
Source: Pre-Program Enrollment Data Forms and Enrollee Interviews.

sites where movers tended to live in worse quality pre-program housing than unsuccessful enrollees, in New York City successful movers and unsuccessful enrollees lived in similar quality housing—nearly half lived in housing that had inadequate space (50 percent for movers and 47 percent for unsuccessful enrollees), and the vast majority lived in physically deficient units (98 percent of successful movers and 95 percent of unsuccessful enrollees).

In summary, the combination of better quality housing for those who qualified in place, and similar housing for movers and unsuccessful enrollees, means that successful enrollees in New York City lived in better quality pre-program housing than unsuccessful enrollees.[15]

Final Housing

As was the case in the other sites, successful enrollees achieved much better housing than the final housing achieved by unsuccessful enrollees (Exhibit 2.14).

Enrollee Effort

Exhibit 2.15 shows that in New York City, as elsewhere, only a small fraction of unsuccessful enrollees (7 percent) did not try to qualify at all. Half tried to qualify in place, and 77 percent tried to move. Thirty-four percent adopted both search strategies.

The exhibit shows that all unsuccessful enrollees who did not try to qualify in place either were ineligible to do so or thought they could not qualify in their pre-program unit.

The bottom panel of the exhibit shows indicators of attempts to qualify by moving among enrollees in New York City. Seventy-seven percent of unsuccessful enrollees tried to move, and 89 percent of those who tried to move visited units. They visited more units than successful movers. Sixty percent of unsuccessful enrollees who tried to move visited more than five units compared with 40 percent of successful movers. On average, they visited nearly twice as many units (12) as successful movers (6). Thus, as elsewhere, it appears that not looking is not the reason unsuccessful enrollees fail. However, as was the case in the other sites, most unsuccessful enrollees stopped searching before the end of their allowed four months. In

[15] Nearly all enrollees in New York City qualified for a federal preference based on the PHA's judgment that they lived in substandard housing—including 61 percent of those who ultimately qualified in place.

Exhibit 2.14

FINAL HOUSING CHARACTERISTICS
NEW YORK CITY

Final Housing Characteristic	Successful Enrollees			Un-Successful Enrollees	All Enrollees
	All	In Place	Mover		
Number of enrollees	257	158	98	126	382
Physical Quality Indicators					
Percent reporting:					
Holes in floor	4%	4%	5%	21%	10%
Broken plaster, peeling paint	7	10	1	37	17
Rodents	14	7	8	43	23
Percent rating unit as:					
Excellent	26%	26%	27%	18%	24%
Good	55	58	52	30	47
Fair	15	15	17	27	19
Poor	3	2	5	25	10
Percent rating neighborhood as:					
Excellent	22%	21%	24%	22%	22%
Good	52	53	49	34	45
Fair	22	22	23	27	24
Poor	4	4	5	17	9
Percent sharing final unit	0%	0%	0%	30%	10%
Affordability Indicators					
Rent burden					
Mean	37%*	37%	37%*	64%	48%
Standard error	0.86	1.14	1.32	2.67	1.38
Median	31%	31%	31%	62%	39%
Gross rent/FMR					
Mean	93%*	90%	97%*	71%	85%
Standard error	1.21	1.69	1.45	2.95	1.46
Median	96%	89%	100%	71%	89%

*Signifies that the difference with unsuccessful households of the proportion is statistically significant at the 90% confidence level.

Note: Columns may not total 100% due to rounding.

Source: Pre-Program Enrollment Data Forms and Enrollee Interviews.

Exhibit 2.15

INDICATORS OF SEARCH INTENSITY - NEW YORK CITY

Indicator	Successful Enrollees		Unsuccessful Enrollees
	In Place	Mover	
Number of enrollees	158	99	136
Search strategy: Percent of enrollees who:			
Only tried in place	80%	NA	16%
Tried in place and tried to move	20	33%	34
Only tried to move	NA	67	43
Did not try	NA	NA	7
Among those who only tried to move, percent who thought they could not qualify in pre-program unit or were ineligible to qualify in place	NA	100%	100%
Search intensity indicators for households who tried to move			
Percent who visited:			
no units	49%	0%	11%
1-2 units	31	38	17
3-5 units	34	21	12
6-10 units	19	27	24
11-25 units	8	11	27
26+ units	3	2	9
Average number of units visited by households that visited some units	8	6	12
Percent of enrollees "not yet successful" during the month who searched for units each month:			
Month 1	91%	76%	90%
Month 2	9	52	54
Month 3	9	40	26
Month 4	NA	NA	34

Source: Enrollee Interviews.

contrast with the other sites, though, unsuccessful enrollees were more likely to start searching earlier than successful movers.

Success Rates for Demographic Subgroups

In New York City, there were several differences in success rates across demographic groups: non-minorities were more likely to succeed (73 percent) than blacks (55 percent), disabled enrollees had below average success rates (55 percent), and single parents with children were more likely to succeed (78 percent), as were enrollees requiring two-bedroom units (89 percent) (Exhibit 2.16). It is important to separate the effects of race, household composition and other characteristics on success rates using multivariable regression, as is done in Section 3.4 below.

2.6 Summary

In summary, it appears that we cannot easily dismiss unsuccessful enrollees as being too few to be of concern, having little need of assistance, or exhibiting limited interest and effort. There were few unsuccessful enrollees in the national sample, but there is reason to believe that this may be a transient and less than universal phenomenon associated with relatively loose submarkets of Section 8 rental markets. In the national sample, unsuccessful enrollees did appear to have slightly higher average incomes and lower average rent burdens than successful enrollees, but more striking is the extent to which the two groups overlapped on other measures of pre-program housing assistance need. About a quarter of unsuccessful enrollees appear to have made very limited efforts to qualify for Section 8 assistance. On average, unsuccessful enrollees searched at least as intensively as successful enrollees, though they did give up before they ran out of time. Finally, while success rates are reasonably similar across demographic groups, there are some differences.

In New York City the specific details of the comparisons between successful and unsuccessful enrollees are different than in the national sample, but the overall patterns are similar. Both successful and unsuccessful enrollees had high rent burdens and often lived in physically inadequate housing. As in the other sites, the program vastly improved the housing situation for successful enrollees, leaving unsuccessful enrollees in far worse housing. In New

Exhibit 2.16

SUCCESS RATES BY DEMOGRAPHIC CHARACTERISTIC
NEW YORK CITY

Demographic Characteristic	Sample Size	Percent of Enrollees Who Succeed	Succeed In Place	Succeed By Moving
Number of enrollees	393	65%	40%	25%
Ethnicity				
Non-minority	161	73%[a]	53%	20%
Black	100	55[a]	28	27
Hispanic	127	65	34	32
Other	3	33	33	0
Household Composition				
Elderly (single and couples)	173	68%[b]	47%	20%
Single, disabled	125	55	30	25
Single, with children	67	78[b]	37	40
Two parents, with children	13	54	31	23
Other	15	80	60	20
Unit size required				
0/1 bedrooms	323	63%[c]	40%	23
2 bedrooms	28	89[c]	46	43
3+ bedrooms	42	64[c]	36	29
Primary income source (≥50% of total annual income)				
Welfare	70	74%	31%	43%
Social Security	286	63	42	21
Wages	27	74	44	30
All other	10	60	50	10
Homeless Status				
Homeless	24	58%	8%	50%
Not homeless	369	66	42	24

[a]Signifies that the difference in success rates between non-minority households and black households is statistically significant at the 0.1 significance level.
[b]Signifies that the difference in success rates between single parent households and elderly and disabled households is statistically significant at the 0.1 significance level.
[c]Signifies that the difference in success rates between households requiring 2 bedrooms and those requring larger or smaller units is statistically significant at the 0.1 significance level.
Note: Rows may not total 100% due to rounding.
Source: Pre-Program Enrollment Data Forms and Enrollee Interviews.

York City, there were more differences in outcomes across demographic groups when compared with the other sites.

Chapter THREE
DETERMINANTS OF ENROLLEE SUCCESS

This chapter presents analyses of the determinants of enrollee success. For the national sample, we discuss the search process in Section 3.1, the association of success with various enrollee characteristics in Section 3.2, and the sorts of landlords and units that enrollees approached in Section 3.3. A separate analysis for enrollees in New York City is presented in Section 3.4.

3.1 THE SEARCH PROCESS

The search process involves four major steps for the enrollee:

- finding a unit the enrollee wants to rent under Section 8;
- obtaining the landlord's initial consent to rent under Section 8 and specifically to allow the unit to be inspected by the PHA;
- arranging for a PHA inspection of the unit; and
- obtaining the landlord's compliance with any required repairs, as well as other program requirements, such as restrictions on the rent or mandated lease provisions.

Enrollees can try to qualify in their pre-program unit, they can try to qualify in new units, or they can do both (or neither). We expect the process to be very different for attempts to qualify in place and attempts to qualify in a new unit. Enrollees already know their pre-program unit and landlord, and may be treated differently by their landlords than an unknown prospective tenant would be. Most enrollees (79 percent) tried to qualify by moving; about half (52 percent) tried to qualify in place. Thirty-one percent of enrollees adopted both search strategies. Only 1 percent of all enrollees (and 8 percent of unsuccessful enrollees) did not look at all (Exhibit 3.1).

QUALIFYING IN PLACE

Consider first the process for enrollees who attempt to qualify in place, which is summarized in Exhibit 3.2 (and diagrammatically in Exhibit B.1 in Appendix B). About half the enrollees asked their pre-program landlord about participating in the program. Three fourths

Exhibit 3.1
SEARCH STRATEGIES ADOPTED
NATIONAL SAMPLE[a]

	Successful Enrollees			Un-Successful Enrollees	All Enrollees
	All	In Place	Movers		
Number of Enrollees	965	294	671	125	1090
Percent of Enrollees who:					
Only tried in place	22%	72%	NA	10%	21%
Tried in place and tried to move	31	28	32%	28	31
Only tried to move	47	NA	68	54	48
Did not try	NA	NA	NA	8	1

[a] Unweighted tabulations for the sample of larger non-statewide PHAs other than New York City and Los Angeles.
Source: Enrollee interviews.

Exhibit 3.2
QUALIFYING IN PLACE — NATIONAL SAMPLE[a]

Number of all enrollees	1,090
Steps in the process:	
Percent of enrollees who asked pre-program landlord	51%
Of those asking, percent where landlord agreed to an inspection	75%
Of those units where landlord agreed to inspection, percent of completed inspections	79%
Of those units inspected, percent of enrollees who qualified in place	89%
Of those units where enrollees qualified in place, percent that required repairs	59%
Enrollees who qualified in place as a percent of all who asked their pre-program landlord	53%

[a] Unweighted tabulations for the sample of larger non-statewide PHAs other than New York City and Los Angeles.
Source: Enrollee Interviews

of the landlords who were asked then agreed to an inspection, and almost four fifths of those agreeing to have an inspection did in fact have an inspection. In almost 90 percent of the cases in which the pre-program unit was inspected, the enrollee ended up qualifying in that unit, even though repairs were required in 59 percent of these units.

Three things stand out about these rates. First, many enrollees did not ask their pre-program landlord about participating in the program. Second, for those who did ask, the proportion passing through each of the various stages was quite high, though only about half of those asking passed through all of the steps and qualified in place. Third, in a fifth of the cases where the landlord agreed to an inspection, none was actually completed.

It appears that almost all of the enrollees who did not ask their pre-program landlord about participating in the program either could not have qualified for the program in their pre-program unit or at least thought that they could not. About one third of all enrollees were homeless, living in public housing, or living as a subunit with another family where they did not pay any part of the rent directly to the owner. These enrollees usually were not eligible to qualify in their pre-program units and almost none tried to do so. Other enrollees, if they had not already qualified in place by the first post-enrollment interview, were asked whether they thought that they could qualify in their pre-program unit. Of the enrollees who responded to the question, about 83 percent thought that either their pre-program unit would not qualify or their pre-program landlord would not participate (though some of these enrollees later tried to qualify in place).

These two groups comprise the vast majority of enrollees who did not try to qualify in their pre-program units. Of the 531 enrollees who did not try to qualify in their pre-program units only 7 percent thought they could qualify in place. Thus, it appears that the relatively high success rates for the various steps in the search process may in part reflect the fact that enrollees primarily approach landlords whom they think are likely to accept them and the program (Exhibit 3.3).[1]

[1] We cannot judge the importance of this self-selection without knowing how accurate enrollee guesses were. We do know that enrollees whom we classified as unable to qualify in their pre-program unit almost never did so. We cannot judge the accuracy of the enrollee assessments reported in the first-month interview, because few enrollees who thought they could not qualify in their pre-program unit approached their pre-program landlord. The results presented here focus on the ***actions*** of enrollees in their attempts to qualify in the Section 8 program. We therefore stratify the sample on the basis of the options they actually pursued, rather than their original stated preferences, as we done in some earlier studies (see Final Comprehensive

Exhibit 3.3

ENROLLEES WHO DID NOT TRY TO QUALIFY IN PLACE
NATIONAL SAMPLE[a]

Number of enrollees	531
Percent:	
Living in units where it is assumed enrollee could not qualify	67%
Who thought either pre-program unit would not qualify or pre-program landlord would not take Section 8	26%
Who thought pre-program unit could qualify and landlord would accept Section 8	7%

[a]Unweighted tabulations for the sample of larger non-statewide PHAs other than New York City and Los Angeles.
Source: Enrollee Interviews

While all probabilities of passing through the individual steps in the process are high, the rate for the last step is especially noticeable (89 percent). It appears that once the landlord and enrollee have committed to the point of having an inspection, the enrollee is quite likely to qualify in the unit, even though, as mentioned above, a large portion (59%) of units in which enrollees ultimately qualified, required repairs.

The third, somewhat unexpected, result shown in Exhibit 3.2 is the fact that among the cases in which a landlord agreed to an inspection, inspections were completed in only 79 percent of the cases. It appears that some enrollees checked with their landlord before they decided whether or not they wanted to stay in their pre-program unit. Upon reflection, this seems quite reasonable since in most cases where enrollees did not arrange for an inspection in spite of the landlord's agreement to participate, they instead qualified by moving (86 percent). This association with other options is further confirmed by the fact that in New York City, where it was less common to qualify by moving, enrollees were much more likely to have an inspection

Report of the Freestanding Housing Voucher Demonstration, HUD, May, 1990, p. 48). In Appendix B, Exhibit B-2, we present search strategies and enrollee outcomes based on ***preferences*** at enrollment. Exhibit B-3 presents a similar table based on enrollee ***perceptions*** regarding the pre-program unit's ability and the landlord's agreement to qualify.

in their pre-program unit once the landlord agreed to one (92 percent, as shown in Exhibit 3.24 in Section 3.4). (It should be noted, however, that not all enrollees who did not pursue an inspection with an agreeing landlord qualified by moving. It is not clear why the remaining few enrollees whose landlords had agreed to an inspection, did not pursue an inspection in their pre-program units even though this meant that they did not qualify for assistance.)

By definition, no unsuccessful enrollee completed all the steps required to qualify in place. Even so, it is useful to see how far unsuccessful enrollees got in this process (Exhibit 3.4). Among the 125 unsuccessful enrollees, 62 percent never asked their pre-program landlords about participating in the program. In almost all of these cases, this appears to reflect the enrollee's judgment that he or she would not be able to qualify in the pre-program unit. Sixty-five percent of those not asking were living in units that were ineligible for the program (homeless shelters, subunits, public housing), and another 29 percent thought that either their pre-program unit would not qualify or their pre-program landlord would not participate. Only 6 percent of unsuccessful enrollees did not try to qualify in place even though they thought they could.

About half (54 percent) of the landlords approached by unsuccessful enrollees agreed to participate, and the other half did not. Enrollees reported that the most common reason landlords gave for turning them down was that the landlord did not rent to Section 8 holders.

Although 26 landlords agreed to an inspection, inspections took place in only 14 units. It is not clear why the remaining 12 units were not inspected (10 percent of all unsuccessful enrollees). Among successful enrollees, we interpreted this as reflecting a decision by the enrollee to qualify by moving instead. In the cases of unsuccessful enrollees, this seems less plausible (six of these enrollees tried to move but did not qualify, and the other six did not try to move). This decision does not seem to be related to their beliefs about the unit's ability to pass the inspection.

Among the 14 units that were inspected, none passed. In six cases, the enrollee indicated that the unit failed and the landlord agreed to repair the unit. Nevertheless, these enrollees did not ultimately qualify. We do not know whether this reflects one party changing his mind, or the inability of the unit to pass program rent or occupancy requirements.

Exhibit 3.4

HOW FAR UNSUCCESSFUL ENROLLEES GOT IN THEIR ATTEMPTS TO QUALIFY IN PLACE NATIONAL SAMPLE[a]

	All Unsuccessful Enrollees	Unsuccessful Enrollees Who Asked Their Landlords About Participating
Number of enrollees	125	48
Percent who never asked their landlord	62%	NA
Percent who asked landlord and were turned down	17%	46%
Percent where landlord agreed to inspection, but no inspection occurred	10%	25%
Percent inspected, but did not pass, and landlord refused to make repairs	6%	16%
Percent that passed inspection, or landlord agreed to make repairs but enrollee did not rent unit	5%	13%

[a]Unweighted tabulations for the sample of larger non-statewide PHAs other than New York City and Los Angeles.
Source: Enrollee Interviews.

QUALIFYING BY MOVING

The process for those who tried to qualify by moving is summarized in Exhibit 3.5 (and diagrammatically in Exhibit B.4 in Appendix B). Qualifying by moving is more complex than qualifying in place. The process of qualifying by moving involves a series of efforts and/or decisions by enrollees, landlords, and PHAs. Enrollees succeed when they find units that they are willing to rent, and owners who are willing both to have the enrollee as a tenant and to comply with the requirements of the Section 8 program. We looked at the roles of enrollee search, landlord decision, and program rules by tracing the steps in the search process—asking enrollees about their ability to find units that they wanted to rent, to obtain a landlord's agreement to an inspection, and, following the inspection, to qualify in the unit.

The first step in the process of qualifying by moving is for the enrollee to find a unit that he or she wants to rent and to approach the landlord. We assume that where enrollees search and which units they pursue, reflect their housing goals as well as their perceptions of the potential acceptability of the unit to the Section 8 program and of the potential willingness of the owner to rent under Section 8. We assume that the owner's agreement to have an inspection reflects the owner's willingness to rent to the enrollee under the Section 8 program.

The step after this consists of actually arranging for an inspection. This step most often reflects a further decision by enrollees. In a subset of cases we asked enrollees why they did not arrange for inspections in units that they said they wanted. In addition to cases in which landlords turned them down, enrollees indicated they sometimes changed their minds about wanting to rent the unit, sometimes found another unit that they wanted to try first, and sometimes decided that the unit was unlikely to qualify under Section 8. At the same time, we cannot be sure that failure to inspect is solely a matter of enrollee decision and does not also reflect some landlord reversals of initial agreements to have an inspection.

Once an inspection is complete, the owner must decide whether to make any necessary repairs, rent within the allowed limits, and comply with other program requirements. While enrollees could also change their minds at this point, this seems very rare.

The important elements of this process are thus the number of units an enrollee visits and the enrollee's ability to locate desirable units, correctly understand program requirements, and convince landlords to participate.

Exhibit 3.5

QUALIFYING BY MOVING
NATIONAL SAMPLE[a]

ENROLLEES	
Number of enrollees	1,090
Percent of enrollees who tried to move	79%
Of those enrollees who tried to move, percent who looked at one or more units	98%
UNITS	
Number of units visited (Average per searcher)	8,241 (9.6)
Of units visited, percent enrollee wanted to rent (Average number per searcher)	38% (3.7)
Of units enrollees wanted to rent, percent where landlord agreed to an inspection (Average number per searcher)	37% (1.4)
Of units where landlord agreed, percent where inspection was completed (Average number per searcher)	65% (0.9)
Of units inspected, percent where enrollee qualified by moving to that unit	89%
Of units where enrollees qualified by moving to that unit, percent that required repairs	48%

[a]Unweighted tabulations for the sample of larger non-statewide PHAs other than New York City and Los Angeles.
Source: Enrollee Interviews

In the national sample, 79 percent of enrollees reported that they tried to find a new unit, and 98 percent of these actually looked at one or more units. Since enrollees typically look at a number of units, the rest of Exhibit 3.5 presents the process in terms of units and units per enrollee. Enrollees who reported that they tried to move looked at an average of 9.6 units. Of the units looked at, 38 percent (or 3.7 per enrollee) were units that enrollees wanted to rent. In 37 percent of these units (or 1.4 units per enrollee), enrollees reported that the landlord agreed to an inspection. Inspections were completed for 65 percent of these units.[2] Where inspections were completed, the enrollee actually moved to the unit as a Section 8 recipient in 89 percent of the cases, and 48 percent of these recipient units required some repairs to meet program housing quality requirements.

As was the case for enrollees who approached their pre-program landlords, no inspection was completed for 35 percent of units in which the enrollee reported that the landlord had agreed to an inspection. This appears to reflect the same factors that led enrollees to decide not to submit pre-program units for inspection, but the details may be somewhat different.

Tabulations of enrollees' reasons for not submitting a request for lease approval for units they initially said they wanted to rent indicate a number of reasons for not submitting a unit for inspection in addition to landlord refusals. These include cases in which enrollees decided that units were unlikely to pass inspection or changed their minds about wanting units, or subsequently found other units that they preferred (the implication being that they might have tried to have those units inspected first). These reasons are roughly equally prevalent for enrollees who ultimately succeeded and those who failed, except that few failing enrollees reported that they found another unit that they preferred.[3]

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[2] During each interview, enrollees were asked the number of units for which an inspection was agreed. If an inspection was agreed to on at least one unit, they were then asked the number of units for which they were waiting for an inspection, and the number for which an inspection was completed. These tabulations assume that the inspections that enrollees were waiting for were in fact completed.

[3] Our understanding of why enrollees do not submit new units for inspection is based on responses to questions regarding a sample of units, rather than all units. During each interviewing wave, we queried enrollees in some detail about the most recent unit that they wanted to rent, but were not going to rent. This was not a random sample of such units, since it over-samples units in later waves (when enrollees tended to look at fewer units) and units for enrollees who looked at fewer than average units that they did not rent. Also, we did not directly query enrollees about arranging for an inspection after the landlord had agreed to one. Rather, we asked in general about the reasons why the enrollee had not obtained an inspection.

The finding that enrollees did not always arrange for inspections in units they initially said they wanted and reported that the landlord agreed to have inspected suggests that the probability that an enrollee will want to rent a unit that he looks at is lower than the 38 percent reported in Exhibit 3.5 above. One way to correct for this would be to infer an "effective" rate for finding a unit that an enrollee wanted to rent by taking the product of (a) the proportion of units looked at that the enrollee said he wanted to rent and (b) the proportion of cases where the landlord agrees to an inspection for which an inspection is actually completed. Thus, in terms of the numbers in Exhibit 3.5 the effective rate would be 25 percent rather than the reported rate of 38 percent (0.38 x 0.65 = 0.25). In other words, it appears that enrollees only wanted one out of every four units that they looked at, and landlords in turn only rented one of every five units that enrollees wanted (including both initial refusals and units not rented after inspection).

As with pre-program units, once a unit was actually inspected, the enrollee almost always rented the unit (89 percent), though as with pre-program units, a substantial portion of rented units required repairs in order to qualify (48 percent).

We can also look at these steps in terms of how far enrollees got in the process, as opposed to the rates for each unit considered. Successful enrollees of course completed all the steps for either moving or qualifying in place. Among the 125 unsuccessful enrollees, 18 percent did not try to move. Another 5 percent said they tried to move, but never visited any units. (See Exhibit 3.6.) Sixty-three percent of unsuccessful enrollees said that they were able to find one or more units that they wanted to rent. However, few unsuccessful enrollees completed an inspection—most often because the landlord turned them down, but almost as often because they failed to follow through with a consenting landlord. Thirty-two percent of unsuccessful enrollees approached landlords, but never found one who would agree to an inspection; another 22 percent obtained at least one landlord's agreement, but never had an inspection completed. Six percent of unsuccessful enrollees had at least one unit inspected, but the units failed and the landlords were unwilling to make the required repairs. Only 3 percent of unsuccessful enrollees had any units either pass an inspection, or fail the inspection with the landlord willing to make the repair. It is not clear whether enrollees did not lease these units because they or the landlords changed their minds or because the unit could not pass program rent or occupancy requirements.

Exhibit 3.6

WHERE UNSUCCESSFUL ENROLLEES STOP IN TRYING TO MOVE
NATIONAL SAMPLE[a]

	All Enrollees	Enrollees Who Tried to Move
Number of enrollees	125	102
Never tried to move	18%	—
Tried but never looked at a unit	5%	6%
Looked but never found a unit that wanted to rent and approached landlord	14%	17%
Approached landlord(s) but none agreed to an inspection	32%	39%
One or more landlord(s) agreed but no inspection completed	22%	22%
One or more inspections were completed but all units failed and landlords refused to repair	6%	7%
One or more units either passed, or landlord agreed to make repairs, but enrollee did not succeed	3%	4%

[a]Unweighted tabulations for the sample of larger non-statewide PHAs other than New York City and Los Angeles.
Source: Enrollee Interviews

It is difficult to use the entries in Exhibit 3.6 directly to determine where in particular unsuccessful enrollees "get stuck," since they are to some extent forced by the fact that we are looking at unsuccessful enrollees. Most obviously, by definition, no unsuccessful enrollee completed the last step in the process, so that all unsuccessful enrollees who had a unit inspected necessarily failed to qualify in that unit. Similarly, given the fact that 89 percent of inspected units end up being program units, it is unlikely that many unsuccessful enrollees would have gotten as far as having a unit inspected. Likewise, since enrollees qualified in 58 percent of the units where landlords agreed to an inspection, we would again expect that unsuccessful enrollees would tend to have stopped before this point in the process.

Direct comparison of the success rates of successful and unsuccessful enrollees does not tell us whether unsuccessful enrollees were in fact less likely to succeed, or whether they originally had the same probability of succeeding as successful enrollees, but were simply less lucky in the units they happened to look at. Comparisons of the pattern of success and failure at various steps, presented in Appendix C, do suggest that unsuccessful enrollees faced special problems in completing the last step in the process—that is, in actually moving into units after an inspection was completed. Unfortunately, so few unsuccessful enrollees reached this step that we were unable to comment on the nature of the difficulty.

The analysis of the searches by enrollees who succeeded by moving, indicates that 11 percent of units looked at by enrollees trying to qualify by moving would be expected to actually become program units if enrollees do not chose instead to qualify in place. Thus, the average enrollee could expect to look at nine units in order to qualify by moving. Furthermore, enrollees may have to be willing to look at a very large number of units in order to obtain a very high overall probability of success. For example, with a per-unit success rate of 0.11, if all enrollees were willing to look at 17 or 18 units, 13 percent would be expected not to succeed within this limit. This low per-unit success rate arises both from enrollees' difficulties in finding units that they want to rent and would pursue to inspection, and in obtaining a landlord's agreement to have an inspection. Once a unit was inspected, it was very likely that the enrollee would ultimately qualify there, even though many inspected units required some repairs. Even so, this last stage seems to be the point at which unsuccessful enrollees experienced particular difficulties in comparison with successful enrollees.

3.2 Multivariate Analysis of Enrollee Success

This section attempts to identify particular factors associated with success using multivariate regressions. The regressions first identify factors that are related to success overall. We then look separately at the processes of qualifying in place and qualifying by moving, and the stages in each process. The regressions are based on the data reported by enrollees during the four interviews. All regressions were done using the logistic estimation procedure, in which the probability of success (or of wanting a unit, asking a landlord, etc.) is expressed as a function of the set of variables that characterize enrollees, their pre-program housing, program understanding, program characteristics, and enrollee expectations. Those variables are listed below. Several are expected to have different effects on the probability of qualifying in place and qualifying by moving, and their overall effect on the probability of success is ambiguous.[4]

Enrollee Characteristics

- **Household Composition**[5]

  Elderly enrollees are often considered good tenants, which would be expected to increase the per-unit probability of success. However, it may be harder for them to look at many units so it may be more difficult for them to qualify by moving.

  Handicapped enrollees often require specific unit features. They also may have difficulties searching, making them potentially less likely to succeed overall, and by moving.

  Couple with children and **Other, no children** may each have an easier time searching, and thus may be more likely to succeed.

[4] To the extent possible, a consistent set of independent variables has been used for all estimations. Some variables did have to be excluded from one or more equations where there were very few enrollees with particular characteristics. Some observations were excluded from the regressions because of missing data for key variables.

[5] When using categorical (yes/no) variables, one category must be omitted in order for the regression to converge to a unique solution. Typically the largest category is omitted, so that the other coefficients are interpreted as the effect of being in that category relative to the omitted category. In these regressions, single adults with children is the omitted category.

- **Income Characteristics**

Working enrollees often have less time to search than others, so they may be less likely to succeed by moving. However, they may be considered more desirable tenants, which could partly offset this.

FMR/Income (for enrollees with at least $100 in reported monthly income). This variable provides an indication of the expected subsidy. We expect that a higher expected subsidy would increase the probability of success.

Reported income below $100 per month.[6] We expect enrollees with very low incomes to benefit more from the program, and be more likely to succeed. However, very low income enrollees may be less desirable tenants, which may partly offset this.

- **Other Demographics**

Minority. We would not expect race to affect the probability of qualifying in place. In a discriminatory environment, minorities may have a harder time qualifying by moving.

Sharer.[7] Enrollees who share their pre-program unit are certainly less likely to qualify in place. They may be more motivated to qualify by moving. The overall effect on the probability of success is unclear.

Homeless enrollees are not eligible to qualify in place, but may be more motivated to qualify by moving. The overall effect on the probability of success is unclear.

Below a high school education. Enrollees with low education may have a harder time looking for housing. Thus, they may be more likely to try in place and less able to search for new units.

- **Factors Affecting Desirability as a Tenant**

We expect the following enrollee characteristics to make enrollees less desirable as tenants and thus to reduce their probability of success overall and in place and by moving: **bad credit history, bad references from previous landlords**, and **drug or other criminal record.**

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[6] For enrollees with very low (or no) reported income, FMR/Income is infinite, thus we did not calculate FMR/Income for these enrollees and instead assigned them to this categorical variable.

[7] Enrollees who shared their pre-program unit with another family, and did not pay rent directly to the owner, as well as enrollees who were homeless, were excluded from the sample for estimating the probability of qualifying in place.

- **Factors Affecting Ability to Search**

Need childcare during housing search, but can't get. We expect enrollees who need child care but can't get it to have a lower probability of success by moving—both overall, because it is harder for them to search, and in each unit visited. These enrollees will be more likely to try to qualify in their pre-program unit.

Access to a car at least part of the time during housing search is likely to increase the overall probability of success by increasing the ability to qualify by moving.

Average number of moves in the last 3 years. Enrollees who move often are likely to view moving as less costly. Thus, they are more likely to qualify by moving.

Pre-Program Unit Characteristics

Pre-program gross rent relative to FMR is an indication of pre-program unit quality. We expect higher pre-program unit rents to indicate better quality housing, thus making the enrollee more likely to succeed overall, by increasing their ability to qualify in place. At very high pre-program rent levels in the Certificate program, rent/FMR may have a negative effect on the probability of qualifying in place, because the unit rent may be above that allowed by the program. Thus, we have created a separate rent to FMR variable for Certificate holders whose pre-program rent is above 110% of FMR, which is the maximum rent allowed in the program.

Pre-program unit has enough bedrooms to qualify. As with pre-program rent relative to the FMR, we expect that having a large enough pre-program unit increases the overall probability of success by allowing for the option of qualifying in place.

Program Understanding

Enrollees who reported understanding program rent and utility allowances are expected to be more able to screen units and thus more likely to succeed in any unit that they try to rent.

Program Variables

State.[8] We expect variation in success rates across sites, though the specific effects are unclear.

Required unit size. We expect enrollees who need more bedrooms to have a harder time qualifying by moving. However, if the pre-program unit has enough bedrooms to qualify, enrollees who need more bedrooms may be more likely to qualify in place; thus we looked at required unit size separately when the pre-program unit had enough units, and when it did not.

Voucher. Landlords often reportedly prefer vouchers over certificates, so having a voucher may increase the probability of success overall, and the probability of qualifying in place and qualifying by moving. In addition, PHAs may sometimes issue Vouchers to families to whom the particular features of a voucher are especially helpful.

Program Expectations

Preferring to remain in the pre-program unit should increase the probability of succeeding in place, and reduce the probability of succeeding by moving.

Preferring to remain in the pre-program neighborhood may increase the overall probability of success because it indicates a focus to the search, but may also have a negative effect because it narrows the scope of search.

Expected benefit: reduced housing costs. We expect wanting lower costs to increase the probability of success, by increasing motivation.

Expected benefit: better quality housing.[9] Enrollees who want better quality housing are likely not to be satisfied with their pre-program units, and are thus expected to be more likely to qualify by moving and less likely to qualify in place. The overall expected effect on success is unclear.

[8] Our original hope was to use variables that characterize sites, such as services offered to searchers. However, the PHA survey indicated very little variation in services across sites. Our second attempt was to use site-specific dummy variables. However, because there were very few unsuccessful enrollees in some sites, we combined sites, generally to the state level. California is the omitted category. Appendix G presents results for regressions that use MSA vacancy rates instead of site dummies.

[9] The two expectation categories listed here are not mutually exclusive. Enrollees often listed several expected benefits.

Success Overall

Exhibit 3.7 shows the coefficients, standard errors and effect estimates for variables that have a significant impact on the probability of success in the logit regressions. Two of these factors, being handicapped and working, were negatively related to success. As indicated above, they may inhibit success by lowering the ability to search. FMR relative to income was an indicator of the expected subsidy, and as can be expected, a higher expected subsidy was positively related to the overall probability of success. Enrollees in better pre-program housing were more likely to succeed, as indicated by the significant effect of pre-program rent relative to the FMR on success. Larger households that need more bedrooms were less likely to succeed, though oddly enough this effect is only significant when the pre-program unit has enough bedrooms to qualify.[10] Unexpectedly, enrollees who needed child care during their search, but could not get it, were more likely to succeed. Another anomalous result is the positive effect on success of the enrollee's report of having a bad credit history.

Exhibit 3.8 shows the variables that affect the overall probability of success and the direction of their effect on the probability of qualifying in place and of qualifying by moving.[11] The second column shows the factors associated with success in place, among all enrollees who were eligible to qualify in their pre-program units. Enrollees eligible to qualify in place are those who were not homeless, those who were not sharing their pre-program unit with another family, and those who shared their pre-program unit with another family but paid rent directly to the owner. The first, obvious result is that factors associated with success overall are not the same as those associated with qualifying in place. (This is indicated by the blank column. None of the significant factors in the overall equation have a significant effect on the probability of qualifying in place.) Most successful enrollees qualified by moving (70

[10] The coefficient for unit size required, if the pre-program unit is too small to qualify, is -0.2988, but is only significant at the .12 level.

[11] The tables present only the variables (other than the state dummies) that are statistically significant in the primary equations (success overall, in place overall, or moving overall) at the 0.1 level. For simplicity, we only present the direction of the effect. Full regressions are presented in Appendix D. As shown in the appendix, many of the state dummies are significant. We have a variable that characterized one aspect of variability across sites—MSA vacancy rate. Appendix G shows that when we replace the site dummies with MSA vacancy rates, the vacancy rates are positively related and significant in explaining success overall, and success by moving. Because this is one of many characteristics that can vary across sites, the main analysis includes site dummies.

Exhibit 3.7

SIGNIFICANT FACTORS AFFECTING SUCCESS
NATIONAL SAMPLE[ab]

Variable	Coefficient	Standard Error	Standardized Estimate[c]
Handicapped	-0.7144	0.3585	-0.1431
Working	-0.6883	0.2649	-0.1663
FMR/Income	0.4084	0.2089	0.1750
Gross rent/FMR (rent below 110% FMR or voucher)	1.2651	0.3978	0.2585
Need Childcare, but unavailable	0.7742	0.4382	0.1378
Bedrooms required, if pre-program unit has enough bedrooms to qualify	-0.3753	0.2174	-0.2600
Bad credit	0.4808	0.2420	0.1278

[a]Unweighted tabulations for the sample of larger non-statewide PHAs other than New York City and Los Angeles.
[b]The full regression for this and all other regressions is presented in Appendix D.
[c]Standardized estimate, or effect = $p \bullet (1-p) \beta$.
Source: Enrollee Interviews

Exhibit 3.8

FACTORS AFFECTING THE PROBABILITY OF SUCCESS NATIONAL SAMPLE[a]

Probability of:	Success	Success In Place	Success by Moving	Success
Among:	All Enrollees	Eligible to Qualify in Place[b]	All Enrollees	Eligible to Qualify in Place[b]
Number of enrollees	1050	713	1050	713
Variable:				
Handicapped	–		–	
Working	–			–
FMR/income	+		+	
Pre-program full rent/FMR (if rent less than 1.1 FMR, or voucher)	+		+	+
Need child care, can't get	+			+
Required bedrooms (if pre-program unit has enough)	–		–	–
Bad credit	+			+

[a]Unweighted tabulations for the sample of larger non-statewide PHAs other than New York City and Los Angeles.
[b]Sample excludes homeless and those who sharing units without paying rent to owner. These enrollees are assumed to be ineligible to qualify in place.
Source: Enrollee Interviews

percent), and factors affecting success overall are more closely tied to factors affecting the probability of qualifying by moving, as can be seen from the third column of Exhibit 3.8.

In order to test whether the difference between success overall and success in place is related to the different samples used in the two equations, the fourth column of the table presents a regression of success overall among those eligible to qualify in their pre-program units. The column shows that for this subsample, the factors affecting success overall are similar to those for the full sample, though fewer variables are statistically significant.

Success In Place

Exhibit 3.9 shows the factors affecting the probability of qualifying in place, and at what stage in the process of qualifying in place the significant factors enter—whether in the probability of an eligible enrollee asking the landlord (column 2), the landlord agreeing to participate (column 3), actually having an inspection when the landlord agrees to participate (column 4), or in success if the landlord agrees to an inspection (column 5).[12]

The probability of qualifying in place was largely affected by the ability to qualify in place. Sharing a pre-program unit with another family is negatively associated with success.[13] As the exhibit shows, the effect of sharing is present in each stage of the process—sharers were less likely to ask their pre-program landlords; landlords were less likely to agree to an inspection, and when inspections are agreed to, they were less likely to take place; and finally, once a unit is inspected, the enrollee was less likely to lease in place.

Having enough bedrooms in the pre-program unit was positively associated with the probability of succeeding in place. Not surprisingly, it entered the process at the last stage, of qualifying once the landlord has agreed to participate.

Enrollee preferences also play the expected role. Preferring to remain in one's pre-program unit was positively associated with ultimately qualifying in place overall. Enrollees

[12] The final stage should be success in place for units that were inspected, but because there were very few units that were inspected but not rented, the last column presents the probability of qualifying in place if the landlord agrees to participate.

[13] Only sharers who paid a portion of rent directly to the owner were considered eligible to qualify in place. Even so, it is not clear if they were the "primary" renters.

Exhibit 3.9

FACTORS AFFECTING THE PROBABILITY OF QUALIFYING IN PLACE—NATIONAL SAMPLE[a]

Probability of:	Success In Place	Asking Pre-Program Landlord	Pre-Program Landlord Agreeing	Inspection Occurring	Success In Place
Among	Eligible to Qualify In Place[b]	Eligible to Qualify In Place[b]	Enrollees Who Asked Landlord	Units Where Landlord Agrees	Units Where Landlord Agrees
Number of enrollees	713	713	513	392	392
Variable:					
Share pre-program unit	–	–	–	–	–
No or very low income reported	–			–	–
Required bedrooms (if pre-program unit has too few)	+				
Prefer to remain in pre-program unit	+	+	+	+	+
Pre-program unit has enough bedrooms	+				+
Want better quality?	–	–			–

[a]Unweighted tabulations for the sample of larger non-statewide PHAs other than New York City and Los Angeles.
[b]Sample excludes homeless and those who sharing units without paying rent to owner. These enrollees are assumed to be ineligible to qualify in place.
Source: Enrollee Interviews

who preferred to remain in their pre-program unit were more likely to pass through each stage of the process.

Wanting better quality housing was negatively related to success in place. If enrollees want better quality housing, it is likely they are not satisfied with their pre-program units, and thus likely to prefer not to qualify in place. Consistent with this interpretation, wanting better quality housing affects the probability of qualifying in place by lowering the probability of asking the pre-program landlord about participating in the program.

Having very low reported income had a negative effect on success in place. Very low income enrollees were less likely to follow through once a landlord agreed to an inspection.

One unanticipated result emerged. We expected that the unit size required on the voucher or certificate would have a negative effect on the probability of success by moving (whether or not the pre-program unit had enough bedrooms), and would increase the probability of qualifying in place if the pre-program unit had enough bedrooms to qualify. In fact, required unit size increased the probability of success in place only if the pre-program unit had fewer bedrooms than required. This may be because as the required unit is larger, enrollees are more likely to try harder to qualify in place, or perhaps enrollees who need larger units live in larger units where there is more chance of enrollee and PHA counts of rooms not matching. This variable enters significantly only in the overall probability of succeeding in place, and not in any of the phases in the process.

Enrollees who asked their pre-program landlords about qualifying in their pre-program unit, but had not qualified by their first interview, were asked whether they thought their landlord had heard of Section 8 prior to being approached. The first column of Exhibit 3.10 shows the overall probability of succeeding in place for all eligible enrollees, and the second column shows the model just for the subset of enrollees who asked their landlords about participating, but had not qualified in place in the first month. Comparing these two regressions shows that the subset of enrollees who asked their landlords about participating in Section 8, but had not qualified in place in the first months are fairly representative of the behavior of all enrollees who were eligible to qualify in their pre-program units. All but two of the same factors are significant. Sharing the pre-program unit and wanting better quality housing lowered the probability of succeeding in place. Preferring to stay in the pre-program unit, having sufficient bedrooms in the pre-program unit, and required unit size when the pre-program unit

Exhibit 3.10
FACTORS AFFECTING THE PROBABILITY OF QUALIFYING IN PLACE ADDING ENROLLEE PERCEPTION OF LANDLORD ACQUAINTANCE WITH SECTION 8 NATIONAL SAMPLE[a]

Probability of:	Adding Acquaintance Variable					
	Success In Place	Success In Place	Success In Place	Pre-Program Landlord Agreeing	Inspection Occurring	Success In Place
Among:	Eligible to Qualify In Place[b]	Enrollees Who Asked Landlord	Enrollees Who Asked Landlord	Enrollees Who Asked Landlord	Units Where Landlord Agrees	Units Where Land-lord Agrees
Number of enrollees	713	336	336	336	237	237
Variable						
Share pre-program unit	–	–	–	–	–	–
No or very low income reported	–					–
Prefer to remain in pre-program unit	+	+	+	+	+	+
Required bedrooms (if pre-program unit has too few)	+	+	+			
Pre-program unit has enough bedrooms	+	+				+
Want better quality?	–	–	–			–
Pre-program rent/FMR (if rent less than 1.1 FMR, or voucher)		+	+	+		+
Pre-program rent/FMR (if rent greater than 1.1 FMR and certificate)		+	+		+	+
Enrollee thought pre-program landlord heard of Section 8			+	+		

[a]Unweighted tabulations for the sample of larger non-statewide PHAs other than New York City and Los Angeles.
[b]Sample excludes homeless and those who are sharing units without paying rent to owner. These enrollees are assumed to be ineligible to qualify in place.
Source: Enrollee Interviews.

has fewer bedrooms than needed all increased the probability of succeeding in place. Having very low or no reported income is no longer significant. Among enrollees who asked their pre-program landlord about participating in Section 8, enrollees with higher rent relative to the FMR were more likely to succeed in place.

The last four columns of the exhibit show the results when the enrollee's perception of whether the landlord had heard of Section 8 is added. Enrollees were more likely to succeed in units where they thought the landlord had heard of the program. In terms of the steps in the process, the overall effect arises because landlords who were judged by enrollees to have heard of Section 8 were more likely to agree to participate. Landlord familiarity did not affect the probability of passing through any other stages in the process. In the equations that include enrollee perception of whether the landlord had heard of Section 8, having enough bedrooms in the pre-program unit was no longer significant in the overall probability of success in place, though it did affect the probability of final success in the unit, if the landlord agreed to an inspection.

Success By Moving

The first column of Exhibit 3.11 presents the factors contributing to success by moving for all enrollees. All the significant variables have the expected sign. Elderly and handicapped enrollees were less likely to succeed by moving. Enrollees who shared their pre-program unit with another family or were homeless were more likely to qualify by moving. Higher expected subsidies increase the probability of succeeding by moving. Enrollees with no or very low reported income were more likely to succeed, as were enrollees with higher FMR-to-income ratios. Enrollees with access to a car at least some of the time during their search were more likely to succeed. Enrollees requiring larger units, regardless of whether the pre-program unit was large enough to qualify, were less likely to qualify by moving.

Several pre-program unit characteristics, and program expectations, also affect the probability of qualifying by moving. Enrollees who wanted better quality housing were more likely to qualify by moving. Those who wanted to remain in the pre-program unit, and those living in units with sufficient bedrooms were less likely to qualify by moving (and more likely to qualify in place).

Exhibit 3.11
FACTORS AFFECTING THE PROBABILITY OF QUALIFYING BY MOVING
NATIONAL SAMPLE[a]

Probability of:	Success By Moving	Success By Moving	Wanting Units	Landlord Agreeing	Inspection Occurring	Success by Moving
Among:	**All Enrollees**	**Units Visited**	**Units Visited**	**Units Wanted**	**Units Where Landlord Agrees**	**Units Inspected**
Sample Size	1050	7943	7943	3052	1119	790
Variable:						
Elderly	–		–	+		
Handicapped	–					
Share pre-program unit	+		+			
Homeless	+					–
FMR/income	+		–		+	
No or very low income reported	+	–		–	+	
Have access to car during search	+		–	+		+
Required bedrooms (if pre-program unit has enough bedrooms)	–			–		
Required bedrooms (if pre-program unit has too few bedrooms)	–	–		–		–
Want better quality?	+		+			
Prefer to remain in pre-program unit	–		–			–
Pre-program unit rent/FMR (if rent less than 1.1 FMR or certificate)	+		–	+		
Pre-program unit has enough bedrooms	–	–	+	–		–
Drug or other criminal record		+				
Need childcare, can't get		–	+	–		
Prefer to remain in pre-program neighborhood		+	+			+
Education < 12		+	+		+	

[a]Unweighted tabulations for the sample of larger non-statewide PHAs other than New York City and Los Angeles.
Source: Enrollee Interviews

The second column of the exhibit shows the per-unit probability of success by moving. The per-unit probability of success is estimated by creating an observation for each unit visited by the enrollee. For successful movers, one observation is assigned an outcome of "success" and the rest are unsuccessful. For unsuccessful enrollees all visits are, by definition, unsuccessful. The model estimates the probability of success in any given unit visited, over all units visited. The estimations of probability of passing through the remaining phases is similar. In order to estimate the effect of various factors on the probability of wanting the units visited, we create an observation for each unit visited. Based on the number of units the enrollee reported wanting, the outcome for each visit is coded as either "wanted" or "not wanted." The probability of wanting each unit is estimated over all units visited.

It is interesting to compare the factors affecting success by moving overall, shown in the first column, with the factors affecting the probability in each unit visited, shown in the second column. It appears that most of the factors that affect success by moving enter the process through their effects on search intensity. Being handicapped, elderly, sharing the pre-program unit, and being homeless do not affect the probability of success in each unit visited, but rather only affect the number of units visited. Similarly, having access to a car and wanting better quality housing do not affect the probability of success in each unit visited, but increase the overall probability of success by moving.

Factors that have a positive effect on the per-unit probability of success include preferring to remain in the pre-program neighborhood (this may result from better ability to target the search, as is indicated by the effect on the probability of wanting a unit visited), and having below a high school education. Having less than a high school education increases the per-unit probability of success by increasing the probability of wanting the units visited, and completing an inspection when the landlord agreed to it, though enrollees with below a high school education did not have a higher overall probability of success by moving.

Factors that are negatively related to the per-unit probability of success include having very low or no reported income (this was positively related to the overall probability of success by moving), and having sufficient bedrooms in the pre-program unit. Enrollees who needed child care but were unable to get it were less likely to succeed in each unit visited (perhaps because they had to bring their children with them as they were looking). Not being able to get child care does not affect the overall probability of qualifying by moving. These enrollees were

more likely to want units they visited (though also less likely to have landlords agree to an inspection).

Required unit size reduces the probability of success in each unit visited, but is only significant when the pre-program unit has fewer bedrooms than required. Larger required unit size reduces the probability of a landlord agreeing to an inspection.

One anomalous result appears. Enrollees who reported a drug or other criminal record had a higher per-unit probability of success (though it was not significant at any given step, or in success by moving overall).

In summary, only three of the factors that significantly alter the probability of qualifying by moving have a significant effect on the per-unit probability. These are related to household size and having very low reported income. Thus, the probability of qualifying by moving appears to be driven mostly by factors affecting search effort, rather than factors affecting the enrollee's probability of qualifying in each unit visited.

3.3 Units Considered and Landlords Approached by Enrollees

This section analyzes where and how enrollees looked for housing and the sorts of landlords and units they considered. We present information from enrollees and from a sample of landlords whom they approached. Because of the small sample sizes, this section combines the results for New York City and the other sites.

Enrollee Characterization of Search

Here we present findings on enrollee characterization of two aspects of their attempts to qualify by moving: the sources through which they heard about units they wanted, and their perception of the familiarity with Section 8 of the landlords they approached. The information pertains to both a sample of units wanted but not rented and to all the new units rented. At each monthly interview enrollees were asked general questions about their search process, and specific questions about the last unit (if any) they wanted but did not rent. If the reason the unit was not rented was anything but an explicit landlord turndown, enrollees were asked to provide information on the most recent unit (if any) where they had been turned down by the landlord. Thus, the sample of units wanted but not rented includes up to eight observations per enrollee (two per interview), including up to four explicit turn-downs (one per interview). During the

final interview, each successful mover was asked about how they found out about unit and about their perception regarding the landlord's familiarity with Section 8. Thus, the sample includes information on all new units rented.

Because the sample of units wanted but not rented is not representative of all units wanted but not rented and because the sample combines information on units in New York City with the other sites, the results presented are suggestive rather than conclusive. The sample over-represents units that were rented because enrollees were asked to report about all units rented. Among units not rented, the following types of units are over representated because of the structure of the interview process: explicit turndowns, units wanted by enrollees who visited fewer units, and units wanted by enrollees who searched for a longer period of time. Nevertheless, they do provide interesting information on the effectiveness of various sources of information of units and on enrollee perceptions regarding landlord familiarity with Section 8.

Enrollees were asked how they learned about the availability of the units they wanted to rent. Exhibit 3.12 shows the sources of units for the sample of units rented and those not rented, as described above. PHA lists were the most common source for units rented. However, PHA lists were also a common source for units not rented. Friends and relatives provided information on 22 percent of the units rented, and on 10 percent of units not rented. Friends and relatives appear to be a very effective source of information about available units. They not only know what the enrollee wants, but also may be more familiar with what is acceptable for the program. The third most common source of units rented was newspapers, which accounted for 18 percent of the units rented. Newspapers do not appear to be a very effective source for finding Section 8 units. Thirty-one percent of the sample of units not rented were found through newspapers. A regression that controls for enrollee characteristics confirms that PHA lists and friends and relatives are effective sources for units, while newspapers are not. In a regression that uses the sample of 1,434 new units for which for we have unit source information to predict whether the unit will be accepted, controlling for enrollee and pre-program unit characteristics, program variables and program understanding, the coefficients for PHA lists and friends and relatives are positive and significant, while the coefficient for newspapers is negative and significant.

Exhibit 3.12.

SOURCES FOR NEW UNITS — COMBINED SAMPLE

	New Units Rented	Units Not Rented[a]
Enrollees	770	664
Sources of Units		
PHA List	24%	20%
Daily Paper	18%*	31%
Weekly Paper	3%	7%
Signs on Buildings	8%	12%
Friends	22%	10%
Real Estate Agent	8%	6%
Word of Mouth	6%	5%
Other	10%	9%

[a]Includes all wanted units not rented for which we have information or unit source.
*Signifies that the difference between new units rented and those not rented is statistically significant at the .1 level

Exhibit 3.13 shows enrollee perceptions of landlord familiarity with the program for the same sample of new units described. Again, this is suggestive rather than conclusive because of the non-representativeness of the sample.

The Role of Landlord Acceptance

One of the important issues to emerge from this study is the role of landlord acceptance of Section 8 in enrollee success. Further, the focus groups led us to hypothesize that the landlords approached by enrollees are generally part of a Section 8 submarket, i.e., a segment of the market that is quite familiar with Section 8, and generally rents to Section 8 enrollees. This section explores the role of landlord acceptance in success. As indicated in Appendix A, this analysis is hampered by the small sample of responding landlords.

Exhibit 3.13

ENROLLEES' PERCEPTION OF LANDLORD FAMILIARITY WITH SECTION 8 AMONG LANDLORDS APPROACHED BY ENROLLEES IN TRYING TO MOVE COMBINED SAMPLE

	Number of Units	Percent of Units in Which the Enrollee Rated the Landlord As...			All
		Well Acquainted with Section 8	Somewhat Acquainted with Section 8	Not Acquainted with Section 8	
Units Rented	738[a]	80%	12%	8%	100%
Units Not Rented	587[a]	59%	21%	20%	100%

[a]Units are non-proportional subsample of the units that enrollees did and did not rent. Includes all units about which enrollees were able to assess landlord acquaintance.

Enrollees were more likely to rent units where they thought the landlord was well acquainted with Section 8, and less likely to rent units where the landlord was not familiar with Section 8. This result is similar to what we found regarding pre-program units, where enrollees were more likely to succeed in units where they thought the landlord had heard of Section 8.

It seems reasonable to suppose that landlord acceptance depends primarily on three factors: 1) the landlord's prior knowledge of the program, 2) his assessment of the program's advantages and disadvantages, and 3) his assessment of the enrollee as a tenant. Below, we characterize landlords according to each of these factors and relate these factors to the probability that the landlord accepts the enrollee. This section relies on the responses to the landlord surveys from landlords of units enrollees wanted to rent.

Landlord Familiarity with Section 8. In order to assess landlords' familiarity with Section 8 at the time they were approached by enrollees who tried to move, we asked landlords to rate their familiarity with Section 8 one year prior to the interview. Their responses to this question show that new landlords approached were generally familiar with Section 8. Exhibit 3.14 shows that 86 percent of new landlords of units enrollees rented and 91 percent of new landlords of units not rented reported that they were at least somewhat familiar with Section 8

one year prior to the interview. There were no significant differences in the levels of familiarity between accepting and rejecting landlords.

Exhibit 3.14

NEW LANDLORD FAMILIARITY WITH THE SECTION 8 PROGRAM
ONE YEAR PRIOR TO THE INTERVIEW
COMBINED SAMPLE

	Accepting Landlords	Rejecting Landlords
Number of Observations	277	73
Percent of landlords who said that they were:		
Very familiar with Section 8	58%	62%
Somewhat familiar	28%	29%
Not at all familiar	14%	10%

Source: Landlord Interviews

This finding appears to contradict enrollee perceptions, presented above, that accepting landlords were more familiar with the program than rejecting landlords. It appears that at least in part the differences between enrollee perceptions of landlord familiarity and landlord-reported familiarity are due to a response bias in the landlord survey, where landlords who were familiar with the program were more likely to respond. Exhibit 3.15 shows how enrollees rated the familiarity levels of responding landlords and non-responding landlords.

Among accepting landlords, enrollees felt there were no differences between responding and non-responding landlords. However, among rejecting landlords, enrollees felt that non-respondents were much more likely to be unfamiliar with Section 8.[14]

We have further indications that enrollees generally approached landlords who are experienced in the Section 8 program. Rejecting landlords were asked whether they either were currently renting other units under Section 8 or had done so in the past. The results were somewhat startling. Of the 175 rejecting landlords (new and pre-program), 71 percent reported

[14] Some of the difference between enrollee and landlord ratings may be due to the reference timing. Landlords were asked about their familiarity one year prior to the interview to be sure that the timing preceded the approach by the enrollee, while the enrollees were asked to rate landlord familiarity when they approached the landlord.

Exhibit 3.15

ENROLLEE PERCEPTION OF NEW LANDLORD FAMILIARITY
WITH THE SECTION 8 PROGRAM
AT THE TIME APPROACHED

	Accepting Landlords		Rejecting Landlords	
	Survey Respondent	Non-Respondent	Survey Respondent	Non-Respondent
Number of Observations	271*	461	68*	514
Percent of enrollees who said landlords were:				
Very familiar with Section 8	80%	80%	69%	58%
Somewhat familiar	12%	12	21%	21
Not at all familiar	7%	8	10%	21

*6 accepting and 5 rejecting landlords were excluded because the enrollee could not judge landlord familiarity.
Source: Enrollee Interviews

that they were currently renting other units under Section 8, and another 9 percent reported that they were not now renting under the Section 8 program, but had in the past. All landlords were asked about the "typical" tenant for each unit in the sample. Exhibit 3.16 shows that most of the units in the sample, both accepting and rejecting, are units in which the typical enrollee is often or sometimes a Section 8 recipient. This further supports the hypothesis that enrollees may have been looking at units where not only the landlord, but the specific unit, was already in the Section 8 program.

In summary, it appears that the landlords who were approached by enrollees, particularly those landlords who responded to the survey, were generally familiar with Section 8. Additionally, a large portion of these landlords, who accepted and rejected enrollees, had direct experience with the program and were accustomed to renting the specific unit involved under Section 8.

Landlord Assessment of the Section 8 Program. The landlords' assessments of the Section 8 program were measured by two types of questions in the survey instrument. First, we asked landlords several questions about their willingness to rent under Section 8. Second,

we asked about specific aspects of the program, such as the reasonableness of required repairs, and for comparisons of Section 8 and non-Section 8 rentals.

Exhibit 3.16

CHARACTERISTICS OF TYPICAL TENANTS FOR SAMPLED UNITS

	Accepting Landlords	Rejecting Landlords
Number of observations	444	168
Typical tenant is: Often Section 8	40%	24%
Sometimes Section 8	40	38
Rarely Section 8	18	19
Never Section 8	2	18

Source: Landlord Interviews

Exhibit 3.17 summarizes landlord willingness to rent under Section 8 for accepting and rejecting landlords. When questioned about their likelihood of accepting Section 8 tenants, the landlords' responses were roughly consistent with their behavior. Accepting" landlords were more likely to report a preference for Section 8 tenants and less likely to report that they did not want Section 8 tenants, as compared to rejecting landlords. At the same time, it is clear that these preferences are far from perfectly correlated with landlord behavior, and that other factors enter the landlord's decision. In particular, nearly half the landlords who rejected enrollees said that Section 8 participation did not play a role in their selection process.

It also appears that an individual landlord's willingness to accept Section 8 is different for different units: over 90 percent of new landlords and over 80 percent of pre-program landlords reported that they would be willing to accept Section 8. However, a large fraction of landlords, regardless of whether they accepted the tenant in question, said they would be willing to accept Section 8 for only some of their units. When these landlords were asked why they would not rent some units under Section 8, the common reasons given were that "unit rents are too high," "Section 8 tenants would not maintain units," "Section 8 tenants would not fit in," and the owner "didn't like Section 8/government programs." A number of landlords also said

Exhibit 3.17

LANDLORD WILLINGNESS TO RENT UNDER SECTION 8

	Pre-Program		New Units	
	Accepting Landlords	Rejecting Landlords	Accepting Landlords	Rejecting Landlords
Number of observations	174	81	277	94
Landlord experience or familiar with Section 8	100%	84%*	100%	95%*
Landlord likelihood of Accepting Section 8				
Attitude when renting last unit:				
Preferred Section 8 tenant	21%	15%	26%	18%
Reluctant about Section 8	12%	16%	12%	16%
Did not matter	63%	44%*	58%	52%
Did not want Section 8	5%	17%*	3%	7%*
More likely to accept Section 8 for current tenant	61%	55%	51%	46%
Would consider accepting Section 8 for:				
All units	52%	37%*	42%	37%
Some units	37%	43%	51%	54%
No units	6%	16%*	5%	6%
Don't know	5%	4%	2%	2%

* Denotes that we can reject the hypothesis that the means of rejecting and accepting landlords are identical, at the 10% level of significance.
** The percent of landlords expressing no opinion (i.e., Don't Know) varied considerably on these questions. Percent shown is the percent of all landlords.
Source: Landlord Interviews.

they did not take Section 8 for particular units because they wanted to maintain a mix of residents in each property.

Exhibit 3.18 shows landlord impressions of specific aspects of the Section 8 program. Accepting landlords in new units were somewhat more likely than rejecting landlords to agree to the reasonableness of program features, though the difference is statistically significant only for the question about repairs. Accepting pre-program landlords were significantly more likely than rejecting landlords to express an overall positive impression of Section 8.

Exhibit 3.18
LANDLORD ASSESSMENT OF THE SECTION 8 PROGRAM

	Pre-Program		New Units	
	Accepting Landlords	Rejecting Landlords	Accepting Landlords	Rejecting Landlords
Landlords' General Assessment of Section 8[a]	174	81	277	94
Reasonableness of program (percent who agreed that):				
Rents under Section 8 are reasonable	81%	81%	81%	71%
Permitted rent increases are reasonable	64	72	64	57
Damage claims feature is sufficient	33	41	37	28
Required repairs are reasonable	76	78	81	63*
Positive impression of Section 8	70	58	67	62

*Denotes that we can reject the hypothesis that the means of rejecting and accepting landlords are identical, at the 10% level of significance.
[a]The percent of landlords expressing no opinion (i.e., Don't Know) varied considerably on these questions. Percent shown is the percent of all landlords.
Source: Landlord Interviews.

Exhibit 3.19 shows the landlords' general assessment of Section 8 rental relative to a non-Section 8 rental of the same unit. The surprising finding is that in cases in which accepting and rejecting landlords differ, it is the accepting landlords who usually expect Section 8 tenants to be more costly, though only the difference in damage expectations is statistically significant.

Comparison of Section 8 Renters with Non-Section 8 Renters. Enrollee characteristics are relevant to each landlord primarily to the extent that enrollees differ from the typical tenant to whom the landlord would normally rent the unit. This divergence may act on either of two levels. First, a landlord may in effect "reject the program" because of a perception that Section 8 tenants are different. Second, an individual enrollee may not fit the landlord's norm, even though an alternative Section 8 tenant would be found acceptable. We examine both of these issues.

The characteristics of the landlords' "normal tenants" are shown in Exhibit 3.20. This information comes from two types of questions administered to the landlords. First, we asked landlords to describe the market (for this unit size) in terms of the characteristics of tenants they would normally expect to occupy it. Exhibit 3.20 shows the percent of landlords responding that their tenants are "often or sometimes" of a particular type (the alternative responses were

Exhibit 3.19

COMPARISON OF SECTION 8 WITH OTHER RENTALS

	Pre-Program		New Units	
	Accepting Landlords	Rejecting Landlords	Accepting Landlords	Rejecting Landlords
Number of landlords	174	81	277	94
Percent of landlords who expected:**				
lower rent from Section 8 tenants	24%	21%	24%	23%
same rent from Section 8 tenants	67	64	67	73
higher rent from Section 8 tenants	7	7	8	3
lower rent increases for Section 8	11%	10%	16%	22%
same rent increases for Section 8	73	67	70	65
higher rent increases for Section 8	9	15	11	11
lower difficulty with eviction	6%	10%	9%	5%
same difficulty with eviction	26	35	43	38
higher difficulty with eviction	42	32	32	35
lower non-payment from Section 8	10%	13%	14%	14%
same non-payment from Section 8	51	50	50	52
higher non-payment from Section 8	38	37	36	34
lower damage with Section 8	18%	21%	18%	13%
same damage with Section 8	48	54	42	48
higher damage with Section 8	31	19*	37	35
lower mos. rent skipped for Section 8	25%	24%	27%	34%
same mos. rent skipped for Section 8	66	58	63	56
higher mos. rent skipped for Section 8	9	18	10	10
lower days vacant for Section 8	14%	13%	17%	20%
same days vacant for Section 8	62	66	59	57
higher days vacant for Section 8	24	21	24	23
lower yrs. tenure for Section 8 tenants	13%	12%	15%	12%
same yrs. tenure for Section 8 tenants	55	48	51	50
higher yrs. tenure for Section 8 tenants	31	40	34	38

*Denotes that we can reject the hypothesis that the means of rejecting and accepting new or pre-program landlords are identical, at the 0.1 level of significance.

**The percent of landlords expressing no opinion (i.e., Don't Know) varied considerably on these questions. Percent shown is the percent of all landlords.

Exhibit 3.20

LANDLORD ASSESSMENT OF SECTION 8 TENANTS

	Pre-Program		New Units	
	Accepting Landlords	Rejecting Landlords	Accepting Landlords	Rejecting Landlords
Number of landlords	174	81	277	94
Characteristics of the "normal" tenant**				
Percent of Landlords who OFTEN/SOMETIMES rented to:	41%	47%	64%	54%
Single parent with kids often	33	38	26	31
Single parent with kids sometimes	34%	27%	23%	29%
Two adults with no kids often	29	41	29	30
Two adults with no kids sometimes	29%	31%	38%	39%
Couple with kids often	33	41	36	37
Couple with kids sometimes	24%	23%	13%	11%
Elderly often	29	31	25	27
Elderly sometimes	48%	58%	64%	57%
Minorities often	37	31	27	26
Minorities sometimes	57%	58%	49%	54%
Employed often	27	32	34	27
Employed sometimes	22%	31%	36%	33%
Welfare recipients often	37	23	34	31
Welfare recipients sometimes	28%	15%	47%	31%
Section 8 recipients often	43	36	38	37
Section 8 recipients sometimes				
Percent of tenants who were low-income	60%	62%	58%	59%
Percent of Landlords using Screening Criteria				
Credit check	64%	64%	74%	73%
Check prior landlord	82	88	89	94
Check personal references	60	68	62	70
Only take employed	19	22	16	20
Use income requirement	43	58*	56	50
Use agents or brokers	13	17	8	17*

*Denotes that we can reject the hypothesis that the means of rejecting and accepting new or pre-program landlords are identical, at the 0.1 level of significance.

**These items were derived by comparing responses from landlords about their experiences with a) Section 8 tenants and b) non-Section 8 tenants. The 5% of landlords who were unfamiliar with Section 8 are not included.

"rarely" and "never"). The second source of information about the tenant population is questions about the landlord's screening criteria.

Accepting and rejecting landlords do not appear to have different tenant populations for the units in the sample. The only statistically significant difference comes from the response about renting to Section 8 tenants: 40 percent of accepting landlords reported that they often rent this unit to Section 8 tenants, while only 24 percent of rejecting landlords reported doing so. Accepting and rejecting landlords do not differ significantly in their likelihood of renting to any particular demographic group; they also reported nearly the same percent of their tenants as being "low-income households." (This last finding should be viewed with caution since the accepting and rejecting landlords may define "low-income" differently.)

The screening practices of accepting and rejecting landlords show some divergence. Rejecting landlords in pre-program units were significantly more likely to check personal references and rejecting landlords in new units were more likely to use agents or brokers.

We next compare the incidence of enrollee-landlord contacts in which enrollees did not meet the landlord norm (see Exhibit 3.21). For example, if a single parent contacts a landlord who does not report "often" or "sometimes" renting to single people, then the enrollee does not meet the landlord's norm; likewise, if the enrollee has bad credit and contacts a landlord whose normal screening procedure includes a credit check, then the enrollee does not meet the landlord's norm. For example, the first row shows the proportion of single parents who tried to rent a unit that was not "often" or "sometimes" rented to a single parent. For two categories of matching, slightly different definitions were used. Non-elderly enrollees were classified as "mismatched" if they tried to rent a unit where the typical tenant was "often" elderly. Non-working enrollees were classified as "mismatched" if they tried to rent a unit where the typical tenant was "often" working.

"Mismatching" on employment and Section 8 appears to occur quite often. However other mismatches are less common. Mismatching usually occurs with similar frequency within the accepting and rejecting groups (the differences are not statistically significant). The only characteristic on which rejected enrollees are significantly less likely to match is on the Section 8 variable. Enrollees who tried to rent units for which the typical tenant was either "rarely" or "never" a Section 8 recipient, were more likely to be rejected.

The percent of all enrollees who failed to meet the landlord's normal screening criteria does not differ for accepting and rejecting landlords. One explanation for why an apparent mismatch succeeds in some instances is that 26 percent of accepting landlords reported that they apply different screening criteria to Section 8 tenants; only 9 percent of rejecting landlords reported different (in nearly all cases more lenient) screening criteria.

In summary, the landlords who were approached by Section 8 enrollees generally appear to be knowledgeable about Section 8 and in most cases currently rent or have rented in the past under the program. Further, there do not appear to be major differences in attitudes or perceptions between accepting and rejecting landlords.

We next attempt to isolate the factors affecting landlord acceptance using a multivariate regression. The model includes a series of enrollee characteristics, landlord characteristics and perceptions regarding Section 8, market characteristics, and indicators of whether the enrollee matches the typical tenant for the unit in question. The model combines pre-program and new units, but allows for separate effects of enrollee characteristics on acceptance. Landlord, market, and match characteristics are assumed to affect the decisions for pre-program and new units in the same way.

Very few of these factors have significant effects on acceptance. This is not surprising, given the similarities between accepting and rejecting landlords. No market variables have significant impacts on acceptance. Exhibit 3.22 shows the landlord variables that have significant effects. The full regression is shown in Appendix E, Exhibit E.1. The direction of effect of enrollee characteristics are similar to those found in the enrollee regressions and are not included in the exhibit.

Not conforming to the norms for renters in the unit reduces the probability of acceptance. In particular, single parents who tried to rent units where the typical renter is not a single parent were less likely to succeed, as were minorities who tried to rent units where the typical tenant is not minority. (These two mismatches have significant impacts, though their incidence are quite low.) Enrollees who tried to rent units where the typical tenant is not a Section 8 recipient were more likely to be turned down.

The only landlord perception and attitude variables that have significant impacts on acceptance are landlord familiarity with Section 8 and landlord expectations regarding damages by Section 8 enrollees. Landlords who are very familiar with Section 8 were likely to reject

Exhibit 3.21

ENROLLEES NOT MATCHING LANDLORD NORMS

	Pre-Program		New Units	
	Accept	Reject	Accept	Reject
Number of enrollees	174	81	277	94
Percent of enrollees with this characteristic not meeting unit "norm": (where "norm" is defined as the type of tenant who would "often" or "sometimes" rent the unit)				
Single parents	2%	10%	6%	15%
Non-elderly	14	17	11	9
Minority	0	7	5	10
Welfare recipients	14	14	17	18
Not working	43	41	39	43
On Section 8	27	47	14	27
Percent of enrollees with this characteristic not meeting landlord screening				
Bad credit	63%	73%	77%	72%
Bad references	89	100	95	100
Unemployed	17	15	15	13
Percent of enrollees looking at units with fewer bedrooms than required	9%	11%	30%	11%*

*Denotes that we can reject the hypothesis that the means of rejecting and accepting landlords are identical, at the 10% level of significance.
Source: Landlord interviews and Enrollee Interviews

Exhibit 3.22

FACTORS AFFECTING THE PROBABILITY OF A UNIT BEING ACCEPTED

	Probability of unit being accepted among units in the landlord sample
Number of units	604
Variable:	Effect Direction:
Landlord uses different screening for Section 8	–
Typical tenant for unit is not Section 8	–
Single parent, typical renter not single parent	–
Minority, typical renter not minority	–
Unit has fewer bedrooms than required	–
Landlord very familiar with Section 8	–
Landlord expects more damage from Section 8	+
Landlord expects less damage from Section 8	+

Source: Enrollee Interviews and Landlord Interviews

enrollees. Surprisingly, both landlords who expect more damage from Section 8 residents and those who expect less damage (where the omitted category is expecting the same level of damage) were more likely to accept enrollees. The effect of expected damages may somehow be related to familiarity with Section 8 in a way not being picked up by the model.

In summary, because of the strong similarities between accepting and rejecting landlords, landlord characteristics or perceptions do not play a major role in acceptance. In this analysis, we capture a group of landlords most of whom participate in Section 8. Their decisions were made for specific units based on enrollee characteristics, the extent to which the enrollee matches the norm for the unit, and whether the specific unit is generally rented to a Section 8 Voucher or Certificate holder.

3.4 Results For New York City

The Search Process

Enrollees in New York City were more likely to try to qualify in place and less likely to try to move than those in the national sample. Exhibit 3.23 presents information on search strategies there. Sixty percent of enrollees tried to qualify by moving; 66 percent tried to qualify in place; 28 percent adopted both search strategies; and 2 percent (7 percent of unsuccessful enrollees) did not try to qualify at all.

Exhibit 3.23

SEARCH STRATEGIES ADOPTED IN NEW YORK CITY

	Successful Enrollees			Un-Successful Enrollees	All Enrollees
	All	In Place	Movers		
Number of enrollees	257	158	99	136	393
Percent of Enrollees who:					
Only tried in place	49%	80%	NA	16%	38%
Tried in place and tried to move	25	20	33%	34	28
Only tried to move	26	NA	67	43	32
Did not try	NA	NA	NA	7	2

Source: Enrollee Interviews.

Qualifying in Place

Exhibit 3.24 compares the process of qualifying in place for enrollees in the national sample and for those in New York City. (Appendix B, Exhibit B.5, graphically displays the process for New York City). Numbers in New York City are similar to those found elsewhere, except that a larger proportion of enrollees approached their pre-program landlord and a noticeably larger percentage of landlord agreements resulted in inspections being completed. Fewer qualifying units in New York City required repairs in order to qualify. All enrollees who

did not try to qualify in place were either ineligible to qualify in their pre-program unit (69 percent), or thought they could not qualify in place (31 percent).[15]

Exhibit 3.24

QUALIFYING IN PLACE

	National Sample[a]	NYC
Number of all enrollees	1,090	393
Steps in the process:		
Percent of enrollees who asked pre-program landlord	51%	66%
Of those asking, percent where landlord agreed to an inspection	75%	78%
Of those where landlord agreed, percent where inspection was completed	79%	92%
Of those with inspection, percent where enrollee qualified in place	89%	85%
Of those units where enrollees qualified in place, percent that required repairs	59%	26%
Enrollees who qualified in place as a percent of all who asked their pre-program landlord	53%	61%

[a]Unweighted tabulations for the sample of larger non-statewide PHAs other than New York City and Los Angeles.
Source: Enrollee Interviews

In the national sample, in a fifth of the cases in which a landlord agreed to an inspection, the enrollee never attempted to arrange for an inspection; in contrast, in New York City only

[15] The results presented here focus on the ***actions*** of enrollees in their attempts to qualify in the Section 8 program. We therefore stratify the sample on the basis of the options they actually pursued, rather than their original stated preferences, as was done in some earlier studies (see Final Comprehensive Report of the Freestanding Housing Voucher Demonstration, HUD, May 1990, p. 48). In Appendix B, Exhibit B-6, we present search strategies and outcomes based on enrollee ***preferences*** regarding remaining in the pre-program unit or moving. In Appendix B, Exhibit B-7, we present similar information based on enrollee ***perceptions*** regarding the unit's ability to qualify and the landlord's willingness to participate.

8 percent of such enrollees did not attempt to arrange for an inspection. This may reflect the fact that in New York City, it appears to have been much more difficult to qualify by moving, so that enrollees were much more likely to have an inspection in their pre-program unit once the landlord agreed to one.

How Far Unsuccessful Enrollees Got in the Process of Qualifying In Place. The pattern in New York is similar to that found in the national sample, though a larger fraction of unsuccessful enrollees (50 percent) tried to qualify in place. All of those who did not try to qualify in place were either ineligible to do so (74 percent) or thought they could not qualify in place (26 percent). About half of the landlords (49 percent) agreed to participate, and the other half did not. Enrollees reported that the most common reason landlords gave for turning them down was that the landlord did not rent to Section 8 people. An equal number of enrollees reported that the landlord did not give a reason. (Exhibit 3.25).

Although 33 landlords agreed to an inspection, inspections took place in only 20 units. It is not clear why the remaining 13 units (10 percent of all unsuccessful enrollees) were not inspected (10 of these enrollees tried to move but did not qualify, and the other 3 did not try to move). Among the 20 units that were inspected, four passed, and in one other case the enrollee indicated that the unit failed but the landlord agreed to make repairs. Nevertheless, these enrollees did not ultimately qualify.

Qualifying By Moving

The process for those who tried to qualify by moving is summarized in Exhibit 3.26 (and graphically in Exhibit B.8 in Appendix B). In New York City, 60 percent of enrollees tried to find a new unit, and 94 percent of these actually visited one or more units. The percentage of enrollees or units passing each stage of the process in New York City is lower than in other sites, except for the next to the last step.

Where Unsuccessful Enrollees Stopped in the Process of Qualifying by Moving. A pattern similar to that in the national sample holds in New York City (see Exhibit 3.27). About one fourth of unsuccessful enrollees (23 percent) did not try to qualify by moving; this proportion is somewhat higher than for the national sample. Another 9 percent did not visit any units. Nearly half found units they wanted to rent. As in the national sample, about half the unsuccessful enrollees in New York who found units they wanted to rent had landlords turn them

Exhibit 3.25

HOW FAR UNSUCCESSFUL ENROLLEES GOT IN THEIR ATTEMPTS TO QUALIFY IN PLACE NEW YORK CITY

	All Unsuccessful Enrollees	Unsuccessful Enrollees Who Asked Their Landlords About Participating
Number of enrollees	136	68
Percent who never asked their landlord	50%	NA
Percent who asked landlord and were turned down	26%	51%
Percent where landlord agreed to inspection, but no inspection occurred	10%	19%
Percent inspected, but did not pass, and landlord refused to make repairs	11%	24%
Percent that passed inspection or landlord agreed to make repairs, but enrollee did not rent unit	4%	7%

Source: Enrollee Interviews

Exhibit 3.26

QUALIFYING BY MOVING

	National Sample[a]	NYC
ENROLLEES		
Number of enrollees	1,090	393
Percent of enrollees who tried to move	79%	60%
Of those enrollees who tried to move, percent who actually looked at one or more units of those who tried to move	98%	94%
UNITS		
Number of units looked at (Average per searcher)	8,241 (9.6)	1,953 (8.1)
Of units enrollees looked at, percent they wanted to rent (Average number per searcher)	38% (3.7)	31% (2.5)
Of the units enrollees wanted to rent, percent where landlord agreed to an inspection (Average number per searcher)	37% (1.4)	28% (0.7)
Of units where landlord agreed, percent where inspection was completed (Average number per searcher)	65% (0.9)	63% (0.4)
Of units with inspection, percent where enrollee qualified by moving to that unit	89%	93%
Of units where enrollees qualified by moving to that unit, percent that required repairs	48%	40%

[a]Unweighted tabulations for the sample of larger non-statewide PHAs other than New York City and Los Angeles.
Source: Enrollee Interviews.

Exhibit 3.27

WHERE UNSUCCESSFUL ENROLLEES STOP IN TRYING TO MOVE
NEW YORK CITY

	All Unsuccessful Enrollees	Enrollees Who Tried to Move
Number of enrollees	136	105
Never tried to move	23%	—
Tried but never looked at a unit	9%	11%
Looked but never found a unit that wanted to rent and approached landlord	24%	30%
Approached landlord(s) but none agreed to have an inspection	22%	29%
One or more landlord(s) agreed but no inspection completed	21%	28%
One or more inspections completed but all units failed and landlords refused to repair	1%	2%
One or more units either passed, or landlord agreed to make repairs, but enrollee did not succeed	0%	0%

Source: Enrollee Interviews

down. Most of the remaining unsuccessful enrollees did not have inspections even though they found landlords who agreed to participate. Only two of the 31 enrollees who found landlords who were willing to have an inspection had any units inspected.

Regression Results in New York City

Success Overall

Exhibit 3.28 shows the factors significantly affecting the probability of success overall in New York City, the probability of success in place for enrollees eligible to qualify in their pre-program units, the probability of qualifying by moving, and the overall probability of success for enrollees who are eligible to qualify in their pre-program unit. Full regression results for New York City are presented in Appendix F.

What is particularly interesting in the results for New York City is that many factors affect success overall, but do not have significant impacts on the separate probabilities of eligible enrollees succeeding in place or by moving. By comparing the probability of success overall with the probability of success for enrollees who were eligible to qualify in place, we can see that many of these factors affect success through their influence on eligibility to qualify in place. Being able to qualify in place was more important in New York City than in the national sample. Sixty-one percent of successful enrollees qualified in place in New York City compared with 30 percent in the national sample. This may be because the enrollee population in New York City during the data collection period of this study was disproportionately elderly or handicapped. These enrollees tend to find it harder to search than other enrollees.

Demographic factors that reduce the probability of success in New York City through their effect on eligibility to qualify in place include being handicapped, being a couple with children, being elderly, and living in a unit with a high rent relative to the FMR. In contrast to the national sample, in which high pre-program rents were positively associated with qualifying in place, in New York City high pre-program rents were often above the FMR, and thus the units could not qualify.

Enrollees who were working were less likely to qualify in the Section 8 program, both in place and by moving; however, very few enrollees in New York City were employed. This result is expected for movers who have less time available to search for a unit, but is not

Exhibit 3.28

FACTORS AFFECTING THE PROBABILITY OF SUCCESS NEW YORK CITY

Probability of:	Success	Success In Place	Success by Moving	Success
Among:	All Enrollees	Eligible to Qualify in Place[a]	All Enrollees	Eligible to Qualify in Place[a]
Number of enrollees	389	315	389	315
Variable				
Handicapped	−			
Working	−	−	−	−
Minority	−	−		−
Couple with children	−			
Elderly	−			
Average moves in 3 years	+		+	+
Pre-program rent/FMR (if rent greater than 110% FMR and certificate)	−		−	
Bad references	−			
Prefer to remain in pre-program unit	+	+		+
Pre-program unit has enough bedrooms	+			
Want better quality?	−	−	+	−
Want lower costs?	−		−	
Understand program rent and utility rules?	+	+		+
Voucher	+	+		

[a]Sample excludes homeless and those who sharing units without paying rent to owner. These enrollees are assumed to be ineligible to qualify in place.
Source: Enrollee Interviews.

expected for those qualifying in place. No other income-related characteristics had a significant effect on success in New York City.

Minorities were less likely to qualify overall, and unexpectedly, they were less likely to qualify in place. As was expected, enrollees with bad landlord references were less likely to succeed in the Section 8 program. Similarly, enrollees who moved more often were more likely to succeed overall.

Preferring to remain in the pre-program unit increases the probability of success by increasing the probability of qualifying in place. Similarly, enrollees living in units with enough bedrooms were more likely to succeed, though this does not have a significant effect on the probability of qualifying in place.

Wanting better quality housing reduces the overall probability of success by lowering the probability of qualifying in place, though this is partially offset by an increase in the probability of qualifying by moving. Wanting lower costs also reduces the overall probability of success, in this case by lowering the probability of qualifying by moving.

Enrollees who felt they understood program rents and utility allowances were more likely to succeed because they were more likely to succeed in place.

Finally, enrollees who had vouchers were more likely to succeed than those who had certificates, primarily by succeeding in place.

Success In Place

The demographic characteristics relating to success in place differ between New York and the national sample (see Exhibit 3.29). All three demographic variables have unexpected effects. Both minority enrollees and employed enrollees were less likely to succeed in place, though working does not show up as significant at any particular stage. Being minority only shows up significantly at the final stage. We did not expect race to affect the probability of succeeding in place and thought working enrollees would be more likely to qualify in their pre-program unit. Enrollees who said they needed child care, but could not get if during their search, were less likely to qualify in place.

As in the other sites, enrollees who wanted to remain in their pre-program units were more likely to pass through each of the steps in the process of qualifying in place, and their overall probability of success in place was higher. Similarly, wanting better quality housing

Exhibit 3.29

FACTORS AFFECTING PROBABILITY OF QUALIFYING IN PLACE
NEW YORK CITY

Probability of:	Success In Place	Asking Pre-Program Landlord	Pre-Program Landlord Agreeing	Inspection Occurring	Success In Place
Among	Eligible to Qualify In Place[a]	Eligible to Qualify In Place[a]	Enrollees Who Asked Landlord	Units Where Landlord Agrees	Units Where Landlord Agrees
Number of enrollees	315	315	252	199	199
Variable:					
Working	–				
Minority	–				–
Voucher	+				+
Prefer to remain in pre-program unit	+	+	+	+	+
Want better quality?	–			–	–
Required bedrooms (if pre-program unit has enough bedrooms)	+		+	–	
Understand program rent and utility rules?	+			+	+
Need child care, can't get	–				–

[a]Sample excludes homeless and those who sharing units without paying rent to owner. These enrollees are assumed to be ineligible to qualify in place.
Source: Enrollee Interviews.

reduced the probability of succeeding in place, by reducing the probability of following the process from landlord agreement to actually having a unit inspection. Required unit size is positively related to qualifying in place, when the pre-program unit has enough bedrooms. Understanding program rent and utility features also increases the probability of success in place, as does having a voucher rather than a certificate.

Success by Moving

As compared with the national sample in which 70 percent of enrollees who succeed do so by moving, in New York City only 39 percent of successful enrollees qualified by moving.

The first column of Exhibit 3.30 shows the factors that have significant impacts on the overall probability of succeeding by moving and the second column shows the factors that affect the per-unit probability of success. The remaining columns show where the significant factors enter the process.

The only demographic characteristic that affects the probability of succeeding by moving is whether the enrollee was working. As expected, enrollees who were working were less likely to succeed by moving, though their per-unit probability of success was not different. They looked at fewer units and were less likely to want units they visited compared with other enrollees.

Success by moving in New York City is affected largely by factors relating to not qualifying in place. This is shown, for example, by the increase in the probability of success by moving related to wanting better quality housing, and the decrease related to wanting lower costs. Higher pre-program rents are negatively related to qualifying by moving. Preferring to remain in one's pre-program neighborhood reduces the likelihood of qualifying by moving, though preferring to remain in the pre-program unit does not have a significant effect on qualifying by moving.

Enrollees who moved more often were more likely to qualify by moving. They were more likely to qualify in any unit visited, but were less likely to want units they visited.

In summary, because qualifying in place is so important in New York City, success overall, success in place, and success by moving are all strongly related to factors affecting eligibility to qualify in place.

Exhibit 3.30

FACTORS AFFECTING THE PROBABILITY OF QUALIFYING BY MOVING NEW YORK CITY

Probability of:	Success by Moving	Success Per Unit	Wanting Unit	Landlord Agreeing to Participate	Unit Being Inspected	Success
Among:	**All Enrollees**	**Units Visited**	**Units Visited**	**Units Wanted**	**Where Landlord Agreed**	**Units Inspected**
Number of enrollees	389	1951	1880	547	167	146
Variable						
Working	−		−			
Pre-program rent/FMR (if rent less than 110% FMR or voucher)	−					−
Pre-program rent/FMR (if rent greater than 110% FMR and certificate)	−					−
Pre-program unit has enough bedrooms		+	−	+		
Want better quality?	+		+		−	
Want lower costs?	−				+	
Average moves in last three years	+	+	−	+		+
Prefer pre-program neighborhood	−					
Required bedrooms (if pre-program unit has enough)		−	+	−	−	

Source: Enrollee Interviews

Appendix A
SAMPLING

This appendix describes the process by which the samples of PHAs, enrollees and landlords were drawn (Section A1.0) and national estimates based on this sample (Sample A2.0).

A1.0 Sampling Procedures

The purpose of this study was to try to identify the determinants of Section 8 enrollee success in finding units and becoming recipients. To do this, we proposed to analyze a sample of 1,600 new enrollees (issuances) in 40 PHAs (excluding New York City, for which we developed a separate sample). With an expected overall response rate of 80 percent, we needed an initial sample of 2,000 enrollees, or 50 per PHA. There were two goals for this sample:

1. We wanted to have a self-weighting sample.

2. Because the planned analyses involved pooled analyses of the 40 PHAs, we wanted roughly equal number of observations in each PHA, so that a few PHAs would not dominate the patterns of results.

To accomplish these goals we used a two phase sampling procedure. In the first phase we sampled New York and the City of Los Angeles with certainty, and drew an equal probability sample of 118 of the other 285 PHAs that were expected to have more than 50 issuances over four months, based on their size and new allocations. Because we needed to collect data within an eight month period, we had to develop the sample of issuances over four months (enrollees have up to four months after issuance to succeed in finding a unit). Thus, we restricted our first phase sample to PHAs that were expected to have at least fifty issuances over four months. The sample of 120 PHAs included in the first phase is listed in Exhibit A.1. The object of the first phase was to determine whether PHAs would in fact have enough issuances to be included in the study, and whether they would be willing to cooperate. The second phase of the sampling involved drawing a self-weighting sample of 50 issuances in each of 40 PHAs, where the PHAs were drawn with probability proportional to size (where size was measured as the expected number of issuances reported in the first phase survey).

Exhibit A.1
Phase I PHA Sample (120 PHAs)

HUD Region	PHA Number	PHA Name
1	MA012	Worcester Housing Authority
1	CT051	City of Hartford
1	MA003	Cambridge Housing Authority
1	MA035	Springfield Housing Authority
1	MA007	New Bedford Housing Authority
1	NH001	Manchester Housing Authority
2	NY028	Schenectady Municipal Hsg Authority
2	NY077	Town of Islip Housing Authority
2	NY121	Glen Cove Comm Dev Agency
2	NY005	New York City Housing Authority
2	NY041	Rochester Housing Authority
2	NJ009	Jersey City Housing Authority
2	NY409	Hsg Council of Niagra Frontier
3	PA081	Lehigh County Hsg Authority
3	PA001	Pittsburgh Housing Authority
3	MD033	Baltimore Co. Housing Agency
3	MD002	Baltimore City Housing Authority
3	PA022	York Housing Authority
3	MD015	Dept Of Hcd Rental Asst Div
3	PA017	Washington County Hsg Authority
3	VA001	Portsmouth RHA
3	PA003	Scranton Housing Authority
3	DE005	New Castle Co Dpt of Com Dev
3	PA018	Westmoreland County Hsg Authority
3	PA046	Chester County Housing Authority
3	PA012	Montgomery County
3	VA019	Fairfax County Redev & Hsg Authority
4	FL003	Tampa Housing Authority
4	MS030	Ms Regional Housing Auth No V
4	MS019	Ms Regional Housing Authy No IV
4	FL017	Miami Beach Housing Authority
4	MS006	Tenn Valley Regional HA
4	FL066	Hialeah Housing Authority
4	KY105	Jefferson County Housing Auth
4	FL093	Orange County Hsg Assistance
4	KY130	Lexington–Fayette Co Hsg Auth
4	GA006	Atlanta Housing Authority
4	KY131	City of Louisville
4	GA228	Hous Auth of Jonesboro
4	FL004	Orlando Housing Authority
4	MS057	Ms Regional Housing Auth No VII
4	NC003	Charlotte H A
4	FL032	Ocala Housing Authority
4	NC167	Northwestern Regional H A
4	GA004	Columbus Housing Authority
4	SC002	Columbia HA
4	MS058	Ms Regional Housing Auth No VI
4	SC057	North Charleston HA
4	FL088	Gainesville Housing
4	FL010	Fort Lauderdale Housing Authority
4	GA062	Americus Housing Authority
4	TN001	Memphis Housing Authority
5	IN003	Fort Wayne Housing Authority
5	OH048	Hamilton County PHA
5	OH016	Mansfield Metro Hsg Authority
5	OH015	Butler Metropolitan Hsg Authority
5	IN016	Evansville Housing Authority
5	WI218	Milwaukee County Hsg Authority
5	OH004	Cincinnati Metro Hsg Authority
5	MN147	Dakota County
5	IL054	Maywood

Exhibit A.1
(Continuation)

HUD Region	PHA Number	PHA Name
5	OH031	Portage
5	OH044	Allen MHA
5	OH003	Cuyahoga Metro Hsg Authority
5	WI002	Milwaukee Housing Authority
5	MN163	Metro Council
5	MI073	Grand Rapids Housing Commission
5	OH022	Greene Metro Hsg Authority
5	OH006	Lucas Metro Hsg
6	OK002	Oklahoma City Hsg Authority
6	TX441	Harris County Housing Authority
6	OK073	Tulsa Hsg Authority
6	TX499	Ark–Tex Cog
6	TX006	San Antonio
6	LA013	Jefferson Parish Housing Authority
6	TX433	Arlington Housing Authority
6	LA001	Housing Authority Of New Orleans
6	TX003	El Paso City Housing Authority
6	TX434	Grand Prairie Hsg Assist
6	LA006	Monroe Housing Authority
6	LA004	Lake Charles Housing Authority
7	MO001	St Louis City
7	MO199	Lincoln County
7	NE001	Omaha Housing Authority
7	MO203	St Francois County
7	IA020	Des Moines PHA
8	UT004	Salt Lake City Housing Authority
8	CO001	Denver Housing Authority
9	CA094	Orange County Hsg Authority
9	CA065	Fairfield City
9	CA064	San Luis Obispo Housing Authority
9	CA123	Pomona Housing Authority
9	CA063	San Diego Housing Authority
9	CA067	Almeda County
9	CA024	County Of San Joaquin HA
9	CA008	Kern County Housing Authority
9	CA004	City of Los Angeles
9	CA010	Richmond Housing Authority
9	CA108	San Diego County Housing Autho
9	AZ001	NIH Dept – City Of Phoenix
9	CA102	Garden Grove Housing Authority
9	CA058	Berkley
9	NV007	North Las Vegas Hsg Authority
9	CA035	San Buenaventura City Housing
9	AZ004	Tucson Housing Department
9	CA033	Monterey County Hsg Authority
9	CA104	Anaheim Housing Authority
9	CA031	Oxnard Housing Authority
9	CA076	Santa Barbara City Housing
9	CA101	Los Angeles County Housing
9	CA111	Santa Monica Housing Authority
9	CA027	Riverside Housing Authority
10	OR006	Lane County Housing Authority
10	WA008	HA of City Of Vancouver
10	WA055	Spokane Housing Authority
10	OR002	Housing Authority of Portland
10	OR011	HA of City of Salem
10	ID013	Boise City Hsg Authority
10	OR019	Linn–Benton HA ("Linn City")
10	OR014	Marion County Housing Authority

It turned out that New York, Los Angeles and 63 of the other 118 first phase PHAs were both willing and eligible to participate in the study. More specifically, of the 120 PHAs (including New York and Los Angeles) in the first phase, 107 responded, 17 respondents were ineligible because they were expecting to issue fewer than 50 vouchers and certificates during our data collection period. Another five PHAs were classified as ineligible because they were multi-county PHAs. Twenty eligible respondents refused to participate in the study.

The 63 eligible responding PHAs (other than New York and LA) were fewer than anticipated and issuances were more varied then expected. As a result, the second phase sample of PHAs had 12 PHAs drawn with certainty (including L.A. but not N.Y.), and some issuance samples within PHAS of more than 50. The non-certainty PHAs had samples with fewer than 50 issuances in order to preserve the overall sample size of 2,000 enrollees.

Before drawing the second phase sample, we identified eight apparent outlier PHAs—five with very large numbers of issuances and three with very small numbers of issuances. We recontacted these PHAs and adjusted their projected issuances as described below.

We identified these outliers from a regression of PHA issuances on the number of units under lease. PHAs are allocated a certain number of program slots (certificates) or a certain budget (vouchers). They issue certificates or vouchers as they receive new allocations of slots or budgets. They also issue certificates or vouchers to replace current recipients who leave the program. The number of issuances reflects the number of new allocations or turnover slots, and the number of issuances needed to fill a slot (on average, the inverse of the enrollee success rate).[1] Regression of projected issuances on new allocations showed no significant relationship. There was a significant relationship between projected issuances and size (number of units under lease). PHAs were classified as outliers if their reported expected issuances were more than 1.64 standard errors away from their predicted values, based on the regression line extended from the other PHAs (i.e., in each case, the PHA being tested was excluded from the estimated regression).

We recontacted these eight PHAs and adjusted their projections as follows:

In 4 cases, the PHA said the original figures were in error and gave us new estimates, which we used.

[1] PHAs also issue new certificates or vouchers when existing recipients move to new units. We have not included such re-issuances in our study population.

In 3 cases, the PHAs said that the figures were current, but reflected an unusual and temporary speed-up on slow-down in issuances. We used instead their normal issuance rate.[2]

In 1 case, we were unable to reach the PHA and simply reset their projected issuances to predicted values.

The eligible and willing PHAs are listed in Exhibit 2, along with their preliminary expected number of issuances (based on PHA size and new allocations) and the PHA's own estimate of issuances from the first phase survey, conducted in November and December of 1992.

Calculations for the Second Phase

Including Los Angeles (but excluding New York), the first phase yielded 64 PHAs with an estimated 11,500 issuances over four months. One PHA, Los Angeles, had been selected in the first place with certainty. The remaining 63 PHAs were an equal probability sample, and had been selected with probability 118/285 (the 63 are the subset of the 118 that responded to the survey, said that they were willing to participate, and projected at least 50 issuances over the four months January to April, 1993).

We wanted to draw a sample of 40 PHAs with probability proportional to size from among these 64. We knew that LA was so large that it would be drawn with certainty in the second phase. After drawing LA we needed

$$P_i = \frac{39 \cdot N_i}{9,686}$$

where

P_i = The probability of selection for the i^{th} site

N_i = The number of issuances in the i^{th} site

9,686 = The total number of issuances in the 61 sites (excluding LA)

[2] If we were focussed on estimating success rates, we would probably had retained the current projection. Given the analytic emphasis of this study, it seemed better to adjust the projections in these extreme cases to reflect customary issuance rates.

Exhibit A.2
Sampling Frame for Second Phase Sample
(Excluding NY and LA)

HUD Region	PHA Number	PHA Name	Units Under Lease (8/91)	Measure of Size *	Survey Responses (11–12/92) Expected Issuances in 4 Months: From Turnover	From New Allocation	Total Issuances	Sampling Probability
4	KY130	Lexington–Fayette Urban County Housing Authorit	759	68	16	36	52	0.21
2	NJ009	Housing Authority Of The City Of Jersey City	1489	110	20	37	57	0.23
1	MA035	Springfield Housing Authority	1884	117	60	0	60	0.24
6	LA004	Housing Authority Of The City Of Lake Charles	961	60	28	34	62	0.25
3	DE005	New Castle County Department Of Cty Dev And Hs	1159	72	44	20	64	0.26
5	OH048	Hamilton County Housing Authority	1181	73	65	0	65	0.26
8	UT004	Salt Lake City Housing Authority	831	64	68	0	68	0.27
1	MA003	Cambridge Housing Authority	960	72	18	50	68	0.27
10	OR019	Linn–Benton Housing Authority	1151	72	44	30	74	0.30
1	NH001	Manchester Housing And Redevelopment Authority	882	55	52	26	78	0.31
9	CA123	City Of Pomona Housing And Grants Division	574	64	52	28	80	0.32
4	NC003	Housing Authority Of The City Of Charlotte	1289	80	88	0	88	0.35
5	IN016	Housing Authority Of The City Of Evansville	979	66	50	40	90	0.36
6	TX499	Ark–Tex Council Of Government	995	62	54	36	90	0.36
5	OH031	Portage Metropolitan Housing Authority	743	71	52	40	92	0.37
4	FL093	Orange County Dept. Of Cty Dev & Asstd Housing	817	51	68	27	95	0.38
2	NY409	Rental Assistance Corporation Of Buffalo	2149	134	100	0	100	0.40
3	PA017	Washington County Housing Authority	654	53	38	63	101	0.41
1	MA007	New Bedford Housing Authority	1149	71	32	70	102	0.41
6	TX434	Grand Prairie Housing And Cty Renewal Agency	820	51	60	45	105	0.42
9	CA111	City Of Santa Monica Dept. Cty And Economic Dev	713	57	56	50	106	0.43
9	AZ004	Tucson Housing Department	2402	149	84	25	109	0.44
5	OH022	Greene Metropolitan Housing Authority	923	57	110	0	110	0.44
9	CA031	City Of Oxnard Housing Department	719	70	52	60	112	0.45
2	NY077	Town Of Islip Housing Authority	620	89	14	100	114	0.46
3	MD015	Prince Georges County Hsg And Cty Dev Agency	1813	113	78	40	118	0.48
4	FL003	Housing Authority Of The City Of Tampa	1613	142	60	60	120	0.48
3	PA081	Lehigh County Housing Authority	645	66	27	95	122	0.49
5	MN163	Metropolitan Council Hsg And Redev Authority	1340	96	76	49	125	0.50
5	MI073	Grand Rapids Housing Commission	447	76	60	68	128	0.52
4	GA228	Jonesboro Housing Authority	931	58	48	80	128	0.52
5	IN003	Fort Wayne Housing Authority	932	83	80	50	130	0.52
9	CA024	Housing Authority Of The County Of San Joaquin	2369	147	131	0	131	0.53
5	WI002	Milwaukee County Hsg And Community Developm	1231	243	45	90	135	0.54
4	GA004	Housing Authority Of The City Of Columbus	973	61	136	0	136	0.55
10	WA055	Spokane Housing Authority	1358	84	112	25	137	0.55
4	TN001	Memphis Housing Authority	2400	149	140	0	140	0.56
5	MN147	Dakota County Hsg And Redevelopment Authority	1608	127	119	25	144	0.58
2	NY041	Rochester Housing Authority	2608	192	120	30	150	0.60
10	OR006	Lane County Housing Authority	1951	144	155	7	162	0.65
3	MD033	Baltimore County Department Of Cty Dev And Hsg	2090	130	80	90	170	0.68
9	CA063	San Diego Housing Commission	5592	469	170	0	170	0.68
9	CA064	Housing Authority Of The City Of San Luis Obispo	1256	90	120	51	171	0.69
6	LA013	Housing Authority Of Jefferson Parish	1260	106	85	90	175	0.70
10	ID013	Boise City Housing Authority	632	64	98	83	181	0.73
9	AZ001	City Of Phoenix Nbhd Improvement And Hsg Dept.	3148	196	160	34	194	0.78
6	TX006	Housing Authority Of The City Of San Antonio	4892	359	195	0	195	0.79
3	MD002	Housing Authority Of Baltimore City	4259	265	80	123	203	0.82
7	MO199	Lincoln County Housing Authority	774	100	120	83	203	0.82
3	PA012	Montgomery County Housing Authority	867	79	162	51	213	0.86
3	PA001	Housing Authority Of The City Of Pittsburgh	2429	175	180	40	220	0.89
4	GA006	Housing Authority Of The City Of Atlanta	4931	307	220	0	220	0.89
6	OK073	Housing Authority Of The City Of Tulsa	2690	198	180	60	240	0.97
5	OH003	Cuyahoga Metropolitan Housing Authority	5351	358	200	45	245	0.99
7	NE001	Omaha Housing Authority	2389	174	120	145	265	1.00
10	OR014	Marion County Housing Authority	833	52	64	205	269	1.00
6	OK002	Oklahoma City Housing Authority	2305	143	150	125	275	1.00
9	CA067	Alameda County Housing Authority	3335	232	230	55	285	1.00
9	CA094	Orange County Housing Authority	5382	365	240	65	305	1.00
5	WI218	Housing Authority Of The City Of Milwaukee	3910	104	320	0	320	1.00
8	CO001	Housing Authority Of The City & County Of Denver	2160	134	160	175	335	1.00
6	LA001	Housing Authority Of New Orleans	3325	207	320	16	336	1.00
9	CA027	Housing Authority Of The County Of Riverside	4822	312	323	25	348	1.00

* Measure of size is the expected issuances based on units under lease and expected new allocations

Thus

$$P_i \geq 1 \quad as \quad N_i \geq 248$$

In addition to Los Angeles, there were 9 PHAs that expected more than 248 issuances. In total they account for 2,738 issuances. We drew these 9 (plus LA) with certainty. Thus we still needed to draw a sample of 30 PHAs with

$$P_i = \frac{30 \cdot N_i}{(9,686 - 2,738)}$$

Thus

$$P_i \geq 1 \quad as \quad N_i \geq 232$$

There were two additional PHA that expected more than 232 issuances, accounting for 485 issuances. We drew these with certainty as well. Thus we needed to draw the remaining sample of 28 PHAs with

$$P_i = \frac{28 \cdot N_i}{(9,686 - 2,738 - 485)}$$

Thus

$$P_i \geq 1 \quad as \quad N_i \geq 231$$

No additional PHAs expected to have more than 231 issuances.

The next goal was to set the sample size in each site so that all enrollees (issuances) would have equal probabilities of selection. The probabilities of selection for issuances in each site are given by:

$$\pi_{LA} = (m_{LA}/N_{LA})$$

$$\pi_{ci} = \left(\frac{118}{285}\right)\left(\frac{m_{ci}}{N_{ci}}\right)$$

$$\pi_{ai} = \left(\frac{118}{285}\right)(P_i)\left(\frac{m}{Ni}\right)$$

$$P_1 = \frac{28 \cdot N_i}{6,463}$$

where

π_i = Probability of selection for an issuance in the i^{th} site

N_i = Number of issuances in the i^{th} site

m_i = Sample size in i^{th} certainty site

m = Sample size for each non-certainty site

LA = Subscript for Los Angeles

ci = Subscript for other certainty sites

ai = Subscript for non-certainty sites

Equating the π_i's gives

$$m_{LA} = N_{LA}\left(\frac{118}{285}\right)\left(\frac{28}{6,463}\right)m$$

$$m_{ci} = N_{ci}\left(\frac{28}{6,463}\right)m$$

Thus, the total sample of 2,000 issuances is given by

$$m\left[28 + 3,223 \cdot \left(\frac{28}{6,463}\right) + 1,814 \cdot \left(\frac{118}{285}\right)\left(\cdot\frac{28}{6,463}\right)\right] = 2,000$$

where

3,223 = Sum of N_{ci}

1,814 = N_{LA}

This yields

m = 44

The resulting sample sizes for the certainty PHAs are shown in Exhibit A.3.

Exhibit A.3
SAMPLE SIZES IN PHASE 2

No.	Name	Issuances	Sample
PHAs Drawn with Certainty in Phase 2:			
CA004	City of Los Angeles	1814	144
CA027	Riverside County	348	67
LA001	New Orleans	336	64
CO001	Denver	335	64
WI218	City of Milwaukee	320	61
CA094	Orange County	305	58
CA067	Alameda County	285	55
OK002	Oklahoma City	275	53
OR014	Marion County	269	52
NE001	Omaha City	265	51
OH003	Cuyahoga Metro	245	47
OK073	City of Tulsa	240	46
All other PHAs	28 PHAs to be drawn PPS. Range from 52 to 220 issuances	124.29 average	44

REPLACEMENT PHAS

During the second stage survey, several replacements were made to the original sample of PHAs. One PHA refused to participate, despite its previous agreement. Four additional PHAs were determined to be ineligible during the second stage survey. (Two of these were multi-county PHAs, and two were not going to be issuing vouchers or certificates during the data collection period). In these cases we drew a replacement from among the PHAs that were not already selected. In each case we drew the closest PHA in terms of expected issuances. The sample size for each replacement PHA was 44 issuances. Since one PHA selected with certainty later turned out to be ineligible, the total target sample of issuances declined slightly (to 1,983 enrollees outside of New York City, instead of 2,000). The final sample of PHAs with their original, first phase and second phase estimates of issuances and anticipated sample size are

listed in Exhibit A.4. As the exhibit shows, the updated estimates often vary substantially from the original estimates.

ENROLLEE SAMPLE

Our original goal was to obtain complete information on the search process for a sample of 1,900 enrollees in the Section 8 program (300 in New York City, and a total of 1,600 from 40 other sites). In fact, as shown in Exhibit A.5, we completed interviews with 1,517 enrollees in 38 sites. The analysis sample excludes 34 enrollees from the five sites where fewer than 12 enrollee interviews were completed (Pomona, Riverside, New Orleans, Los Angeles and Denver), so that the final analysis sample includes 1,483 enrollees from 33 sites, as described in Exhibit 1.2 in the main text.

The smaller than expected sample is primarily due to problems in eight sites. We received no sample from three PHAs (Cuyahoga, Ohio; Milwaukee County, Wisconsin; and Cambridge, Massachusetts). Five sites submitted information on fewer than the expected number of enrollees (the City of Los Angeles, New Orleans, Denver, Pomona, and Riverside, California). The reasons for the smaller samples included:

- Three PHAs issued fewer vouchers and certificates than originally planned (New Orleans, Pomona, and Riverside).
- Two PHAs (Cambridge and Denver) were issuing mostly or only for categories of enrollees not included in the study (public housing demolition or relocation).
- Three PHAs, and/or enrollees in those sites, were unwilling to participate (Cuyahoga, Los Angeles, and Milwaukee County)

The remaining 33 PHAs either reached their targets or were close to them.

The smaller than planned overall enrollee sample increases our error of estimate by about 20 percent for analyses outside of New York. However, not only is the overall sample smaller than planned; the success rate in the sample is much higher than expected. The combination of these two factors means that our error of estimate in comparing successful and unsuccessful enrollees is roughly 60 percent higher than planned.

Exhibit A.4
Study Sample of PHAs

Obs	Note	PHA Number	PHA Name	Issuances (mail survey 11–12/92)	Sample Size	Updated Issuances (Training 2/93)
1		LA004	Housing Authority Of The City Of Lake Charles	62	44	85
2		MA003	Cambridge Housing Authority	68	44	58
3		CA123	City Of Pomona Housing And Grants Division	80	44	80
4	1	IN016	Housing Authority of the City of Evansville	90	44	52
5		FL093	Orange County Dept. Of Community Devel. & Assisted Hous	95	44	102
6		PA017	Washington County Housing Authority	101	44	76
7		CA111	City Of Santa Monica Dept. Community And Economic Devel	106	44	69
8		OH022	Greene Metropolitan Housing Authority	110	44	89
9	2	MD015	Prince Georges County	118	44	83
10		FL003	Housing Authority Of The City Of Tampa	120	44	80
11		MN163	Metropolitan Council Housing And Redevelopment Authority	125	44	92
12		GA228	Jonesboro Housing Authority	128	44	78
13		IN003	Fort Wayne Housing Authority	130	44	100
14		WI002	Milwaukee County Housing And Community Development	135	44	94
15		WA055	Spokane Housing Authority	137	44	100
16		TN001	Memphis Housing Authority	140	44	129
17		NY041	Rochester Housing Authority	150	44	130
18		MD033	Baltimore County Department Of Community Development A	170	44	165
19	3	OR006	Lane County Housing Authority	162	44	DK
20		CA064	Housing Authority Of The City Of San Luis Obispo	171	44	44
21		ID013	Boise City Housing Authority	181	44	80
22		AZ001	City Of Phoenix Neighborhood Improvement And Housing D	194	44	56
23		TX006	Housing Authority Of The City Of San Antonio	195	44	320
24		MD002	Housing Authority Of Baltimore City	203	44	212
25	4	MN147	Dakota County Housing Authority	144	44	DK
26		PA012	Montgomery County Housing Authority	213	44	215
27		PA001	Housing Authority Of The City Of Pittsburgh	220	44	200
28		GA006	Housing Authority Of The City Of Atlanta	220	44	480
29		OK073	Housing Authority Of The City Of Tulsa	240	46	80
30		OH003	Cuyahoga Metropolitan Housing Authority	245	47	235
31		NE001	Omaha Housing Authority	265	51	80
32		OR014	Marion County Housing Authority	269	52	158
33		OK002	Oklahoma City Housing Authority	275	53	120
34	5	GA004	Columbus Georgia	136	44	56
35		CA094	Orange County Housing Authority	305	58	340
36		WI218	Housing Authority Of The City Of Milwaukee	320	61	400
37		CO001	Housing Authority Of The City & County Of Denver	335	64	200
38		LA001	Housing Authority Of New Orleans	336	64	175
39		CA027	Housing Authority Of The County Of Riverside	348	67	175
40		CA004	City of Los Angeles	1814	144	1200

Notes:

1 Evansville replaced ARK–TEX HA(TX499) which is a multi–county HA
2 Prince George's County replaced Islip NY (NY077) which refused to participate
3 Lane County replaced San Diego Hsg Comm (CA063), which was not issuing 44
4 Dakota County replaced Lincoln Cty (MO199) which is a multi–county HA, an interim replacement Jefferson Parrish (LA013) was not going to be issuing.
5 Columbus replaced Almeda County (CA067) which was not issuing 44. This was the only certainty site that needed to be replaced.

Exhibit A.5
ENROLLEE SURVEY SUMMARY

	All Sites Except NY	New York City	Total
Total Respondents	1,124	393	1,517
Successful enrollees in place	302	158	460
Successful enrollees new unit	693	99	792
Unsuccessful enrollees	129	136	265
Total Nonrespondents[a]	232	170	402
Successful	169	68	237
Unsuccessful	50	60	110
Outcome unknown	13	42	55
Total Initial Sample	**1,356**	**563**	**1,919**

[a] PHAs provided information on the success of most nonrespondents.
Source: Enrollee Interviews and PHA data.

LANDLORD SAMPLE

Enrollees were asked to keep track of the landlords they contacted during their housing search. During each monthly interview, enrollees were asked to provide the name, address, telephone number and other identifying information for:

(a) their pre-program landlord;

(b) the landlord of the unit, if any, that they were planning to rent under the program;

(c) the landlord of the last unit that they wanted to rent but did not rent;

(d) the landlord of the last unit that they wanted to rent but did not rent because the landlord turned them down, if this was not the reason why the did not rent the unit listed in (c).

These landlords were to serve as the sampling frame for the landlord interviewing. We expected to complete interviews with landlords on a sample of 1,900 units (300 in New York City, and a total of 1,600 in the other sites). Due to the smaller than expected sample of enrollees, the high success rate, and the inability of enrollees to provide good owner contacts, the sample of landlords is only 631.

Enrollees were able to provide some contact information for only 1,341 landlords, representing 1,575 units. We attempted to complete interviews with all of these landlords. Exhibit A.6 shows the final status for these 1,341 landlords. In 246 cases, the contact information provided by the enrollee was not sufficient to locate the property owner or manager. Another 155 landlords were determined to be ineligible because the person contacted said they did not own or manage the property in question, or the unit was not vacant during the past year (these were mostly cases where the enrollee had listed his or her name on a waiting list, rather than applying for a currently available unit, so that no landlord decision was involved). Of the remaining 940 landlords, interviews were completed with 631 (67 percent) providing information on 748 units. When we excluded the landlords and units for the five excluded sites and for enrollees whose final status was not known, we were left with a sample of 612 landlords who provided information on 672 units.

Exhibit A.6
LANDLORD SURVEY - FINAL STATUS

	Outside NY	New York City	Total
Total Respondents	554	77	631
Total Nonrespondents			
Refusal	101	16	117
Contact information not usable	189	57	246
Ineligible	124	31	155
Could not reach	104	34	138
Other final	40	14	54
Total Initial Sample	**1,112**	**229**	**1,341**

Source: Landlord Survey.

The sample of units used in the analysis of landlord acceptance is restricted to units that enrollees *wanted*. Hence we excluded the following categories of units from the sample of 672 units described above. 1) pre-program units where the landlord agreed to an inspection but the enrollee did not try to get an inspection (this excludes 34 pre-program units) and 2) new units for which the enrollee reported that he "decided he didn't want the unit" or "found another unit"

(this results in the exclusion of 15 units). We also excluded 3 pre-program units in which the enrollee was related to the landlord.

Representativeness of the Landlord Sample

The landlord sample is subject to considerable non-response, raising the possibility of substantial response bias. Non-response arises from three sources. First, where enrollees did not rent a unit, they were often unable to provide us with enough information to identify and find the unit's owner or owner representative. Second, even where there was adequate information, we had the usual survey losses associated with refusals and being unable to reach respondents. Finally, among landlords whom we did reach, a number turned out to be ineligible; this occurred in cases where enrollees listed their names on waiting lists with buildings in which there were no vacancies and where, in consequence, the landlord had not actually made any decision about renting to the enrollee.

Exhibit A.7 compares the completed landlord sample to the *potential* landlord sample, defined by the landlord contacts made by enrollees for units they wanted to rent. Interviews were completed for only 32 percent of the potential sample outside of New York City, and only 18 percent of the potential sample inside New York City. (These rates have not been adjusted to net out the ineligible landlords in the potential sample; these were more common in New York City and account for at least some of the lower completion rate in that site). Further, completion rates were lower for new landlords than for pre-program landlords and for unsuccessful contacts than for successful ones.

The bias in our landlord sample associated with outcome and with whether the unit is a pre-program or new unit can be corrected by weighting or other devices. Even so, there is clearly room for considerable response bias within these categories.

A2.0 National Estimates

Our original intent was to use our sample to provide national estimates of the success rates for Section 8 issuances during April-July, 1993 by PHAs that expected to issue at least 50 Vouchers or Certificates during that period. Based on the results of the sampling, we neither can do this, nor in fact want to do it. What we do instead is provide an estimate of the success rate in early 1993 that would be associated with a proportional expansion of the Section 8 slots

Exhibit A.7

SAMPLE OF UNITS FOR LANDLORD SURVEY

	Outside NYC			NYC		
	Potential Sample	Actual Sample		Potential Sample	Actual Sample	
	Number	Number	Completion Rate	Number	Number	Completion Rate
Total # Units	1686	546	32%	442	80	18%
Pre-program landlords	486	200	41%	251	55	22%
New landlords	1200	346	29%	191	25	13%
Pre-program landlords	486	200	41%	251	55	22%
Enrollee Succeeded In Place	294	144	49%	158	30	19%
Enrollee Failed to Qualify *	192	56	29%	93	25	27%
New landlords	1200	346	29%	191	25	13%
Enrollee Succeeded with Move	671	261	39%	99	16	16%
Unsuccessful Landlord Contact **	529	85	16%	92	9	10%

* The count of units includes only those for which the Enrollee tried to qualify with his or her pre-program landlord.

** The count of unsuccessful landlord contacts is derived from Section G of the Enrollee survey. The count of units therefore reflects the sampling frame and not the total number of units that enrollees wanted.

in larger, non-statewide PHAs (specifically, non-statewide PHAs with at least 804 slots). This is conceptually comparable to the estimated success rates in large urban PHAs that were developed from the Housing Voucher Demonstration (though the universe for this report includes PHAs that were too small to be included in the Voucher Demonstration sample).

Apart from the overall success rate, the analyses and tabulations in this report are based on unweighted data. This reflects their analytic focus. Further, while the data are far from self-weighting, the average success rate is almost the same for weighted and unweighted estimates.

The remainder of this Section discusses these points in turn.

We cannot pursue our original design of estimating the success rates for all issuances during a specific time period, because we were unable to obtain counts from some of our sampled PHAs of their actual issuance during the relevant period. This means in turn that we cannot weight the individual PHAs to reflect their issuances as a proportion of total issuance during the period. Further, given the variability in expected and actual issuances from one phase of the sampling to the next, we are unwilling to base weights on either expected issuances or on extrapolation from the time required to meet our sampling requirements.

At the same time, the very fact that issuances do seem to vary so much over time suggests that we would not be very interested in the weights that attach to a specific few months. Instead, we have undertaken to estimate the success rate that would have been associated with a proportional expansion of the Section 8 slots in larger, non-statewide PHAs during that period. This seems to us to provide a more stable conceptual construct and has the further advantage of being comparable to the 1986 rates estimated for all large, urban PHAs in the Housing Voucher Demonstration.

Before turning to the details of the estimator involved, consider first the sampling procedure. We included in our initial universe all PHAs with at least 804 slots, so that we can imagine that we started out sampling larger PHAs (where larger is defined as more than 804 slots). We did sample some other PHAs as well, but of our final sample of 32 PHAs (excluding NYC), only 3 are not larger PHAs. Thus, while we have not excluded these PHAs, we can reasonably characterize our results as estimates from a sample of the universe of non-statewide PHAs with at least 804 slots. (Alternatively, we could, of course, exclude the 3 additional PHAs. This is, however, not desirable in terms of the analytic focus of the study).

The other question, of course, is whether the attrition of sampled PHAs is large enough to worry about attrition bias. Our concern now is with the subset of PHAs in the initial sample that came from the set with at least 804 slots. In the following discussion, we exclude the two PHAs drawn with certainty in the initial sample -- New york City and Los Angeles -- since they were self-representing. (New York City is included in our final sample; Los Angeles is not). Excluding these two PHAs, the first phase sample consisted of 93 PHAs with at least 804 slots. Of these, 3 turned out to be ineligible because they were multi-county PHAs, so that our base is 90. Among these 90 larger PHAs, we had 12 non-respondents, 15 that said they wouldn't participate in the study, and another 9 that had too few expected issuances, leaving us 54 at the end of the first phase of sampling.

In the next phase, including replacement PHAs, we drew a sample of 40 larger PHAs. Of these, we lost 2 that were ineligible, had 2 refusals, and 6 that had too few issuances, leaving us 30.

If we ignore the losses associated with issuances and just consider retention of eligible PHAs, then our retention rate for all of the stages (non-response to the survey, refusal at the first stage, and refusal following selection) would be:

$$\left(\frac{78}{90}\right)\left(\frac{63}{78}\right)\left(\frac{36}{38}\right) = 0.663$$

In other words, we lose about a third of our sample to attrition associated with non-response or unwillingness to participate in the study. This does not seem excessive, and we have no reason to think that it is associated with success rates, which PHAs in fact do not often monitor directly.

In addition, our retention rate associated with issuances is:

$$\left(\frac{54}{63}\right)\left(\frac{30}{36}\right) = 0.714$$

Thus, we lose 30 percent of our retained sample (or about 17 percent -- that is, 15/90 -- of our original sample) because of issuances. Since, other things equal, higher issuances would be associated with lower success rates, we may have some tendency to underestimate success rates due to the exclusion of PHAs with few issuances. Our impression is that this effect is minor,

and the cases where we lost PHAs due to issuances tended to be dominated by large swings associated with changes of priorities or periodic suspensions of issuances.

Estimating the success rate that would be expected if we issued new Vouchers or Certificates in proportion to the PHA's number of slots actually turns out to involve estimating the average number of issuances per slot, which we then invert to provide an estimated success rate. This reflects the fact that PHAs with lower success rates would have more issuances, and hence more weight in computing an overall success rate.

$$\pi = \frac{\sum (M_i)\left(\frac{1}{\pi_i}\right)\pi_i}{\sum (M_i)\left(\frac{1}{\pi_i}\right)}$$

$$= \left[\frac{\sum (M_i)\left(\frac{1}{\pi_i}\right)}{\sum (M_i)}\right]^{-1}$$

$$= [N]^{-1}$$

$$\hat{\pi} = [\hat{N}]^{-1}$$

$$\hat{N} = \frac{\sum \frac{M_i}{P_i}\hat{N}_i}{\sum \frac{M_i}{P_i}}$$

where the sums are over PHAs, and

π = the overall success rate for a proportional expansion of slots;

π_i = the success rate in the ith PHA;

M_i = the number of slots in the ith PHA;

N = the overall mean issuances per slot;

N_i = the mean issuances per slot in the ith PHA;

P_i = the probability of selection for the ith PHA;

$\hat{N}_i$ = the estimated issuances per slot in the ith PHA.

$\hat{N}$ = our estimate of overall mean issuances per slot;

Our estimate for the issuances per recipient within each PHA is given by:

$$\hat{N}_i = \frac{I_i + 1}{R_i + 1}$$

where:

I_i = the total number of issuances in the ith PHA;

R_i = the total number of successful enrollees in the ith PHA.

This estimate is slightly downward biased (there being no unbiased estimate), but the bias is small:

$$N_i = \left(\frac{1}{\pi_i}\right)$$

$$E(\hat{N}_i) = \left(\frac{1}{\pi_i}\right) - \left(\frac{1}{\pi_i}\right)(1 - \pi_i)^{(I_i+1)}$$

$$\frac{Bias}{N_i} = -(1 - \pi_i)^{(I_i+1)}$$

Finally, we should note that, apart from the estimate of overall success rates, all the tabulations in this report are unweighted. The sample is not selfweighting. Rather, the use of unweighted estimates reflects our focus on analytic results as opposed to estimation of population parameters. As indicated in Chapter Two, however, weighting has little effect on the estimate of the overall success rate.

APPENDIX B

SUPPLEMENTARY EXHIBITS

Exhibit B.1

Attempts to Qualify in Place - National Sample

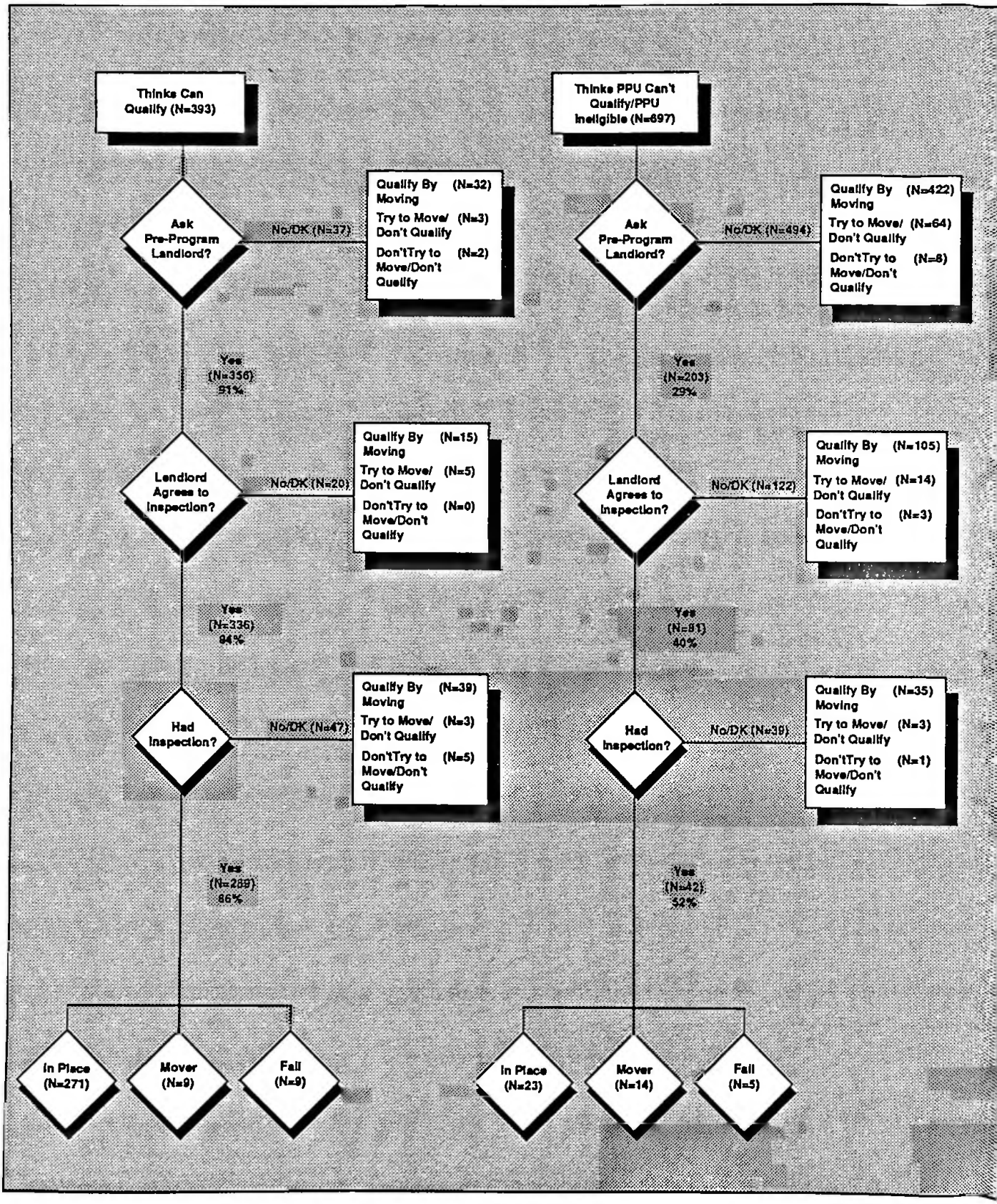


Exhibit B 2

Enrollee Search Strategies and Outcomes

Based on Preference Regarding Moving or Remaining in Pre–Program Unit

National Sample

	Prefer to Remain in Place			Prefer to Move			Don't Know/Don't Care			TOTAL		
Search Strategy	Number (col. pct)	Outcome		Number (col. pct)	Outcome		Number (col. pct)	Outcome		Number (col. pct)	Outcome	
Only Try In Place	172 63%	Qualify In Place	163 95%	38 5%	Qualify In Place	34 89%	14 19%	Qualify In Place	14 100%	224 21%	Qualify In Place	211 94%
		Qualify by Move	0 0%		Qualify by Move	0 0%		Qualify by Move	0 0%		Qualify by Move	0 0%
		Fail	9 5%		Fail	4 11%		Fail	0 0%		Fail	13 6%
Only Try to Move	37 14%	Qualify In Place	0 0%	450 60%	Qualify In Place	0 0%	34 47%	Qualify In Place	0 0%	521 48%	Qualify In Place	0 0%
		Qualify by Move	29 78%		Qualify by Move	396 88%		Qualify by Move	29 85%		Qualify by Move	454 87%
		Fail	8 22%		Fail	54 12%		Fail	5 15%		Fail	67 13%
Try In Place and Move	63 23%	Qualify In Place	26 41%	248 33%	Qualify In Place	48 19%	24 33%	Qualify In Place	9 38%	335 31%	Qualify In Place	83 25%
		Qualify by Move	29 46%		Qualify by Move	177 71%		Qualify by Move	11 46%		Qualify by Move	217 65%
		Fail	8 13%		Fail	23 9%		Fail	4 17%		Fail	35 10%
Do Not Try	1 0%	Qualify In Place	0 0%	8 1%	Qualify In Place	0 0%	1 1%	Qualify In Place	0 0%	10 1%	Qualify In Place	0 0%
		Qualify by Move	0 0%		Qualify by Move	0 0%		Qualify by Move	0 0%		Qualify by Move	0 0%
		Fail	1 100%		Fail	8 100%		Fail	1 100%		Fail	10 100%
TOTAL (row pct)	273 25%	Qualify In Place	189 69%	744 68%	Qualify In Place	82 11%	73 7%	Qualify In Place	23 32%	1090 100%	Qualify In Place	294 27%
		Qualify by Move	58 21%		Qualify by Move	573 77%		Qualify by Move	40 55%		Qualify by Move	671 62%
		Fail	26 10%		Fail	89 12%		Fail	10 14%		Fail	125 11%

Exhibit B.3

Search Strategies and Outcomes
Based on Enrollee Perceptions Regarding Pre–Program Unit and Landlord
National Sample

	Thought Could Qualify in Pre–Program Unit (or Qualified in 1st Round)			Thought Pre–Program Unit or Landlord would not Qualify			Pre–Program Unit Ineligible			TOTAL		
Search Strategy	Number (col. pct)	Outcome		Number (col. pct)	Outcome		Number (col. pct)	Outcome		Number (col. pct)	Outcome	
Only Try in Place	211 54%	Qualify in Place	202 96%	12 4%	Qualify in Place	8 67%	1 0%	Qualify in Place	1 100%	224 21%	Qualify in Place	211 94%
		Qualify by Move	0 0%		Qualify by Move	0 0%		Qualify by Move	0 0%		Qualify by Move	0 0%
		Fail	9 4%		Fail	4 33%		Fail	0 0%		Fail	13 6%
Only Try to Move	35 9%	Qualify in Place	0 0%	134 40%	Qualify in Place	0 0%	352 98%	Qualify in Place	0 0%	521 48%	Qualify in Place	0 0%
		Qualify by Move	32 91%		Qualify by Move	115 86%		Qualify by Move	307 87%		Qualify by Move	454 87%
		Fail	3 9%		Fail	19 14%		Fail	45 13%		Fail	67 13%
Try In Place and Move	145 37%	Qualify in Place	69 48%	189 56%	Qualify in Place	13 7%	1 0%	Qualify in Place	1 100%	335 31%	Qualify in Place	83 25%
		Qualify by Move	63 43%		Qualify by Move	154 81%		Qualify by Move	0 0%		Qualify by Move	217 65%
		Fail	13 9%		Fail	22 12%		Fail	0 0%		Fail	35 10%
Do Not Try	2 1%	Qualify in Place	0 0%	3 1%	Qualify in Place	0 0%	5 1%	Qualify in Place	0 0%	10 1%	Qualify in Place	0 0%
		Qualify by Move	0 0%		Qualify by Move	0 0%		Qualify by Move	0 0%		Qualify by Move	0 0%
		Fail	2 100%		Fail	3 100%		Fail	5 100%		Fail	10 100%
TOTAL (row pct)	393 36%	Qualify in Place	271 69%	338 31%	Qualify in Place	21 6%	359 33%	Qualify in Place	2 1%	1090 100%	Qualify in Place	294 27%
		Qualify by Move	95 24%		Qualify by Move	269 80%		Qualify by Move	307 86%		Qualify by Move	671 62%
		Fail	27 7%		Fail	48 14%		Fail	50 14%		Fail	125 11%

Exhibit B.4
Attempts to Qualify by Moving - National Sample

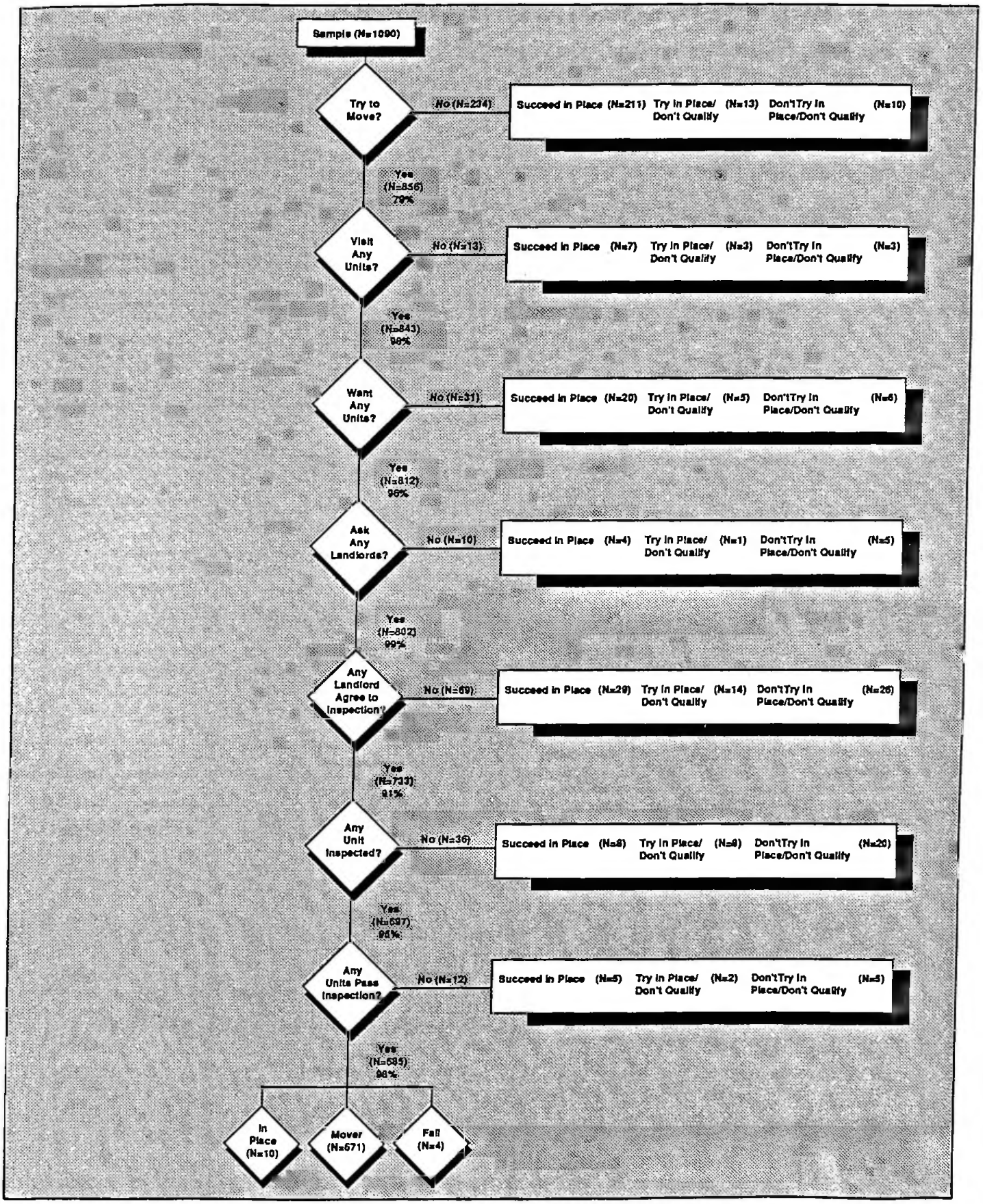


Exhibit B.5

Attempts to Qualify in Place - New York City

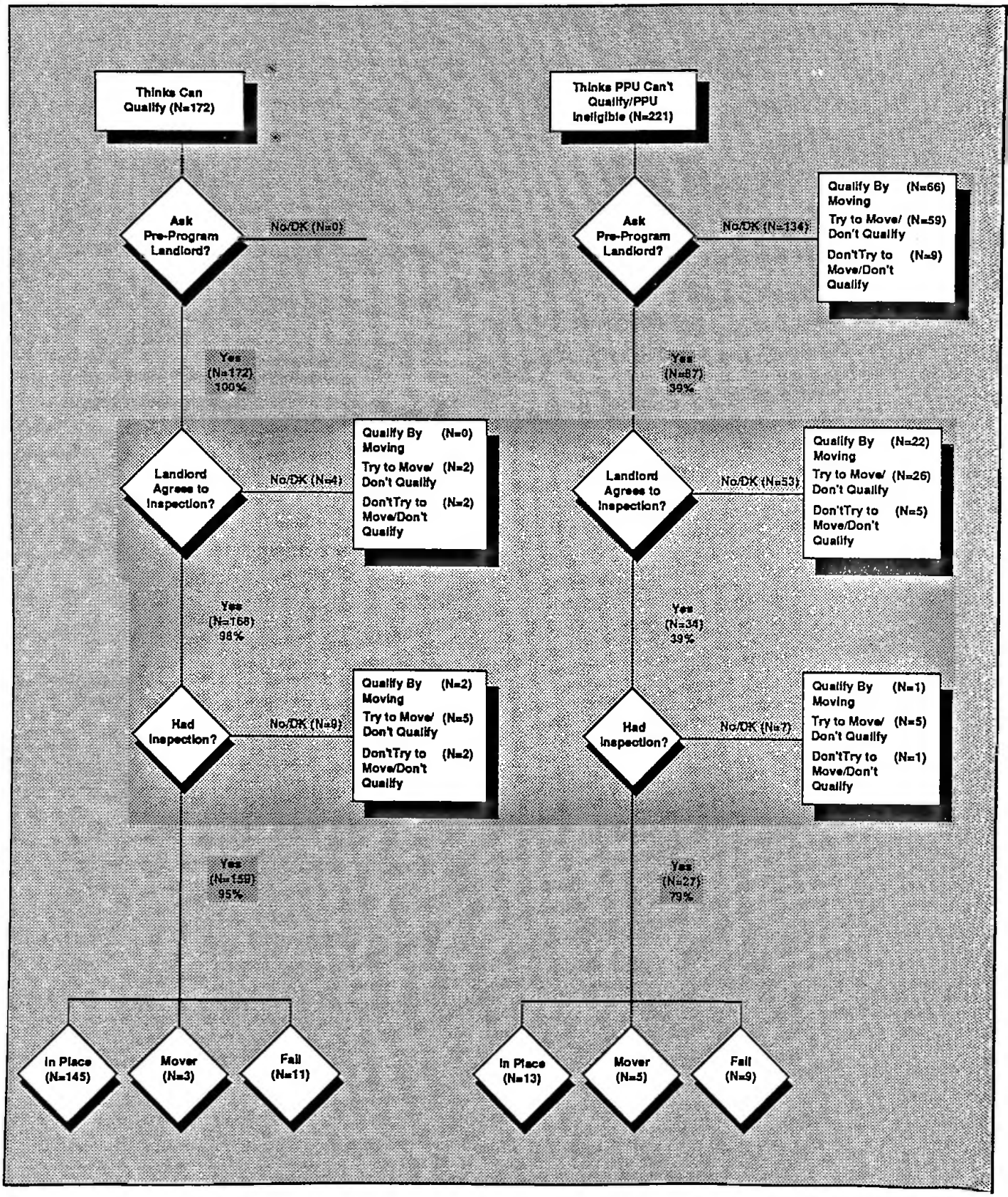


Exhibit B.6
Enrollee Search Strategies and Outcomes
Based on Preference Regarding Moving or Remaining in Pre–Program Unit
New York City

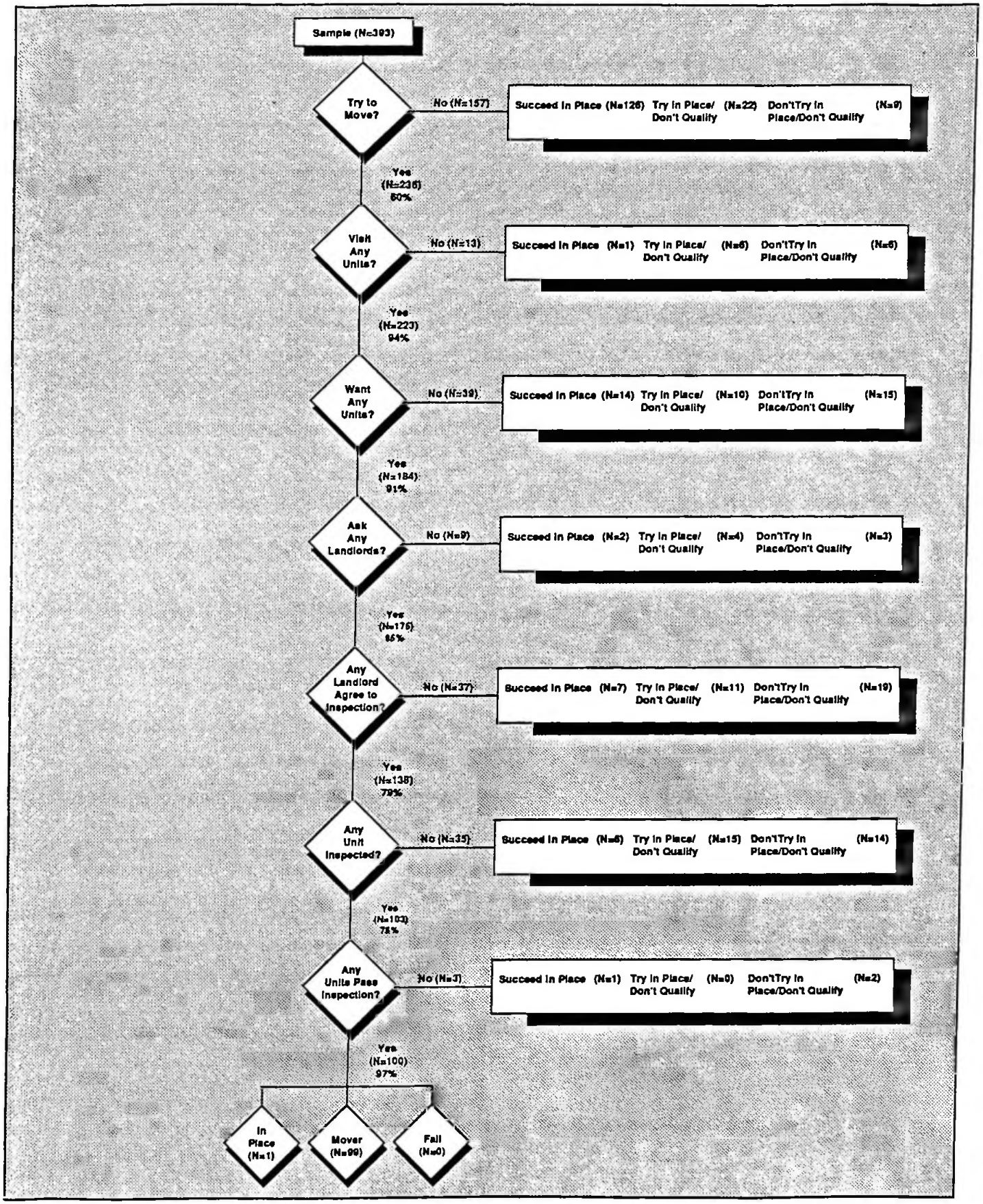
	Prefer to Remain In Place			Prefer to Move			Don't Know/Don't Care			TOTAL		
Search Strategy	Number (col. pct)	Outcome		Number (col. pct)	Outcome		Number (col. pct)	Outcome		Number (col. pct)	Outcome	
Only Try in Place	124 82%	Qualify In Place Qualify by Move Fail	109 88% 0 0% 15 12%	10 5%	Qualify in Place Qualify by Move Fail	4 40% 0 0% 6 60%	14 47%	Qualify in Place Qualify by Move Fail	13 93% 0 0% 1 7%	148 38%	Qualify in Place Qualify by Move Fail	126 85% 0 0% 22 15%
Only Try to Move	5 3%	Qualify in Place Qualify by Move Fail	0 0% 0 0% 5 100%	112 53%	Qualify in Place Qualify by Move Fail	0 0% 63 56% 49 44%	8 27%	Qualify in Place Qualify by Move Fail	0 0% 3 38% 5 63%	125 32%	Qualify in Place Qualify by Move Fail	0 0% 66 53% 59 47%
Try in Place and Move	21 14%	Qualify in Place Qualify by Move Fail	13 62% 0 0% 8 38%	83 39%	Qualify in Place Qualify by Move Fail	16 19% 32 29% 35 42%	7 23%	Qualify in Place Qualify by Move Fail	3 43% 1 13% 3 43%	111 28%	Qualify in Place Qualify by Move Fail	32 29% 33 30% 46 41%
Do Not Try	2 1%	Qualify in Place Qualify by Move Fail	0 0% 0 0% 2 100%	6 3%	Qualify in Place Qualify by Move Fail	0 0% 0 0% 6 100%	1 3%	Qualify in Place Qualify by Move Fail	0 0% 0 0% 1 100%	9 2%	Qualify in Place Qualify by Move Fail	0 0% 0 0% 9 100%
TOTAL (row pct)	152 39%	Qualify in Place Qualify by Move Fail	122 80% 0 0% 30 20%	211 54%	Qualify in Place Qualify by Move Fail	20 9% 95 45% 96 45%	30 8%	Qualify in Place Qualify by Move Fail	16 53% 4 13% 10 33%	393 100%	Qualify in Place Qualify by Move Fail	158 40% 99 25% 136 35%

Exhibit B.7
Search Strategies and Outcomes
Based on Enrollee Perceptions Regarding Pre-Program Unit and Landlord
New York City

	Thought Could Qualify In Pre-Program Unit (or Qualified in 1st Round)			Thought Pre-Program Unit or Landlord would not Qualify			Pre-Program Unit Ineligible			TOTAL		
Search Strategy	Number (col. pct)	Outcome		Number (col. pct)	Outcome		Number (col. pct)	Outcome		Number (col. pct)	Outcome	
Only Try In Place	132 77%	Qualify In Place Qualify by Move Fail	121 92% 0 0% 11 8%	16 13%	Qualify In Place Qualify by Move Fail	5 31% 0 0% 11 69%	0 0%	Qualify In Place Qualify by Move Fail	0 0% 0 0% 0 0%	148 38%	Qualify In Place Qualify by Move Fail	126 85% 0 0% 22 15%
Only Try to Move	0 0%	Qualify In Place Qualify by Move Fail	0 0% 0 0% 0 0%	38 30%	Qualify In Place Qualify by Move Fail	0 0% 24 63% 14 37%	87 92%	Qualify In Place Qualify by Move Fail	0 0% 42 48% 45 52%	125 32%	Qualify In Place Qualify by Move Fail	0 0% 66 53% 59 47%
Try In Place and Move	40 23%	Qualify In Place Qualify by Move Fail	24 60% 5 13% 11 28%	68 54%	Qualify In Place Qualify by Move Fail	5 7% 28 74% 35 51%	3 3%	Qualify In Place Qualify by Move Fail	3 100% 0 0% 0 0%	111 28%	Qualify In Place Qualify by Move Fail	32 29% 33 30% 46 41%
Do Not Try	0 0%	Qualify In Place Qualify by Move Fail	0 0% 0 0% 0 0%	4 3%	Qualify In Place Qualify by Move Fail	0 0% 0 0% 4 100%	5 5%	Qualify In Place Qualify by Move Fail	0 0% 0 0% 5 100%	9 2%	Qualify In Place Qualify by Move Fail	0 0% 0 0% 9 100%
TOTAL (row pct)	172 44%	Qualify In Place Qualify by Move Fail	145 84% 5 3% 22 13%	126 32%	Qualify In Place Qualify by Move Fail	10 8% 52 41% 64 51%	95 24%	Qualify In Place Qualify by Move Fail	3 3% 42 44% 50 53%	393 100%	Qualify In Place Qualify by Move Fail	158 40% 99 25% 136 35%

Exhibit B.8

Attempts to Qualify by Moving - New York City



APPENDIX C
COMPARISON OF SUCCESSFUL AND UNSUCCESSFUL ENROLLEES

This appendix discusses the extent to which we can obtain useful information from direct comparison of outcomes for successful and unsuccessful enrollees. The essential question involved is whether unsuccessful enrollees are in fact less likely to succeed than successful enrollees. The answer is not obvious. There are, in fact, two possibilities. First, we can imagine, that unsuccessful enrollees are just as likely to succeed as successfull enrollees, and that unsuccessful enrollees are simply less lucky than successful enrollees. Second, we can imagine that unsuccessful enrollees are systematically less likely to succeed. If this were true, and if we could identify the sources of such systematic differences, it might aid in devising ways to mitigate their effects.

The standard approach to such a problem is to analyze the probability of success as a function of a number of variables reflecting on enrollees' characteristics or situations. This we do. However, such analyses are only as good as the variables included in them. We would like to have some direct measure of variation in success and of where in the process such variation occurs.

This appendix develops a framework for direct comparison of successful and unsuccessful enrollees. We consider only the enrollee's probability of success on a single try, which we refer to as the "per unit" probability of success. This is the probability that an enrollee, on going to look at a unit, will end up qualifying in that unit. (Thus , the enrollee's overall probability of success depends on this per unit probability and the number of units that the enrollee is willing and able to look at in the allowed time). Our focus is on identification of steps in the success process that are especially difficult for unsuccessful enrollees. However, it seems likely that the approach could be extended to develop a measure of the extent of unexplained variation in success rates.[1]

[1] Another method would be to look for evidence that the overall probability of success with a given unit varies with the number of trials. In particular, in situations like this one in which enrollees stop looking once they succeed, a finding that the per trial success rate appears to fall with the number of trials is often taken as evidence of unexplained heterogeneity—the idea being that it reflects the fact that those with higher probabilities tend to complete the process with fewer trials. We did not collect information on each unit that

The interpretation of such patterns is admittedly difficult. For example, unsuccessful enrollees can stop at some step more often than expected because they have a harder time completing that step or because they have an easier time completing the step before it. As demonstrated below, the best that we have been able to do is to pose the following comparison: if we assumed that successful and unsuccessful enrollees had the same overall per-unit probability of success, are there some steps that are clearly more difficult—that is, have a lower success rate—for unsuccessful enrollees?

Note that since we are comparing rates under the assumption that the overall per-unit probability is the same for successfu and unsuccessful enrollees, finding that one step has a lower pass rate necessarily means that at least one of the other steps will have a higher rate. In examining the results of this comparison, we cannot look at the absolute rates estimated for the unsuccessful enrollees. We can only note whether one or another step seems relatively more or less difficult.

The model we use is straightforward. We imagine that there are K steps in the search process, and that the probability of succeeding in the kth step is π_k. Further, we assume that the enrollee undertakes the process n times, stopping when he either succeeds or stops searching (either because he decides not to or runs out of time).[2] Now first consider successful enrollees. We know the number of times that the enrollee tried; we know that only one of these trials was completely successful; and we know how far the enrollee got in the various steps with the unsuccessful tries (if any). Thus, let

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the enrollee considered in sequence, but on the entire set considered in a given month. However, we could construct such a series for the overall probability that an enrollee succeeds in a given unit.

We should note, however, that this approach to measuring heterogeneity is subject to several caveats. First, it is conceivable that a decline reflects a learning process—in particular, that as the allowed time for search draws to a close, enrollees cast a wider net, including less likely candidates. Second, in the other direction, it is certainly conceivable that learning could improve an enrollee's likelihood of success, masking the effects of heterogeneity. Even so, this might provide a useful diagnostic.

[2] While this seems a plausible model, we should note that we have some evidence that enrollees do not follow such a strictly sequential system. In particular, it appears that, as one might expect, some enrollees may look at several units, obtaining landlord agreements to inspection whenever they can for units they think they might like, and only pursuing the most promising of these. Others appear to arrange for several units to be inspected at once.

n = the number of tries, including the successful one;

a_k = the number of tries in which the enrollee only completed the kth step (k = 0 .... K, and $a_K = 1$);

p_k = the probability that a trial only completes the kth step (k = 0 .... K), so that p_K = the overall probability that the enrollee succeeds in a given trial;

α_k = the probability that an unsuccessful trial only completes the kth step (k = 0 .... K-1);

π_k = the probability that an enrollee who has completed k-1 steps in a given trial, will complete the kth step for that trial as well.

The following relations are self evident:

$$
\begin{aligned}
& n = \sum_{k=0}^{K} a_k \\
& \alpha_k = \frac{p_k}{1 - p_k} \qquad\qquad k = 0 \ldots (K-1) \\
& p_k = \pi_1 \pi_2 \ldots \pi_k (1 - \pi_{k+1}) \quad k = 0 \ldots (K-1) \\
& p_K = \pi_1 \ldots \pi_K \\
& 1 = \sum_{k=0}^{K} p_k = \sum_{k=0}^{K-1} \alpha_k
\end{aligned}
\tag{1}
$$

We can also write the likelihood of this particular enrollee's outcomes as:

$$
L = \left[(1 - p_K)^{n-1} p_K \right] \left[\frac{(n-1)!}{a_0! a_1! \ldots a_{K-1}!} \alpha_0^{a_0} \alpha_1^{a_1} \alpha_2^{a_2} \ldots \alpha_{K-1}^{a_{K-1}} \right] \tag{2}
$$

where the first term in brackets is the probability of taking n tries to succeed, and the second is the probability of the observed distribution of the steps in the process at which the failing tries stopped.

Because we are estimating the probability of success on a single trial, and because we observe the number of trials required for success, we can estimate all of the parameters based on the successful enrollees alone. If we assume that all successful enrollees have the same probability of success and that this probability is constant over trials, and if we use capital N's and A's to represent the sums of the n's and a's over all successful enrollees, the maximum likelihood estimates of the parameters for successful enrollees are given by:

$$\hat{p}_K^s = \frac{T_s}{N_s}$$

$$\hat{\alpha}_k^s = \frac{A_k^s}{N_s - T_s} \qquad k = 0 \ldots (K-1)$$

$$Var(\hat{p}_K^s) = \frac{p_K(1-p_K)}{N_s} \tag{3}$$

$$Var(\hat{\alpha}_s) = \frac{1}{N_s - T_s}[(diag\,\alpha_s) - \alpha_s \alpha_s']$$

$$Cov(\hat{p}_K^s, \hat{\alpha}_s) = 0$$

where

$$\alpha_s' = (\alpha_1^s, \alpha_2^s, \ldots, \alpha_{K-1}^s) \tag{4}$$

and

T_s = the number of successful enrollees;

N_s = the total number of attempts by all successful enrollees;

A_k^s = the total number of unsuccessful attempts (by successful enrollees) that only completed the kth step.

We now turn to the unsuccessful enrollees. Here, we regard the number of trials as given. Further, since we are selecting these enrollees based on their final status, we must condition the likelihood on the fact that none of these tries was successful. Thus, the likelihood

function for a single enrollee, conditioned on being unsuccessful in n tries, simply involves the allocation of the unsuccessful tries:

$$L = \left[\frac{n!}{a_0! a_1! \ldots a_{K-1}!} \alpha_0^{a_0} \alpha_1^{a_1} \ldots \alpha_{K-1}^{a_{K-1}} \right] \tag{5}$$

This yields the following maximum likelihood estimates:

$$\hat{\alpha}_k^F = \frac{A_k^F}{N_F} \qquad k = 0 \ldots (K-1)$$

$$Var(\hat{\alpha}_F) = \frac{1}{N_F} [(Diag\ \alpha_F) - \alpha_F \alpha_F'] \tag{6}$$

where the notation parallels that used for successful enrollees, with capital letters and F super- or sub-scripts indicating aggregates over all unsuccessful enrollees.[3]

We can solve for the individual step probabilities of success (the π) by noting that, from EQ(1),

$$\sum_{i=0}^{k} p_i = 1 - (\pi_1 \pi_2 \ldots \pi_{k+1}) \tag{7}$$

Thus,

Substituting in terms of α yields:

[3] If we were to assume that the per unit probability of success (the p_K of EQ(1)) was the same for successful and unsuccessful enrollees, then the unsuccessful enrollees would contribute information to the estimation of p_K. This would seem to suggest that there must be some ability to test the equality of the overall success rates for the two groups. Unfortunately, and somewhat surprisingly, this does not appear to be the case. The reason seems to be that indicated above; under the hypothesis that rates for successful and unsuccessful enrollees are different, there is no information on the overall success rate for the unsuccessful enrollees; the information that one suspects must be contained in the number of unsuccessful enrollees and the number of trials they undertook really has to do with their relative frequency among all enrollees, and that would seem to require some specification of the number of trials that successful enrollees were willing to undertake.

$$\hat{\pi}_k = \frac{1 - \sum_{i=0}^{k-1} \hat{p}_i}{1 - \sum_{i=0}^{k-2} \hat{p}_i} \tag{8}$$

$$\hat{\pi}_k = \frac{1 - (1 - \hat{p}_K) \sum_{i=0}^{k-1} \hat{\alpha}_i}{1 - (1 - \hat{p}_K) \sum_{i=0}^{k-2} \hat{\alpha}_i} \tag{9}$$

We are going to compare the $\hat{\pi}$'s under the assumption that the overall per unit probability of success is the same for the two groups (and equal to the estimated value of $\hat{p}_K$ for successful enrollees, which for the purpose of comparing step probabilities, we treat as fixed). Since the unsuccessful enrollees would be expected to have an overall per unit success rate no greater than that of the successful enrollees, this will tend to overstate the rate for unsuccessful enrollees.[4]

To derive the error of estimate, define:

where

$$\begin{aligned} \bar{N} &= N_s - T_s \quad \textit{for successful enrollees} \\ &= N_F \quad \textit{for unsuccessful enrollees} \end{aligned} \tag{11}$$

Finally, we have

$$\hat{\pi}_k = \frac{1 - (1 - p_K)\hat{\beta}_{k-1}}{1 - (1 - p_K)\hat{\beta}_{k-2}} \tag{12}$$

We use the usual asymptotic approximation to the variance:

[4] If rates are the same for all enrollees, then the rates for the two groups are equal. If rates differ, then enrollees with a lower probability of success will be over-represented among the unsuccessful enrollees. However, this may not be the case if the per unit probability is negatively correlated with the maximum number of trials that the enrollee is willing to undertake. In fact, however, we would generally expect that people with lower per unit chances of success would, if they were aware of the fact, either not look at all or, if they did look, do so planning to be willing to look at more units than those with lower per unit chances of success.

$$\hat{\beta}_k = \sum_{i=0}^{k-1} \hat{\alpha}_i \qquad k = 0 \ldots (K-1)$$

$$Var(\hat{\beta}_k) = \sum_{i=0}^{k-1} Var(\hat{\alpha}_i) + \sum_{i=0}^{k-1} \sum_{j \neq i} Cov(\hat{\alpha}_i, \hat{\alpha}_j)$$

$$= \left(\sum_{i=0}^{k-1} \hat{\alpha}_i \right) \left(1 - \sum_{i=0}^{k-1} \hat{\alpha}_i \right) \left(\frac{1}{\tilde{N}} \right)$$

$$= \hat{\beta}_k (1 - \hat{\beta}_k) \left(\frac{1}{\tilde{N}} \right) \qquad (10)$$

$$Cov(\hat{\beta}_k, \hat{\beta}_{k-1}) = \left(\sum_{i=0}^{k-2} \hat{\alpha}_i \right) \left(1 - \sum_{i=0}^{k-1} \hat{\alpha}_i \right) \left(\frac{1}{\tilde{N}} \right)$$

$$= \hat{\beta}_{k-1} (1 - \hat{\beta}_k) \left(\frac{1}{\tilde{N}} \right)$$

$$Var(\hat{\pi}_k \mid (1 - p_K)) = (1 - p_K)^2 Z$$

$$Z = \left(\frac{1}{(1 - (1 - p_K) \hat{\beta}_{k-2})^2} \right) Var(\hat{\beta}_{k-1}) + \left(\frac{(1 - (1 - p_K) \hat{\beta}_{k-1})^2}{(1 - (1 - p_K) \hat{\beta}_{k-2})^4} \right) Var(\hat{\beta}_{k-2}) \qquad (13)$$

$$- 2 \left(\frac{(1 - (1 - p_K) \hat{\beta}_{k-1})}{(1 - (1 - p_K) \hat{\beta}_{k-2})^3} \right) Cov(\hat{\beta}_{k-1}, \hat{\beta}_{k-2})$$

The results of this comparison are presented in Table C.1; the raw data in Table C.2. Again, we emphasize that the rates shown for enrollees who were not successful in moving (whether those who qualified in place or those who did not succeed at all) have been constrained so that the overall probability of succeeding in a single try (the product of the success rates for each step) equals that of the successful movers. All of the rates shown for unsuccessful enrollees might be higher or lower than those of the table; what the table does is to indicate their relative ordering in relation to the rates for successful enrollees. Thus, in relation to the other steps, unsuccessful enrollees had special difficulty in completing the last step of qualifying after inspection. Similarly, they had less additional difficulty in following up on landlord agreements

by arranging for inspections. It seems quite possible that unsuccessful enrollees may be more aggressive in following up on landlord agreements. At the same time, a less discriminating pursuit of such agreements may be connected with the lower success rate following inspection. There is no indication that unsuccessful enrollees had special difficulty with finding units that they wanted or obtaining landlord agreements to have inspections (or rather, if they had additional difficulty with these steps, it applied equally to both).

Enrollees who tried unsuccessfully to move but qualified in place show the same pattern as unsuccessful enrollees in the last two steps, but were also less likely to want a unit they looked at (perhaps reflecting their attachment to their pre-program unit) and more likely to obtain landlord agreement (perhaps reflecting the same factors that helped them to be able to qualify in place).

Table C.1

IMPLIED STEP SUCCESS RATES ASSUMING THAT THE OVERALL PER UNIT SUCCESS RATE IS CONSTANT (NATIONAL SAMPLE)

	Successful Movers	Successful In Place	Unsuccessful Enrollees
	National Sample[a]		
Π_W = Probability that enrollee wants to rent a unit enrollee looks at. (standard error)[b]	0.40**	0.33**	0.43
	(0.006)	(0.013)	(0.013)
Π_A = Probability that owner of a unit the enrollee wants to rent agrees to an inspection. (standard error)[b]	0.40	0.51**	0.39
	(0.007)	(0.023)	(0.016)
Π_I = Probability that a unit whose owner agrees to an inspection has an inspection. (standard error)[b]	0.72**	0.87	0.88
	(0.012)	(0.025)	(0.021)
Π_S = Probability that an inspected unit is the one in which the enrollee qualifies. (standard error)[b]	0.92**	0.73	0.72
	(0.010)	(0.032)	(0.027)
Π_U = the per unit probability of success ($= \Pi_W \bullet \Pi_A \bullet \Pi_I \bullet \Pi_S$), i.e., the probability that a unit an enrollee looks at is the one in which the enrollee ultimately qualifies.	0.11	0.11	0.11

(continued)

Table C.1 (Continued)

IMPLIED STEP SUCESS RATES ASSUMING THAT THE OVERALL PER UNIT SUCCESS RATE IS CONSTANT (IN NEW YORK CITY)

	Successful Movers	Successful In Place	Unsuccessful Enrollees
	In New York City[a]		
Π_W = Probability that enrollee wants to rent a unit enrollee looks at. (standard error)[b]	0.37** (0.016)	0.28** (0.019)	0.42 (0.012)
Π_A = Probability that owner of a unit the enrollee wants to rent agrees to an inspection. (standard error)[b]	0.49 (0.023)	0.65** (0.043)	0.46 (0.015)
Π_I = Probability that a unit whose owner agrees to an inspection has an inspection. (standard error)[b]	0.90 (0.026)	1.0 (NA)	0.96 (0.013)
Π_S = Probability that an inspected unit is the one in which the enrollee qualifies. (standard error)[b]	0.96** (0.019)	0.85 (0.045)	0.85 (0.021)
Π_U = the per unit probability of success (= $\Pi_W \bullet \Pi_A \bullet \Pi_I \bullet \Pi_S$), i.e., the probability that a unit an enrollee looks at is the one in which the enrollee ultimately qualifies.	(0.16)	(0.16)	(0.16)

[a]Unweighted tabulations for the sample of larger non-statewide PHAs other than New York City and Los Angeles.

[b]Standard errors are conditioned on the value of "$_U$."

**= Significantly different from unsuccessful enrollees at 0.01 level.

Table C.2

RAW DATA FOR IMPLIED STEP SUCCESS RATES

	National Sample[a]			In New York		
	Successful Movers	Successful In-Place	Not Successful	Successful Movers	Successful In-Place	Not Successful
Number of enrollees	671	294	125	99	158	136
Number of enrollees who look at one or more units	671	76	96	99	31	93
Number of new units:						
Enrollee looked at	6272	838	1131	626	239	1088
Enrollee wanted to rent	2536	212	415	233	33	341
Owner agreed to inspection	1024	58	81	114	8	46
Inspection completed[b]	733	37	54	103	8	35
Where enrollee qualified	671	0	0	99	0	0

[a]Unweighted tabulations for the sample of larger non-statewide PHAs other than New York City and Los Angeles.
[b]Inspection completed = enrollee reported inspection completed or waiting for inspection.

APPENDIX D

REGRESSIONS—NATIONAL SAMPLE

Each regression contains two tables. The first presents the variables, with their means, standard deviations, minimums and maximums. The second table contains the logit regression results.

The LOGISTIC Procedure

Data Set: WORK.NONNY
Response Variable: OUTCOME
Response Levels: 2
Number of Observations: 1050
Link Function: Logit

Response Profile

Ordered Value	OUTCOME	Count
1	1	931
2	2	119

WARNING: 40 observation(s) were deleted due to missing values for the response or explanatory variables.

Simple Statistics for Explanatory Variables

Variable	Mean	Standard Deviation	Minimum	Maximum	Variable Label
MINORITY	0.570476	0.495244	0.000000	1.0000	Minority?
OLD	0.057143	0.232226	0.000000	1.0000	Old?
HANDIC	0.156190	0.363209	0.000000	1.0000	Handicapped?
WRKING	0.259048	0.438321	0.000000	1.0000	Employed?
COUPCHLD	0.099048	0.298868	0.000000	1.0000	Couple w/Child?
OTHNOKD	0.038095	0.191517	0.000000	1.0000	Other no Children
AZDUMM	0.033333	0.179591	0.000000	1.0000	Arizona
FLDUMM	0.049524	0.217062	0.000000	1.0000	Florida
IDDUMM	0.037143	0.189202	0.000000	1.0000	Idaho
INDUMM	0.064762	0.246223	0.000000	1.0000	Indiana
MDDUMM	0.074286	0.262360	0.000000	1.0000	Maryland
MNDUMM	0.064762	0.246223	0.000000	1.0000	Minnesota
NEDUMM	0.040000	0.196053	0.000000	1.0000	Nebraska
NYDUMM	0.033333	0.179591	0.000000	1.0000	Rochester NY
OHDUMM	0.036190	0.186853	0.000000	1.0000	Ohio
LAOKDUMM	0.110476	0.313632	0.000000	1.0000	Louisiana or Oklahoma
WAORDUMM	0.093333	0.291038	0.000000	1.0000	Washington or Oregon
PADUMM	0.074286	0.262360	0.000000	1.0000	Pennsylvania
TNGADUMM	0.100952	0.301409	0.000000	1.0000	Tennessee or Georgia
TXDUMM	0.029524	0.169350	0.000000	1.0000	Texas
WIDUMM	0.045714	0.208964	0.000000	1.0000	Wisconsin
SHARER	0.246667	0.431276	0.000000	1.0000	Does Enrollee Share?
HOMELSS	0.171429	0.377063	0.000000	1.0000	Is Enrollee Homeless?
PREFHOME	0.251429	0.434041	0.000000	1.0000	Prefer Home?
UNTRAT	0.498340	0.370603	0.000000	1.3586	FULLGROSS/FMR
INCLE100	0.025714	0.158357	0.000000	1.0000	Income LE $100/Month?
PPBB	0.974286	1.111645	0.000000	5.0000	PPBEDOK * BEDROOMS
PPBNOK	1.104762	1.277687	0.000000	7.0000	BR Required if PP BR Not Ok
PREFNEIG	0.379048	0.485381	0.000000	1.0000	Prefer Neighborhood?
PPBEDOK	0.506667	0.500194	0.000000	1.0000	Pre-Program BR Ok?
NOCARE	0.118095	0.322875	0.000000	1.0000	No Child Care Avail When Needed?
FMRINC	1.230238	0.777037	0.000000	7.8713	FMR/INC
ACCCAR	0.793333	0.405107	0.000000	1.0000	Have Access to Car?
MOVE3YRS	2.074643	3.533094	0.100000	96.0000	Average Moves Per 3 Years
UNTRATH	0.032518	0.214886	0.000000	2.4264	FULLGROSS/FMR (Adjusted)
BADCREDT	0.366667	0.482124	0.000000	1.0000	BAD CREDIT
BADREFS	0.122857	0.328430	0.000000	1.0000	BAD LANDLORD REFERENCES
DRUGS	0.060952	0.239357	0.000000	1.0000	DRUG ARREST
EDUCLT12	0.298095	0.457640	0.000000	1.0000	(1) if educ < 12 yrs
VOUCHER	0.271429	0.444909	0.000000	1.0000	(1) if voucher, else certif
UNDPROG	0.702857	0.457218	0.000000	1.0000	Understand PGM?
WANTHQ	0.501905	0.500235	0.000000	1.0000	Want Better Housing?
WANTLC	0.720952	0.448745	0.000000	1.0000	Want Lower Cost?

The LOGISTIC Procedure

Criteria for Assessing Model Fit

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	744.199	718.493	.
SC	749.156	936.581	.
-2 LOG L	742.199	630.493	111.707 with 43 DF (p=0.0001)
Score	.	.	104.724 with 43 DF (p=0.0001)

Analysis of Maximum Likelihood Estimates

Variable	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Variable Label
INTERCPT	2.2554	0.9095	6.1495	0.0131	.	Intercept
MINORITY	0.0593	0.2587	0.0526	0.8186	0.016195	Minority?
OLD	-0.5183	0.5547	0.8731	0.3501	-0.066363	Old?
HANDIC	-0.7144	0.3585	3.9715	0.0463	-0.143059	Handicapped?
WRKING	-0.6883	0.2649	6.7510	0.0094	-0.166323	Employed?
COUPCHLD	-0.5052	0.3372	2.2445	0.1341	-0.083242	Couple w/Child?
OTHNOKD	-0.7417	0.6794	1.1920	0.2749	-0.078317	Other no Children
AZDUMM	-0.0182	1.1398	0.0003	0.9873	-0.001801	Arizona
FLDUMM	-0.3840	0.8070	0.2264	0.6342	-0.045951	Florida
IDDUMM	-0.7886	0.9076	0.7551	0.3849	-0.082266	Idaho
INDUMM	-0.2659	0.7760	0.1174	0.7318	-0.036100	Indiana
MDDUMM	-0.6005	0.6882	0.7614	0.3829	-0.086860	Maryland
MNDUMM	-0.0252	0.8836	0.0008	0.9772	-0.003422	Minnesota
NEDUMM	-1.4757	0.6610	4.9845	0.0256	-0.159512	Nebraska
NYDUMM	-2.7515	0.6800	16.3733	0.0001	-0.272441	Rochester NY
OHDUMM	-1.5044	0.7142	4.4376	0.0352	-0.154981	Ohio
LAOKDUMM	-2.2256	0.5525	16.2272	0.0001	-0.384840	Louisiana or Oklahoma
WAORDUMM	-1.7314	0.5744	9.0866	0.0026	-0.277816	Washington or Oregon
PADUMM	-1.8134	0.5934	9.3381	0.0022	-0.262300	Pennsylvania
TNGADUMM	-1.2596	0.6093	4.2737	0.0387	-0.209314	Tennessee or Georgia
TXDUMM	-0.9072	0.8015	1.2813	0.2577	-0.084707	Texas
WIDUMM	-1.9944	0.7075	7.9473	0.0048	-0.229773	Wisconsin
SHARER	0.0366	0.3064	0.0143	0.9049	0.008701	Does Enrollee Share?
HOMELSS	0.0810	0.3845	0.0444	0.8331	0.016844	Is Enrollee Homeless?
PREFHOME	0.4968	0.3140	2.5039	0.1136	0.118885	Prefer Home?
UNTRAT	1.2651	0.3978	10.1122	0.0015	0.258490	FULLGROSS/FMR
INCLE100	1.0522	0.9307	1.2780	0.2583	0.091861	Income LE $100/Month?
PPBB	-0.3753	0.2147	3.0549	0.0805	-0.230010	PPBEDOK * BEDROOMS
PPBNOK	-0.2988	0.1897	2.4818	0.1152	-0.210478	BR Required if PP BR Not Ok
PREFNEIG	-0.2110	0.2452	0.7408	0.3894	-0.056465	Prefer Neighborhood?
PPBEDOK	0.0224	0.6480	0.0012	0.9724	0.006178	Pre-Program BR Ok?
NOCARE	0.7742	0.4382	3.1206	0.0773	0.137809	No Child Care Avail When Needed?
FMRINC	0.4084	0.2089	3.8214	0.0506	0.174957	FMR/INC
ACCCAR	0.3967	0.2654	2.2339	0.1350	0.088606	Have Access to Car?
MOVE3YRS	0.0935	0.0786	1.4125	0.2346	0.182055	Average Moves Per 3 Years
UNTRATH	-0.0132	0.4646	0.0008	0.9774	-0.001561	FULLGROSS/FMR (Adjusted)
BADCREDT	0.4808	0.2420	3.9457	0.0470	0.127801	BAD CREDIT
BADREFS	0.2433	0.3857	0.3977	0.5283	0.044048	BAD LANDLORD REFERENCES
DRUGS	0.0546	0.4885	0,0125	0.9109	0.007212	DRUG ARREST
EDUCLT12	0.1726	0.2411	0.5123	0.4741	0.043547	(1) if educ < 12 yrs
VOUCHER	0.4326	0.3050	2.0116	0.1561	0.106122	(1) if voucher, else certif
UNDPROG	0.2070	0.2352	0.7752	0.3786	0.052192	Understand PGM?
WANTHQ	0.2721	0.2285	1.4180	0.2337	0.075046	Want Better Housing?
WANTLC	-0.0683	0.2447	0.0779	0.7801	-0.016896	Want Lower Cost?

Association of Predicted Probabilities and Observed Responses

Concordant	= 77.7%	Somers' D	= 0.558
Discordant	= 21.9%	Gamma	= 0.561
Tied	= 0.5%	Tau-a	= 0.112
(110789 pairs)		c	= 0.779

The LOGISTIC Procedure

Data Set: WORK.NONNY
Response Variable: SUCCESS
Response Levels: 2
Number of Observations: 713
Link Function: Logit

Response Profile

Ordered Value	SUCCESS	Count
1	1	271
2	2	442

WARNING: 29 observation(s) were deleted due to missing values for the response or explanatory variables.

Simple Statistics for Explanatory Variables

Variable	Mean	Standard Deviation	Minimum	Maximum	Variable Label
MINORITY	0.577840	0.494250	0.000000	1.0000	Minority?
OLD	0.070126	0.255539	0.000000	1.0000	Old?
HANDIC	0.143058	0.350377	0.000000	1.0000	Handicapped?
WRKING	0.277700	0.448179	0.000000	1.0000	Employed?
COUPCHLD	0.105189	0.307013	0.000000	1.0000	Couple w/Child?
OTHNOKD	0.039271	0.194375	0.000000	1.0000	Other no Children
AZDUMM	0.029453	0.169191	0.000000	1.0000	Arizona
FLDUMM	0.049088	0.216204	0.000000	1.0000	Florida
IDDUMM	0.035063	0.184068	0.000000	1.0000	Idaho
INDUMM	0.065919	0.248314	0.000000	1.0000	Indiana
MDDUMM	0.072931	0.260206	0.000000	1.0000	Maryland
MNDUMM	0.070126	0.255539	0.000000	1.0000	Minnesota
NEDUMM	0.046283	0.210245	0.000000	1.0000	Nebraska
NYDUMM	0.044881	0.207188	0.000000	1.0000	Rochester NY
OHDUMM	0.022440	0.148215	0.000000	1.0000	Ohio
LAOKDUMM	0.112202	0.315836	0.000000	1.0000	Louisiana or Oklahoma
WAORDUMM	0.051893	0.221968	0.000000	1.0000	Washington or Oregon
PADUMM	0.081346	0.273558	0.000000	1.0000	Pennsylvania
TNGADUMM	0.110799	0.314104	0.000000	1.0000	Tennessee or Georgia
TXDUMM	0.022440	0.148215	0.000000	1.0000	Texas
WIDUMM	0.064516	0.245843	0.000000	1.0000	Wisconsin
SHARER	0.077139	0.266999	0.000000	1.0000	Does Enrollee Share?
PREFHOME	0.329593	0.470395	0.000000	1.0000	Prefer Home?
UNTRAT	0.641119	0.300121	0.000000	1.3586	FULLGROSS/FMR
INCLE100	0.014025	0.117677	0.000000	1.0000	Income LE $100/Month?
PPBB	1.434783	1.076575	0.000000	5.0000	PPBEDOK * BEDROOMS
PPBNOK	0.695652	1.270316	0.000000	7.0000	BR Required if PP BR Not Ok
PREFNEIG	0.419355	0.493800	0.000000	1.0000	Prefer Neighborhood?
PPBEDOK	0.746143	0.435522	0.000000	1.0000	Pre-Program BR Ok?
NOCARE	0.120617	0.325910	0.000000	1.0000	No Child Care Avail When Needed?
FMRINC	1.085354	0.643236	0.000000	5.6080	FMR/INC
ACCCAR	0.791024	0.406863	0.000000	1.0000	Have Access to Car?
MOVE3YRS	1.885192	3.833571	0.100000	96.0000	Average Moves Per 3 Years
UNTRATH	0.042844	0.248361	0.000000	2.4264	FULLGROSS/FMR (Adjusted)
BADCREDT	0.374474	0.484327	0.000000	1.0000	BAD CREDIT
BADREFS	0.102384	0.303366	0.000000	1.0000	BAD LANDLORD REFERENCES
DRUGS	0.049088	0.216204	0.000000	1.0000	DRUG ARREST
EDUCLT12	0.301543	0.459250	0.000000	1.0000	(1) if educ < 12 yrs
VOUCHER	0.300140	0.458640	0.000000	1.0000	(1) if voucher, else certif
UNDPROG	0.706872	0.455516	0.000000	1.0000	Understand PGM?
WANTHQ	0.506311	0.500311	0.000000	1.0000	Want Better Housing?
WANTLC	0.776999	0.416551	0.000000	1.0000	Want Lower Cost?

The LOGISTIC Procedure

Criteria for Assessing Model Fit

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	949.014	727.912	.
SC	953.584	924.400	.
-2 LOG L	947.014	641.912	305.102 with 42 DF (p=0.0001)
Score	.	.	266.543 with 42 DF (p=0.0001)

Analysis of Maximum Likelihood Estimates

Variable	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Variable Label
INTERCPT	-2.5626	0.9414	7.4102	0.0065	.	Intercept
MINORITY	-0.2882	0.2439	1.3959	0.2374	-0.078528	Minority?
OLD	0.3837	0.5312	0.5218	0.4701	0.054062	Old?
HANDIC	0.5551	0.3541	2.4578	0.1169	0.107228	Handicapped?
WRKING	-0.2135	0.2557	0.6973	0.4037	-0.052761	Employed?
COUPCHLD	-0.00428	0.3607	0.0001	0.9905	-0.000724	Couple w/Child?
OTHNOKD	0.9309	0.6109	2.3220	0.1276	0.099764	Other no Children
AZDUMM	-0.2554	0.7360	0.1204	0.7286	-0.023827	Arizona
FLDUMM	-0.2578	0.5720	0.2031	0.6522	-0.030725	Florida
IDDUMM	0.8704	0.6707	1.6842	0.1944	0.088330	Idaho
INDUMM	0.4752	0.4938	0.9260	0.3359	0.065056	Indiana
MDDUMM	0.2542	0.4907	0.2685	0.6044	0.036471	Maryland
MNDUMM	0.5739	0.4902	1.3707	0.2417	0.080860	Minnesota
NEDUMM	-0.7256	0.5915	1.5048	0.2199	-0.084105	Nebraska
NYDUMM	0.2988	0.5845	0.2613	0.6092	0.034134	Rochester NY
OHDUMM	-1.4022	0.8907	2.4783	0.1154	-0.114581	Ohio
LAOKDUMM	-0.1010	0.4309	0.0549	0.8147	-0.017583	Louisiana or Oklahoma
WAORDUMM	0.9898	0.5611	3.1123	0.0777	0.121130	Washington or Oregon
PADUMM	-0.2281	0.4814	0.2245	0.6356	-0.034400	Pennsylvania
TNGADUMM	0.1620	0.4492	0.1300	0.7184	0.028049	Tennessee or Georgia
TXDUMM	0.1930	0.7223	0.0714	0.7893	0.015774	Texas
WIDUMM	0.2526	0.5364	0.2218	0.6377	0.034236	Wisconsin
SHARER	-3.1792	0.8156	15.1927	0.0001	-0.467986	Does Enrollee Share?
PREFHOME	2.3044	0.2502	84.8396	0.0001	0.597640	Prefer Home?
UNTRAT	0.0395	0.4113	0.0092	0.9235	0.006535	FULLGROSS/FMR
INCLE100	-1.6172	0.9355	2.9882	0.0839	-0.104923	Income LE $100/Month?
PPBB	0.1354	0.1900	0.5080	0.4760	0.080395	PPBEDOK * BEDROOMS
PPBNOK	0.5266	0.2484	4.4948	0.0340	0.368780	BR Required if PP BR Not Ok
PREFNEIG	-0.2147	0.2379	0.8147	0.3667	-0.058460	Prefer Neighborhood?
PPBEDOK	1.7907	0.7929	5.1008	0.0239	0.429966	Pre-Program BR Ok?
NOCARE	-0.0443	0.3245	0.0187	0.8914	-0.007965	No Child Care Avail When Needed?
FMRINC	-0.2227	0.1963	1.2868	0.2566	-0.078973	FMR/INC
ACCCAR	-0.3732	0.2572	2.1060	0.1467	-0.083721	Have Access to Car?
MOVE3YRS	0.0140	0.0310	0.2048	0.6509	0.029686	Average Moves Per 3 Years
UNTRATH	0.2075	0.4517	0.2111	0.6459	0.028419	FULLGROSS/FMR (Adjusted)
BADCREDT	0.1045	0.2222	0.2212	0.6381	0.027903	BAD CREDIT
BADREFS	0.1170	0.3396	0.1187	0.7305	0.019564	BAD LANDLORD REFERENCES
DRUGS	-0.5579	0.5090	1.2014	0.2730	-0.066501	DRUG ARREST
EDUCLT12	0.0550	0.2265	0.0590	0.8080	0.013938	(1) if educ < 12 yrs
VOUCHER	0.3619	0.2681	1.8216	0.1771	0.091507	(1) if voucher, else certif
UNDPROG	0.2086	0.2296	0.8251	0.3637	0.052385	Understand PGM?
WANTHQ	-0.8512	0.2153	15.6260	0.0001	-0.234799	Want Better Housing?
WANTLC	0.1360	0.2496	0.2970	0.5858	0.031242	Want Lower Cost?

Association of Predicted Probabilities and Observed Responses

Concordant	= 85.3%	Somers' D	= 0.707
Discordant	= 14.6%	Gamma	= 0.708
Tied	= 0.2%	Tau-a	= 0.334
(119782 pairs)		c	= 0.854

The LOGISTIC Procedure

Data Set: WORK.NONNY
Response Variable: SUCCESS
Response Levels: 2
Number of Observations: 713
Link Function: Logit

Response Profile

Ordered Value	SUCCESS	Count
1	1	640
2	2	73

WARNING: 29 observation(s) were deleted due to missing values for the response or explanatory variables.

Simple Statistics for Explanatory Variables

Variable	Mean	Standard Deviation	Minimum	Maximum	Variable Label
MINORITY	0.577840	0.494250	0.000000	1.0000	Minority?
OLD	0.070126	0.255539	0.000000	1.0000	Old?
HANDIC	0.143058	0.350377	0.000000	1.0000	Handicapped?
WRKING	0.277700	0.448179	0.000000	1.0000	Employed?
COUPCHLD	0.105189	0.307013	0.000000	1.0000	Couple w/Child?
OTHNOKD	0.039271	0.194375	0.000000	1.0000	Other no Children
AZDUMM	0.029453	0.169191	0.000000	1.0000	Arizona
FLDUMM	0.049088	0.216204	0.000000	1.0000	Florida
INDUMM	0.065919	0.248314	0.000000	1.0000	Indiana
MDDUMM	0.072931	0.260206	0.000000	1.0000	Maryland
MNDUMM	0.070126	0.255539	0.000000	1.0000	Minnesota
NEDUMM	0.046283	0.210245	0.000000	1.0000	Nebraska
NYDUMM	0.044881	0.207188	0.000000	1.0000	Rochester NY
OHDUMM	0.022440	0.148215	0.000000	1.0000	Ohio
LAOKDUMM	0.112202	0.315836	0.000000	1.0000	Louisiana or Oklahoma
WAORIDDM	0.086957	0.281969	0.000000	1.0000	
PADUMM	0.081346	0.273558	0.000000	1.0000	Pennsylvania
TNGADUMM	0.110799	0.314104	0.000000	1.0000	Tennessee or Georgia
TXDUMM	0.022440	0.148215	0.000000	1.0000	Texas
WIDUMM	0.064516	0.245843	0.000000	1.0000	Wisconsin
SHARER	0.077139	0.266999	0.000000	1.0000	Does Enrollee Share?
PREFHOME	0.329593	0.470395	0.000000	1.0000	Prefer Home?
UNTRAT	0.641119	0.300121	0.000000	1.3586	FULLGROSS/FMR
INCLE100	0.014025	0.117677	0.000000	1.0000	Income LE $100/Month?
PPBB	1.434783	1.076575	0.000000	5.0000	PPBEDOK * BEDROOMS
PPBNOK	0.695652	1.270316	0.000000	7.0000	BR Required if PP BR Not Ok
UNTRATH	0.042844	0.248361	0.000000	2.4264	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.419355	0.493800	0.000000	1.0000	Prefer Neighborhood?
PPBEDOK	0.746143	0.435522	0.000000	1.0000	Pre-Program BR Ok?
NOCARE	0.120617	0.325910	0.000000	1.0000	No Child Care Avail When Needed?
FMRINC	1.085354	0.643236	0.000000	5.6080	FMR/INC
ACCCAR	0.791024	0.406863	0.000000	1.0000	Have Access to Car?
MOVE3YRS	1.885192	3.833571	0.100000	96.0000	Average Moves Per 3 Years
BADCREDT	0.374474	0.484327	0.000000	1.0000	BAD CREDIT
BADREFS	0.102384	0.303366	0.000000	1.0000	BAD LANDLORD REFERENCES
DRUGS	0.049088	0.216204	0.000000	1.0000	DRUG ARREST
EDUCLT12	0.301543	0.459250	0.000000	1.0000	(1) if educ < 12 yrs
VOUCHER	0.300140	0.458640	0.000000	1.0000	(1) if voucher, else certif
UNDPROG	0.706872	0.455516	0.000000	1.0000	Understand PGM?
WANTHQ	0.506311	0.500311	0.000000	1.0000	Want Better Housing?
WANTLC	0.776999	0.416551	0.000000	1.0000	Want Lower Cost?

The LOGISTIC Procedure

Criteria for Assessing Model Fit

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	472.994	477.240	.
SC	477.564	669.158	.
-2 LOG L	470.994	393.240	77.754 with 41 DF (p=0.0005)
Score	.	.	70.482 with 41 DF (p=0.0028)

Analysis of Maximum Likelihood Estimates

Variable	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Variable Label
INTERCPT	2.1498	1.3213	2.6473	0.1037	.	Intercept
MINORITY	0.4118	0.3379	1.4846	0.2230	0.112200	Minority?
OLD	-0.8004	0.6990	1.3112	0.2522	-0.112761	Old?
HANDIC	-0.4723	0.4874	0.9389	0.3326	-0.091232	Handicapped?
WRKING	-0.7420	0.3433	4.6717	0.0307	-0.183348	Employed?
COUPCHLD	-0.4280	0.4302	0.9897	0.3198	-0.072440	Couple w/Child?
OTHNOKD	-0.0322	0.9057	0.0013	0.9717	-0.003447	Other no Children
AZDUMM	-0.3041	1.1937	0.0649	0.7989	-0.028366	Arizona
FLDUMM	0.3997	1.2237	0.1067	0.7439	0.047646	Florida
INDUMM	0.6359	1.1604	0.3003	0.5837	0.087058	Indiana
MDDUMM	0.2403	0.9327	0.0664	0.7967	0.034478	Maryland
MNDUMM	0.5961	1.1675	0.2607	0.6096	0.083985	Minnesota
NEDUMM	-1.3032	0.7421	3.0841	0.0791	-0.151065	Nebraska
NYDUMM	-2.9444	0.7723	14.5369	0.0001	-0.336333	Rochester NY
OHDUMM	-1.3996	0.9323	2.2538	0.1333	-0.114367	Ohio
LAOKDUMM	-1.6609	0.6606	6.3218	0.0119	-0.289205	Louisiana or Oklahoma
WAORIDDM	-0.8282	0.7197	1.3240	0.2499	-0.128747	
PADUMM	-1.8570	0.6698	7.6872	0.0056	-0.280080	Pennsylvania
TNGADUMM	-1.3814	0.6778	4.1541	0.0415	-0.239221	Tennessee or Georgia
TXDUMM	-1.0639	0.9941	1.1454	0.2845	-0.086940	Texas
WIDUMM	-2.2985	0.7972	8.3131	0.0039	-0.311533	Wisconsin
SHARER	0.2925	0.6222	0.2211	0.6382	0.043059	Does Enrollee Share?
PREFHOME	0.5568	0.3774	2.1772	0.1401	0.144414	Prefer Home?
UNTRAT	1.4747	0.5474	7.2570	0.0071	0.244011	FULLGROSS/FMR
INCLE100	0.1369	1.2927	0.0112	0.9157	0.008883	Income LE $100/Month?
PPBB	-0.3912	0.2401	2.6544	0.1033	-0.232215	PPBEDOK * BEDROOMS
PPBNOK	-0.3867	0.3007	1.6539	0.1984	-0.270810	BR Required if PP BR Not Ok
UNTRATH	0.0925	0.6010	0.0237	0.8777	0.012665	FULLGROSS/FMR (Adjusted)
PREFNEIG	-0.1944	0.3259	0.3559	0.5508	-0.052929	Prefer Neighborhood?
PPBEDOK	-0.4266	1.0183	0.1756	0.6752	-0.102444	Pre-Program BR Ok?
NOCARE	1.2312	0.6619	3.4606	0.0628	0.221235	No Child Care Avail When Needed?
FMRINC	0.3137	0.2937	1.1405	0.2855	0.111246	FMR/INC
ACCCAR	0.4443	0.3353	1.7558	0.1851	0.099674	Have Access to Car?
MOVE3YRS	0.1134	0.1194	0.9020	0.3422	0.239631	Average Moves Per 3 Years
BADCREDT	0.6695	0.3173	4.4514	0.0349	0.178778	BAD CREDIT
BADREFS	0.2190	0.5405	0.1641	0.6854	0.036621	BAD LANDLORD REFERENCES
DRUGS	-0.6280	0.6399	0.9633	0.3263	-0.074859	DRUG ARREST
EDUCLT12	0.3375	0.3151	1.1474	0.2841	0.085450	(1) if educ < 12 yrs
VOUCHER	0.7246	0.3991	3.2960	0.0694	0.183226	(1) if voucher, else certif
UNDPROG	0.1385	0.3070	0.2036	0.6518	0.034795	Understand PGM?
WANTHQ	0.0465	0.3063	0.0231	0.8793	0.012828	Want Better Housing?
WANTLC	-0.0725	0.3378	0.0460	0.8301	-0.016645	Want Lower Cost?

Association of Predicted Probabilities and Observed Responses

Concordant = 79.3%	Somers' D = 0.590
Discordant = 20.2%	Gamma = 0.593
Tied = 0.5%	Tau-a = 0.109
(46720 pairs)	c = 0.795

The LOGISTIC Procedure

Data Set: WORK.NONNY
Response Variable: ASK
Response Levels: 2
Number of Observations: 713
Link Function: Logit

Response Profile

Ordered Value	ASK	Count
1	1	513
2	2	200

WARNING: 29 observation(s) were deleted due to missing values for the response or explanatory variables.

Simple Statistics for Explanatory Variables

Variable	Mean	Standard Deviation	Minimum	Maximum	Variable Label
MINORITY	0.577840	0.494250	0.000000	1.0000	Minority?
OLD	0.070126	0.255539	0.000000	1.0000	Old?
HANDIC	0.143058	0.350377	0.000000	1.0000	Handicapped?
WRKING	0.277700	0.448179	0.000000	1.0000	Employed?
COUPCHLD	0.105189	0.307013	0.000000	1.0000	Couple w/Child?
OTHNOKD	0.039271	0.194375	0.000000	1.0000	Other no Children
AZDUMM	0.029453	0.169191	0.000000	1.0000	Arizona
FLDUMM	0.049088	0.216204	0.000000	1.0000	Florida
IDDUMM	0.035063	0.184068	0.000000	1.0000	Idaho
INDUMM	0.065919	0.248314	0.000000	1.0000	Indiana
MDDUMM	0.072931	0.260206	0.000000	1.0000	Maryland
MNDUMM	0.070126	0.255539	0.000000	1.0000	Minnesota
NEDUMM	0.046283	0.210245	0.000000	1.0000	Nebraska
NYDUMM	0.044881	0.207188	0.000000	1.0000	Rochester NY
OHDUMM	0.022440	0.148215	0.000000	1.0000	Ohio
LAOKDUMM	0.112202	0.315836	0.000000	1.0000	Louisiana or Oklahoma
WAORDUMM	0.051893	0.221968	0.000000	1.0000	Washington or Oregon
PADUMM	0.081346	0.273558	0.000000	1.0000	Pennsylvania
TNGADUMM	0.110799	0.314104	0.000000	1.0000	Tennessee or Georgia
TXDUMM	0.022440	0.148215	0.000000	1.0000	Texas
WIDUMM	0.064516	0.245843	0.000000	1.0000	Wisconsin
SHARER	0.077139	0.266999	0.000000	1.0000	Does Enrollee Share?
PREFHOME	0.329593	0.470395	0.000000	1.0000	Prefer Home?
UNTRAT	0.641119	0.300121	0.000000	1.3586	FULLGROSS/FMR
INCLE100	0.014025	0.117677	0.000000	1.0000	Income LE $100/Month?
PPBB	1.434783	1.076575	0.000000	5.0000	PPBEDOK * BEDROOMS
PPBNOK	0.695652	1.270316	0.000000	7.0000	BR Required if PP BR Not Ok
UNTRATH	0.042844	0.248361	0.000000	2.4264	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.419355	0.493800	0.000000	1.0000	Prefer Neighborhood?
PPBEDOK	0.746143	0.435522	0.000000	1.0000	Pre-Program BR Ok?
NOCARE	0.120617	0.325910	0.000000	1.0000	No Child Care Avail When Needed?
FMRINC	1.085354	0.643236	0.000000	5.6080	FMR/INC
ACCCAR	0.791024	0.406863	0.000000	1.0000	Have Access to Car?
MOVE3YRS	1.885192	3.833571	0.100000	96.0000	Average Moves Per 3 Years
BADCREDT	0.374474	0.484327	0.000000	1.0000	BAD CREDIT
BADREFS	0.102384	0.303366	0.000000	1.0000	BAD LANDLORD REFERENCES
DRUGS	0.049088	0.216204	0.000000	1.0000	DRUG ARREST
EDUCLT12	0.301543	0.459250	0.000000	1.0000	(1) if educ < 12 yrs
VOUCHER	0.300140	0.458640	0.000000	1.0000	(1) if voucher, else certif
UNDPROG	0.706872	0.455516	0.000000	1.0000	Understand PGM?
WANTHQ	0.506311	0.500311	0.000000	1.0000	Want Better Housing?
WANTLC	0.776999	0.416551	0.000000	1.0000	Want Lower Cost?

The LOGISTIC Procedure

Criteria for Assessing Model Fit

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	848.231	746.314	.
SC	852.800	942.802	.
-2 LOG L	846.231	660.314	185.917 with 42 DF (p=0.0001)
Score	.	.	156.945 with 42 DF (p=0.0001)

Analysis of Maximum Likelihood Estimates

Variable	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Variable Label
INTERCPT	-1.2509	0.9198	1.8496	0.1738	.	Intercept
MINORITY	-0.3468	0.2381	2.1206	0.1453	-0.094498	Minority?
OLD	0.6034	0.6533	0.8533	0.3556	0.085016	Old?
HANDIC	-0.2622	0.3405	0.5927	0.4414	-0.050645	Handicapped?
WRKING	0.1961	0.2520	0.6054	0.4365	0.048456	Employed?
COUPCHLD	-0.00413	0.3380	0.0001	0.9903	-0.000698	Couple w/Child?
OTHNOKD	-0.1175	0.5974	0.0387	0.8440	-0.012597	Other no Children
AZDUMM	0.9690	0.7435	1.6987	0.1925	0.090390	Arizona
FLDUMM	0.1025	0.5293	0.0375	0.8464	0.012218	Florida
IDDUMM	1.2299	0.7585	2.6287	0.1049	0.124809	Idaho
INDUMM	0.9122	0.4973	3.3647	0.0666	0.124882	Indiana
MDDUMM	0.4935	0.4496	1.2049	0.2723	0.070799	Maryland
MNDUMM	0.3160	0.4619	0.4682	0.4938	0.044522	Minnesota
NEDUMM	0.2528	0.5407	0.2186	0.6401	0.029306	Nebraska
NYDUMM	1.1057	0.6687	2.7342	0.0982	0.126305	Rochester NY
OHDUMM	0.3538	0.7277	0.2364	0.6268	0.028912	Ohio
LAOKDUMM	-0.4334	0.4090	1.1232	0.2892	-0.075475	Louisiana or Oklahoma
WAORDUMM	0.2722	0.5833	0.2177	0.6408	0.033309	Washington or Oregon
PADUMM	0.2901	0.4503	0.4152	0.5194	0.043755	Pennsylvania
TNGADUMM	0.1544	0.3996	0.1492	0.6993	0.026732	Tennessee or Georgia
TXDUMM	0.0783	0.6354	0.0152	0.9019	0.006401	Texas
WIDUMM	1.2870	0.6236	4.2584	0.0391	0.174434	Wisconsin
SHARER	-0.6160	0.3412	3.2595	0.0710	-0.090681	Does Enrollee Share?
PREFHOME	1.8776	0.3247	33.4299	0.0001	0.486937	Prefer Home?
UNTRAT	1.5950	0.3832	17.3217	0.0001	0.263924	FULLGROSS/FMR
INCLE100	-0.4502	1.0695	0.1772	0.6738	-0.029208	Income LE $100/Month?
PPBB	0.1528	0.1983	0.5942	0.4408	0.090721	PPBEDOK * BEDROOMS
PPBNOK	0.2799	0.2524	1.2300	0.2674	0.196033	BR Required if PP BR Not Ok
UNTRATH	1.1467	0.5450	4.4268	0.0354	0.157022	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.0695	0.2324	0.0895	0.7648	0.018926	Prefer Neighborhood?
PPBEDOK	0.4857	0.7786	0.3891	0.5328	0.116621	Pre-Program BR Ok?
NOCARE	0.3623	0.3202	1.2798	0.2579	0.065096	No Child Care Avail When Needed?
FMRINC	-0.2292	0.1813	1.5969	0.2063	-0.081268	FMR/INC
ACCCAR	-0.2036	0.2593	0.6161	0.4325	-0.045664	Have Access to Car?
MOVE3YRS	0.00892	0.0604	0.0218	0.8826	0.018854	Average Moves Per 3 Years
BADCREDT	0.4299	0.2170	3.9254	0.0476	0.114794	BAD CREDIT
BADREFS	-0.6181	0.3182	3.7734	0.0521	-0.103376	BAD LANDLORD REFERENCES
DRUGS	-0.4230	0.4326	0.9558	0.3283	-0.050416	DRUG ARREST
EDUCLT12	0.0744	0.2217	0.1127	0.7371	0.018846	(1) if educ < 12 yrs
VOUCHER	0.3369	0.2765	1.4844	0.2231	0.085178	(1) if voucher, else certif
UNDPROG	0.2812	0.2211	1.6173	0.2035	0.070609	Understand PGM?
WANTHQ	-0.5853	0.2112	7.6825	0.0056	-0.161450	Want Better Housing?
WANTLC	0.2746	0.2291	1.4363	0.2307	0.063065	Want Lower Cost?

Association of Predicted Probabilities and Observed Responses

Concordant = 81.1%	Somers' D = 0.624
Discordant = 18.7%	Gamma = 0.625
Tied = 0.2%	Tau-a = 0.252
(102600 pairs)	c = 0.812

The LOGISTIC Procedure

Data Set: WORK.NONNY
Response Variable: AGREE
Response Levels: 2
Number of Observations: 513
Link Function: Logit

Response Profile

Ordered Value	AGREE	Count
1	1	392
2	2	121

WARNING: 20 observation(s) were deleted due to missing values for the response or explanatory variables.

Simple Statistics for Explanatory Variables

Variable	Mean	Standard Deviation	Minimum	Maximum	Variable Label
MINORITY	0.547758	0.498200	0.000000	1.0000	Minority?
OLD	0.087719	0.283162	0.000000	1.0000	Old?
HANDIC	0.138402	0.345658	0.000000	1.0000	Handicapped?
WRKING	0.290448	0.454412	0.000000	1.0000	Employed?
COUPCHLD	0.103314	0.304665	0.000000	1.0000	Couple w/Child?
OTHNOKD	0.037037	0.189037	0.000000	1.0000	Other no Children
AZDUMM	0.035088	0.184181	0.000000	1.0000	Arizona
FLDUMM	0.046784	0.211381	0.000000	1.0000	Florida
IDDUMM	0.042885	0.202796	0.000000	1.0000	Idaho
INDUMM	0.074074	0.262147	0.000000	1.0000	Indiana
MDDUMM	0.064327	0.245575	0.000000	1.0000	Maryland
MNDUMM	0.070175	0.255692	0.000000	1.0000	Minnesota
NEDUMM	0.044834	0.207142	0.000000	1.0000	Nebraska
NYDUMM	0.054581	0.227382	0.000000	1.0000	Rochester NY
OHDUMM	0.019493	0.138385	0.000000	1.0000	Ohio
LAOKDUMM	0.099415	0.299511	0.000000	1.0000	Louisiana or Oklahoma
WAORDUMM	0.058480	0.234877	0.000000	1.0000	Washington or Oregon
PADUMM	0.081871	0.274436	0.000000	1.0000	Pennsylvania
TNGADUMM	0.095517	0.294214	0.000000	1.0000	Tennessee or Georgia
TXDUMM	0.019493	0.138385	0.000000	1.0000	Texas
WIDUMM	0.079922	0.271437	0.000000	1.0000	Wisconsin
SHARER	0.054581	0.227382	0.000000	1.0000	Does Enrollee Share?
PREFHOME	0.426901	0.495110	0.000000	1.0000	Prefer Home?
UNTRAT	0.680463	0.285034	0.000000	1.3586	FULLGROSS/FMR
INCLE100	0.013645	0.116126	0.000000	1.0000	Income LE $100/Month?
PPBB	1.454191	1.079979	0.000000	5.0000	PPBEDOK * BEDROOMS
PPBNOK	0.682261	1.281790	0.000000	7.0000	BR Required if PP BR Not Ok
UNTRATH	0.048422	0.262786	0.000000	2.4264	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.473684	0.499794	0.000000	1.0000	Prefer Neighborhood?
PPBEDOK	0.756335	0.429712	0.000000	1.0000	Pre-Program BR Ok?
NOCARE	0.126706	0.332968	0.000000	1.0000	No Child Care Avail When Needed?
FMRINC	1.025459	0.611967	0.000000	5.6080	FMR/INC
ACCCAR	0.785575	0.410823	0.000000	1.0000	Have Access to Car?
MOVE3YRS	1.910337	4.435828	0.100000	96.0000	Average Moves Per 3 Years
BADCREDT	0.380117	0.485889	0.000000	1.0000	BAD CREDIT
BADREFS	0.091618	0.288767	0.000000	1.0000	BAD LANDLORD REFERENCES
DRUGS	0.042885	0.202796	0.000000	1.0000	DRUG ARREST
EDUCLT12	0.302144	0.459636	0.000000	1.0000	(1) if educ < 12 yrs
VOUCHER	0.341131	0.474552	0.000000	1.0000	(1) if voucher, else certif
UNDPROG	0.711501	0.453507	0.000000	1.0000	Understand PGM?
WANTHQ	0.450292	0.498009	0.000000	1.0000	Want Better Housing?
WANTLC	0.810916	0.391957	0.000000	1.0000	Want Lower Cost?

The LOGISTIC Procedure

Criteria for Assessing Model Fit

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	562.472	517.515	.
SC	566.713	699.846	.
-2 LOG L	560.472	431.515	128.958 with 42 DF (p=0.0001)
Score	.	.	114.859 with 42 DF (p=0.0001)

Analysis of Maximum Likelihood Estimates

Variable	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Variable Label
INTERCPT	0.4169	1.1510	0.1312	0.7172	.	Intercept
MINORITY	-0.6871	0.3096	4.9256	0.0265	-0.188715	Minority?
OLD	0.4263	0.7344	0.3370	0.5616	0.066558	Old?
HANDIC	0.1826	0.4848	0.1419	0.7064	0.034807	Handicapped?
WRKING	-0.3967	0.3019	1.7274	0.1887	-0.099398	Employed?
COUPCHLD	0.1922	0.4306	0.1993	0.6553	0.032292	Couple w/Child?
OTHNOKD	0.9275	0.8270	1.2577	0.2621	0.096664	Other no Children
AZDUMM	-0.5649	0.7728	0.5343	0.4648	-0.057363	Arizona
FLDUMM	0.4756	0.6394	0.5534	0.4569	0.055428	Florida
IDDUMM	1.8321	0.9513	3.7086	0.0541	0.204837	Idaho
INDUMM	1.7216	0.6430	7.1681	0.0074	0.248819	Indiana
MDDUMM	0.2963	0.5754	0.2652	0.6066	0.040121	Maryland
MNDUMM	1.2990	0.6487	4.0097	0.0452	0.183114	Minnesota
NEDUMM	-0.2348	0.6587	0.1271	0.7215	-0.026817	Nebraska
NYDUMM	1.6975	0.7273	5.4471	0.0196	0.212801	Rochester NY
OHDUMM	-0.5104	0.9421	0.2935	0.5880	-0.038942	Ohio
LAOKDUMM	0.7394	0.5678	1.6959	0.1928	0.122095	Louisiana or Oklahoma
WAORDUMM	1.8521	1.1120	2.7744	0.0958	0.239840	Washington or Oregon
PADUMM	0.1191	0.5526	0.0465	0.8293	0.018026	Pennsylvania
TNGADUMM	0.7795	0.5194	2.2523	0.1334	0.126441	Tennessee or Georgia
TXDUMM	0.4431	0.8605	0.2651	0.6066	0.033803	Texas
WIDUMM	1.4436	0.6379	5.1204	0.0236	0.216032	Wisconsin
SHARER	-1.7327	0.5418	10.2266	0.0014	-0.217219	Does Enrollee Share?
PREFHOME	1.7597	0.3472	25.6924	0.0001	0.480332	Prefer Home?
UNTRAT	0.1286	0.5365	0.0575	0.8105	0.020216	FULLGROSS/FMR
INCLE100	-0.5855	1.3521	0.1875	0.6650	-0.037485	Income LE $100/Month?
PPBB	0.1028	0.2553	0.1621	0.6872	0.061210	PPBEDOK * BEDROOMS
PPBNOK	0.2186	0.2942	0.5517	0.4576	0.154458	BR Required if PP BR Not Ok
UNTRATH	0.1530	0.5914	0.0669	0.7959	0.022167	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.1321	0.2840	0.2164	0.6418	0.036406	Prefer Neighborhood?
PPBEDOK	0.4066	0.9780	0.1729	0.6776	0.096336	Pre-Program BR Ok?
NOCARE	0.2690	0.4120	0.4263	0.5138	0.049387	No Child Care Avail When Needed?
FMRINC	-0.1124	0.2518	0.1992	0.6554	-0.037912	FMR/INC
ACCCAR	-0.6052	0.3330	3.3043	0.0691	-0.137087	Have Access to Car?
MOVE3YRS	0.00691	0.0416	0.0276	0.8680	0.016899	Average Moves Per 3 Years
BADCREDT	0.2397	0.2684	0.7982	0.3716	0.064224	BAD CREDIT
BADREFS	-0.2731	0.4388	0.3873	0.5337	-0.043473	BAD LANDLORD REFERENCES
DRUGS	0.1883	0.7351	0.0656	0.7978	0.021052	DRUG ARREST
EDUCLT12	0.4760	0.2946	2.6107	0.1061	0.120632	(1) if educ < 12 yrs
VOUCHER	-0.2938	0.3389	0.7514	0.3860	-0.076863	(1) if voucher, else certif
UNDPROG	-0.0465	0.2810	0.0274	0.8685	-0.011631	Understand PGM?
WANTHQ	-0.3393	0.2665	1.6206	0.2030	-0.093152	Want Better Housing?
WANTLC	0.0288	0.3087	0.0087	0.9256	0.006230	Want Lower Cost?

Association of Predicted Probabilities and Observed Responses

Concordant	= 81.6%	Somers' D	= 0.633
Discordant	= 18.2%	Gamma	= 0.635
Tied	= 0.2%	Tau-a	= 0.229
(47432 pairs)		c	= 0.817

The LOGISTIC Procedure

Data Set: WORK.NONNY
Response Variable: HAVEINSP
Response Levels: 2
Number of Observations: 392
Link Function: Logit

Response Profile

Ordered Value	HAVEINSP	Count
1	1	307
2	2	85

WARNING: 16 observation(s) were deleted due to missing values for the response or explanatory variables.

Simple Statistics for Explanatory Variables

Variable	Mean	Standard Deviation	Minimum	Maximum	Variable Label
MINORITY	0.500000	0.500639	0.000000	1.0000	Minority?
OLD	0.102041	0.303089	0.000000	1.0000	Old?
HANDIC	0.147959	0.355513	0.000000	1.0000	Handicapped?
WRKING	0.262755	0.440693	0.000000	1.0000	Employed?
COUPCHLD	0.102041	0.303089	0.000000	1.0000	Couple w/Child?
OTHNOKD	0.040816	0.198117	0.000000	1.0000	Other no Children
AZDUMM	0.028061	0.165359	0.000000	1.0000	Arizona
FLDUMM	0.040816	0.198117	0.000000	1.0000	Florida
IDDUMM	0.051020	0.220321	0.000000	1.0000	Idaho
INDUMM	0.084184	0.278018	0.000000	1.0000	Indiana
MDDUMM	0.056122	0.230452	0.000000	1.0000	Maryland
MNDUMM	0.079082	0.270211	0.000000	1.0000	Minnesota
NEDUMM	0.038265	0.192081	0.000000	1.0000	Nebraska
NYDUMM	0.061224	0.240048	0.000000	1.0000	Rochester NY
OHDUMM	0.015306	0.122924	0.000000	1.0000	Ohio
LAOKDUMM	0.109694	0.312907	0.000000	1.0000	Louisiana or Oklahoma
WAORDUMM	0.073980	0.262072	0.000000	1.0000	Washington or Oregon
PADUMM	0.076531	0.266185	0.000000	1.0000	Pennsylvania
TNGADUMM	0.086735	0.281806	0.000000	1.0000	Tennessee or Georgia
TXDUMM	0.017857	0.132601	0.000000	1.0000	Texas
WIDUMM	0.084184	0.278018	0.000000	1.0000	Wisconsin
SHARER	0.028061	0.165359	0.000000	1.0000	Does Enrollee Share?
PREFHOME	0.517857	0.500320	0.000000	1.0000	Prefer Home?
UNTRAT	0.686813	0.284817	0.000000	1.3586	FULLGROSS/FMR
INCLE100	0.015306	0.122924	0.000000	1.0000	Income LE $100/Month?
PPBB	1.446429	1.076219	0.000000	4.0000	PPBEDOK * BEDROOMS
PPBNOK	0.655612	1.275891	0.000000	7.0000	BR Required if PP BR Not Ok
UNTRATH	0.046864	0.264006	0.000000	2.4264	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.522959	0.500111	0.000000	1.0000	Prefer Neighborhood?
PPBEDOK	0.767857	0.422739	0.000000	1.0000	Pre-Program BR Ok?
NOCARE	0.130102	0.336846	0.000000	1.0000	No Child Care Avail When Needed?
FMRINC	1.015098	0.623494	0.000000	5.6080	FMR/INC
ACCCAR	0.770408	0.421108	0.000000	1.0000	Have Access to Car?
MOVE3YRS	1.913649	4.989892	0.100000	96.0000	Average Moves Per 3 Years
BADCREDT	0.380102	0.486032	0.000000	1.0000	BAD CREDIT
BADREFS	0.086735	0.281806	0.000000	1.0000	BAD LANDLORD REFERENCES
DRUGS	0.045918	0.209576	0.000000	1.0000	DRUG ARREST
EDUCLT12	0.323980	0.468590	0.000000	1.0000	(1) if educ < 12 yrs
VOUCHER	0.354592	0.479001	0.000000	1.0000	(1) if voucher, else certif
UNDPROG	0.711735	0.453534	0.000000	1.0000	Understand PGM?
WANTHQ	0.408163	0.492122	0.000000	1.0000	Want Better Housing?
WANTLC	0.834184	0.372391	0.000000	1.0000	Want Lower Cost?

The LOGISTIC Procedure

Criteria for Assessing Model Fit

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	411.934	387.457	.
SC	415.905	558.222	.
-2 LOG L	409.934	301.457	108.477 with 42 DF (p=0.0001)
Score	.	.	96.741 with 42 DF (p=0.0001)

Analysis of Maximum Likelihood Estimates

Variable	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Variable Label
INTERCPT	1.3826	1.3883	0.9918	0.3193	.	Intercept
MINORITY	0.2067	0.3669	0.3172	0.5733	0.057043	Minority?
OLD	-0.1770	0.7869	0.0506	0.8221	-0.029569	Old?
HANDIC	0.9730	0.6428	2.2915	0.1301	0.190716	Handicapped?
WRKING	0.0929	0.3800	0.0598	0.8068	0.022576	Employed?
COUPCHLD	0.7474	0.6114	1.4946	0.2215	0.124898	Couple w/Child?
OTHNOKD	2.2479	1.1619	3.7426	0.0530	0.245529	Other no Children
AZDUMM	-0.3808	1.0240	0.1383	0.7100	-0.034716	Arizona
FLDUMM	0.00982	0.9363	0.0001	0.9916	0.001073	Florida
IDDUMM	-0.5263	1.0234	0.2645	0.6071	-0.063933	Idaho
INDUMM	0.0245	0.7599	0.0010	0.9743	0.003756	Indiana
MDDUMM	-0.4618	0.8526	0.2934	0.5881	-0.058677	Maryland
MNDUMM	-0.0392	0.7836	0.0025	0.9601	-0.005833	Minnesota
NEDUMM	1.1417	1.2863	0.7878	0.3748	0.120903	Nebraska
NYDUMM	-0.3709	0.8678	0.1827	0.6691	-0.049085	Rochester NY
OHDUMM	-0.1090	1.5014	0.0053	0.9421	-0.007386	Ohio
LAOKDUMM	-0.6947	0.7577	0.8406	0.3592	-0.119840	Louisiana or Oklahoma
WAORDUMM	1.1745	0.9332	1.5841	0.2082	0.169699	Washington or Oregon
PADUMM	-0.3106	0.7554	0.1691	0.6809	-0.045581	Pennsylvania
TNGADUMM	-0.2447	0.7203	0.1154	0.7341	-0.038018	Tennessee or Georgia
TXDUMM	-0.4972	1.1445	0.1887	0.6640	-0.036348	Texas
WIDUMM	-0.00532	0.8652	0.0000	0.9951	-0.000815	Wisconsin
SHARER	-3.7268	0.9920	14.1135	0.0002	-0.339762	Does Enrollee Share?
PREFHOME	2.1832	0.4146	27.7242	0.0001	0.602220	Prefer Home?
UNTRAT	-1.6846	0.7332	5.2796	0.0216	-0.264535	FULLGROSS/FMR
INCLE100	-2.7894	1.3714	4.1374	0.0419	-0.189045	Income LE $100/Month?
PPBB	-0.2070	0.2964	0.4875	0.4850	-0.122807	PPBEDOK * BEDROOMS
PPBNOK	0.1241	0.3164	0.1538	0.6949	0.087281	BR Required if PP BR Not Ok
UNTRATH	0.1277	0.8624	0.0219	0.8823	0.018587	FULLGROSS/FMR (Adjusted)
PREFNEIG	-0.4655	0.3566	1.7033	0.1919	-0.128337	Prefer Neighborhood?
PPBEDOK	1.5128	1.0855	1.9421	0.1634	0.352592	Pre-Program BR Ok?
NOCARE	-0.7477	0.4294	3.0322	0.0816	-0.138853	No Child Care Avail When Needed?
FMRINC	0.0188	0.2714	0.0048	0.9447	0.006466	FMR/INC
ACCCAR	-0.1776	0.3847	0.2132	0.6443	-0.041243	Have Access to Car?
MOVE3YRS	-0.0121	0.0409	0.0872	0.7677	-0.033224	Average Moves Per 3 Years
BADCREDT	0.1894	0.3322	0.3250	0.5686	0.050740	BAD CREDIT
BADREFS	1.0282	0.6303	2.6608	0.1028	0.159752	BAD LANDLORD REFERENCES
DRUGS	-1.1461	0.7326	2.4477	0.1177	-0.132424	DRUG ARREST
EDUCLT12	-0.5052	0.3354	2.2695	0.1319	-0.130526	(1) if educ < 12 yrs
VOUCHER	0.8217	0.4423	3.4519	0.0632	0.217005	(1) if voucher, else certif
UNDPROG	0.1329	0.3422	0.1509	0.6977	0.033240	Understand PGM?
WANTHQ	-0.3426	0.3283	1.0885	0.2968	-0.092943	Want Better Housing?
WANTLC	-0.3749	0.4248	0.7787	0.3776	-0.076967	Want Lower Cost?

Association of Predicted Probabilities and Observed Responses

Concordant	= 83.9%	Somers' D	= 0.679
Discordant	= 15.9%	Gamma	= 0.681
Tied	= 0.2%	Tau-a	= 0.231
(26095 pairs)		c	= 0.840

The LOGISTIC Procedure

Data Set: WORK.NONNY
Response Variable: QUIP
Response Levels: 2
Number of Observations: 392
Link Function: Logit

Response Profile

Ordered Value	QUIP	Count
1	1	271
2	2	121

WARNING: 16 observation(s) were deleted due to missing values for the response or explanatory variables.

Simple Statistics for Explanatory Variables

Variable	Mean	Standard Deviation	Minimum	Maximum	Variable Label
MINORITY	0.500000	0.500639	0.000000	1.0000	Minority?
OLD	0.102041	0.303089	0.000000	1.0000	Old?
HANDIC	0.147959	0.355513	0.000000	1.0000	Handicapped?
WRKING	0.262755	0.440693	0.000000	1.0000	Employed?
COUPCHLD	0.102041	0.303089	0.000000	1.0000	Couple w/Child?
OTHNOKD	0.040816	0.198117	0.000000	1.0000	Other no Children
AZDUMM	0.028061	0.165359	0.000000	1.0000	Arizona
FLDUMM	0.040816	0.198117	0.000000	1.0000	Florida
IDDUMM	0.051020	0.220321	0.000000	1.0000	Idaho
INDUMM	0.084184	0.278018	0.000000	1.0000	Indiana
MDDUMM	0.056122	0.230452	0.000000	1.0000	Maryland
MNDUMM	0.079082	0.270211	0.000000	1.0000	Minnesota
NEDUMM	0.038265	0.192081	0.000000	1.0000	Nebraska
NYDUMM	0.061224	0.240048	0.000000	1.0000	Rochester NY
OHDUMM	0.015306	0.122924	0.000000	1.0000	Ohio
LAOKDUMM	0.109694	0.312907	0.000000	1.0000	Louisiana or Oklahoma
WAORDUMM	0.073980	0.262072	0.000000	1.0000	Washington or Oregon
PADUMM	0.076531	0.266185	0.000000	1.0000	Pennsylvania
TNGADUMM	0.086735	0.281806	0.000000	1.0000	Tennessee or Georgia
TXDUMM	0.017857	0.132601	0.000000	1.0000	Texas
WIDUMM	0.084184	0.278018	0.000000	1.0000	Wisconsin
SHARER	0.028061	0.165359	0.000000	1.0000	Does Enrollee Share?
PREFHOME	0.517857	0.500320	0.000000	1.0000	Prefer Home?
UNTRAT	0.686813	0.284817	0.000000	1.3586	FULLGROSS/FMR
INCLE100	0.015306	0.122924	0.000000	1.0000	Income LE $100/Month?
PPBB	1.446429	1.076219	0.000000	4.0000	PPBEDOK * BEDROOMS
PPBNOK	0.655612	1.275891	0.000000	7.0000	BR Required if PP BR Not Ok
UNTRATH	0.046864	0.264006	0.000000	2.4264	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.522959	0.500111	0.000000	1.0000	Prefer Neighborhood?
PPBEDOK	0.767857	0.422739	0.000000	1.0000	Pre-Program BR Ok?
NOCARE	0.130102	0.336846	0.000000	1.0000	No Child Care Avail When Needed?
FMRINC	1.015098	0.623494	0.000000	5.6080	FMR/INC
ACCCAR	0.770408	0.421108	0.000000	1.0000	Have Access to Car?
MOVE3YRS	1.913649	4.989892	0.100000	96.0000	Average Moves Per 3 Years
BADCREDT	0.380102	0.486032	0.000000	1.0000	BAD CREDIT
BADREFS	0.086735	0.281806	0.000000	1.0000	BAD LANDLORD REFERENCES
DRUGS	0.045918	0.209576	0.000000	1.0000	DRUG ARREST
EDUCLT12	0.323980	0.468590	0.000000	1.0000	(1) if educ < 12 yrs
VOUCHER	0.354592	0.479001	0.000000	1.0000	(1) if voucher, else certif
UNDPROG	0.711735	0.453534	0.000000	1.0000	Understand PGM?
WANTHQ	0.408163	0.492122	0.000000	1.0000	Want Better Housing?
WANTLC	0.834184	0.372391	0.000000	1.0000	Want Lower Cost?

The LOGISTIC Procedure

Criteria for Assessing Model Fit

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	486.540	423.963	.
SC	490.511	594.728	.
-2 LOG L	484.540	337.963	146.576 with 42 DF (p=0.0001)
Score	.	.	125.842 with 42 DF (p=0.0001)

Analysis of Maximum Likelihood Estimates

Variable	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Variable Label
INTERCPT	1.1189	1.3038	0.7366	0.3908	.	Intercept
MINORITY	0.3048	0.3499	0.7591	0.3836	0.084138	Minority?
OLD	0.4655	0.7925	0.3451	0.5569	0.077793	Old?
HANDIC	0.5870	0.5480	1.1472	0.2841	0.115050	Handicapped?
WRKING	-0.2222	0.3502	0.4024	0.5258	-0.053978	Employed?
COUPCHLD	-0.2539	0.5024	0.2555	0.6132	-0.042435	Couple w/Child?
OTHNOKD	1.8180	0.9837	3.4156	0.0646	0.198571	Other no Children
AZDUMM	-1.4688	1.0687	1.8889	0.1693	-0.133906	Arizona
FLDUMM	-1.2547	0.8781	2.0414	0.1531	-0.137047	Florida
IDDUMM	-0.9689	1.0172	0.9072	0.3409	-0.117689	Idaho
INDUMM	-1.2997	0.7615	2.9133	0.0879	-0.199216	Indiana
MDDUMM	-0.8482	0.8695	0.9516	0.3293	-0.107772	Maryland
MNDUMM	-0.8851	0.7849	1.2714	0.2595	-0.131852	Minnesota
NEDUMM	-1.7695	0.9216	3.6867	0.0548	-0.187387	Nebraska
NYDUMM	-2.0776	0.8550	5.9053	0.0151	-0.274966	Rochester NY
OHDUMM	-2.4739	1.2150	4.1458	0.0417	-0.167657	Ohio
LAOKDUMM	-1.2869	0.7966	2.6100	0.1062	-0.222012	Louisiana or Oklahoma
WAORDUMM	0.5677	0.9051	0.3935	0.5305	0.082032	Washington or Oregon
PADUMM	-1.5881	0.7523	4.4558	0.0348	-0.233058	Pennsylvania
TNGADUMM	-1.0708	0.7477	2.0510	0.1521	-0.166369	Tennessee or Georgia
TXDUMM	-1.1243	1.1585	0.9417	0.3318	-0.082191	Texas
WIDUMM	-2.2306	0.8316	7.1951	0.0073	-0.341902	Wisconsin
SHARER	-4.2254	1.0703	15.5851	0.0001	-0.385218	Does Enrollee Share?
PREFHOME	2.0032	0.3561	31.6395	0.0001	0.552556	Prefer Home?
UNTRAT	-1.2657	0.6655	3.6166	0.0572	-0.198748	FULLGROSS/FMR
INCLE100	-2.4598	1.2171	4.0842	0.0433	-0.166704	Income LE $100/Month?
PPBB	0.0636	0.2770	0.0528	0.8183	0.037748	PPBEDOK * BEDROOMS
PPBNOK	0.4058	0.2989	1.8424	0.1747	0.285435	BR Required if PP BR Not Ok
UNTRATH	-0.2078	0.5939	0.1225	0.7264	-0.030252	FULLGROSS/FMR (Adjusted)
PREFNEIG	-0.5966	0.3372	3.1308	0.0768	-0.164507	Prefer Neighborhood?
PPBEDOK	2.1210	1.0226	4.3016	0.0381	0.494333	Pre-Program BR Ok?
NOCARE	-0.7286	0.4139	3.0977	0.0784	-0.135303	No Child Care Avail When Needed?
FMRINC	-0.0812	0.2537	0.1025	0.7489	-0.027919	FMR/INC
ACCCAR	-0.3071	0.3611	0.7230	0.3952	-0.071292	Have Access to Car?
MOVE3YRS	0.0103	0.0420	0.0597	0.8069	0.028224	Average Moves Per 3 Years
BADCREDT	-0.1390	0.3058	0.2068	0.6493	-0.037259	BAD CREDIT
BADREFS	1.0217	0.5504	3.4453	0.0634	0.158734	BAD LANDLORD REFERENCES
DRUGS	-1.3058	0.6822	3.6644	0.0556	-0.150880	DRUG ARREST
EDUCLT12	-0.2622	0.3140	0.6971	0.4038	-0.067726	(1) if educ < 12 yrs
VOUCHER	0.8540	0.4259	4.0214	0.0449	0.225527	(1) if voucher, else certif
UNDPROG	0.1603	0.3123	0.2633	0.6079	0.040071	Understand PGM?
WANTHQ	-0.7474	0.3033	6.0742	0.0137	-0.202784	Want Better Housing?
WANTLC	-0.3648	0.3859	0.8935	0.3445	-0.074896	Want Lower Cost?

Association of Predicted Probabilities and Observed Responses

Concordant = 85.1%	Somers' D = 0.704
Discordant = 14.8%	Gamma = 0.704
Tied = 0.1%	Tau-a = 0.301
(32791 pairs)	c = 0.852

The LOGISTIC Procedure

Data Set: WORK.NONNY
Response Variable: SUCCESS
Response Levels: 2
Number of Observations: 336
Link Function: Logit

Response Profile

Ordered Value	SUCCESS	Count
1	1	117
2	2	219

WARNING: 15 observation(s) were deleted due to missing values for the response or explanatory variables.

Simple Statistics for Explanatory Variables

Variable	Mean	Standard Deviation	Minimum	Maximum	Variable Label
MINORITY	0.559524	0.497185	0.000000	1.0000	Minority?
OLD	0.068452	0.252897	0.000000	1.0000	Old?
HANDIC	0.130952	0.337851	0.000000	1.0000	Handicapped?
WRKING	0.294643	0.456562	0.000000	1.0000	Employed?
COUPCHLD	0.110119	0.313505	0.000000	1.0000	Couple w/Child?
OTHNOKD	0.035714	0.185854	0.000000	1.0000	Other no Children
AZDUMM	0.029762	0.170183	0.000000	1.0000	Arizona
FLDUMM	0.044643	0.206826	0.000000	1.0000	Florida
IDDUMM	0.023810	0.152683	0.000000	1.0000	Idaho
INDUMM	0.080357	0.272251	0.000000	1.0000	Indiana
MDDUMM	0.056548	0.231321	0.000000	1.0000	Maryland
MNDUMM	0.056548	0.231321	0.000000	1.0000	Minnesota
NEDUMM	0.047619	0.213276	0.000000	1.0000	Nebraska
NYDUMM	0.059524	0.236955	0.000000	1.0000	Rochester NY
OHDUMM	0.023810	0.152683	0.000000	1.0000	Ohio
LAOKDUMM	0.083333	0.276798	0.000000	1.0000	Louisiana or Oklahoma
WAORDUMM	0.044643	0.206826	0.000000	1.0000	Washington or Oregon
PADUMM	0.098214	0.298048	0.000000	1.0000	Pennsylvania
TNGADUMM	0.107143	0.309756	0.000000	1.0000	Tennessee or Georgia
TXDUMM	0.020833	0.143039	0.000000	1.0000	Texas
WIDUMM	0.107143	0.309756	0.000000	1.0000	Wisconsin
SHARER	0.068452	0.252897	0.000000	1.0000	Does Enrollee Share?
PREFHOME	0.348214	0.477115	0.000000	1.0000	Prefer Home?
UNTRAT	0.723324	0.252105	0.000000	1.2849	FULLGROSS/FMR
INCLE100	0.008929	0.094209	0.000000	1.0000	Income LE $100/Month?
PPBB	1.431548	1.117601	0.000000	5.0000	PPBEDOK * BEDROOMS
PPBNOK	0.782738	1.357280	0.000000	7.0000	BR Required if PP BR Not Ok
UNTRATH	0.051333	0.262575	0.000000	2.2616	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.446429	0.497863	0.000000	1.0000	Prefer Neighborhood?
PPBEDOK	0.723214	0.448077	0.000000	1.0000	Pre-Program BR Ok?
NOCARE	0.139881	0.347381	0.000000	1.0000	No Child Care Avail When Needed?
FMRINC	1.015592	0.563381	0.000000	5.6080	FMR/INC
ACCCAR	0.779762	0.415025	0.000000	1.0000	Have Access to Car?
MOVE3YRS	2.084283	5.394760	0.100000	96.0000	Average Moves Per 3 Years
BADCREDT	0.395833	0.489758	0.000000	1.0000	BAD CREDIT
BADREFS	0.092262	0.289827	0.000000	1.0000	BAD LANDLORD REFERENCES
DRUGS	0.044643	0.206826	0.000000	1.0000	DRUG ARREST
EDUCLT12	0.282738	0.451002	0.000000	1.0000	(1) if educ < 12 yrs
VOUCHER	0.342262	0.475174	0.000000	1.0000	(1) if voucher, else certif
UNDPROG	0.684524	0.465398	0.000000	1.0000	Understand PGM?
WANTHQ	0.479167	0.500311	0.000000	1.0000	Want Better Housing?
WANTLC	0.815476	0.388489	0.000000	1.0000	Want Lower Cost?

The LOGISTIC Procedure

Criteria for Assessing Model Fit

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	436.337	393.722	.
SC	440.154	557.858	.
-2 LOG L	434.337	307.722	126.615 with 42 DF (p=0.0001)
Score	.	.	110.753 with 42 DF (p=0.0001)

Analysis of Maximum Likelihood Estimates

Variable	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Variable Label
INTERCPT	-4.2575	1.4762	8.3186	0.0039	.	Intercept
MINORITY	-0.4065	0.3621	1.2601	0.2616	-0.111432	Minority?
OLD	0.2733	0.7782	0.1234	0.7254	0.038109	Old?
HANDIC	0.6939	0.5325	1.6981	0.1925	0.129255	Handicapped?
WRKING	-0.5015	0.3736	1.8020	0.1795	-0.126238	Employed?
COUPCHLD	-0.6332	0.5116	1.5319	0.2158	-0.109453	Couple w/Child?
OTHNOKD	0.8099	0.8675	0.8715	0.3505	0.082984	Other no Children
AZDUMM	-1.1049	1.0278	1.1558	0.2823	-0.103672	Arizona
FLDUMM	-1.1757	0.9349	1.5816	0.2085	-0.134068	Florida
IDDUMM	-0.6482	1.1626	0.3109	0.5771	-0.054566	Idaho
INDUMM	0.2518	0.6999	0.1294	0.7190	0.037795	Indiana
MDDUMM	-0.4426	0.8028	0.3041	0.5814	-0.056453	Maryland
MNDUMM	-0.5160	0.8419	0.3756	0.5400	-0.065802	Minnesota
NEDUMM	-1.1814	0.8567	1.9017	0.1679	-0.138915	Nebraska
NYDUMM	-0.3359	0.7939	0.1790	0.6722	-0.043883	Rochester NY
OHDUMM	-1.2421	1.1431	1.1807	0.2772	-0.104559	Ohio
LAOKDUMM	-0.2132	0.6591	0.1047	0.7463	-0.032541	Louisiana or Oklahoma
WAORDUMM	1.1602	0.8744	1.7604	0.1846	0.132292	Washington or Oregon
PADUMM	-0.4738	0.6699	0.5002	0.4794	-0.077853	Pennsylvania
TNGADUMM	-0.3470	0.6573	0.2788	0.5975	-0.059268	Tennessee or Georgia
TXDUMM	-0.0264	1.0916	0.0006	0.9807	-0.002084	Texas
WIDUMM	-0.0379	0.7244	0.0027	0.9583	-0.006467	Wisconsin
SHARER	-2.7598	0.9689	8.1136	0.0044	-0.384800	Does Enrollee Share?
PREFHOME	1.9729	0.3732	27.9432	0.0001	0.518954	Prefer Home?
UNTRAT	2.2722	0.9174	6.1342	0.0133	0.315822	FULLGROSS/FMR
INCLE100	-1.6191	1.4214	1.2976	0.2547	-0.084096	Income LE $100/Month?
PPBB	0.2134	0.2701	0.6246	0.4293	0.131509	PPBEDOK * BEDROOMS
PPBNOK	0.5901	0.3384	3.0413	0.0812	0.441598	BR Required if PP BR Not Ok
UNTRATH	1.6732	0.8901	3.5337	0.0601	0.242226	FULLGROSS/FMR (Adjusted)
PREFNEIG	-0.4904	0.3651	1.8037	0.1793	-0.134596	Prefer Neighborhood?
PPBEDOK	1.7830	1.1313	2.4843	0.1150	0.440477	Pre-Program BR Ok?
NOCARE	-0.0980	0.4477	0.0479	0.8268	-0.018763	No Child Care Avail When Needed?
FMRINC	-0.0442	0.3165	0.0195	0.8890	-0.013723	FMR/INC
ACCCAR	-0.1087	0.3779	0.0828	0.7736	-0.024878	Have Access to Car?
MOVE3YRS	0.0140	0.0439	0.1011	0.7505	0.041506	Average Moves Per 3 Years
BADCREDT	0.0794	0.3297	0.0580	0.8098	0.021434	BAD CREDIT
BADREFS	0.6752	0.5191	1.6916	0.1934	0.107890	BAD LANDLORD REFERENCES
DRUGS	-1.4622	0.9414	2.4125	0.1204	-0.166736	DRUG ARREST
EDUCLT12	-0.2168	0.3449	0.3954	0.5295	-0.053919	(1) if educ < 12 yrs
VOUCHER	0.1567	0.4081	0.1475	0.7009	0.041058	(1) if voucher, else certif
UNDPROG	0.3569	0.3330	1.1492	0.2837	0.091584	Understand PGM?
WANTHQ	-0.7437	0.3427	4.7098	0.0300	-0.205141	Want Better Housing?
WANTLC	0.0971	0.4108	0.0558	0.8132	0.020788	Want Lower Cost?

Association of Predicted Probabilities and Observed Responses

Concordant	= 83.6%	Somers' D	= 0.673
Discordant	= 16.3%	Gamma	= 0.674
Tied	= 0.2%	Tau-a	= 0.306
(25623 pairs)		c	= 0.837

The LOGISTIC Procedure

Data Set: WORK.NONNY
Response Variable: SUCCESS
Response Levels: 2
Number of Observations: 336
Link Function: Logit

Response Profile

Ordered Value	SUCCESS	Count
1	1	117
2	2	219

WARNING: 15 observation(s) were deleted due to missing values for the response or explanatory variables.

Simple Statistics for Explanatory Variables

Variable	Mean	Standard Deviation	Minimum	Maximum	Variable Label
MINORITY	0.559524	0.497185	0.000000	1.0000	Minority?
OLD	0.068452	0.252897	0.000000	1.0000	Old?
HANDIC	0.130952	0.337851	0.000000	1.0000	Handicapped?
WRKING	0.294643	0.456562	0.000000	1.0000	Employed?
COUPCHLD	0.110119	0.313505	0.000000	1.0000	Couple W/Child?
OTHNOKD	0.035714	0.185854	0.000000	1.0000	Other no Children
AZDUMM	0.029762	0.170183	0.000000	1.0000	Arizona
FLDUMM	0.044643	0.206826	0.000000	1.0000	Florida
IDDUMM	0.023810	0.152683	0.000000	1.0000	Idaho
INDUMM	0.080357	0.272251	0.000000	1.0000	Indiana
MDDUMM	0.056548	0.231321	0.000000	1.0000	Maryland
MNDUMM	0.056548	0.231321	0.000000	1.0000	Minnesota
NEDUMM	0.047619	0.213276	0.000000	1.0000	Nebraska
NYDUMM	0.059524	0.236955	0.000000	1.0000	Rochester NY
OHDUMM	0.023810	0.152683	0.000000	1.0000	Ohio
LAOKDUMM	0.083333	0.276798	0.000000	1.0000	Louisiana or Oklahoma
WAORDUMM	0.044643	0.206826	0.000000	1.0000	Washington or Oregon
PADUMM	0.098214	0.298048	0.000000	1.0000	Pennsylvania
TNGADUMM	0.107143	0.309756	0.000000	1.0000	Tennessee or Georgia
TXDUMM	0.020833	0.143039	0.000000	1.0000	Texas
WIDUMM	0.107143	0.309756	0.000000	1.0000	Wisconsin
SHARER	0.068452	0.252897	0.000000	1.0000	Does Enrollee Share?
PREFHOME	0.348214	0.477115	0.000000	1.0000	Prefer Home?
UNTRAT	0.723324	0.252105	0.000000	1.2849	FULLGROSS/FMR
INCLE100	0.008929	0.094209	0.000000	1.0000	Income LE $100/Month?
PPBB	1.431548	1.117601	0.000000	5.0000	PPBEDOK * BEDROOMS
PPBNOK	0.782738	1.357280	0.000000	7.0000	BR Required if PP BR Not Ok
UNTRATH	0.051333	0.262575	0.000000	2.2616	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.446429	0.497863	0.000000	1.0000	Prefer Neighborhood?
PPBEDOK	0.723214	0.448077	0.000000	1.0000	Pre-Program BR Ok?
NOCARE	0.139881	0.347381	0.000000	1.0000	No Child Care Avail When Needed?
FMRINC	1.015592	0.563381	0.000000	5.6080	FMR/INC
ACCCAR	0.779762	0.415025	0.000000	1.0000	Have Access to Car?
MOVE3YRS	2.084283	5.394760	0.100000	96.0000	Average Moves Per 3 Years
FAMILIAR	0.877976	0.327801	0.000000	1.0000	LL Heard of S8?
BADCREDT	0.395833	0.489758	0.000000	1.0000	BAD CREDIT
BADREFS	0.092262	0.289827	0.000000	1.0000	BAD LANDLORD REFERENCES
DRUGS	0.044643	0.206826	0.000000	1.0000	DRUG ARREST
EDUCLT12	0.282738	0.451002	0.000000	1.0000	(1) if educ < 12 yrs
VOUCHER	0.342262	0.475174	0.000000	1.0000	(1) if voucher, else certif
UNDPROG	0.684524	0.465398	0.000000	1.0000	Understand PGM?
WANTHQ	0.479167	0.500311	0.000000	1.0000	Want Better Housing?
WANTLC	0.815476	0.388489	0.000000	1.0000	Want Lower Cost?

Criteria for Assessing Model Fit

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	436.337	390.000	.
SC	440.154	557.953	.
-2 LOG L	434.337	302.000	132.336 with 43 DF (p=0.0001)
Score	.	.	113.940 with 43 DF (p=0.0001)

Analysis of Maximum Likelihood Estimates

Variable	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Variable Label
INTERCPT	-4.9501	1.5380	10.3584	0.0013	.	Intercept
MINORITY	-0.5372	0.3721	2.0837	0.1489	-0.147247	Minority?
OLD	0.0169	0.7932	0.0005	0.9830	0.002351	Old?
HANDIC	0.6245	0.5341	1.3674	0.2423	0.116332	Handicapped?
WRKING	-0.6019	0.3866	2.4242	0.1195	-0.151520	Employed?
COUPCHLD	-0.7508	0.5258	2.0392	0.1533	-0.129777	Couple w/Child?
OTHNOKD	0.9454	0.8862	1.1381	0.2861	0.096875	Other no Children
AZDUMM	-1.3211	1.0523	1.5763	0.2093	-0.123958	Arizona
FLDUMM	-1.5382	0.9819	2.4540	0.1172	-0.175395	Florida
IDDUMM	-0.9418	1.1906	0.6257	0.4289	-0.079277	Idaho
INDUMM	-0.0943	0.7297	0.0167	0.8972	-0.014156	Indiana
MDDUMM	-0.7125	0.8141	0.7659	0.3815	-0.090864	Maryland
MNDUMM	-0.7831	0.8561	0.8367	0.3603	-0.099872	Minnesota
NEDUMM	-1.4526	0.8624	2.8375	0.0921	-0.170810	Nebraska
NYDUMM	-0.4964	0.8107	0.3749	0.5403	-0.064852	Rochester NY
OHDUMM	-1.6130	1.1670	1.9104	0.1669	-0.135781	Ohio
LAOKDUMM	-0.6123	0.6840	0.8014	0.3707	-0.093449	Louisiana or Oklahoma
WAORDUMM	0.8859	0.8910	0.9886	0.3201	0.101024	Washington or Oregon
PADUMM	-0.7361	0.6855	1.1533	0.2829	-0.120960	Pennsylvania
TNGADUMM	-0.6055	0.6696	0.8175	0.3659	-0.103400	Tennessee or Georgia
TXDUMM	-0.2388	1.1069	0.0466	0.8292	-0.018836	Texas
WIDUMM	-0.2823	0.7384	0.1461	0.7023	-0.048204	Wisconsin
SHARER	-2.8227	0.9804	8.2894	0.0040	-0.393571	Does Enrollee Share?
PREFHOME	2.1362	0.3900	30.0074	0.0001	0.561927	Prefer Home?
UNTRAT	2.4050	0.9264	6.7395	0.0094	0.334281	FULLGROSS/FMR
INCLE100	-1.5904	1.4360	1.2266	0.2681	-0.082605	Income LE $100/Month?
PPBB	0.2501	0.2713	0.8502	0.3565	0.154127	PPBEDOK * BEDROOMS
PPBNOK	0.5807	0.3447	2.8379	0.0921	0.434551	BR Required if PP BR Not Ok
UNTRATH	1.9107	0.9336	4.1885	0.0407	0.276608	FULLGROSS/FMR (Adjusted)
PREFNEIG	-0.4648	0.3680	1.5953	0.2066	-0.127568	Prefer Neighborhood?
PPBEDOK	1.6953	1.1645	2.1195	0.1454	0.418805	Pre-Program BR Ok?
NOCARE	-0.1385	0.4540	0.0930	0.7604	-0.026518	No Child Care Avail When Needed?
FMRINC	-0.1007	0.3288	0.0939	0.7593	-0.031292	FMR/INC
ACCCAR	-0.1822	0.3841	0.2250	0.6352	-0.041691	Have Access to Car?
MOVE3YRS	0.0126	0.0446	0.0794	0.7782	0.037329	Average Moves Per 3 Years
FAMILIAR	1.1763	0.5096	5.3284	0.0210	0.212580	LL Heard of S8?
BADCREDT	0.0592	0.3340	0.0314	0.8594	0.015973	BAD CREDIT
BADREFS	0.5922	0.5212	1.2911	0.2558	0.094625	BAD LANDLORD REFERENCES
DRUGS	-1.2865	0.9206	1.9531	0.1623	-0.146702	DRUG ARREST
EDUCLT12	-0.1140	0.3513	0.1053	0.7456	-0.028348	(1) if educ < 12 yrs
VOUCHER	0.2194	0.4158	0.2783	0.5978	0.057466	(1) if voucher, else certif
UNDPROG	0.4083	0.3374	1.4643	0.2262	0.104762	Understand PGM?
WANTHQ	-0.7975	0.3487	5.2298	0.0222	-0.219977	Want Better Housing?
WANTLC	0.0263	0.4192	0.0039	0.9500	0.005635	Want Lower Cost?

Association of Predicted Probabilities and Observed Responses

Concordant	= 84.3%	Somers' D	= 0.686
Discordant	= 15.6%	Gamma	= 0.687
Tied	= 0.1%	Tau-a	= 0.313
(25623 pairs)		c	= 0.843

The LOGISTIC Procedure

Data Set: WORK.NONNY
Response Variable: AGREE
Response Levels: 2
Number of Observations: 336
Link Function: Logit

Response Profile

Ordered Value	AGREE	Count
1	1	237
2	2	99

WARNING: 15 observation(s) were deleted due to missing values for the response or explanatory variables.

Simple Statistics for Explanatory Variables

Variable	Mean	Standard Deviation	Minimum	Maximum	Variable Label
MINORITY	0.559524	0.497185	0.000000	1.0000	Minority?
OLD	0.068452	0.252897	0.000000	1.0000	Old?
HANDIC	0.130952	0.337851	0.000000	1.0000	Handicapped?
WRKING	0.294643	0.456562	0.000000	1.0000	Employed?
COUPCHLD	0.110119	0.313505	0.000000	1.0000	Couple w/Child?
OTHNOKD	0.035714	0.185854	0.000000	1.0000	Other no Children
AZDUMM	0.029762	0.170183	0.000000	1.0000	Arizona
FLDUMM	0.044643	0.206826	0.000000	1.0000	Florida
IDDUMM	0.023810	0.152683	0.000000	1.0000	Idaho
INDUMM	0.080357	0.272251	0.000000	1.0000	Indiana
MDDUMM	0.056548	0.231321	0.000000	1.0000	Maryland
MNDUMM	0.056548	0.231321	0.000000	1.0000	Minnesota
NEDUMM	0.047619	0.213276	0.000000	1.0000	Nebraska
NYDUMM	0.059524	0.236955	0.000000	1.0000	Rochester NY
OHDUMM	0.023810	0.152683	0.000000	1.0000	Ohio
LAOKDUMM	0.083333	0.276798	0.000000	1.0000	Louisiana or Oklahoma
WAORDUMM	0.044643	0.206826	0.000000	1.0000	Washington or Oregon
PADUMM	0.098214	0.298048	0.000000	1.0000	Pennsylvania
TNGADUMM	0.107143	0.309756	0.000000	1.0000	Tennessee or Georgia
TXDUMM	0.020833	0.143039	0.000000	1.0000	Texas
WIDUMM	0.107143	0.309756	0.000000	1.0000	Wisconsin
SHARER	0.068452	0.252897	0.000000	1.0000	Does Enrollee Share?
PREFHOME	0.348214	0.477115	0.000000	1.0000	Prefer Home?
UNTRAT	0.723324	0.252105	0.000000	1.2849	FULLGROSS/FMR
PPBB	1.431548	1.117601	0.000000	5.0000	PPBEDOK * BEDROOMS
PPBNOK	0.782738	1.357280	0.000000	7.0000	BR Required if PP BR Not Ok
FAMILIAR	0.877976	0.327801	0.000000	1.0000	LL Heard of S8?
UNTRATH	0.051333	0.262575	0.000000	2.2616	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.446429	0.497863	0.000000	1.0000	Prefer Neighborhood?
PPBEDOK	0.723214	0.448077	0.000000	1.0000	Pre-Program BR Ok?
NOCARE	0.139881	0.347381	0.000000	1.0000	No Child Care Avail When Needed?
FMRINC	1.015592	0.563381	0.000000	5.6080	FMR/INC
ACCCAR	0.779762	0.415025	0.000000	1.0000	Have Access to Car?
MOVE3YRS	2.084283	5.394760	0.100000	96.0000	Average Moves Per 3 Years
BADCREDT	0.395833	0.489758	0.000000	1.0000	BAD CREDIT
BADREFS	0.092262	0.289827	0.000000	1.0000	BAD LANDLORD REFERENCES
DRUGS	0.044643	0.206826	0.000000	1.0000	DRUG ARREST
EDUCLT12	0.282738	0.451002	0.000000	1.0000	(1) if educ < 12 yrs
VOUCHER	0.342262	0.475174	0.000000	1.0000	(1) if voucher, else certif
UNDPROG	0.684524	0.465398	0.000000	1.0000	Understand PGM?
WANTHQ	0.479167	0.500311	0.000000	1.0000	Want Better Housing?
WANTLC	0.815476	0.388489	0.000000	1.0000	Want Lower Cost?

Criteria for Assessing Model Fit

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	409.404	400.994	.
SC	413.222	565.130	.
-2 LOG L	407.404	314.994	92.411 with 42 DF (p=0.0001)
Score	.	.	79.949 with 42 DF (p=0.0004)

Analysis of Maximum Likelihood Estimates

Variable	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Variable Label
INTERCPT	-2.6365	1.5098	3.0495	0.0808	.	Intercept
MINORITY	-0.8855	0.3730	5.6355	0.0176	-0.242716	Minority?
OLD	0.5876	0.9024	0.4240	0.5150	0.081929	Old?
HANDIC	0.1492	0.5368	0.0773	0.7810	0.027795	Handicapped?
WRKING	-0.3034	0.3449	0.7739	0.3790	-0.076372	Employed?
COUPCHLD	0.1119	0.4934	0.0514	0.8206	0.019343	Couple w/Child?
OTHNOKD	0.9937	0.8358	1.4134	0.2345	0.101820	Other no Children
AZDUMM	-0.8669	0.9338	0.8618	0.3532	-0.081334	Arizona
FLDUMM	-0.0992	0.7892	0.0158	0.9000	-0.011309	Florida
IDDUMM	2.2273	1.5428	2.0843	0.1488	0.187494	Idaho
INDUMM	2.2221	0.8043	7.6319	0.0057	0.333531	Indiana
MDDUMM	-0.1006	0.7283	0.0191	0.8901	-0.012830	Maryland
MNDUMM	0.8646	0.7638	1.2813	0.2577	0.110269	Minnesota
NEDUMM	0.0539	0.7687	0.0049	0.9441	0.006334	Nebraska
NYDUMM	1.7204	0.8460	4.1355	0.0420	0.224747	Rochester NY
OHDUMM	0.1260	1.1062	0.0130	0.9093	0.010609	Ohio
LAOKDUMM	0.5417	0.6709	0.6519	0.4194	0.082666	Louisiana or Oklahoma
WAORDUMM	1.4304	1.1831	1.4617	0.2267	0.163110	Washington or Oregon
PADUMM	0.1781	0.6306	0.0798	0.7776	0.029264	Pennsylvania
TNGADUMM	0.4960	0.5921	0.7016	0.4022	0.084705	Tennessee or Georgia
TXDUMM	0.1186	0.9577	0.0153	0.9014	0.009353	Texas
WIDUMM	1.5811	0.7053	5.0248	0.0250	0.270017	Wisconsin
SHARER	-1.2504	0.6350	3.8781	0.0489	-0.174347	Does Enrollee Share?
PREFHOME	1.5136	0.4187	13.0674	0.0003	0.398153	Prefer Home?
UNTRAT	1.9874	0.7975	6.2099	0.0127	0.276236	FULLGROSS/FMR
PPBB	0.2204	0.2814	0.6136	0.4334	0.135814	PPBEDOK * BEDROOMS
PPBNOK	0.3075	0.3635	0.7156	0.3976	0.230075	BR Required if PP BR Not Ok
FAMILIAR	1.0693	0.4552	5.5182	0.0188	0.193254	LL Heard of S8?
UNTRATH	1.3296	0.8654	2.3603	0.1245	0.192481	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.0975	0.3496	0.0778	0.7803	0.026771	Prefer Neighborhood?
PPBEDOK	0.0235	1.1846	0.0004	0.9842	0.005808	Pre-Program BR Ok?
NOCARE	0.5693	0.4933	1.3318	0.2485	0.109036	No Child Care Avail When Needed?
FMRINC	0.1868	0.3422	0.2980	0.5851	0.058018	FMR/INC
ACCCAR	-0.5045	0.3847	1.7193	0.1898	-0.115437	Have Access to Car?
MOVE3YRS	0.00373	0.0492	0.0058	0.9395	0.011095	Average Moves Per 3 Years
BADCREDT	0.4499	0.3175	2.0085	0.1564	0.121482	BAD CREDIT
BADREFS	-0.2955	0.5300	0.3109	0.5771	-0.047223	BAD LANDLORD REFERENCES
DRUGS	0.5431	0.8861	0.3757	0.5399	0.061934	DRUG ARREST
EDUCLT12	0.5736	0.3519	2.6568	0.1031	0.142614	(1) if educ < 12 yrs
VOUCHER	-0.5332	0.4113	1.6803	0.1949	-0.139686	(1) if voucher, else certif
UNDPROG	0.0601	0.3300	0.0332	0.8554	0.015432	Understand PGM?
WANTHQ	0.0217	0.3250	0.0045	0.9467	0.005992	Want Better Housing?
WANTLC	0.0566	0.3716	0.0232	0.8789	0.012128	Want Lower Cost?

Association of Predicted Probabilities and Observed Responses

Concordant	= 80.7%	Somers' D	= 0.616
Discordant	= 19.1%	Gamma	= 0.618
Tied	= 0.2%	Tau-a	= 0.257
(23463 pairs)		c	= 0.808

The LOGISTIC Procedure

Data Set: WORK.NONNY
Response Variable: HAVEINSP
Response Levels: 2
Number of Observations: 237
Link Function: Logit

Response Profile

Ordered Value	HAVEINSP	Count
1	1	152
2	2	85

WARNING: 11 observation(s) were deleted due to missing values for the response or explanatory variables.

Simple Statistics for Explanatory Variables

Variable	Mean	Standard Deviation	Minimum	Maximum	Variable Label
MINORITY	0.502110	0.501054	0.000000	1.0000	Minority?
OLD	0.080169	0.272129	0.000000	1.0000	Old?
HANDIC	0.139241	0.346930	0.000000	1.0000	Handicapped?
WRKING	0.253165	0.435745	0.000000	1.0000	Employed?
COUPCHLD	0.109705	0.313183	0.000000	1.0000	Couple w/Child?
OTHNOKD	0.037975	0.191540	0.000000	1.0000	Other no Children
AZDUMM	0.025316	0.157417	0.000000	1.0000	Arizona
FLDUMM	0.033755	0.180981	0.000000	1.0000	Florida
IDDUMM	0.029536	0.169661	0.000000	1.0000	Idaho
INDUMM	0.101266	0.302319	0.000000	1.0000	Indiana
MDDUMM	0.042194	0.201457	0.000000	1.0000	Maryland
MNDUMM	0.063291	0.244001	0.000000	1.0000	Minnesota
NEDUMM	0.042194	0.201457	0.000000	1.0000	Nebraska
NYDUMM	0.071730	0.258586	0.000000	1.0000	Rochester NY
OHDUMM	0.025316	0.157417	0.000000	1.0000	Ohio
LAOKDUMM	0.088608	0.284778	0.000000	1.0000	Louisiana or Oklahoma
WAORDUMM	0.059072	0.236258	0.000000	1.0000	Washington or Oregon
PADUMM	0.097046	0.296647	0.000000	1.0000	Pennsylvania
TNGADUMM	0.092827	0.290804	0.000000	1.0000	Tennessee or Georgia
TXDUMM	0.016878	0.129086	0.000000	1.0000	Texas
WIDUMM	0.118143	0.323461	0.000000	1.0000	Wisconsin
SHARER	0.046414	0.210824	0.000000	1.0000	Does Enrollee Share?
PREFHOME	0.430380	0.496177	0.000000	1.0000	Prefer Home?
UNTRAT	0.750760	0.231139	0.000000	1.2849	FULLGROSS/FMR
INCLE100	0.012658	0.112031	0.000000	1.0000	Income LE $100/Month?
PPBB	1.392405	1.132169	0.000000	4.0000	PPBEDOK * BEDROOMS
PPBNOK	0.822785	1.399995	0.000000	7.0000	BR Required if PP BR Not Ok
FAMILIAR	0.890295	0.313183	0.000000	1.0000	LL Heard of S8?
UNTRATH	0.050938	0.265178	0.000000	2.2616	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.502110	0.501054	0.000000	1.0000	Prefer Neighborhood?
PPBEDOK	0.713080	0.453281	0.000000	1.0000	Pre-Program BR Ok?
NOCARE	0.156118	0.363735	0.000000	1.0000	No Child Care Avail When Needed?
FMRINC	1.008662	0.568904	0.000000	5.6080	FMR/INC
ACCCAR	0.759494	0.428295	0.000000	1.0000	Have Access to Car?
MOVE3YRS	2.205411	6.330003	0.150000	96.0000	Average Moves Per 3 Years
BADCREDT	0.413502	0.493504	0.000000	1.0000	BAD CREDIT
BADREFS	0.092827	0.290804	0.000000	1.0000	BAD LANDLORD REFERENCES
DRUGS	0.050633	0.219711	0.000000	1.0000	DRUG ARREST
EDUCLT12	0.303797	0.460870	0.000000	1.0000	(1) if educ < 12 yrs
VOUCHER	0.341772	0.475307	0.000000	1.0000	(1) if voucher, else certif
UNDPROG	0.683544	0.466077	0.000000	1.0000	Understand PGM?
WANTHQ	0.459916	0.499445	0.000000	1.0000	Want Better Housing?
WANTLC	0.843882	0.363735	0.000000	1.0000	Want Lower Cost?

Criteria for Assessing Model Fit

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	311.350	312.026	.
SC	314.818	464.620	.
-2 LOG L	309.350	224.026	85.324 with 43 DF (p=0.0001)
Score	.	.	70.749 with 43 DF (p=0.0049)

Analysis of Maximum Likelihood Estimates

Variable	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Variable Label
INTERCPT	-0.8794	1.8095	0.2362	0.6270	.	Intercept
MINORITY	-0.1391	0.4379	0.1009	0.7508	-0.038421	Minority?
OLD	-0.3521	0.9356	0.1416	0.7066	-0.052831	Old?
HANDIC	0.9336	0.7092	1.7326	0.1881	0.178568	Handicapped?
WRKING	0.1684	0.4427	0.1447	0.7036	0.040457	Employed?
COUPCHLD	0.6915	0.6714	1.0608	0.3030	0.119396	Couple w/Child?
OTHNOKD	2.2477	1.1454	3.8508	0.0497	0.237365	Other no Children
AZDUMM	-0.3569	1.1656	0.0938	0.7594	-0.030979	Arizona
FLDUMM	-1.3323	1.1647	1.3085	0.2527	-0.132938	Florida
IDDUMM	-1.9991	1.4343	1.9427	0.1634	-0.186993	Idaho
INDUMM	0.2177	0.8500	0.0656	0.7979	0.036280	Indiana
MDDUMM	-1.0589	1.1014	0.9244	0.3363	-0.117613	Maryland
MNDUMM	-0.9759	0.9403	1.0771	0.2993	-0.131281	Minnesota
NEDUMM	1.1058	1.3482	0.6727	0.4121	0.122815	Nebraska
NYDUMM	-0.3280	0.9495	0.1193	0.7298	-0.046759	Rochester NY
OHDUMM	-0.3123	1.5955	0.0383	0.8448	-0.027102	Ohio
LAOKDUMM	-1.2228	0.8821	1.9213	0.1657	-0.191980	Louisiana or Oklahoma
WAORDUMM	0.9892	1.0684	0.8571	0.3545	0.128843	Washington or Oregon
PADUMM	-0.4846	0.8678	0.3118	0.5766	-0.079252	Pennsylvania
TNGADUMM	-0.5327	0.8244	0.4175	0.5182	-0.085408	Tennessee or Georgia
TXDUMM	-0.7629	1.2969	0.3461	0.5563	-0.054297	Texas
WIDUMM	0.6668	0.9826	0.4604	0.4974	0.118906	Wisconsin
SHARER	-2.8141	1.0276	7.4999	0.0062	-0.327089	Does Enrollee Share?
PREFHOME	1.9932	0.4987	15.9770	0.0001	0.545252	Prefer Home?
UNTRAT	1.3972	1.1571	1.4580	0.2272	0.178054	FULLGROSS/FMR
INCLE100	-3.0824	1.9268	2.5591	0.1097	-0.190386	Income LE $100/Month?
PPBB	-0.1121	0.3393	0.1092	0.7410	-0.070001	PPBEDOK * BEDROOMS
PPBNOK	-0.00931	0.3447	0.0007	0.9785	-0.007182	BR Required if PP BR Not Ok
FAMILIAR	-0.1556	0.6158	0.0638	0.8005	-0.026867	LL Heard of S8?
UNTRATH	2.1720	1.1801	3.3872	0.0657	0.317543	FULLGROSS/FMR (Adjusted)
PREFNEIG	-0.3791	0.4365	0.7543	0.3851	-0.104719	Prefer Neighborhood?
PPBEDOK	0.6133	1.2506	0.2405	0.6239	0.153258	Pre-Program BR Ok?
NOCARE	-0.6615	0.5079	1.6961	0.1928	-0.132659	No Child Care Avail When Needed?
FMRINC	-0.00510	0.3584	0.0002	0.9886	-0.001600	FMR/INC
ACCCAR	0.0239	0.4444	0.0029	0.9571	0.005652	Have Access to Car?
MOVE3YRS	-0.0227	0.0520	0.1914	0.6618	-0.079372	Average Moves Per 3 Years
BADCREDT	0.5487	0.4031	1.8528	0.1735	0.149297	BAD CREDIT
BADREFS	1.3282	0.7274	3.3338	0.0679	0.212948	BAD LANDLORD REFERENCES
DRUGS	-1.2898	0.9168	1.9794	0.1595	-0.156240	DRUG ARREST
EDUCLT12	-0.6340	0.4094	2.3985	0.1215	-0.161099	(1) if educ < 12 yrs
VOUCHER	0.5610	0.5252	1.1411	0.2854	0.147012	(1) if voucher, else certif
UNDPROG	0.2298	0.3988	0.3323	0.5643	0.059062	Understand PGM?
WANTHQ	-0.3762	0.3954	0.9051	0.3414	-0.103586	Want Better Housing?
WANTLC	-0.1320	0.4994	0.0698	0.7916	-0.026466	Want Lower Cost?

Association of Predicted Probabilities and Observed Responses

Concordant = 83.5%	Somers' D = 0.672
Discordant = 16.3%	Gamma = 0.673
Tied = 0.1%	Tau-a = 0.310
(12920 pairs)	c = 0.836

The LOGISTIC Procedure

Data Set: WORK.NONNY
Response Variable: SUCCESS
Response Levels: 2
Number of Observations: 237
Link Function: Logit

Response Profile

Ordered Value	SUCCESS	Count
1	1	117
2	2	120

WARNING: 11 observation(s) were deleted due to missing values for the response or explanatory variables.

Simple Statistics for Explanatory Variables

Variable	Mean	Standard Deviation	Minimum	Maximum	Variable Label
MINORITY	0.502110	0.501054	0.000000	1.0000	Minority?
OLD	0.080169	0.272129	0.000000	1.0000	Old?
HANDIC	0.139241	0.346930	0.000000	1.0000	Handicapped?
WRKING	0.253165	0.435745	0.000000	1.0000	Employed?
COUPCHLD	0.109705	0.313183	0.000000	1.0000	Couple w/Child?
OTHNOKD	0.037975	0.191540	0.000000	1.0000	Other no Children
AZDUMM	0.025316	0.157417	0.000000	1.0000	Arizona
FLDUMM	0.033755	0.180981	0.000000	1.0000	Florida
IDDUMM	0.029536	0.169661	0.000000	1.0000	Idaho
INDUMM	0.101266	0.302319	0.000000	1.0000	Indiana
MDDUMM	0.042194	0.201457	0.000000	1.0000	Maryland
MNDUMM	0.063291	0.244001	0.000000	1.0000	Minnesota
NEDUMM	0.042194	0.201457	0.000000	1.0000	Nebraska
NYDUMM	0.071730	0.258586	0.000000	1.0000	Rochester NY
OHDUMM	0.025316	0.157417	0.000000	1.0000	Ohio
LAOKDUMM	0.088608	0.284778	0.000000	1.0000	Louisiana or Oklahoma
WAORDUMM	0.059072	0.236258	0.000000	1.0000	Washington or Oregon
PADUMM	0.097046	0.296647	0.000000	1.0000	Pennsylvania
TNGADUMM	0.092827	0.290804	0.000000	1.0000	Tennessee or Georgia
TXDUMM	0.016878	0.129086	0.000000	1.0000	Texas
WIDUMM	0.118143	0.323461	0.000000	1.0000	Wisconsin
SHARER	0.046414	0.210824	0.000000	1.0000	Does Enrollee Share?
PREFHOME	0.430380	0.496177	0.000000	1.0000	Prefer Home?
UNTRAT	0.750760	0.231139	0.000000	1.2849	FULLGROSS/FMR
INCLE100	0.012658	0.112031	0.000000	1.0000	Income LE $100/Month?
PPBB	1.392405	1.132169	0.000000	4.0000	PPBEDOK * BEDROOMS
PPBNOK	0.822785	1.399995	0.000000	7.0000	BR Required if PP BR Not Ok
FAMILIAR	0.890295	0.313183	0.000000	1.0000	LL Heard of SB?
UNTRATH	0.050938	0.265178	0.000000	2.2616	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.502110	0.501054	0.000000	1.0000	Prefer Neighborhood?
PPBEDOK	0.713080	0.453281	0.000000	1.0000	Pre-Program BR Ok?
NOCARE	0.156118	0.363735	0.000000	1.0000	No Child Care Avail When Needed?
FMRINC	1.008662	0.568904	0.000000	5.6080	FMR/INC
ACCCAR	0.759494	0.428295	0.000000	1.0000	Have Access to Car?
MOVE3YRS	2.205411	6.330003	0.150000	96.0000	Average Moves Per 3 Years
BADCREDT	0.413502	0.493504	0.000000	1.0000	BAD CREDIT
BADREFS	0.092827	0.290804	0.000000	1.0000	BAD LANDLORD REFERENCES
DRUGS	0.050633	0.219711	0.000000	1.0000	DRUG ARREST
EDUCLT12	0.303797	0.460870	0.000000	1.0000	(1) if educ < 12 yrs
VOUCHER	0.341772	0.475307	0.000000	1.0000	(1) if voucher, else certif
UNDPROG	0.683544	0.466077	0.000000	1.0000	Understand PGM?
WANTHQ	0.459916	0.499445	0.000000	1.0000	Want Better Housing?
WANTLC	0.843882	0.363735	0.000000	1.0000	Want Lower Cost?

Criteria for Assessing Model Fit

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	330.514	308.749	.
SC	333.982	461.344	.
-2 LOG L	328.514	220.749	107.764 with 43 DF (p=0.0001)
Score	.	.	89.291 with 43 DF (p=0.0001)

Analysis of Maximum Likelihood Estimates

Variable	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Variable Label
INTERCPT	-3.1576	1.8317	2.9719	0.0847	.	Intercept
MINORITY	-0.1644	0.4609	0.1273	0.7212	-0.045427	Minority?
OLD	0.2516	0.9333	0.0727	0.7875	0.037752	Old?
HANDIC	0.5077	0.6614	0.5891	0.4428	0.097100	Handicapped?
WRKING	-0.4495	0.4812	0.8726	0.3502	-0.107987	Employed?
COUPCHLD	-0.6512	0.6484	1.0089	0.3152	-0.112446	Couple w/Child?
OTHNOKD	1.5416	1.0825	2.0281	0.1544	0.162791	Other no Children
AZDUMM	-2.0476	1.3516	2.2950	0.1298	-0.177709	Arizona
FLDUMM	-2.2283	1.2511	3.1722	0.0749	-0.222344	Florida
IDDUMM	-2.2815	1.4116	2.6121	0.1060	-0.213409	Idaho
INDUMM	-1.4905	0.9520	2.4511	0.1174	-0.248431	Indiana
MDDUMM	-1.4197	1.1216	1.6024	0.2056	-0.157689	Maryland
MNDUMM	-1.9307	1.0187	3.5916	0.0581	-0.259726	Minnesota
NEDUMM	-2.5444	1.1016	5.3351	0.0209	-0.282604	Nebraska
NYDUMM	-1.9898	1.0127	3.8609	0.0494	-0.283681	Rochester NY
OHDUMM	-2.7847	1.3787	4.0795	0.0434	-0.241676	Ohio
LAOKDUMM	-1.7201	0.9245	3.4615	0.0628	-0.270072	Louisiana or Oklahoma
WAORDUMM	0.5958	1.1199	0.2831	0.5947	0.077608	Washington or Oregon
PADUMM	-1.8600	0.8983	4.2875	0.0384	-0.304211	Pennsylvania
TNGADUMM	-1.5809	0.8798	3.2287	0.0724	-0.253469	Tennessee or Georgia
TXDUMM	-1.5287	1.3846	1.2189	0.2696	-0.108792	Texas
WIDUMM	-1.6480	0.9769	2.8458	0.0916	-0.293901	Wisconsin
SHARER	-3.2944	1.1473	8.2455	0.0041	-0.382916	Does Enrollee Share?
PREFHOME	1.9935	0.4662	18.2827	0.0001	0.545340	Prefer Home?
UNTRAT	2.0763	1.1403	3.3154	0.0686	0.264594	FULLGROSS/FMR
INCLE100	-2.6922	1.6476	2.6700	0.1023	-0.166284	Income LE $100/Month?
PPBB	0.0961	0.3247	0.0876	0.7673	0.059983	PPBEDOK * BEDROOMS
PPBNOK	0.5197	0.3768	1.9019	0.1679	0.401105	BR Required if PP BR Not Ok
FAMILIAR	0.7918	0.6314	1.5729	0.2098	0.136722	LL Heard of S8?
UNTRATH	2.0459	1.1130	3.3790	0.0660	0.299106	FULLGROSS/FMR (Adjusted)
PREFNEIG	-0.6388	0.4528	1.9901	0.1583	-0.176471	Prefer Neighborhood?
PPBEDOK	2.3837	1.3509	3.1135	0.0776	0.595715	Pre-Program BR Ok?
NOCARE	-0.4316	0.5259	0.6735	0.4118	-0.086554	No Child Care Avail When Needed?
FMRINC	-0.1240	0.3633	0.1164	0.7329	-0.038887	FMR/INC
ACCCAR	0.0426	0.4560	0.0087	0.9256	0.010058	Have Access to Car?
MOVE3YRS	0.000888	0.0549	0.0003	0.9871	0.003100	Average Moves Per 3 Years
BADCREDT	0.0372	0.4029	0.0085	0.9265	0.010114	BAD CREDIT
BADREFS	1.4978	0.7013	4.5610	0.0327	0.240140	BAD LANDLORD REFERENCES
DRUGS	-1.9404	1.0739	3.2645	0.0708	-0.235048	DRUG ARREST
EDUCLT12	-0.4754	0.4197	1.2831	0.2573	-0.120796	(1) if educ < 12 yrs
VOUCHER	0.7606	0.5480	1.9263	0.1652	0.199318	(1) if voucher, else certif
UNDPROG	0.5246	0.3999	1.7206	0.1896	0.134806	Understand PGM?
WANTHQ	-0.9387	0.4059	5.3469	0.0208	-0.258475	Want Better Housing?
WANTLC	-0.2197	0.5092	0.1862	0.6661	-0.044064	Want Lower Cost?

Association of Predicted Probabilities and Observed Responses

Concordant = 85.5%	Somers' D = 0.711
Discordant = 14.4%	Gamma = 0.712
Tied = 0.1%	Tau-a = 0.357
(14040 pairs)	c = 0.856

The LOGISTIC Procedure

Data Set: WORK.NONNY
Response Variable: SUCCESS
Response Levels: 2
Number of Observations: 1050
Link Function: Logit

Response Profile

Ordered Value	SUCCESS	Count
1	1	645
2	2	405

WARNING: 40 observation(s) were deleted due to missing values for the response or explanatory variables.

Simple Statistics for Explanatory Variables

Variable	Mean	Standard Deviation	Minimum	Maximum	Variable Label
MINORITY	0.570476	0.495244	0.000000	1.0000	Minority?
OLD	0.057143	0.232226	0.000000	1.0000	Old?
HANDIC	0.156190	0.363209	0.000000	1.0000	Handicapped?
WRKING	0.259048	0.438321	0.000000	1.0000	Employed?
COUPCHLD	0.099048	0.298868	0.000000	1.0000	Couple w/Child?
OTHNOKD	0.038095	0.191517	0.000000	1.0000	Other no Children
AZDUMM	0.033333	0.179591	0.000000	1.0000	Arizona
FLDUMM	0.049524	0.217062	0.000000	1.0000	Florida
IDDUMM	0.037143	0.189202	0.000000	1.0000	Idaho
INDUMM	0.064762	0.246223	0.000000	1.0000	Indiana
MDDUMM	0.074286	0.262360	0.000000	1.0000	Maryland
MNDUMM	0.064762	0.246223	0.000000	1.0000	Minnesota
NEDUMM	0.040000	0.196053	0.000000	1.0000	Nebraska
NYDUMM	0.033333	0.179591	0.000000	1.0000	Rochester NY
OHDUMM	0.036190	0.186853	0.000000	1.0000	Ohio
LAOKDUMM	0.110476	0.313632	0.000000	1.0000	Louisiana or Oklahoma
WAORDUMM	0.093333	0.291038	0.000000	1.0000	Washington or Oregon
PADUMM	0.074286	0.262360	0.000000	1.0000	Pennsylvania
TNGADUMM	0.100952	0.301409	0.000000	1.0000	Tennessee or Georgia
TXDUMM	0.029524	0.169350	0.000000	1.0000	Texas
WIDUMM	0.045714	0.208964	0.000000	1.0000	Wisconsin
SHARER	0.246667	0.431276	0.000000	1.0000	Does Enrollee Share?
HOMELSS	0.171429	0.377063	0.000000	1.0000	Is Enrollee Homeless?
PREFHOME	0.251429	0.434041	0.000000	1.0000	Prefer Home?
UNTRAT	0.498340	0.370603	0.000000	1.3586	FULLGROSS/FMR
INCLE100	0.025714	0.158357	0.000000	1.0000	Income LE $100/Month?
PPBB	0.974286	1.111645	0.000000	5.0000	PPBEDOK * BEDROOMS
PPBNOK	1.104762	1.277687	0.000000	7.0000	BR Required if PP BR Not Ok
UNTRATH	0.032518	0.214886	0.000000	2.4264	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.379048	0.485381	0.000000	1.0000	Prefer Neighborhood?
PPBEDOK	0.506667	0.500194	0.000000	1.0000	Pre-Program BR Ok?
NOCARE	0.118095	0.322875	0.000000	1.0000	No Child Care Avail When Needed?
FMRINC	1.230238	0.777037	0.000000	7.8713	FMR/INC
ACCCAR	0.793333	0.405107	0.000000	1.0000	Have Access to Car?
MOVE3YRS	2.074643	3.533094	0.100000	96.0000	Average Moves Per 3 Years
BADCREDT	0.366667	0.482124	0.000000	1.0000	BAD CREDIT
BADREFS	0.122857	0.328430	0.000000	1.0000	BAD LANDLORD REFERENCES
DRUGS	0.060952	0.239357	0.000000	1.0000	DRUG ARREST
EDUCLT12	0.298095	0.457640	0.000000	1.0000	(1) if educ < 12 yrs
VOUCHER	0.271429	0.444909	0.000000	1.0000	(1) if voucher, else certif
UNDPROG	0.702857	0.457218	0.000000	1.0000	Understand PGM?
WANTHQ	0.501905	0.500235	0.000000	1.0000	Want Better Housing?
WANTLC	0.720952	0.448745	0.000000	1.0000	Want Lower Cost?

The LOGISTIC Procedure

Criteria for Assessing Model Fit

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	1402.264	1051.614	.
SC	1407.221	1269.702	.
-2 LOG L	1400.264	963.614	436.650 with 43 DF (p=0.0001)
Score	.	.	377.151 with 43 DF (p=0.0001)

Analysis of Maximum Likelihood Estimates

Variable	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Variable Label
INTERCPT	1.3087	0.6533	4.0126	0.0452	.	Intercept
MINORITY	0.2900	0.1939	2.2377	0.1347	0.079184	Minority?
OLD	-1.1365	0.4636	6.0098	0.0142	-0.145507	Old?
HANDIC	-0.7601	0.2779	7.4809	0.0062	-0.152207	Handicapped?
WRKING	-0.2859	0.2042	1.9606	0.1614	-0.069089	Employed?
COUPCHLD	-0.2450	0.2703	0.8216	0.3647	-0.040367	Couple w/Child?
OTHNOKD	-0.8817	0.5024	3.0798	0.0793	-0.093102	Other no Children
AZDUMM	0.3488	0.6456	0.2918	0.5890	0.034531	Arizona
FLDUMM	0.0314	0.4923	0.0041	0.9492	0.003755	Florida
IDDUMM	-0.7838	0.5290	2.1954	0.1384	-0.081765	Idaho
INDUMM	-0.4657	0.4233	1.2106	0.2712	-0.063220	Indiana
MDDUMM	-0.4118	0.4060	1.0286	0.3105	-0.059568	Maryland
MNDUMM	-0.6039	0.4181	2.0864	0.1486	-0.081978	Minnesota
NEDUMM	-0.1729	0.4917	0.1237	0.7251	-0.018689	Nebraska
NYDUMM	-1.9569	0.5204	14.1379	0.0002	-0.193759	Rochester NY
OHDUMM	-0.5702	0.5390	1.1193	0.2901	-0.058742	Ohio
LAOKDUMM	-1.2736	0.3581	12.6525	0.0004	-0.220230	Louisiana or Oklahoma
WAORDUMM	-1.4178	0.4053	12.2340	0.0005	-0.227490	Washington or Oregon
PADUMM	-0.7748	0.3907	3.9323	0.0474	-0.112078	Pennsylvania
TNGADUMM	-0.6470	0.3801	2.8982	0.0887	-0.107521	Tennessee or Georgia
TXDUMM	-1.1615	0.5461	4.5236	0.0334	-0.108442	Texas
WIDUMM	-1.2039	0.4666	6.6569	0.0099	-0.138699	Wisconsin
SHARER	1.0602	0.2497	18.0275	0.0001	0.252079	Does Enrollee Share?
HOMELSS	0.6896	0.3240	4.5304	0.0333	0.143356	Is Enrollee Homeless?
PREFHOME	-1.9838	0.2213	80.3452	0.0001	-0.474711	Prefer Home?
UNTRAT	0.5605	0.2981	3.5354	0.0601	0.114520	FULLGROSS/FMR
INCLE100	1.5471	0.7206	4.6093	0.0318	0.135069	Income LE $100/Month?
PPBB	-0.3696	0.1740	4.5111	0.0337	-0.226535	PPBEDOK * BEDROOMS
PPBNOK	-0.4824	0.1635	8.7070	0.0032	-0.339806	BR Required if PP BR Not Ok
UNTRATH	-0.1030	0.4435	0.0539	0.8163	-0.012203	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.0356	0.1910	0.0349	0.8519	0.009540	Prefer Neighborhood?
PPBEDOK	-1.0014	0.5288	3.5868	0.0582	-0.276168	Pre-Program BR Ok?
NOCARE	0.3099	0.2690	1.3266	0.2494	0.055163	No Child Care Avail When Needed?
FMRINC	0.3664	0.1498	5.9853	0.0144	0.156985	FMR/INC
ACCCAR	0.4487	0.2089	4.6146	0.0317	0.100209	Have Access to Car?
MOVE3YRS	0.0165	0.0201	0.6739	0.4117	0.032169	Average Moves Per 3 Years
BADCREDT	0.1947	0.1786	1.1884	0.2756	0.051758	BAD CREDIT
BADREFS	0.0966	0.2642	0.1338	0.7145	0.017500	BAD LANDLORD REFERENCES
DRUGS	0.3756	0.3637	1.0664	0.3017	0.049570	DRUG ARREST
EDUCLT12	-0.0474	0.1837	0.0665	0.7965	-0.011949	(1) if educ < 12 yrs
VOUCHER	-0.0172	0.2209	0.0060	0.9381	-0.004208	(1) if voucher, else certif
UNDPROG	0.0561	0.1819	0.0951	0.7578	0.014143	Understand PGM?
WANTHQ	0.8321	0.1730	23.1274	0.0001	0.229484	Want Better Housing?
WANTLC	-0.0662	0.1892	0.1225	0.7263	-0.016379	Want Lower Cost?

Association of Predicted Probabilities and Observed Responses

Concordant = 84.7%	Somers' D = 0.695
Discordant = 15.2%	Gamma = 0.696
Tied = 0.1%	Tau-a = 0.330
(261225 pairs)	c = 0.847

The LOGISTIC Procedure

Data Set: WORK.NONNY
Response Variable: SUCCESS
Response Levels: 2
Number of Observations: 7943
Link Function: Logit

Response Profile

Ordered Value	SUCCESS	Count
1	1	645
2	2	7298

WARNING: 298 observation(s) were deleted due to missing values for the response or explanatory variables.

Simple Statistics for Explanatory Variables

Variable	Mean	Standard Deviation	Minimum	Maximum	Variable Label
MINORITY	0.625330	0.484068	0.000000	1.0000	Minority?
OLD	0.023795	0.152418	0.000000	1.0000	Old?
HANDIC	0.104998	0.306570	0.000000	1.0000	Handicapped?
WRKING	0.236183	0.424763	0.000000	1.0000	Employed?
COUPCHLD	0.100466	0.300639	0.000000	1.0000	Couple w/Child?
OTHNOKD	0.042805	0.202430	0.000000	1.0000	Other no Children
FLDUMM	0.055395	0.228763	0.000000	1.0000	Florida
IDDUMM	0.022032	0.146797	0.000000	1.0000	Idaho
INDUMM	0.054136	0.226300	0.000000	1.0000	Indiana
MDDUMM	0.047337	0.212373	0.000000	1.0000	Maryland
MNDUMM	0.046078	0.209668	0.000000	1.0000	Minnesota
NEDUMM	0.047967	0.213709	0.000000	1.0000	Nebraska
NYDUMM	0.058416	0.234544	0.000000	1.0000	Rochester NY
OHDUMM	0.033615	0.180246	0.000000	1.0000	Ohio
LAOKDUMM	0.105628	0.307380	0.000000	1.0000	Louisiana or Oklahoma
WAORDUMM	0.120987	0.326133	0.000000	1.0000	Washington or Oregon
PADUMM	0.070251	0.255585	0.000000	1.0000	Pennsylvania
TNGADUMM	0.101725	0.302305	0.000000	1.0000	Tennessee or Georgia
TXDUMM	0.024298	0.153983	0.000000	1.0000	Texas
WIDUMM	0.053254	0.224555	0.000000	1.0000	Wisconsin
SHARER	0.280624	0.449333	0.000000	1.0000	Does Enrollee Share?
HOMELSS	0.229007	0.420220	0.000000	1.0000	Is Enrollee Homeless?
PREFHOME	0.102354	0.303133	0.000000	1.0000	Prefer Home?
UNTRAT	0.475622	0.389858	0.000000	1.3237	FULLGROSS/FMR
INCLE100	0.043686	0.204409	0.000000	1.0000	Income LE $100/Month?
PPBB	0.867053	1.105924	0.000000	5.0000	PPBEDOK * BEDROOMS
PPBNOK	1.300768	1.285805	0.000000	5.0000	BR Required if PP BR Not Ok
UNTRATH	0.025964	0.177779	0.000000	2.0491	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.271182	0.444598	0.000000	1.0000	Prefer Neighborhood?
PPBEDOK	0.433338	0.495567	0.000000	1.0000	Pre-Program BR Ok?
NOCARE	0.160896	0.367458	0.000000	1.0000	No Child Care Avail When Needed?
FMRINC	1.267698	0.762834	0.000000	7.8713	FMR/INC
ACCCAR	0.796676	0.402497	0.000000	1.0000	Have Access to Car?
MOVE3YRS	2.239532	2.315846	0.100000	25.0000	Average Moves Per 3 Years
BADCREDT	0.398968	0.489717	0.000000	1.0000	BAD CREDIT
BADREFS	0.139242	0.346221	0.000000	1.0000	BAD LANDLORD REFERENCES
DRUGS	0.053003	0.224053	0.000000	1.0000	DRUG ARREST
EDUCLT12	0.234294	0.423584	0.000000	1.0000	(1) if educ < 12 yrs
VOUCHER	0.245121	0.430186	0.000000	1.0000	(1) if voucher, else certif
UNDPROG	0.679340	0.466760	0.000000	1.0000	Understand PGM?
WANTHQ	0.576357	0.494166	0.000000	1.0000	Want Better Housing?
WANTLC	0.687398	0.463583	0.000000	1.0000	Want Lower Cost?

The LOGISTIC Procedure

Criteria for Assessing Model Fit

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	4477.072	4393.937	.
SC	4484.052	4694.079	.
-2 LOG L	4475.072	4307.937	167.135 with 42 DF (p=0.0001)
Score	.	.	172.778 with 42 DF (p=0.0001)

Analysis of Maximum Likelihood Estimates

Variable	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Variable Label
INTERCPT	-1.9521	0.3391	33.1508	0.0001	.	Intercept
MINORITY	0.00335	0.1043	0.0010	0.9743	0.000895	Minority?
OLD	-0.1313	0.3080	0.1817	0.6699	-0.011031	Old?
HANDIC	0.0422	0.1578	0.0716	0.7890	0.007138	Handicapped?
WRKING	0.1328	0.1163	1.3026	0.2537	0.031090	Employed?
COUPCHLD	0.0322	0.1560	0.0426	0.8365	0.005336	Couple w/Child?
OTHNOKD	-0.2962	0.3597	0.6782	0.4102	-0.033060	Other no Children
FLDUMM	0.2263	0.2164	1.0936	0.2957	0.028537	Florida
IDDUMM	0.3758	0.2724	1.9044	0.1676	0.030419	Idaho
INDUMM	0.2399	0.2019	1.4121	0.2347	0.029937	Indiana
MDDUMM	0.4705	0.1926	5.9676	0.0146	0.055092	Maryland
MNDUMM	0.3483	0.2125	2.6854	0.1013	0.040261	Minnesota
NEDUMM	-0.2024	0.2516	0.6476	0.4210	-0.023852	Nebraska
NYDUMM	-1.3527	0.3268	17.1376	0.0001	-0.174919	Rochester NY
OHDUMM	0.0330	0.2890	0.0130	0.9091	0.003280	Ohio
LAOKDUMM	-0.1795	0.1842	0.9487	0.3300	-0.030412	Louisiana or Oklahoma
WAORDUMM	-0.7291	0.2155	11.4494	0.0007	-0.131089	Washington or Oregon
PADUMM	0.0231	0.1960	0.0139	0.9061	0.003258	Pennsylvania
TNGADUMM	0.2094	0.1776	1.3895	0.2385	0.034899	Tennessee or Georgia
TXDUMM	0.0750	0.2733	0.0753	0.7838	0.006365	Texas
WIDUMM	-0.5224	0.2761	3.5802	0.0585	-0.064674	Wisconsin
SHARER	0.1378	0.1125	1.5008	0.2206	0.034135	Does Enrollee Share?
HOMELSS	-0.0754	0.1613	0.2183	0.6403	-0.017458	Is Enrollee Homeless?
PREFHOME	-0.2641	0.1709	2.3880	0.1223	-0.044145	Prefer Home?
UNTRAT	-0.1146	0.1387	0.6822	0.4088	-0.024624	FULLGROSS/FMR
INCLE100	-0.7193	0.3856	3.4796	0.0621	-0.081060	Income LE $100/Month?
PPBB	-0.1348	0.1115	1.4621	0.2266	-0.082184	PPBEDOK * BEDROOMS
PPBNOK	-0.2909	0.0899	10.4839	0.0012	-0.206240	BR Required if PP BR Not Ok
UNTRATH	-0.0486	0.2604	0.0348	0.8521	-0.004761	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.2905	0.1097	7.0058	0.0081	0.071204	Prefer Neighborhood?
PPBEDOK	-0.6093	0.2805	4.7163	0.0299	-0.166463	Pre-Program BR Ok?
NOCARE	-0.3481	0.1341	6.7400	0.0094	-0.070520	No Child Care Avail When Needed?
FMRINC	0.0352	0.0670	0.2750	0.6000	0.014784	FMR/INC
ACCCAR	0.0331	0.1136	0.0849	0.7708	0.007344	Have Access to Car?
MOVE3YRS	0.0224	0.0201	1.2366	0.2661	0.028551	Average Moves Per 3 Years
BADCREDT	-0.0484	0.0970	0.2493	0.6176	-0.013078	BAD CREDIT
BADREFS	0.0714	0.1306	0.2990	0.5845	0.013628	BAD LANDLORD REFERENCES
DRUGS	0.3847	0.1758	4.7896	0.0286	0.047515	DRUG ARREST
EDUCLT12	0.4649	0.1010	21.1674	0.0001	0.108572	(1) if educ < 12 yrs
VOUCHER	0.0894	0.1228	0.5302	0.4665	0.021201	(1) if voucher, else certif
UNDPROG	0.0378	0.0980	0.1487	0.6998	0.009724	Understand PGM?
WANTHQ	0.1347	0.0949	2.0159	0.1557	0.036700	Want Better Housing?
WANTLC	-0.0439	0.0975	0.2025	0.6527	-0.011209	Want Lower Cost?

Association of Predicted Probabilities and Observed Responses

Concordant	= 64.5%	Somers' D	= 0.304
Discordant	= 34.1%	Gamma	= 0.309
Tied	= 1.5%	Tau-a	= 0.045
(4707210 pairs)		c	= 0.652

The LOGISTIC Procedure

Data Set: WORK.NONNY
Response Variable: WANT
Response Levels: 2
Number of Observations: 7943
Link Function: Logit

Response Profile

Ordered Value	WANT	Count
1	1	3045
2	2	4898

WARNING: 298 observation(s) were deleted due to missing values for the response or explanatory variables.

Simple Statistics for Explanatory Variables

Variable	Mean	Standard Deviation	Minimum	Maximum	Variable Label
MINORITY	0.625330	0.484068	0.000000	1.0000	Minority?
OLD	0.023795	0.152418	0.000000	1.0000	Old?
HANDIC	0.104998	0.306570	0.000000	1.0000	Handicapped?
WRKING	0.236183	0.424763	0.000000	1.0000	Employed?
COUPCHLD	0.100466	0.300639	0.000000	1.0000	Couple w/Child?
OTHNOKD	0.042805	0.202430	0.000000	1.0000	Other no Children
FLDUMM	0.055395	0.228763	0.000000	1.0000	Florida
IDDUMM	0.022032	0.146797	0.000000	1.0000	Idaho
INDUMM	0.054136	0.226300	0.000000	1.0000	Indiana
MDDUMM	0.047337	0.212373	0.000000	1.0000	Maryland
MNDUMM	0.046078	0.209668	0.000000	1.0000	Minnesota
NEDUMM	0.047967	0.213709	0.000000	1.0000	Nebraska
NYDUMM	0.058416	0.234544	0.000000	1.0000	Rochester NY
OHDUMM	0.033615	0.180246	0.000000	1.0000	Ohio
LAOKDUMM	0.105628	0.307380	0.000000	1.0000	Louisiana or Oklahoma
WAORDUMM	0.120987	0.326133	0.000000	1.0000	Washington or Oregon
PADUMM	0.070251	0.255585	0.000000	1.0000	Pennsylvania
TNGADUMM	0.101725	0.302305	0.000000	1.0000	Tennessee or Georgia
TXDUMM	0.024298	0.153983	0.000000	1.0000	Texas
WIDUMM	0.053254	0.224555	0.000000	1.0000	Wisconsin
SHARER	0.280624	0.449333	0.000000	1.0000	Does Enrollee Share?
HOMELSS	0.229007	0.420220	0.000000	1.0000	Is Enrollee Homeless?
PREFHOME	0.102354	0.303133	0.000000	1.0000	Prefer Home?
UNTRAT	0.475622	0.389858	0.000000	1.3237	FULLGROSS/FMR
INCLE100	0.043686	0.204409	0.000000	1.0000	Income LE $100/Month?
PPBB	0.867053	1.105924	0.000000	5.0000	PPBEDOK * BEDROOMS
PPBNOK	1.300768	1.285805	0.000000	5.0000	BR Required if PP BR Not Ok
UNTRATH	0.025964	0.177779	0.000000	2.0491	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.271182	0.444598	0.000000	1.0000	Prefer Neighborhood?
PPBEDOK	0.433338	0.495567	0.000000	1.0000	Pre-Program BR Ok?
NOCARE	0.160896	0.367458	0.000000	1.0000	No Child Care Avail When Needed?
FMRINC	1.267698	0.762834	0.000000	7.8713	FMR/INC
ACCCAR	0.796676	0.402497	0.000000	1.0000	Have Access to Car?
MOVE3YRS	2.239532	2.315846	0.100000	25.0000	Average Moves Per 3 Years
BADCREDT	0.398968	0.489717	0.000000	1.0000	BAD CREDIT
BADREFS	0.139242	0.346221	0.000000	1.0000	BAD LANDLORD REFERENCES
DRUGS	0.053003	0.224053	0.000000	1.0000	DRUG ARREST
EDUCLT12	0.234294	0.423584	0.000000	1.0000	(1) if educ < 12 yrs
VOUCHER	0.245121	0.430186	0.000000	1.0000	(1) if voucher, else certif
UNDPROG	0.679340	0.466760	0.000000	1.0000	Understand PGM?
WANTHQ	0.576357	0.494166	0.000000	1.0000	Want Better Housing?
WANTLC	0.687398	0.463583	0.000000	1.0000	Want Lower Cost?

The LOGISTIC Procedure

Criteria for Assessing Model Fit

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	10577.046	10000.611	.
SC	10584.026	10300.753	.
-2 LOG L	10575.046	9914.611	660.435 with 42 DF (p=0.0001)
Score	.	.	636.347 with 42 DF (p=0.0001)

Analysis of Maximum Likelihood Estimates

Variable	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Variable Label
INTERCPT	-0.9219	0.2028	20.6546	0.0001	.	Intercept
MINORITY	0.1948	0.0616	9.9884	0.0016	0.051978	Minority?
OLD	-1.1378	0.2102	29.2949	0.0001	-0.095612	Old?
HANDIC	-0.00395	0.1001	0.0016	0.9685	-0.000667	Handicapped?
WRKING	-0.00098	0.0676	0.0002	0.9884	-0.000230	Employed?
COUPCHLD	0.3406	0.0853	15.9507	0.0001	0.056452	Couple w/Child?
OTHNOKD	0.0483	0.2074	0.0542	0.8159	0.005390	Other no Children
FLDUMM	0.0890	0.1320	0.4549	0.5000	0.011227	Florida
IDDUMM	0.1494	0.1828	0.6676	0.4139	0.012088	Idaho
INDUMM	-0.7750	0.1389	31.1176	0.0001	-0.096693	Indiana
MDDUMM	0.6121	0.1286	22.6468	0.0001	0.071668	Maryland
MNDUMM	-0.1646	0.1369	1.4449	0.2294	-0.019022	Minnesota
NEDUMM	0.4952	0.1379	12.9011	0.0003	0.058343	Nebraska
NYDUMM	-0.8233	0.1456	31.9626	0.0001	-0.106461	Rochester NY
OHDUMM	0.6853	0.1731	15.6766	0.0001	0.068100	Ohio
LAOKDUMM	0.4421	0.1019	18.8389	0.0001	0.074920	Louisiana or Oklahoma
WAORDUMM	0.2453	0.1149	4.5575	0.0328	0.044107	Washington or Oregon
PADUMM	-0.1675	0.1150	2.1194	0.1454	-0.023600	Pennsylvania
TNGADUMM	-0.1966	0.1112	3.1238	0.0772	-0.032766	Tennessee or Georgia
TXDUMM	-0.0776	0.1732	0.2008	0.6541	-0.006590	Texas
WIDUMM	0.2306	0.1428	2.6079	0.1063	0.028554	Wisconsin
SHARER	0.3438	0.0653	27.6757	0.0001	0.085165	Does Enrollee Share?
HOMELSS	0.1426	0.0949	2.2577	0.1330	0.033029	Is Enrollee Homeless?
PREFHOME	-0.2635	0.0982	7.1986	0.0073	-0.044035	Prefer Home?
UNTRAT	-0.6989	0.0812	74.0063	0.0001	-0.150230	FULLGROSS/FMR
INCLE100	-0.1249	0.2095	0.3553	0.5511	-0.014074	Income LE $100/Month?
PPBB	-0.00193	0.0594	0.0011	0.9741	-0.001175	PPBEDOK * BEDROOMS
PPBNOK	0.0164	0.0528	0.0966	0.7560	0.011633	BR Required if PP BR Not Ok
UNTRATH	-0.5544	0.1537	13.0107	0.0003	-0.054338	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.2528	0.0665	14.4574	0.0001	0.061957	Prefer Neighborhood?
PPBEDOK	0.3721	0.1653	5.0689	0.0244	0.101679	Pre-Program BR Ok?
NOCARE	0.2824	0.0719	15.4135	0.0001	0.057214	No Child Care Avail When Needed?
FMRINC	-0.1703	0.0434	15.4146	0.0001	-0.071604	FMR/INC
ACCCAR	-0.3337	0.0654	26.0502	0.0001	-0.074060	Have Access to Car?
MOVE3YRS	0.0267	0.0120	4.9293	0.0264	0.034150	Average Moves Per 3 Years
BADCREDT	0.2183	0.0555	15.4813	0.0001	0.058946	BAD CREDIT
BADREFS	-0.0765	0.0753	1.0322	0.3097	-0.014610	BAD LANDLORD REFERENCES
DRUGS	-0.0952	0.1137	0.7012	0.4024	-0.011762	DRUG ARREST
EDUCLT12	0.1920	0.0625	9.4256	0.0021	0.044837	(1) if educ < 12 yrs
VOUCHER	0.0772	0.0731	1.1154	0.2909	0.018320	(1) if voucher, else certif
UNDPROG	0.2198	0.0565	15.1088	0.0001	0.056552	Understand PGM?
WANTHQ	0.3367	0.0568	35.1652	0.0001	0.091734	Want Better Housing?
WANTLC	0.1894	0.0575	10.8463	0.0010	0.048417	Want Lower Cost?

Association of Predicted Probabilities and Observed Responses

Concordant = 66.2%	Somers' D = 0.330
Discordant = 33.2%	Gamma = 0.332
Tied = 0.5%	Tau-a = 0.156
(14914410 pairs)	c = 0.665

The LOGISTIC Procedure

Data Set: WORK.NONNY
Response Variable: AGREE
Response Levels: 2
Number of Observations: 3052
Link Function: Logit

Response Profile

Ordered Value	AGREE	Count
1	1	1084
2	2	1968

WARNING: 111 observation(s) were deleted due to missing values for the response or explanatory variables.

Simple Statistics for Explanatory Variables

Variable	Mean	Standard Deviation	Minimum	Maximum	Variable Label
MINORITY	0.634666	0.481603	0.000000	1.0000	Minority?
OLD	0.012451	0.110905	0.000000	1.0000	Old?
HANDIC	0.120577	0.325688	0.000000	1.0000	Handicapped?
WRKING	0.232307	0.422373	0.000000	1.0000	Employed?
COUPCHLD	0.117955	0.322608	0.000000	1.0000	Couple w/Child?
OTHNOKD	0.038991	0.193605	0.000000	1.0000	Other no Children
AZDUMM	0.031127	0.173690	0.000000	1.0000	Arizona
FLDUMM	0.053080	0.224230	0.000000	1.0000	Florida
IDDUMM	0.021625	0.145480	0.000000	1.0000	Idaho
INDUMM	0.033093	0.178909	0.000000	1.0000	Indiana
MDDUMM	0.062254	0.241656	0.000000	1.0000	Maryland
MNDUMM	0.047837	0.213457	0.000000	1.0000	Minnesota
NEDUMM	0.057339	0.232528	0.000000	1.0000	Nebraska
NYDUMM	0.033421	0.179762	0.000000	1.0000	Rochester NY
OHDUMM	0.048165	0.214150	0.000000	1.0000	Ohio
LAOKDUMM	0.135649	0.342471	0.000000	1.0000	Louisiana or Oklahoma
WAORDUMM	0.141547	0.348642	0.000000	1.0000	Washington or Oregon
PADUMM	0.065858	0.248075	0.000000	1.0000	Pennsylvania
TNGADUMM	0.082896	0.275771	0.000000	1.0000	Tennessee or Georgia
TXDUMM	0.025557	0.157835	0.000000	1.0000	Texas
WIDUMM	0.059961	0.237453	0.000000	1.0000	Wisconsin
SHARER	0.318480	0.465963	0.000000	1.0000	Does Enrollee Share?
HOMELSS	0.263434	0.440568	0.000000	1.0000	Is Enrollee Homeless?
PREFHOME	0.092071	0.289173	0.000000	1.0000	Prefer Home?
UNTRAT	0.407175	0.378612	0.000000	1.3237	FULLGROSS/FMR
INCLE100	0.040301	0.196698	0.000000	1.0000	Income LE $100/Month?
PPBB	0.853866	1.109363	0.000000	5.0000	PPBEDOK * BEDROOMS
PPBNOK	1.370249	1.297909	0.000000	5.0000	BR Required if PP BR Not Ok
UNTRATH	0.022686	0.169930	0.000000	2.0491	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.289974	0.453824	0.000000	1.0000	Prefer Neighborhood?
PPBEDOK	0.413172	0.492484	0.000000	1.0000	Pre-Program BR Ok?
NOCARE	0.190695	0.392913	0.000000	1.0000	No Child Care Avail When Needed?
FMRINC	1.260139	0.735667	0.000000	7.8713	FMR/INC
ACCCAR	0.764744	0.424228	0.000000	1.0000	Have Access to Car?
MOVE3YRS	2.243406	2.649361	0.100000	25.0000	Average Moves Per 3 Years
BADCREDT	0.443644	0.496895	0.000000	1.0000	BAD CREDIT
BADREFS	0.159240	0.365960	0.000000	1.0000	BAD LANDLORD REFERENCES
DRUGS	0.052425	0.222918	0.000000	1.0000	DRUG ARREST
EDUCLT12	0.242792	0.428840	0.000000	1.0000	(1) if educ < 12 yrs
VOUCHER	0.243119	0.429037	0.000000	1.0000	(1) if voucher, else certif
UNDPROG	0.711337	0.453215	0.000000	1.0000	Understand PGM?
WANTHQ	0.614024	0.486905	0.000000	1.0000	Want Better Housing?
WANTLC	0.696265	0.459945	0.000000	1.0000	Want Lower Cost?

The LOGISTIC Procedure

Criteria for Assessing Model Fit

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	3973.217	3679.511	.
SC	3979.241	3944.547	.
-2 LOG L	3971.217	3591.511	379.706 with 43 DF (p=0.0001)
Score	.	.	362.413 with 43 DF (p=0.0001)

Analysis of Maximum Likelihood Estimates

Variable	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Variable Label
INTERCPT	0.1900	0.3417	0.3091	0.5782	.	Intercept
MINORITY	0.0134	0.1034	0.0168	0.8967	0.003563	Minority?
OLD	0.8613	0.3764	5.2359	0.0221	0.052666	Old?
HANDIC	0.1257	0.1643	0.5859	0.4440	0.022577	Handicapped?
WRKING	0.1701	0.1113	2.3351	0.1265	0.039614	Employed?
COUPCHLD	-0.4053	0.1461	7.6945	0.0055	-0.072091	Couple w/Child?
OTHNOKD	-0.3687	0.3303	1.2459	0.2643	-0.039350	Other no Children
AZDUMM	0.3803	0.2620	2.1069	0.1466	0.036416	Arizona
FLDUMM	0.4455	0.2257	3.8973	0.0484	0.055075	Florida
IDDUMM	0.5750	0.2969	3.7511	0.0528	0.046122	Idaho
INDUMM	1.5546	0.2668	33.9454	0.0001	0.153337	Indiana
MDDUMM	0.7900	0.2038	15.0278	0.0001	0.105258	Maryland
MNDUMM	0.4790	0.2264	4.4768	0.0344	0.056376	Minnesota
NEDUMM	-0.8477	0.2632	10.3717	0.0013	-0.108678	Nebraska
NYDUMM	0.0188	0.2665	0.0050	0.9438	0.001862	Rochester NY
OHDUMM	0.2066	0.2765	0.5582	0.4550	0.024389	Ohio
LAOKDUMM	-0.3177	0.1823	3.0366	0.0814	-0.059991	Louisiana or Oklahoma
WAORDUMM	-1.0527	0.2115	24.7708	0.0001	-0.202355	Washington or Oregon
PADUMM	0.3788	0.2037	3.4586	0.0629	0.051807	Pennsylvania
TNGADUMM	0.2360	0.1998	1.3941	0.2377	0.035875	Tennessee or Georgia
TXDUMM	0.5331	0.2780	3.6764	0.0552	0.046389	Texas
WIDUMM	0.0188	0.2376	0.0063	0.9369	0.002462	Wisconsin
SHARER	-0.1246	0.1133	1.2088	0.2716	-0.032009	Does Enrollee Share?
HOMELSS	0.0260	0.1584	0.0270	0.8694	0.006326	Is Enrollee Homeless?
PREFHOME	-0.0307	0.1658	0.0342	0.8532	-0.004892	Prefer Home?
UNTRAT	0.4621	0.1479	9.7626	0.0018	0.096456	FULLGROSS/FMR
INCLE100	-1.0727	0.3497	9.4074	0.0022	-0.116331	Income LE $100/Month?
PPBB	-0.3040	0.1082	7.8869	0.0050	-0.185908	PPBEDOK * BEDROOMS
PPBNOK	-0.3255	0.0926	12.3640	0.0004	-0.232902	BR Required if PP BR Not Ok
UNTRATH	0.3438	0.2573	1.7858	0.1814	0.032212	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.1301	0.1095	1.4112	0.2349	0.032557	Prefer Neighborhood?
PPBEDOK	-0.5028	0.2844	3.1245	0.0771	-0.136518	Pre-Program BR Ok?
NOCARE	-0.6458	0.1255	26.4730	0.0001	-0.139903	No Child Care Avail When Needed?
FMRINC	-0.00293	0.0737	0.0016	0.9683	-0.001188	FMR/INC
ACCCAR	0.3400	0.1085	9.8284	0.0017	0.079527	Have Access to Car?
MOVE3YRS	-0.0197	0.0197	0.9977	0.3179	-0.028788	Average Moves Per 3 Years
BADCREDT	-0.1924	0.0940	4.1884	0.0407	-0.052722	BAD CREDIT
BADREFS	0.5236	0.1270	16.9884	0.0001	0.105641	BAD LANDLORD REFERENCES
DRUGS	0.0907	0.1893	0.2295	0.6319	0.011145	DRUG ARREST
EDUCLT12	0.1376	0.1017	1.8326	0.1758	0.032538	(1) if educ < 12 yrs
VOUCHER	-0.1961	0.1234	2.5252	0.1120	-0.046394	(1) if voucher, else certif
UNDPROG	-0.2267	0.0976	5.3901	0.0203	-0.056645	Understand PGM?
WANTHQ	0.1215	0.0948	1.6415	0.2001	0.032614	Want Better Housing?
WANTLC	-0.1630	0.0967	2.8394	0.0920	-0.041324	Want Lower Cost?

Association of Predicted Probabilities and Observed Responses

Concordant	= 70.2%	Somers' D	= 0.410
Discordant	= 29.3%	Gamma	= 0.412
Tied	= 0.5%	Tau-a	= 0.188
(2133312 pairs)		c	= 0.705

The LOGISTIC Procedure

Data Set: WORK.NONNY
Response Variable: INSP
Response Levels: 2
Number of Observations: 1119
Link Function: Logit

Response Profile

Ordered Value	INSP	Count
1	1	761
2	2	358

WARNING: 45 observation(s) were deleted due to missing values for the response or explanatory variables.

Simple Statistics for Explanatory Variables

Variable	Mean	Standard Deviation	Minimum	Maximum	Variable Label
MINORITY	0.647900	0.477839	0.000000	1.0000	Minority?
OLD	0.018767	0.135761	0.000000	1.0000	Old?
HANDIC	0.142091	0.349300	0.000000	1.0000	Handicapped?
WRKING	0.260947	0.439348	0.000000	1.0000	Employed?
COUPCHLD	0.093834	0.291728	0.000000	1.0000	Couple w/Child?
OTHNOKD	0.037534	0.190150	0.000000	1.0000	Other no Children
AZDUMM	0.042002	0.200683	0.000000	1.0000	Arizona
FLDUMM	0.063450	0.243879	0.000000	1.0000	Florida
IDDUMM	0.027703	0.164195	0.000000	1.0000	Idaho
INDUMM	0.068811	0.253246	0.000000	1.0000	Indiana
MDDUMM	0.097408	0.296646	0.000000	1.0000	Maryland
MNDUMM	0.059875	0.237361	0.000000	1.0000	Minnesota
NEDUMM	0.028597	0.166745	0.000000	1.0000	Nebraska
NYDUMM	0.031278	0.174146	0.000000	1.0000	Rochester NY
OHDUMM	0.047364	0.212511	0.000000	1.0000	Ohio
LAOKDUMM	0.089366	0.285398	0.000000	1.0000	Louisiana or Oklahoma
WAORDUMM	0.068811	0.253246	0.000000	1.0000	Washington or Oregon
PADUMM	0.071492	0.257761	0.000000	1.0000	Pennsylvania
TNGADUMM	0.106345	0.308416	0.000000	1.0000	Tennessee or Georgia
TXDUMM	0.036640	0.187960	0.000000	1.0000	Texas
WIDUMM	0.057194	0.232317	0.000000	1.0000	Wisconsin
SHARER	0.305630	0.460880	0.000000	1.0000	Does Enrollee Share?
HOMELSS	0.214477	0.410643	0.000000	1.0000	Is Enrollee Homeless?
PREFHOME	0.093834	0.291728	0.000000	1.0000	Prefer Home?
UNTRAT	0.453611	0.372203	0.000000	1.3237	FULLGROSS/FMR
INCLE100	0.033959	0.181204	0.000000	1.0000	Income LE $100/Month?
PPBB	0.835567	1.069058	0.000000	4.0000	PPBEDOK * BEDROOMS
PPBNOK	1.295800	1.255788	0.000000	5.0000	BR Required if PP BR Not Ok
UNTRATH	0.024429	0.178598	0.000000	2.0491	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.292225	0.454989	0.000000	1.0000	Prefer Neighborhood?
PPBEDOK	0.420018	0.493782	0.000000	1.0000	Pre-Program BR Ok?
NOCARE	0.134048	0.340856	0.000000	1.0000	No Child Care Avail When Needed?
FMRINC	1.267333	0.771488	0.000000	7.8713	FMR/INC
ACCCAR	0.804290	0.396924	0.000000	1.0000	Have Access to Car?
MOVE3YRS	2.129564	2.136477	0.100000	25.0000	Average Moves Per 3 Years
BADCREDT	0.395889	0.489259	0.000000	1.0000	BAD CREDIT
BADREFS	0.152815	0.359970	0.000000	1.0000	BAD LANDLORD REFERENCES
DRUGS	0.056300	0.230604	0.000000	1.0000	DRUG ARREST
EDUCLT12	0.262735	0.440316	0.000000	1.0000	(1) if educ < 12 yrs
VOUCHER	0.233244	0.423085	0.000000	1.0000	(1) if voucher, else certif
UNDPROG	0.680965	0.466311	0.000000	1.0000	Understand PGM?
WANTHQ	0.622878	0.484883	0.000000	1.0000	Want Better Housing?
WANTLC	0.697051	0.459739	0.000000	1.0000	Want Lower Cost?

The LOGISTIC Procedure

Criteria for Assessing Model Fit

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	1404.813	1378.796	.
SC	1409.833	1599.685	.
-2 LOG L	1402.813	1290.796	112.017 with 43 DF (p=0.0001)
Score	.	.	105.257 with 43 DF (p=0.0001)

Analysis of Maximum Likelihood Estimates

Variable	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Variable Label
INTERCPT	0.9417	0.5934	2.5180	0.1126	.	Intercept
MINORITY	-0.2151	0.1816	1.4036	0.2361	-0.056666	Minority?
OLD	0.4570	0.6887	0.4404	0.5069	0.034207	Old?
HANDIC	-0.1660	0.2560	0.4202	0.5169	-0.031962	Handicapped?
WRKING	0.0535	0.1917	0.0779	0.7801	0.012962	Employed?
COUPCHLD	0.3472	0.2613	1.7652	0.1840	0.055839	Couple w/Child?
OTHNOKD	-0.2289	0.4589	0.2488	0.6179	-0.023998	Other no Children
AZDUMM	-0.8503	0.4036	4.4379	0.0351	-0.094078	Arizona
FLDUMM	-0.5977	0.3897	2.3529	0.1251	-0.080364	Florida
IDDUMM	-0.2085	0.5197	0.1610	0.6882	-0.018878	Idaho
INDUMM	-0.5489	0.3566	2.3691	0.1238	-0.076638	Indiana
MDDUMM	-1.1905	0.3284	13.1432	0.0003	-0.194707	Maryland
MNDUMM	0.1030	0.3841	0.0719	0.7886	0.013479	Minnesota
NEDUMM	1.2155	0.6662	3.3286	0.0681	0.111745	Nebraska
NYDUMM	-1.5946	0.4705	11.4851	0.0007	-0.153100	Rochester NY
OHDUMM	-0.8420	0.4655	3.2718	0.0705	-0.098655	Ohio
LAOKDUMM	-0.4080	0.3338	1.4937	0.2216	-0.064195	Louisiana or Oklahoma
WAORDUMM	0.1407	0.4058	0.1202	0.7288	0.019645	Washington or Oregon
PADUMM	-0.0369	0.3654	0.0102	0.9196	-0.005239	Pennsylvania
TNGADUMM	-0.0175	0.3389	0.0027	0.9587	-0.002982	Tennessee or Georgia
TXDUMM	-0.7816	0.4289	3.3204	0.0684	-0.080995	Texas
WIDUMM	-1.4417	0.4223	11.6545	0.0006	-0.184651	Wisconsin
SHARER	-0.1151	0.1927	0.3568	0.5503	-0.029254	Does Enrollee Share?
HOMELSS	-0.2008	0.2593	0.5998	0.4386	-0.045459	Is Enrollee Homeless?
PREFHOME	0.0383	0.2759	0.0193	0.8896	0.006159	Prefer Home?
UNTRAT	-0.0187	0.2613	0.0051	0.9431	-0.003828	FULLGROSS/FMR
INCLE100	0.9008	0.5280	2.9110	0.0880	0.089995	Income LE $100/Month?
PPBB	0.0867	0.1823	0.2264	0.6342	0.051124	PPBEDOK * BEDROOMS
PPBNOK	-0.0642	0.1485	0.1867	0.6657	-0.044441	BR Required if PP BR Not Ok
UNTRATH	0.8171	0.5000	2.6709	0.1022	0.080458	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.0405	0.1757	0.0532	0.8175	0.010168	Prefer Neighborhood?
PPBEDOK	-0.4447	0.4956	0.8053	0.3695	-0.121067	Pre-Program BR Ok?
NOCARE	-0.2608	0.2135	1.4916	0.2220	-0.049006	No Child Care Avail When Needed?
FMRINC	0.4726	0.1403	11.3391	0.0008	0.201001	FMR/INC
ACCCAR	-0.2826	0.1815	2.4252	0.1194	-0.061854	Have Access to Car?
MOVE3YRS	0.0435	0.0396	1.2109	0.2712	0.051296	Average Moves Per 3 Years
BADCREDT	-0.0464	0.1544	0.0903	0.7638	-0.012514	BAD CREDIT
BADREFS	-0.3951	0.2016	3.8420	0.0500	-0.078413	BAD LANDLORD REFERENCES
DRUGS	0.2382	0.3358	0.5031	0.4781	0.030280	DRUG ARREST
EDUCLT12	0.4178	0.1696	6.0676	0.0138	0.101423	(1) if educ < 12 yrs
VOUCHER	0.5230	0.2237	5.4664	0.0194	0.121990	(1) if voucher, else certif
UNDPROG	0.1722	0.1588	1.1748	0.2784	0.044261	Understand PGM?
WANTHQ	-0.2237	0.1536	2.1222	0.1452	-0.059811	Want Better Housing?
WANTLC	0.1340	0.1612	0.6903	0.4061	0.033955	Want Lower Cost?

Association of Predicted Probabilities and Observed Responses

Concordant	= 68.6%	Somers' D	= 0.376
Discordant	= 30.9%	Gamma	= 0.378
Tied	= 0.5%	Tau-a	= 0.164
(272438 pairs)		c	= 0.688

The LOGISTIC Procedure

Data Set: WORK.NONNY
Response Variable: SUCCESS
Response Levels: 2
Number of Observations: 790
Link Function: Logit

Response Profile

Ordered Value	SUCCESS	Count
1	1	645
2	2	145

WARNING: 34 observation(s) were deleted due to missing values for the response or explanatory variables.

Simple Statistics for Explanatory Variables

Variable	Mean	Standard Deviation	Minimum	Maximum	Variable Label
MINORITY	0.620253	0.485631	0.000000	1.0000	Minority?
OLD	0.022785	0.149311	0.000000	1.0000	Old?
HANDIC	0.135443	0.342413	0.000000	1.0000	Handicapped?
WRKING	0.251899	0.434378	0.000000	1.0000	Employed?
COUPCHLD	0.121519	0.326936	0.000000	1.0000	Couple w/Child?
OTHNOKD	0.040506	0.197268	0.000000	1.0000	Other no Children
AZDUMM	0.035443	0.185014	0.000000	1.0000	Arizona
FLDUMM	0.063291	0.243640	0.000000	1.0000	Florida
IDDUMM	0.030380	0.171739	0.000000	1.0000	Idaho
INDUMM	0.063291	0.243640	0.000000	1.0000	Indiana
MDDUMM	0.075949	0.265085	0.000000	1.0000	Maryland
MNDUMM	0.064557	0.245898	0.000000	1.0000	Minnesota
NEDUMM	0.036709	0.188165	0.000000	1.0000	Nebraska
NYDUMM	0.021519	0.145199	0.000000	1.0000	Rochester NY
OHDUMM	0.040506	0.197268	0.000000	1.0000	Ohio
LAOKDUMM	0.091139	0.287989	0.000000	1.0000	Louisiana or Oklahoma
WAORDUMM	0.088608	0.284357	0.000000	1.0000	Washington or Oregon
PADUMM	0.078481	0.269097	0.000000	1.0000	Pennsylvania
TNGADUMM	0.116456	0.320974	0.000000	1.0000	Tennessee or Georgia
TXDUMM	0.029114	0.168232	0.000000	1.0000	Texas
WIDUMM	0.044304	0.205900	0.000000	1.0000	Wisconsin
SHARER	0.317722	0.465886	0.000000	1.0000	Does Enrollee Share?
HOMELSS	0.231646	0.422151	0.000000	1.0000	Is Enrollee Homeless?
PREFHOME	0.097468	0.296782	0.000000	1.0000	Prefer Home?
UNTRAT	0.448603	0.376214	0.000000	1.3237	FULLGROSS/FMR
INCLE100	0.036709	0.188165	0.000000	1.0000	Income LE $100/Month?
PPBB	0.789873	1.053162	0.000000	4.0000	PPBEDOK * BEDROOMS
PPBNOK	1.312658	1.233136	0.000000	5.0000	BR Required if PP BR Not Ok
UNTRATH	0.028272	0.193150	0.000000	2.0491	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.284810	0.451610	0.000000	1.0000	Prefer Neighborhood?
PPBEDOK	0.401266	0.490465	0.000000	1.0000	Pre-Program BR Ok?
NOCARE	0.127848	0.334132	0.000000	1.0000	No Child Care Avail When Needed?
FMRINC	1.302642	0.828855	0.000000	7.8713	FMR/INC
ACCCAR	0.801266	0.399300	0.000000	1.0000	Have Access to Car?
MOVE3YRS	2.217818	2.321447	0.100000	25.0000	Average Moves Per 3 Years
BADCREDT	0.381013	0.485943	0.000000	1.0000	BAD CREDIT
BADREFS	0.139241	0.346417	0.000000	1.0000	BAD LANDLORD REFERENCES
DRUGS	0.067089	0.250334	0.000000	1.0000	DRUG ARREST
EDUCLT12	0.286076	0.452212	0.000000	1.0000	(1) if educ < 12 yrs
VOUCHER	0.230380	0.421343	0.000000	1.0000	(1) if voucher, else certif
UNDPROG	0.683544	0.465388	0.000000	1.0000	Understand PGM?
WANTHQ	0.582278	0.493496	0.000000	1.0000	Want Better Housing?
WANTLC	0.701266	0.457993	0.000000	1.0000	Want Lower Cost?

The LOGISTIC Procedure

Criteria for Assessing Model Fit

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	755.226	725.557	.
SC	759.898	931.127	.
-2 LOG L	753.226	637.557	115.669 with 43 DF (p=0.0001)
Score	.	.	107.826 with 43 DF (p=0.0001)

Analysis of Maximum Likelihood Estimates

Variable	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Variable Label
INTERCPT	2.4046	0.9141	6.9201	0.0085	.	Intercept
MINORITY	0.0596	0.2580	0.0533	0.8174	0.015949	Minority?
OLD	0.0589	0.8696	0.0046	0.9460	0.004849	Old?
HANDIC	0.1345	0.4029	0.1114	0.7385	0.025387	Handicapped?
WRKING	-0.2057	0.2711	0.5760	0.4479	-0.049266	Employed?
COUPCHLD	-1.2754	0.2926	19.0019	0.0001	-0.229894	Couple w/Child?
OTHNOKD	-0.6482	0.6093	1.1317	0.2874	-0.070499	Other no Children
AZDUMM	0.7241	0.8708	0.6913	0.4057	0.073857	Arizona
FLDUMM	-1.0060	0.5564	3.2686	0.0706	-0.135128	Florida
IDDUMM	0.2789	0.8663	0.1037	0.7475	0.026407	Idaho
INDUMM	0.2659	0.5938	0.2005	0.6543	0.035712	Indiana
MDDUMM	0.6357	0.6370	0.9962	0.3182	0.092912	Maryland
MNDUMM	-0.1713	0.5508	0.0967	0.7558	-0.023220	Minnesota
NEDUMM	-0.1181	0.6659	0.0315	0.8592	-0.012256	Nebraska
NYDUMM	-1.6692	0.7307	5.2184	0.0223	-0.133621	Rochester NY
OHDUMM	-0.6560	0.6562	0.9995	0.3174	-0.071351	Ohio
LAOKDUMM	-0.8861	0.4593	3.7211	0.0537	-0.140691	Louisiana or Oklahoma
WAORDUMM	-0.6792	0.5072	1.7933	0.1805	-0.106487	Washington or Oregon
PADUMM	-0.8186	0.4653	3.0950	0.0785	-0.121449	Pennsylvania
TNGADUMM	-0.6447	0.4596	1.9676	0.1607	-0.114080	Tennessee or Georgia
TXDUMM	0.1182	0.8557	0.0191	0.8901	0.010967	Texas
WIDUMM	-1.7660	0.6006	8.6474	0.0033	-0.200475	Wisconsin
SHARER	0.4679	0.2893	2.6154	0.1058	0.120179	Does Enrollee Share?
HOMELSS	-0.7244	0.3967	3.3347	0.0678	-0.168610	Is Enrollee Homeless?
PREFHOME	-0.9116	0.3589	6.4502	0.0111	-0.149158	Prefer Home?
UNTRAT	0.4105	0.3915	1.0997	0.2943	0.085149	FULLGROSS/FMR
INCLE100	-0.1641	0.6741	0.0592	0.8077	-0.017022	Income LE $100/Month?
PPBB	-0.1726	0.2550	0.4585	0.4983	-0.100242	PPBEDOK * BEDROOMS
PPBNOK	-0.5305	0.2188	5.8776	0.0153	-0.360661	BR Required if PP BR Not Ok
UNTRATH	0.9588	0.6229	2.3690	0.1238	0.102103	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.6618	0.2754	5.7750	0.0163	0.164773	Prefer Neighborhood?
PPBEDOK	-1.4730	0.7234	4.1470	0.0417	-0.398323	Pre-Program BR Ok?
NOCARE	-0.0181	0.3323	0.0030	0.9565	-0.003337	No Child Care Avail When Needed?
FMRINC	0.2568	0.2051	1.5683	0.2105	0.117361	FMR/INC
ACCCAR	0.5614	0.2587	4.7079	0.0300	0.123580	Have Access to Car?
MOVE3YRS	0.0258	0.0543	0.2267	0.6339	0.033068	Average Moves Per 3 Years
BADCREDT	0.2546	0.2335	1.1889	0.2756	0.068201	BAD CREDIT
BADREFS	-0.0353	0.3184	0.0123	0.9117	-0.006747	BAD LANDLORD REFERENCES
DRUGS	0.2572	0.4936	0.2715	0.6023	0.035498	DRUG ARREST
EDUCLT12	0.4038	0.2569	2.4716	0.1159	0.100680	(1) if educ < 12 yrs
VOUCHER	0.7629	0.3211	5.6445	0.0175	0.177214	(1) if voucher, else certif
UNDPROG	0.3104	0.2281	1.8517	0.1736	0.079647	Understand PGM?
WANTHQ	0.1884	0.2236	0.7096	0.3996	0.051257	Want Better Housing?
WANTLC	-0.5606	0.2540	4.8713	0.0273	-0.141564	Want Lower Cost?

Association of Predicted Probabilities and Observed Responses

Concordant = 77.3%	Somers' D = 0.549
Discordant = 22.3%	Gamma = 0.551
Tied = 0.4%	Tau-a = 0.165
(93525 pairs)	c = 0.775

APPENDIX E

LANDLORD REGRESSION

The regression contains two tables. The first presents the variables, with their means, standard deviations, minimums and maximums. The second table contains the logit regression results.

The LOGISTIC Procedure

Data Set: WORK.D1
Response Variable: SUCCESS (1) if success
Response Levels: 2
Number of Observations: 564
Link Function: Logit

Response Profile

Ordered Value	SUCCESS	Count
1	1	416
2	2	148

WARNING: 62 observation(s) were deleted due to missing values for the response or explanatory variables.

Simple Statistics for Explanatory Variables

Variable	Mean	Standard Deviation	Minimum	Maximum	Variable Label
MINPPGM	0.205674	0.404552	0.00000	1.000	Minority * PPGM
MINNEW	0.347518	0.476605	0.00000	1.000	Minority * 1-PPGM
OLDPPGM	0.086879	0.281908	0.00000	1.000	Old * PPGM
OLDNEW	0.030142	0.171129	0.00000	1.000	Old * 1-PPGM
HANPPGM	0.085106	0.279288	0.00000	1.000	HANDIC * PPGM
HANNEW	0.090426	0.287045	0.00000	1.000	HANDIC * 1-PPGM
WRKPPGM	0.104610	0.306322	0.00000	1.000	WRKING * PPGM
WRKNEW	0.120567	0.325913	0.00000	1.000	WRKING * 1-PPGM
CPCPPGM	0.026596	0.161042	0.00000	1.000	COUPCHLD * PPGM
CPCNEW	0.049645	0.217404	0.00000	1.000	COUPCHLD * 1-PPGM
ONKPPGM	0.005319	0.072803	0.00000	1.000	OTHNOKD * PPGM
ONKNEW	0.014184	0.118356	0.00000	1.000	OTHNOKD * 1-PPGM
AZDUMM	0.046099	0.209886	0.00000	1.000	Arizona
FLDUMM	0.033688	0.180585	0.00000	1.000	Florida
IDDUMM	0.040780	0.197956	0.00000	1.000	Idaho
INDUMM	0.076241	0.265619	0.00000	1.000	Indiana
SITE41	0.134752	0.341761	0.00000	1.000	New York City
MDDUMM	0.058511	0.234915	0.00000	1.000	Maryland
MNDUMM	0.083333	0.276631	0.00000	1.000	Minnesota
NEDUMM	0.037234	0.189503	0.00000	1.000	Nebraska
NYDUMM	0.017730	0.132087	0.00000	1.000	Rochester NY
OHDUMM	0.031915	0.175930	0.00000	1.000	Ohio
LAOKDUMM	0.081560	0.273937	0.00000	1.000	Louisiana or Oklahoma
WAORDUMM	0.078014	0.268432	0.00000	1.000	Washington or Oregon
PADUMM	0.062057	0.241473	0.00000	1.000	Pennsylvania
TNGADUMM	0.065603	0.247806	0.00000	1.000	Tennessee or Georgia
TXDUMM	0.033688	0.180585	0.00000	1.000	Texas
WIDUMM	0.042553	0.202027	0.00000	1.000	Wisconsin
SHARPPGM	0.021277	0.144433	0.00000	1.000	SHARER * PPGM
SHARNEW	0.195035	0.396580	0.00000	1.000	SHARER * 1-PPGM
HOMENEW	0.115248	0.319605	0.00000	1.000	HOMELSS * 1-PPGM
PHMEPPGM	0.226950	0.419232	0.00000	1.000	PREFHOME * PPGM
PHMENEW	0.035461	0.185106	0.00000	1.000	PREFHOME * 1-PPGM
UNTPPGM	0.299058	0.405607	0.00000	2.426	Pre Prog Rent/FMR * PPGM
UNTNEW	0.264353	0.355796	0.00000	1.366	Pre Prog Rent/FMR * 1-PPGM
INCNEW	0.012411	0.110811	0.00000	1.000	INCLE100 * 1-PPGM
PPBB	0.923759	1.098782	0.00000	4.000	PPBEDOK * BEDROOMS
PPBNOK	0.987589	1.239459	0.00000	4.000	BR Required if PP BR Not Ok
NOPAS_S8	0.230496	0.421524	0.00000	1.000	(1) re: section 8
PNGHPPGM	0.228723	0.420384	0.00000	1.000	PREFNEIG * PPGM
PNGHNEW	0.159574	0.366536	0.00000	1.000	PREFNEIG * 1-PPGM
NOCRPPGM	0.037234	0.189503	0.00000	1.000	NOCARE * PPGM
NOCRNEW	0.102837	0.304015	0.00000	1.000	NOCARE * 1-PPGM
FMRINC	1.174183	0.611109	0.00000	4.818	FMR/INC
CARPPGM	0.264184	0.441289	0.00000	1.000	ACCCAR * PPGM
CARNEW	0.439716	0.496793	0.00000	1.000	ACCCAR * 1-PPGM
MOVEPPGM	0.777561	4.209636	0.00000	96.000	MOVE3YRS * PPGM
MOVENEW	1.313408	1.914111	0.00000	18.000	MOVE3YRS * 1-PPGM
DRUGPPGM	0.021277	0.144433	0.00000	1.000	DRUGS * PPGM
DRUGNEW	0.033688	0.180585	0.00000	1.000	DRUGS * 1-PPGM
EDUCPPGM	0.145390	0.352807	0.00000	1.000	EDUCLT12 * PPGM
EDUCNEW	0.175532	0.380759	0.00000	1.000	EDUCLT12 * 1-PPGM
VOUCPPGM	0.118794	0.323834	0.00000	1.000	VOUCHER * PPGM

The LOGISTIC Procedure

Simple Statistics for Explanatory Variables

Variable	Mean	Standard Deviation	Minimum	Maximum	Variable Label
VOUCNEW	0.122340	0.327969	0.00000	1.000	VOUCHER * 1-PPGM
UNDPPPGM	0.306738	0.461549	0.00000	1.000	UNDPROG * PPGM
UNDPNEW	0.427305	0.495126	0.00000	1.000	UNDPROG * 1-PPGM
WNHQPPGM	0.145390	0.352807	0.00000	1.000	WANTHQ * PPGM
WNHQNEW	0.349291	0.477169	0.00000	1.000	WANTHQ * 1-PPGM
WNLCPPGM	0.340426	0.474273	0.00000	1.000	WANTLC * PPGM
WNLCNEW	0.382979	0.486545	0.00000	1.000	WANTLC * 1-PPGM
OWN	0.503546	0.500431	0.00000	1.000	<A1> OWN, MANAGE OR BROKER
DIFFSCRN	0.329787	0.470553	0.00000	1.000	(QE3) 1 if diff. screen for sec. 8
NOPASS1	0.031915	0.175930	0.00000	1.000	(1) re: single w/kids
NOPASS3	0.237589	0.425984	0.00000	1.000	(1) re: bad credit
NOPASS4	0.118794	0.323834	0.00000	1.000	(1) re: bad references
NOPASS5	0.017730	0.132087	0.00000	1.000	(1) re: minority
NOPASS8	0.088652	0.284494	0.00000	1.000	(1) if bedrooms< needed
MKTUP	0.354610	0.478820	0.00000	1.000	A12: (1) if mkt improved last yr
MKTGOOD	0.728723	0.445013	0.00000	1.000	A11: (1) if market good
NGHGOOD	0.645390	0.478820	0.00000	1.000	A25: (1) if nghbrh good
EXVAC	18.657801	20.527803	0.00000	180.000	Expected Days Vacant
EVACMIS	0.092199	0.289563	0.00000	1.000	EXVAC Missing?
LLVFAM	0.567376	0.495879	0.00000	1.000	LL Very Familiar w/S8
LLNFAM	0.143617	0.351012	0.00000	1.000	LL Not Familiar w/S8
STAYLESS	0.315603	0.465168	0.00000	1.000	1 if E(yrs tenure) less for S8
STAYMORE	0.141844	0.349200	0.00000	1.000	1 if E(yrs tenure) less for S8
MOREDAMG	0.322695	0.467922	0.00000	1.000	(QE4H) 1 if expect more damage w/S8
LESSDAMG	0.166667	0.373009	0.00000	1.000	(QE4H) 1 if expect less damage w/S8
HRD2EVCT	0.312057	0.463744	0.00000	1.000	Harder to Evict if S8
ESY2EVCT	0.063830	0.244666	0.00000	1.000	Easier to Evict if S8
LOWRRNT	0.242908	0.429221	0.00000	1.000	Expect Lower Rent if S8
HIGHRNT	0.070922	0.256922	0.00000	1.000	Expect Higher Rent if S8
MOREPBL	0.250000	0.433397	0.00000	1.000	Expect More Problems if S8
LESSPBL	0.182624	0.386701	0.00000	1.000	Expect Less Problems if S8
NOPAS4XR	0.125887	0.332016	0.00000	1.000	not elderly/LL oft rents 2 elderly
NOPAS6XR	0.414894	0.493141	0.00000	1.000	not emplyd/LL oft rents 2 emplyd
PCTVAC	7.879180	4.940691	1.69531	32.090	% VACANT UNITS

Criteria for Assessing Model Fit

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	651.236	637.713	.
SC	655.571	1019.198	.
-2 LOG L	649.236	461.713	187.523 with 87 DF (p=0.0001)
Score	.	.	167.452 with 87 DF (p=0.0001)

The LOGISTIC Procedure

Analysis of Maximum Likelihood Estimates

Variable	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Variable Label
INTERCPT	2.4995	1.1589	4.6518	0.0310	.	Intercept
MINPPGM	0.2549	0.4910	0.2696	0.6036	0.056858	Minority * PPGM
MINNEW	-0.0268	0.3753	0.0051	0.9430	-0.007051	Minority * 1-PPGM
OLDPPGM	-1.0547	0.8029	1.7256	0.1890	-0.163929	Old * PPGM
OLDNEW	0.6617	0.8463	0.6113	0.4343	0.062428	Old * 1-PPGM
HANPPGM	-0.1818	0.6927	0.0689	0.7930	-0.027989	HANDIC * PPGM
HANNEW	-0.3095	0.5481	0.3188	0.5723	-0.048974	HANDIC * 1-PPGM
WRKPPGM	-0.1091	0.5547	0.0387	0.8441	-0.018420	WRKING * PPGM
WRKNEW	0.1484	0.4495	0.1090	0.7413	0.026665	WRKING * 1-PPGM
CPCPPGM	0.2079	0.8514	0.0596	0.8071	0.018459	COUPCHLD * PPGM
CPCNEW	-0.7073	0.6455	1.2006	0.2732	-0.084778	COUPCHLD * 1-PPGM
ONKPPGM	-2.3642	2.0911	1.2783	0.2582	-0.094895	OTHNOKD * PPGM
ONKNEW	0.0884	1.0790	0.0067	0.9347	0.005766	OTHNOKD * 1-PPGM
AZDUMM	0.9067	0.8300	1.1933	0.2747	0.104923	Arizona
FLDUMM	0.1327	0.8038	0.0272	0.8689	0.013208	Florida
IDDUMM	0.2604	0.8073	0.1040	0.7471	0.028416	Idaho
INDUMM	0.5064	0.6510	0.6050	0.4367	0.074156	Indiana
SITE41	-1.1307	0.7402	2.3335	0.1266	-0.213042	New York City
MDDUMM	1.6735	0.8530	3.8489	0.0498	0.216746	Maryland
MNDUMM	1.9272	0.7168	7.2290	0.0072	0.293919	Minnesota
NEDUMM	-0.3741	0.7624	0.2408	0.6237	-0.039083	Nebraska
NYDUMM	-1.1806	1.1687	1.0203	0.3124	-0.085972	Rochester NY
OHDUMM	1.9462	1.0855	3.2144	0.0730	0.188767	Ohio
LAOKDUMM	0.9437	0.7582	1.5491	0.2133	0.142531	Louisiana or Oklahoma
WAORDUMM	1.3922	0.7768	3.2122	0.0731	0.206037	Washington or Oregon
PADUMM	0.5291	0.6653	0.6324	0.4265	0.070440	Pennsylvania
TNGADUMM	0.1855	0.6753	0.0754	0.7836	0.025341	Tennessee or Georgia
TXDUMM	1.4476	0.9223	2.4636	0.1165	0.144122	Texas
WIDUMM	-0.0454	0.8186	0.0031	0.9558	-0.005056	Wisconsin
SHARPPGM	-2.6773	0.9695	7.6263	0.0058	-0.213195	SHARER * PPGM
SHARNEW	-0.6237	0.4089	2.3265	0.1272	-0.136377	SHARER * 1-PPGM
HOMENEW	-0.6181	0.5585	1.2245	0.2685	-0.108906	HOMELSS * 1-PPGM
PHMEPPGM	2.6884	0.5611	22.9572	0.0001	0.621388	PREFHOME * PPGM
PHMENEW	-0.8422	0.6828	1.5215	0.2174	-0.085949	PREFHOME * 1-PPGM
UNTPPGM	-0.7400	0.6858	1.1641	0.2806	-0.165474	Pre Prog Rent/FMR * PPGM
UNTNEW	-0.4131	0.5419	0.5811	0.4459	-0.081035	Pre Prog Rent/FMR * 1-PPGM
INCNEW	-2.0431	1.1263	3.2907	0.0697	-0.124817	INCLE100 * 1-PPGM
PPBB	-0.3684	0.2436	2.2871	0.1305	-0.223186	PPBEDOK * BEDROOMS
PPBNOK	-0.2349	0.2145	1.2000	0.2733	-0.160552	BR Required if PP BR Not Ok
NOPAS_S8	-0.9878	0.3195	9.5607	0.0020	-0.229574	(1) re: section 8
PNGHPPGM	-0.5542	0.4944	1.2565	0.2623	-0.128449	PREFNEIG * PPGM
PNGHNEW	-0.1175	0.3902	0.0907	0.7633	-0.023744	PREFNEIG * 1-PPGM
NOCRPPGM	-0.2179	0.6840	0.1015	0.7500	-0.022769	NOCARE * PPGM
NOCRNEW	-0.6014	0.4538	1.7562	0.1851	-0.100796	NOCARE * 1-PPGM
FMRINC	0.0956	0.2694	0.1258	0.7228	0.032200	FMR/INC
CARPPGM	-0.5421	0.5054	1.1504	0.2835	-0.131888	ACCCAR * PPGM
CARNEW	0.1172	0.4272	0.0753	0.7837	0.032109	ACCCAR * 1-PPGM
MOVEPPGM	0.0227	0.0752	0.0915	0.7623	0.052796	MOVE3YRS * PPGM
MOVENEW	0.0699	0.0888	0.6193	0.4313	0.073765	MOVE3YRS * 1-PPGM
DRUGPPGM	-0.9729	0.9540	1.0398	0.3079	-0.077470	DRUGS * PPGM
DRUGNEW	0.6491	0.8668	0.5607	0.4540	0.064622	DRUGS * 1-PPGM
EDUCPPGM	1.0839	0.5025	4.6519	0.0310	0.210824	EDUCLT12 * PPGM
EDUCNEW	0.2357	0.3674	0.4116	0.5211	0.049485	EDUCLT12 * 1-PPGM
VOUCPPGM	0.6367	0.5645	1.2721	0.2594	0.113672	VOUCHER * PPGM
VOUCNEW	-0.1725	0.4396	0.1540	0.6948	-0.031189	VOUCHER * 1-PPGM
UNDPPPGM	-1.0557	0.4778	4.8825	0.0271	-0.268631	UNDPROG * PPGM
UNDPNEW	-0.2777	0.3794	0.5357	0.4642	-0.075797	UNDPROG * 1-PPGM
WNHQPPGM	-0.9149	0.4552	4.0398	0.0444	-0.177963	WANTHQ * PPGM
WNHQNEW	-0.7467	0.3446	4.6970	0.0302	-0.196452	WANTHQ * 1-PPGM
WNLCPPGM	0.0169	0.5220	0.0011	0.9741	0.004425	WANTLC * PPGM
WNLCNEW	-0.1363	0.3587	0.1445	0.7039	-0.036572	WANTLC * 1-PPGM
OWN	0.3387	0.2748	1.5191	0.2178	0.093438	<A1> OWN, MANAGE OR BROKER
DIFFSCRN	-0.5470	0.2873	3.6249	0.0569	-0.141905	(QE3) 1 if diff. screen for sec. 8
NOPASS1	-1.3430	0.6580	4.1660	0.0412	-0.130264	(1) re: single w/kids
NOPASS3	-0.0670	0.3249	0.0425	0.8367	-0.015731	(1) re: bad credit
NOPASS4	-0.1505	0.4200	0.1283	0.7202	-0.026862	(1) re: bad references
NOPASS5	-2.6855	1.0693	6.3078	0.0120	-0.195566	(1) re: minority
NOPASS8	-1.1178	0.5611	3.9691	0.0463	-0.175326	(1) if bedrooms< needed
MKTUP	-0.3215	0.2798	1.3200	0.2506	-0.084876	A12: (1) if mkt improved last yr
MKTGOOD	0.3106	0.3079	1.0177	0.3131	0.076203	A11: (1) if market good
NGHGOOD	-0.1202	0.3052	0.1551	0.6937	-0.031728	A25: (1) if nghbrh good

The LOGISTIC Procedure

Analysis of Maximum Likelihood Estimates

Variable	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Variable Label
EXVAC	0.00603	0.00761	0.6274	0.4283	0.068212	Expected Days Vacant
EVACMIS	-0.0615	0.4984	0.0152	0.9017	-0.009822	EXVAC Missing?
LLVFAM	-0.5415	0.3106	3.0396	0.0813	-0.148036	LL Very Familiar w/S8
LLNFAM	-0.1746	0.4406	0.1571	0.6919	-0.033793	LL Not Familiar w/S8
STAYLESS	-0.2221	0.3151	0.4966	0.4810	-0.056952	1 if E(yrs tenure) less for S8
STAYMORE	-0.4365	0.4014	1.1823	0.2769	-0.084031	1 if E(yrs tenure) less for S8
MOREDAMG	0.7680	0.3454	4.9432	0.0262	0.198119	(QE4H) 1 if expect more damage w/S8
LESSDAMG	0.8665	0.4884	3.1480	0.0760	0.178195	(QE4H) 1 if expect less damage w/S8
HRD2EVCT	-0.2146	0.3084	0.4844	0.4864	-0.054872	Harder to Evict if S8
ESY2EVCT	0.8813	0.6102	2.0859	0.1487	0.118880	Easier to Evict if S8
LOWRRNT	0.0325	0.3222	0.0102	0.9196	0.007700	Expect Lower Rent if S8
HIGHRNT	0.3818	0.5631	0.4597	0.4978	0.054081	Expect Higher Rent if S8
MOREPBL	-0.0764	0.3891	0.0386	0.8442	-0.018266	Expect More Problems if S8
LESSPBL	-0.0843	0.4224	0.0398	0.8418	-0.017975	Expect Less Problems if S8
NOPAS4XR	0.0231	0.4380	0.0028	0.9579	0.004231	not elderly/LL oft rents 2 elderly
NOPAS6XR	0.3328	0.3012	1.2208	0.2692	0.090491	not emplyd/LL oft rents 2 emplyd
PCTVAC	0.0199	0.0361	0.3031	0.5820	0.054166	% VACANT UNITS

Association of Predicted Probabilities and Observed Responses

Concordant = 83.4%	Somers' D = 0.670
Discordant = 16.4%	Gamma = 0.671
Tied = 0.2%	Tau-a = 0.260
(61568 pairs)	c = 0.835

APPENDIX F

REGRESSIONS FOR NEW YORK CITY

Each regression contains two tables. The first presents the variables, with their means, standard deviations, minimums and maximums. The second table contains the logit regression results.

The LOGISTIC Procedure

Data Set: WORK.NY
Response Variable: OUTCOME
Response Levels: 2
Number of Observations: 389
Link Function: Logit

Response Profile

Ordered Value	OUTCOME	Count
1	1	255
2	2	134

WARNING: 4 observation(s) were deleted due to missing values for the response or explanatory variables.

Simple Statistics for Explanatory Variables

Variable	Mean	Standard Deviation	Minimum	Maximum	Variable Label
MINORITY	0.591260	0.492234	0.000000	1.00000	Minority?
OLD	0.444730	0.497576	0.000000	1.00000	Old?
HANDIC	0.331620	0.471401	0.000000	1.00000	Handicapped?
WRKING	0.046272	0.210345	0.000000	1.00000	Employed?
COUPCHLD	0.033419	0.179960	0.000000	1.00000	Couple w/Child?
OTHNOKD	0.033419	0.179960	0.000000	1.00000	Other no Children
SHARER	0.182519	0.386769	0.000000	1.00000	Does Enrollee Share?
HOMELSS	0.061697	0.240914	0.000000	1.00000	Is Enrollee Homeless?
PREFHOME	0.390746	0.488546	0.000000	1.00000	Prefer Home?
UNTRAT	0.561046	0.367902	0.000000	1.52504	FULLGROSS/FMR
PPBB	0.226221	0.703622	0.000000	4.00000	PPBEDOK * BEDROOMS
PPBNOK	0.339332	0.948694	0.000000	4.00000	BR Required if PP BR Not Ok
UNTRATH	0.077222	0.295952	0.000000	1.49057	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.547558	0.498374	0.000000	1.00000	Prefer Neighborhood?
PPBEDOK	0.717224	0.450929	0.000000	1.00000	Pre-Program BR Ok?
NOCARE	0.038560	0.192793	0.000000	1.00000	No Child Care Avail When Needed?
FMRINC	1.167361	0.405936	0.323780	3.12426	FMR/INC
ACCCAR	0.182519	0.386769	0.000000	1.00000	Have Access to Car?
MOVE3YRS	0.905859	0.790268	0.062500	5.00000	Average Moves Per 3 Years
BADCREDT	0.056555	0.231288	0.000000	1.00000	BAD CREDIT
BADREFS	0.020566	0.142107	0.000000	1.00000	BAD LANDLORD REFERENCES
DRUGS	0.023136	0.150530	0.000000	1.00000	DRUG ARREST
EDUCLT12	0.511568	0.500510	0.000000	1.00000	(1) if educ < 12 yrs
VOUCHER	0.097686	0.297272	0.000000	1.00000	(1) if voucher, else certif
UNDPROG	0.622108	0.485485	0.000000	1.00000	Understand PGM?
WANTHQ	0.347044	0.476643	0.000000	1.00000	Want Better Housing?
WANTLC	0.755784	0.430175	0.000000	1.00000	Want Lower Cost?

Criteria for Assessing Model Fit

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	502.999	461.593	.
SC	506.963	572.573	.
-2 LOG L	500.999	405.593	95.407 with 27 DF (p=0.0001)
Score	.	.	86.499 with 27 DF (p=0.0001)

The LOGISTIC Procedure

Analysis of Maximum Likelihood Estimates

Variable	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Variable Label
INTERCPT	0.8695	1.1611	0.5607	0.4540	.	Intercept
MINORITY	-0.7019	0.3000	5.4725	0.0193	-0.190477	Minority?
OLD	-1.1216	0.6391	3.0804	0.0792	-0.307697	Old?
HANDIC	-1.1645	0.6103	3.6405	0.0564	-0.302646	Handicapped?
WRKING	-1.3448	0.6545	4.2218	0.0399	-0.155954	Employed?
COUPCHLD	-1.9227	0.8157	5.5556	0.0184	-0.190766	Couple w/Child?
OTHNOKD	-0.4690	0.9084	0.2666	0.6056	-0.046537	Other no Children
SHARER	-0.6738	0.4998	1.8170	0.1777	-0.143671	Does Enrollee Share?
HOMELSS	-0.6186	0.8059	0.5892	0.4427	-0.082161	Is Enrollee Homeless?
PREFHOME	1.1228	0.3428	10.7295	0.0011	0.302433	Prefer Home?
UNTRAT	-0.7458	0.5196	2.0598	0.1512	-0.151272	FULLGROSS/FMR
PPBB	0.4511	0.3009	2.2467	0.1339	0.174977	PPBEDOK * BEDROOMS
PPBNOK	0.3784	0.2762	1.8771	0.1707	0.197905	BR Required if PP BR Not Ok
UNTRATH	-0.9627	0.4950	3.7828	0.0518	-0.157085	FULLGROSS/FMR (Adjusted)
PREFNEIG	-0.2437	0.2880	0.7163	0.3974	-0.066974	Prefer Neighborhood?
PPBEDOK	0.9780	0.5530	3.1273	0.0770	0.243130	Pre-Program BR Ok?
NOCARE	-0.5242	0.7267	0.5204	0.4707	-0.055723	No Child Care Avail When Needed?
FMRINC	0.0378	0.4457	0.0072	0.9324	0.008462	FMR/INC
ACCCAR	0.0573	0.3364	0.0290	0.8648	0.012218	Have Access to Car?
MOVE3YRS	0.5727	0.1974	8.4174	0.0037	0.249515	Average Moves Per 3 Years
BADCREDT	0.0748	0.6116	0.0150	0.9026	0.009543	BAD CREDIT
BADREFS	-1.8286	0.9765	3.5062	0.0611	-0.143264	BAD LANDLORD REFERENCES
DRUGS	1.0494	0.8197	1.6393	0.2004	0.087095	DRUG ARREST
EDUCLT12	0.3345	0.2679	1.5588	0.2118	0.092310	(1) if educ < 12 yrs
VOUCHER	0.8285	0.5069	2.6714	0.1022	0.135788	(1) if voucher, else certif
UNDPROG	0.6177	0.2643	5.4632	0.0194	0.165343	Understand PGM?
WANTHQ	-0.5350	0.2758	3.7623	0.0524	-0.140591	Want Better Housing?
WANTLC	-0.2325	0.3036	0.5867	0.4437	-0.055144	Want Lower Cost?

Association of Predicted Probabilities and Observed Responses

Concordant	= 78.5%	Somers' D	= 0.573
Discordant	= 21.2%	Gamma	= 0.574
Tied	= 0.2%	Tau-a	= 0.259
(34170 pairs)		c	= 0.786

The LOGISTIC Procedure

Data Set: WORK.NY
Response Variable: SUCCESS
Response Levels: 2
Number of Observations: 315
Link Function: Logit

Response Profile

Ordered Value	SUCCESS	Count
1	1	152
2	2	163

WARNING: 3 observation(s) were deleted due to missing values for the response or explanatory variables.

Simple Statistics for Explanatory Variables

Variable	Mean	Standard Deviation	Minimum	Maximum	Variable Label
MINORITY	0.574603	0.495190	0.000000	1.00000	Minority?
OLD	0.466667	0.499681	0.000000	1.00000	Old?
HANDIC	0.298413	0.458290	0.000000	1.00000	Handicapped?
WRKING	0.053968	0.226315	0.000000	1.00000	Employed?
OTHNOKD	0.041270	0.199230	0.000000	1.00000	Other no Children
SHARER	0.066667	0.249841	0.000000	1.00000	Does Enrollee Share?
PREFHOME	0.466667	0.499681	0.000000	1.00000	Prefer Home?
UNTRAT	0.650422	0.314514	0.000000	1.52504	FULLGROSS/FMR
PPBB	0.279365	0.772571	0.000000	4.00000	PPBEDOK * BEDROOMS
PPBNOK	0.339683	0.994658	0.000000	4.00000	BR Required if PP BR Not Ok
UNTRATH	0.068651	0.280352	0.000000	1.49057	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.580952	0.494188	0.000000	1.00000	Prefer Neighborhood?
PPBEDOK	0.885714	0.318664	0.000000	1.00000	Pre-Program BR Ok?
NOCARE	0.041270	0.199230	0.000000	1.00000	No Child Care Avail When Needed?
FMRINC	1.070643	0.327520	0.323780	3.12426	FMR/INC
ACCCAR	0.174603	0.380231	0.000000	1.00000	Have Access to Car?
MOVE3YRS	0.799982	0.648467	0.062500	3.00000	Average Moves Per 3 Years
BADCREDT	0.047619	0.213298	0.000000	1.00000	BAD CREDIT
DRUGS	0.015873	0.125183	0.000000	1.00000	DRUG ARREST
EDUCLT12	0.526984	0.500066	0.000000	1.00000	(1) if educ < 12 yrs
VOUCHER	0.101587	0.302585	0.000000	1.00000	(1) if voucher, else certif
UNDPROG	0.606349	0.489336	0.000000	1.00000	Understand PGM?
WANTHQ	0.323810	0.468673	0.000000	1.00000	Want Better Housing?
WANTLC	0.815873	0.388204	0.000000	1.00000	Want Lower Cost?

Criteria for Assessing Model Fit

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	438.299	287.654	.
SC	442.051	381.469	.
-2 LOG L	436.299	237.654	198.644 with 24 DF (p=0.0001)
Score	.	.	159.430 with 24 DF (p=0.0001)

The LOGISTIC Procedure

Analysis of Maximum Likelihood Estimates

Variable	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Variable Label
INTERCPT	-1.0512	2.5125	0.1751	0.6757	.	Intercept
MINORITY	-0.7193	0.4117	3.0524	0.0806	-0.196383	Minority?
OLD	-0.2133	0.8819	0.0585	0.8089	-0.058754	Old?
HANDIC	0.0160	0.8598	0.0003	0.9852	0.004034	Handicapped?
WRKING	-1.6237	0.8739	3.4523	0.0632	-0.202591	Employed?
OTHNOKD	0.7080	1.0395	0.4640	0.4958	0.077772	Other no Children
SHARER	-1.3351	0.9689	1.8988	0.1682	-0.183904	Does Enrollee Share?
PREFHOME	3.0604	0.4365	49.1483	0.0001	0.843104	Prefer Home?
UNTRAT	0.4320	0.8259	0.2736	0.6009	0.074915	FULLGROSS/FMR
PPBB	0.8190	0.3516	5.4265	0.0198	0.348857	PPBEDOK * BEDROOMS
PPBNOK	-0.2161	0.6230	0.1204	0.7286	-0.118531	BR Required if PP BR Not Ok
UNTRATH	0.6049	0.7833	0.5964	0.4399	0.093503	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.4344	0.3910	1.2345	0.2665	0.118366	Prefer Neighborhood?
PPBEDOK	-1.1004	1.6932	0.4224	0.5158	-0.193332	Pre-Program BR Ok?
NOCARE	-2.0834	1.1015	3.5775	0.0586	-0.228841	No Child Care Avail When Needed?
FMRINC	-0.4115	0.6888	0.3569	0.5502	-0.074310	FMR/INC
ACCCAR	0.2113	0.4538	0.2168	0.6415	0.044289	Have Access to Car?
MOVE3YRS	0.3554	0.2969	1.4324	0.2314	0.127053	Average Moves Per 3 Years
BADCREDT	-0.8418	0.9484	0.7878	0.3748	-0.098991	BAD CREDIT
DRUGS	-0.3967	1.5074	0.0693	0.7924	-0.027380	DRUG ARREST
EDUCLT12	0.5541	0.3748	2.1861	0.1393	0.152775	(1) if educ < 12 yrs
VOUCHER	1.2872	0.6575	3.8328	0.0503	0.214735	(1) if voucher, else certif
UNDPROG	0.9838	0.3702	7.0631	0.0079	0.265409	Understand PGM?
WANTHQ	-1.3192	0.4006	10.8422	0.0010	-0.340881	Want Better Housing?
WANTLC	-0.0590	0.4860	0.0147	0.9034	-0.012621	Want Lower Cost?

Association of Predicted Probabilities and Observed Responses

Concordant = 91.1%	Somers' D = 0.823
Discordant = 8.8%	Gamma = 0.824
Tied = 0.1%	Tau-a = 0.412
(24776 pairs)	c = 0.911

The LOGISTIC Procedure

Data Set: WORK.NY
Response Variable: SUCCESS
Response Levels: 2
Number of Observations: 315
Link Function: Logit

Response Profile

Ordered Value	SUCCESS	Count
1	1	221
2	2	94

WARNING: 3 observation(s) were deleted due to missing values for the response or explanatory variables.

Simple Statistics for Explanatory Variables

Variable	Mean	Standard Deviation	Minimum	Maximum	Variable Label
MINORITY	0.574603	0.495190	0.000000	1.00000	Minority?
OLD	0.466667	0.499681	0.000000	1.00000	Old?
HANDIC	0.298413	0.458290	0.000000	1.00000	Handicapped?
WRKING	0.053968	0.226315	0.000000	1.00000	Employed?
OTHNOKD	0.041270	0.199230	0.000000	1.00000	Other no Children
SHARER	0.066667	0.249841	0.000000	1.00000	Does Enrollee Share?
PREFHOME	0.466667	0.499681	0.000000	1.00000	Prefer Home?
UNTRAT	0.650422	0.314514	0.000000	1.52504	FULLGROSS/FMR
PPBB	0.279365	0.772571	0.000000	4.00000	PPBEDOK * BEDROOMS
PPBNOK	0.339683	0.994658	0.000000	4.00000	BR Required if PP BR Not Ok
UNTRATH	0.068651	0.280352	0.000000	1.49057	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.580952	0.494188	0.000000	1.00000	Prefer Neighborhood?
PPBEDOK	0.885714	0.318664	0.000000	1.00000	Pre-Program BR Ok?
NOCARE	0.041270	0.199230	0.000000	1.00000	No Child Care Avail When Needed?
FMRINC	1.070643	0.327520	0.323780	3.12426	FMR/INC
ACCCAR	0.174603	0.380231	0.000000	1.00000	Have Access to Car?
MOVE3YRS	0.799982	0.648467	0.062500	3.00000	Average Moves Per 3 Years
BADCREDT	0.047619	0.213298	0.000000	1.00000	BAD CREDIT
DRUGS	0.015873	0.125183	0.000000	1.00000	DRUG ARREST
EDUCLT12	0.526984	0.500066	0.000000	1.00000	(1) if educ < 12 yrs
VOUCHER	0.101587	0.302585	0.000000	1.00000	(1) if voucher, else certif
UNDPROG	0.606349	0.489336	0.000000	1.00000	Understand PGM?
WANTHQ	0.323810	0.468673	0.000000	1.00000	Want Better Housing?
WANTLC	0.815873	0.388204	0.000000	1.00000	Want Lower Cost?

Criteria for Assessing Model Fit

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	385.993	368.847	.
SC	389.746	462.661	.
-2 LOG L	383.993	318.847	65.147 with 24 DF (p=0.0001)
Score	.	.	58.705 with 24 DF (p=0.0001)

The LOGISTIC Procedure

Analysis of Maximum Likelihood Estimates

Variable	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Variable Label
INTERCPT	3.5623	2.2626	2.4789	0.1154	.	Intercept
MINORITY	-0.8830	0.3559	6.1555	0.0131	-0.241070	Minority?
OLD	-0.3206	0.7235	0.1963	0.6577	-0.088309	Old?
HANDIC	-0.2861	0.6899	0.1720	0.6784	-0.072280	Handicapped?
WRKING	-1.4690	0.6638	4.8975	0.0269	-0.183287	Employed?
OTHNOKD	0.3220	0.9019	0.1275	0.7210	0.035373	Other no Children
SHARER	-0.6357	0.5937	1.1462	0.2844	-0.087557	Does Enrollee Share?
PREFHOME	1.2584	0.3695	11.5970	0.0007	0.346670	Prefer Home?
UNTRAT	-0.8573	0.6617	1.6784	0.1951	-0.148657	FULLGROSS/FMR
PPBB	0.4251	0.3051	1.9418	0.1635	0.181077	PPBEDOK * BEDROOMS
PPBNOK	-0.7266	0.5745	1.5997	0.2059	-0.398453	BR Required if PP BR Not Ok
UNTRATH	-0.9163	0.6255	2.1458	0.1430	-0.141630	FULLGROSS/FMR (Adjusted)
PREFNEIG	-0.1857	0.3319	0.3131	0.5758	-0.050602	Prefer Neighborhood?
PPBEDOK	-2.6267	1.8652	1.9833	0.1590	-0.461489	Pre-Program BR Ok?
NOCARE	-0.6442	0.7442	0.7494	0.3867	-0.070762	No Child Care Avail When Needed?
FMRINC	-0.0824	0.5809	0.0201	0.8871	-0.014886	FMR/INC
ACCCAR	0.3821	0.3959	0.9313	0.3345	0.080095	Have Access to Car?
MOVE3YRS	0.6784	0.2880	5.5489	0.0185	0.242541	Average Moves Per 3 Years
BADCREDT	0.00500	0.7273	0.0000	0.9945	0.000588	BAD CREDIT
DRUGS	-0.0716	1.0323	0.0048	0.9447	-0.004939	DRUG ARREST
EDUCLT12	0.5641	0.3058	3.4029	0.0651	0.155533	(1) if educ < 12 yrs
VOUCHER	0.7378	0.6136	1.4460	0.2292	0.123087	(1) if voucher, else certif
UNDPROG	0.6541	0.2981	4.8153	0.0282	0.176469	Understand PGM?
WANTHQ	-0.5320	0.3165	2.8258	0.0928	-0.137471	Want Better Housing?
WANTLC	-0.1531	0.3672	0.1739	0.6766	-0.032777	Want Lower Cost?

Association of Predicted Probabilities and Observed Responses

Concordant	= 77.3%	Somers' D	= 0.549
Discordant	= 22.4%	Gamma	= 0.550
Tied	= 0.2%	Tau-a	= 0.231
(20774 pairs)		c	= 0.775

The LOGISTIC Procedure

Data Set: WORK.NY
Response Variable: ASK
Response Levels: 2
Number of Observations: 315
Link Function: Logit

Response Profile

Ordered Value	ASK	Count
1	1	252
2	2	63

WARNING: 3 observation(s) were deleted due to missing values for the response or explanatory variables.

Simple Statistics for Explanatory Variables

Variable	Mean	Standard Deviation	Minimum	Maximum	Variable Label
MINORITY	0.574603	0.495190	0.000000	1.00000	Minority?
OLD	0.466667	0.499681	0.000000	1.00000	Old?
HANDIC	0.298413	0.458290	0.000000	1.00000	Handicapped?
WRKING	0.053968	0.226315	0.000000	1.00000	Employed?
OTHNOKD	0.041270	0.199230	0.000000	1.00000	Other no Children
SHARER	0.066667	0.249841	0.000000	1.00000	Does Enrollee Share?
PREFHOME	0.466667	0.499681	0.000000	1.00000	Prefer Home?
UNTRAT	0.650422	0.314514	0.000000	1.52504	FULLGROSS/FMR
PPBB	0.279365	0.772571	0.000000	4.00000	PPBEDOK * BEDROOMS
PPBNOK	0.339683	0.994658	0.000000	4.00000	BR Required if PP BR Not Ok
UNTRATH	0.068651	0.280352	0.000000	1.49057	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.580952	0.494188	0.000000	1.00000	Prefer Neighborhood?
PPBEDOK	0.885714	0.318664	0.000000	1.00000	Pre-Program BR Ok?
NOCARE	0.041270	0.199230	0.000000	1.00000	No Child Care Avail When Needed?
FMRINC	1.070643	0.327520	0.323780	3.12426	FMR/INC
ACCCAR	0.174603	0.380231	0.000000	1.00000	Have Access to Car?
MOVE3YRS	0.799982	0.648467	0.062500	3.00000	Average Moves Per 3 Years
BADCREDT	0.047619	0.213298	0.000000	1.00000	BAD CREDIT
BADREFS	0.019048	0.136910	0.000000	1.00000	BAD LANDLORD REFERENCES
DRUGS	0.015873	0.125183	0.000000	1.00000	DRUG ARREST
EDUCLT12	0.526984	0.500066	0.000000	1.00000	(1) if educ < 12 yrs
VOUCHER	0.101587	0.302585	0.000000	1.00000	(1) if voucher, else certif
UNDPROG	0.606349	0.489336	0.000000	1.00000	Understand PGM?
WANTHQ	0.323810	0.468673	0.000000	1.00000	Want Better Housing?
WANTLC	0.815873	0.388204	0.000000	1.00000	Want Lower Cost?

Criteria for Assessing Model Fit

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	317.254	282.951	.
SC	321.006	380.518	.
-2 LOG L	315.254	230.951	84.302 with 25 DF (p=0.0001)
Score	.	.	74.134 with 25 DF (p=0.0001)

The LOGISTIC Procedure

Analysis of Maximum Likelihood Estimates

Variable	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Variable Label
INTERCPT	-T.1094	2.0967	0.2800	0.5967	.	Intercept
MINORITY	-0.3486	0.4381	0.6331	0.4262	-0.095180	Minority?
OLD	-0.4693	0.8577	0.2994	0.5842	-0.129295	Old?
HANDIC	0.0114	0.8301	0.0002	0.9890	0.002891	Handicapped?
WRKING	-0.9632	0.7274	1.7534	0.1854	-0.120184	Employed?
OTHNOKD	-0.2958	0.9800	0.0911	0.7628	-0.032491	Other no Children
SHARER	0.2999	0.6225	0.2321	0.6300	0.041307	Does Enrollee Share?
PREFHOME	2.6814	0.5935	20.4127	0.0001	0.738702	Prefer Home?
UNTRAT	1.1944	0.7166	2.7781	0.0956	0.207117	FULLGROSS/FMR
PPBB	0.5963	0.4471	1.7787	0.1823	0.253994	PPBEDOK * BEDROOMS
PPBNOK	0.1885	0.4903	0.1478	0.7006	0.103379	BR Required if PP BR Not Ok
UNTRATH	-0.1100	0.6522	0.0284	0.8661	-0.016999	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.0995	0.3718	0.0717	0.7889	0.027118	Prefer Neighborhood?
PPBEDOK	0.9626	1.4685	0.4297	0.5121	0.169126	Pre-Program BR Ok?
NOCARE	-0.3262	0.9010	0.1311	0.7173	-0.035831	No Child Care Avail When Needed?
FMRINC	-0.0486	0.6109	0.0063	0.9366	-0.008777	FMR/INC
ACCCAR	0.2847	0.4539	0.3934	0.5305	0.059679	Have Access to Car?
MOVE3YRS	-0.0672	0.3031	0.0491	0.8246	-0.024021	Average Moves Per 3 Years
BADCREDT	0.2714	0.8250	0.1082	0.7422	0.031919	BAD CREDIT
BADREFS	-1.2111	1.0427	1.3491	0.2454	-0.091420	BAD LANDLORD REFERENCES
DRUGS	-0.0569	1.1366	0.0025	0.9601	-0.003924	DRUG ARREST
EDUCLT12	0.2860	0.3676	0.6054	0.4365	0.078861	(1) if educ < 12 yrs
VOUCHER	-0.3388	0.6867	0.2435	0.6217	-0.056524	(1) if voucher, else certif
UNDPROG	0.1214	0.3706	0.1073	0.7433	0.032747	Understand PGM?
WANTHQ	-0.0549	0.3708	0.0219	0.8823	-0.014188	Want Better Housing?
WANTLC	0.5689	0.3888	2.1406	0.1434	0.121763	Want Lower Cost?

Association of Predicted Probabilities and Observed Responses

Concordant = 84.5%	Somers' D = 0.692
Discordant = 15.2%	Gamma = 0.695
Tied = 0.3%	Tau-a = 0.222
(15876 pairs)	c = 0.846

The LOGISTIC Procedure

Data Set: WORK.NY
Response Variable: AGREE
Response Levels: 2
Number of Observations: 252
Link Function: Logit

Response Profile

Ordered Value	AGREE	Count
1	1	198
2	2	54

WARNING: 2 observation(s) were deleted due to missing values for the response or explanatory variables.

Simple Statistics for Explanatory Variables

Variable	Mean	Standard Deviation	Minimum	Maximum	Variable Label
MINORITY	0.543651	0.499082	0.000000	1.00000	Minority?
OLD	0.472222	0.500221	0.000000	1.00000	Old?
HANDIC	0.305556	0.461559	0.000000	1.00000	Handicapped?
WRKING	0.043651	0.204724	0.000000	1.00000	Employed?
OTHNOKD	0.039683	0.195601	0.000000	1.00000	Other no Children
SHARER	0.055556	0.229517	0.000000	1.00000	Does Enrollee Share?
PREFHOME	0.567460	0.496414	0.000000	1.00000	Prefer Home?
UNTRAT	0.689894	0.301077	0.000000	1.52504	FULLGROSS/FMR
PPBB	0.321429	0.834907	0.000000	4.00000	PPBEDOK * BEDROOMS
PPBNOK	0.265873	0.890826	0.000000	4.00000	BR Required if PP BR Not Ok
UNTRATH	0.056371	0.253272	0.000000	1.38169	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.638889	0.481279	0.000000	1.00000	Prefer Neighborhood?
PPBEDOK	0.912698	0.282838	0.000000	1.00000	Pre-Program BR Ok?
NOCARE	0.039683	0.195601	0.000000	1.00000	No Child Care Avail When Needed?
FMRINC	1.058666	0.296285	0.323780	2.42556	FMR/INC
ACCCAR	0.170635	0.376938	0.000000	1.00000	Have Access to Car?
MOVE3YRS	0.800507	0.644646	0.062500	3.00000	Average Moves Per 3 Years
BADCREDT	0.043651	0.204724	0.000000	1.00000	BAD CREDIT
BADREFS	0.011905	0.108673	0.000000	1.00000	BAD LANDLORD REFERENCES
EDUCLT12	0.523810	0.500427	0.000000	1.00000	(1) if educ < 12 yrs
VOUCHER	0.107143	0.309910	0.000000	1.00000	(1) if voucher, else certif
UNDPROG	0.615079	0.487545	0.000000	1.00000	Understand PGM?
WANTHQ	0.273810	0.446800	0.000000	1.00000	Want Better Housing?
WANTLC	0.857143	0.350623	0.000000	1.00000	Want Lower Cost?

Criteria for Assessing Model Fit

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	263.868	227.538	.
SC	267.398	315.774	.
-2 LOG L	261.868	177.538	84.330 with 24 DF (p=0.0001)
Score	.	.	78.046 with 24 DF (p=0.0001)

The LOGISTIC Procedure

Analysis of Maximum Likelihood Estimates

Variable	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Variable Label
INTERCPT	5.2375	4.4347	1.3948	0.2376	.	Intercept
MINORITY	-0.2059	0.4800	0.1841	0.6679	-0.056657	Minority?
OLD	1.1341	1.0619	1.1407	0.2855	0.312770	Old?
HANDIC	0.5973	1.0068	0.3519	0.5530	0.151985	Handicapped?
WRKING	-0.2770	0.9767	0.0805	0.7767	-0.031270	Employed?
OTHNOKD	0.8819	1.3321	0.4382	0.5080	0.095100	Other no Children
SHARER	-0.7431	0.8106	0.8405	0.3593	-0.094034	Does Enrollee Share?
PREFHOME	2.3272	0.5261	19.5660	0.0001	0.636919	Prefer Home?
UNTRAT	1.0217	0.9261	1.2170	0.2700	0.169587	FULLGROSS/FMR
PPBB	0.7798	0.4262	3.3475	0.0673	0.358930	PPBEDOK * BEDROOMS
PPBNOK	-1.3938	1.1441	1.4843	0.2231	-0.684565	BR Required if PP BR Not Ok
UNTRATH	1.1080	0.9058	1.4960	0.2213	0.154710	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.5476	0.4380	1.5634	0.2112	0.145315	Prefer Neighborhood?
PPBEDOK	-7.0486	4.0965	2.9606	0.0853	-1.099130	Pre-Program BR Ok?
NOCARE	-0.3235	1.0302	0.0986	0.7535	-0.034890	No Child Care Avail When Needed?
FMRINC	0.4907	0.8441	0.3379	0.5610	0.080150	FMR/INC
ACCCAR	-0.6072	0.5058	1.4415	0.2299	-0.126196	Have Access to Car?
MOVE3YRS	0.4146	0.3994	1.0774	0.2993	0.147360	Average Moves Per 3 Years
BADCREDT	0.0650	1.0333	0.0040	0.9498	0.007339	BAD CREDIT
BADREFS	-2.9469	1.7796	2.7421	0.0977	-0.176562	BAD LANDLORD REFERENCES
EDUCLT12	0.0620	0.4363	0.0202	0.8870	0.017110	(1) if educ < 12 yrs
VOUCHER	0.9100	0.9679	0.8839	0.3471	0.155479	(1) if voucher, else certif
UNDPROG	0.0599	0.4375	0.0188	0.8910	0.016114	Understand PGM?
WANTHQ	-0.5213	0.4323	1.4544	0.2278	-0.128422	Want Better Housing?
WANTLC	-0.4951	0.5386	0.8452	0.3579	-0.095708	Want Lower Cost?

Association of Predicted Probabilities and Observed Responses

Concordant = 86.2%	Somers' D = 0.726
Discordant = 13.6%	Gamma = 0.728
Tied = 0.2%	Tau-a = 0.245
(10692 pairs)	c = 0.863

The LOGISTIC Procedure

Data Set: WORK.NY
Response Variable: HAVEINSP
Response Levels: 2
Number of Observations: 199
Link Function: Logit

Response Profile

Ordered Value	HAVEINSP	Count
1	1	182
2	2	17

Simple Statistics for Explanatory Variables

Variable	Mean	Standard Deviation	Minimum	Maximum	Variable Label
MINORITY	0.502513	0.501255	0.000000	1.00000	Minority?
OLD	0.517588	0.500951	0.000000	1.00000	Old?
HANDIC	0.271357	0.445781	0.000000	1.00000	Handicapped?
WRKING	0.035176	0.184689	0.000000	1.00000	Employed?
OTHNOKD	0.040201	0.196926	0.000000	1.00000	Other no Children
PREFHOME	0.678392	0.468272	0.000000	1.00000	Prefer Home?
UNTRAT	0.721393	0.292955	0.000000	1.52504	FULLGROSS/FMR
PPBB	0.341709	0.855062	0.000000	4.00000	PPBEDOK * BEDROOMS
PPBNOK	0.251256	0.857048	0.000000	4.00000	BR Required if PP BR Not Ok
UNTRATH	0.052402	0.241594	0.000000	1.25991	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.718593	0.450820	0.000000	1.00000	Prefer Neighborhood?
PPBEDOK	0.914573	0.280221	0.000000	1.00000	Pre-Program BR Ok?
NOCARE	0.035176	0.184689	0.000000	1.00000	No Child Care Avail When Needed?
FMRINC	1.040267	0.261542	0.409994	1.86732	FMR/INC
ACCCAR	0.150754	0.358711	0.000000	1.00000	Have Access to Car?
MOVE3YRS	0.831582	0.680801	0.062500	3.00000	Average Moves Per 3 Years
EDUCLT12	0.522613	0.500748	0.000000	1.00000	(1) if educ < 12 yrs
VOUCHER	0.125628	0.332266	0.000000	1.00000	(1) if voucher, else certif
UNDPROG	0.618090	0.487080	0.000000	1.00000	Understand PGM?
WANTHQ	0.211055	0.409087	0.000000	1.00000	Want Better Housing?
WANTLC	0.879397	0.326487	0.000000	1.00000	Want Lower Cost?

Criteria for Assessing Model Fit

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	118.148	107.320	.
SC	121.441	179.772	.
-2 LOG L	116.148	63.320	52.828 with 21 DF (p=0.0001)
Score	.	.	51.560 with 21 DF (p=0.0002)

The LOGISTIC Procedure

Analysis of Maximum Likelihood Estimates

Variable	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Variable Label
INTERCPT	4.5129	5.8210	0.6011	0.4382	.	Intercept
MINORITY	-0.3378	0.9023	0.1401	0.7081	-0.093348	Minority?
OLD	-1.4356	1.5087	0.9054	0.3413	-0.396496	Old?
HANDIC	-1.0286	1.3571	0.5745	0.4485	-0.252790	Handicapped?
WRKING	0.0579	2.2243	0.0007	0.9792	0.005892	Employed?
OTHNOKD	-1.4861	2.6384	0.3173	0.5732	-0.161351	Other no Children
PREFHOME	2.5476	1.0383	6.0202	0.0141	0.657718	Prefer Home?
UNTRAT	-0.1740	1.9661	0.0078	0.9295	-0.028112	FULLGROSS/FMR
PPBB	-0.9445	0.4947	3.6452	0.0562	-0.445262	PPBEDOK * BEDROOMS
PPBNOK	-0.9163	1.3020	0.4953	0.4816	-0.432963	BR Required if PP BR Not Ok
UNTRATH	-1.1649	1.7082	0.4651	0.4953	-0.155165	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.6011	0.8247	0.5312	0.4661	0.149399	Prefer Neighborhood?
PPBEDOK	-0.0717	4.1487	0.0003	0.9862	-0.011081	Pre-Program BR Ok?
NOCARE	-0.0130	1.7799	0.0001	0.9942	-0.001321	No Child Care Avail When Needed?
FMRINC	-1.8095	1.5389	1.3825	0.2397	-0.260920	FMR/INC
ACCCAR	-0.3886	1.0879	0.1276	0.7209	-0.076852	Have Access to Car?
MOVE3YRS	-1.1178	0.6333	3.1147	0.0776	-0.419547	Average Moves Per 3 Years
EDUCLT12	1.6899	0.9885	2.9222	0.0874	0.466536	(1) if educ < 12 yrs
VOUCHER	2.8625	2.1544	1.7653	0.1840	0.524371	(1) if voucher, else certif
UNDPROG	2.3959	0.9145	6.8633	0.0088	0.643397	Understand PGM?
WANTHQ	-2.3681	0.7821	9.1684	0.0025	-0.534095	Want Better Housing?
WANTLC	0.9316	0.8040	1.3424	0.2466	0.167689	Want Lower Cost?

Association of Predicted Probabilities and Observed Responses

Concordant	= 92.0%	Somers' D	= 0.846
Discordant	= 7.4%	Gamma	= 0.851
Tied	= 0.6%	Tau-a	= 0.133
(3094 pairs)		c	= 0.923

The LOGISTIC Procedure

Data Set: WORK.NY
Response Variable: QUIP
Response Levels: 2
Number of Observations: 199
Link Function: Logit

Response Profile

Ordered Value	QUIP	Count
1	1	153
2	2	46

Simple Statistics for Explanatory Variables

Variable	Mean	Standard Deviation	Minimum	Maximum	Variable Label
MINORITY	0.502513	0.501255	0.000000	1.00000	Minority?
OLD	0.517588	0.500951	0.000000	1.00000	Old?
HANDIC	0.271357	0.445781	0.000000	1.00000	Handicapped?
WRKING	0.035176	0.184689	0.000000	1.00000	Employed?
OTHNOKD	0.040201	0.196926	0.000000	1.00000	Other no Children
PREFHOME	0.678392	0.468272	0.000000	1.00000	Prefer Home?
UNTRAT	0.721393	0.292955	0.000000	1.52504	FULLGROSS/FMR
PPBB	0.341709	0.855062	0.000000	4.00000	PPBEDOK * BEDROOMS
PPBNOK	0.251256	0.857048	0.000000	4.00000	BR Required if PP BR Not Ok
UNTRATH	0.052402	0.241594	0.000000	1.25991	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.718593	0.450820	0.000000	1.00000	Prefer Neighborhood?
PPBEDOK	0.914573	0.280221	0.000000	1.00000	Pre-Program BR Ok?
NOCARE	0.035176	0.184689	0.000000	1.00000	No Child Care Avail When Needed?
FMRINC	1.040267	0.261542	0.409994	1.86732	FMR/INC
ACCCAR	0.150754	0.358711	0.000000	1.00000	Have Access to Car?
MOVE3YRS	0.831582	0.680801	0.062500	3.00000	Average Moves Per 3 Years
EDUCLT12	0.522613	0.500748	0.000000	1.00000	(1) if educ < 12 yrs
VOUCHER	0.125628	0.332266	0.000000	1.00000	(1) if voucher, else certif
UNDPROG	0.618090	0.487080	0.000000	1.00000	Understand PGM?
WANTHQ	0.211055	0.409087	0.000000	1.00000	Want Better Housing?
WANTLC	0.879397	0.326487	0.000000	1.00000	Want Lower Cost?

Criteria for Assessing Model Fit

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	217.186	179.030	.
SC	220.480	251.483	.
-2 LOG L	215.186	135.030	80.157 with 21 DF (p=0.0001)
Score	.	.	73.285 with 21 DF (p=0.0001)

The LOGISTIC Procedure

Analysis of Maximum Likelihood Estimates

Variable	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Variable Label
INTERCPT	5.1924	3.8893	1.7823	0.1819	.	Intercept
MINORITY	-0.9344	0.5671	2.7151	0.0994	-0.258241	Minority?
OLD	-1.2155	1.2375	0.9648	0.3260	-0.335711	Old?
HANDIC	-0.4292	1.1856	0.1311	0.7173	-0.105491	Handicapped?
WRKING	-1.4077	1.4644	0.9241	0.3364	-0.143338	Employed?
OTHNOKD	-0.2095	1.5552	0.0181	0.8929	-0.022741	Other no Children
PREFHOME	2.6223	0.5888	19.8332	0.0001	0.677007	Prefer Home?
UNTRAT	-1.4310	1.2689	1.2718	0.2594	-0.231125	FULLGROSS/FMR
PPBB	0.2936	0.4318	0.4624	0.4965	0.138421	PPBEDOK * BEDROOMS
PPBNOK	-1.1241	0.9305	1.4595	0.2270	-0.531157	BR Required if PP BR Not Ok
UNTRATH	-0.2336	1.1639	0.0403	0.8410	-0.031109	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.2476	0.5208	0.2259	0.6346	0.061529	Prefer Neighborhood?
PPBEDOK	-2.4471	2.6761	0.8362	0.3605	-0.378068	Pre-Program BR Ok?
NOCARE	-2.7949	1.1558	5.8474	0.0156	-0.284593	No Child Care Avail When Needed?
FMRINC	-1.4155	1.0863	1.6979	0.1926	-0.204114	FMR/INC
ACCCAR	-0.3259	0.6546	0.2478	0.6186	-0.064444	Have Access to Car?
MOVE3YRS	0.5311	0.4415	1.4469	0.2290	0.199338	Average Moves Per 3 Years
EDUCLT12	0.5326	0.5121	1.0817	0.2983	0.147029	(1) if educ < 12 yrs
VOUCHER	2.7510	1.2265	5.0305	0.0249	0.503945	(1) if voucher, else certif
UNDPROG	1.0622	0.4953	4.5988	0.0320	0.285252	Understand PGM?
WANTHQ	-1.9794	0.5370	13.5878	0.0002	-0.446447	Want Better Housing?
WANTLC	-0.1789	0.6592	0.0737	0.7861	-0.032208	Want Lower Cost?

Association of Predicted Probabilities and Observed Responses

Concordant	= 88.0%	Somers' D	= 0.761
Discordant	= 11.8%	Gamma	= 0.763
Tied	= 0.2%	Tau-a	= 0.272
(7038 pairs)		c	= 0.881

The LOGISTIC Procedure

Data Set: WORK.NY
Response Variable: SUCCESS
Response Levels: 2
Number of Observations: 389
Link Function: Logit

Response Profile

Ordered Value	SUCCESS	Count
1	1	98
2	2	291

WARNING: 4 observation(s) were deleted due to missing values for the response or explanatory variables.

Simple Statistics for Explanatory Variables

Variable	Mean	Standard Deviation	Minimum	Maximum	Variable Label
MINORITY	0.591260	0.492234	0.000000	1.00000	Minority?
OLD	0.444730	0.497576	0.000000	1.00000	Old?
HANDIC	0.331620	0.471401	0.000000	1.00000	Handicapped?
WRKING	0.046272	0.210345	0.000000	1.00000	Employed?
COUPCHLD	0.033419	0.179960	0.000000	1.00000	Couple w/Child?
OTHNOKD	0.033419	0.179960	0.000000	1.00000	Other no Children
SHARER	0.182519	0.386769	0.000000	1.00000	Does Enrollee Share?
HOMELSS	0.061697	0.240914	0.000000	1.00000	Is Enrollee Homeless?
UNTRAT	0.561046	0.367902	0.000000	1.52504	FULLGROSS/FMR
PPBB	0.226221	0.703622	0.000000	4.00000	PPBEDOK * BEDROOMS
PPBNOK	0.339332	0.948694	0.000000	4.00000	BR Required if PP BR Not Ok
UNTRATH	0.077222	0.295952	0.000000	1.49057	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.547558	0.498374	0.000000	1.00000	Prefer Neighborhood?
PPBEDOK	0.717224	0.450929	0.000000	1.00000	Pre-Program BR Ok?
NOCARE	0.038560	0.192793	0.000000	1.00000	No Child Care Avail When Needed?
FMRINC	1.167361	0.405936	0.323780	3.12426	FMR/INC
ACCCAR	0.182519	0.386769	0.000000	1.00000	Have Access to Car?
MOVE3YRS	0.905859	0.790268	0.062500	5.00000	Average Moves Per 3 Years
BADCREDT	0.056555	0.231288	0.000000	1.00000	BAD CREDIT
BADREFS	0.020566	0.142107	0.000000	1.00000	BAD LANDLORD REFERENCES
DRUGS	0.023136	0.150530	0.000000	1.00000	DRUG ARREST
EDUCLT12	0.511568	0.500510	0.000000	1.00000	(1) if educ < 12 yrs
VOUCHER	0.097686	0.297272	0.000000	1.00000	(1) if voucher, else certif
UNDPROG	0.622108	0.485485	0.000000	1.00000	Understand PGM?
WANTHQ	0.347044	0.476643	0.000000	1.00000	Want Better Housing?
WANTLC	0.755784	0.430175	0.000000	1.00000	Want Lower Cost?

Criteria for Assessing Model Fit

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	441.137	397.235	.
SC	445.101	504.251	.
-2 LOG L	439.137	343.235	95.902 with 26 DF (p=0.0001)
Score	.	.	91.374 with 26 DF (p=0.0001)

The LOGISTIC Procedure

Analysis of Maximum Likelihood Estimates

Variable	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Variable Label
INTERCPT	-0.1918	1.2666	0.0229	0.8797	.	Intercept
MINORITY	-0.3764	0.3463	1.1818	0.2770	-0.102154	Minority?
OLD	-0.6914	0.6614	1.0928	0.2959	-0.189682	Old?
HANDIC	-0.8656	0.6287	1.8955	0.1686	-0.224979	Handicapped?
WRKING	-1.2830	0.7536	2.8981	0.0887	-0.148784	Employed?
COUPCHLD	-0.0751	0.8369	0.0081	0.9285	-0.007450	Couple w/Child?
OTHNOKD	-0.2980	0.9484	0.0987	0.7533	-0.029567	Other no Children
SHARER	-0.0375	0.5428	0.0048	0.9449	-0.007994	Does Enrollee Share?
HOMELSS	-0.7499	0.8369	0.8029	0.3702	-0.099608	Is Enrollee Homeless?
UNTRAT	-1.6795	0.5392	9.7015	0.0018	-0.340651	FULLGROSS/FMR
PPBB	-0.1405	0.2901	0.2345	0.6282	-0.054499	PPBEDOK * BEDROOMS
PPBNOK	0.2286	0.2857	0.6403	0.4236	0.119576	BR Required if PP BR Not Ok
UNTRATH	-1.3104	0.5703	5.2798	0.0216	-0.213809	FULLGROSS/FMR (Adjusted)
PREFNEIG	-1.2418	0.2914	18.1594	0.0001	-0.341206	Prefer Neighborhood?
PPBEDOK	0.5307	0.5932	0.8002	0.3710	0.131928	Pre-Program BR Ok?
NOCARE	0.7421	0.6806	1.1891	0.2755	0.078884	No Child Care Avail When Needed?
FMRINC	0.5588	0.4634	1.4545	0.2278	0.125065	FMR/INC
ACCCAR	0.3952	0.3591	1.2110	0.2711	0.084265	Have Access to Car?
MOVE3YRS	0.5101	0.1911	7.1266	0.0076	0.222252	Average Moves Per 3 Years
BADCREDT	-0.2009	0.6718	0.0894	0.7649	-0.025618	BAD CREDIT
BADREFS	-0.0449	0.9416	0.0023	0.9619	-0.003521	BAD LANDLORD REFERENCES
DRUGS	0.8893	0.8228	1.1683	0.2798	0.073807	DRUG ARREST
EDUCLT12	0.0424	0.2956	0.0206	0.8859	0.011708	(1) if educ < 12 yrs
VOUCHER	-0.1048	0.5169	0.0411	0.8394	-0.017173	(1) if voucher, else certif
UNDPROG	0.1002	0.3001	0.1115	0.7384	0.026824	Understand PGM?
WANTHQ	0.6401	0.2909	4.8400	0.0278	0.168202	Want Better Housing?
WANTLC	-0.6836	0.3103	4.8519	0.0276	-0.162124	Want Lower Cost?

Association of Predicted Probabilities and Observed Responses

Concordant	= 80.6%	Somers' D	= 0.615
Discordant	= 19.1%	Gamma	= 0.617
Tied	= 0.2%	Tau-a	= 0.232
(28518 pairs)		c	= 0.808

The LOGISTIC Procedure

Data Set: WORK.NY
Response Variable: SUCCESS
Response Levels: 2
Number of Observations: 1951
Link Function: Logit

Response Profile

Ordered Value	SUCCESS	Count
1	1	98
2	2	1853

WARNING: 3 observation(s) were deleted due to missing values for the response or explanatory variables.

Simple Statistics for Explanatory Variables

Variable	Mean	Standard Deviation	Minimum	Maximum	Variable Label
MINORITY	0.675038	0.468481	0.000000	1.00000	Minority?
OLD	0.315736	0.464927	0.000000	1.00000	Old?
HANDIC	0.315223	0.464724	0.000000	1.00000	Handicapped?
WRKING	0.074321	0.262360	0.000000	1.00000	Employed?
COUPCHLD	0.044593	0.206460	0.000000	1.00000	Couple w/Child?
SHARER	0.381343	0.485841	0.000000	1.00000	Does Enrollee Share?
HOMELSS	0.078934	0.269705	0.000000	1.00000	Is Enrollee Homeless?
UNTRAT	0.383115	0.364468	0.000000	1.27116	FULLGROSS/FMR
PPBB	0.256791	0.803310	0.000000	4.00000	PPBEDOK * BEDROOMS
PPBNOK	0.535623	1.082560	0.000000	4.00000	BR Required if PP BR Not Ok
BADCREDT	0.081497	0.273666	0.000000	1.00000	BAD CREDIT
VOUCHER	0.051768	0.221616	0.000000	1.00000	(1) if voucher, else certif
UNTRATH	0.090992	0.317098	0.000000	1.49057	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.330087	0.470365	0.000000	1.00000	Prefer Neighborhood?
PPBEDOK	0.470015	0.499228	0.000000	1.00000	Pre-Program BR Ok?
NOCARE	0.086110	0.280598	0.000000	1.00000	No Child Care Avail When Needed?
FMRINC	1.265141	0.445623	0.323780	3.12426	FMR/INC
ACCCAR	0.220400	0.414623	0.000000	1.00000	Have Access to Car?
MOVE3YRS	0.818617	0.663806	0.075000	5.00000	Average Moves Per 3 Years
EDUCLT12	0.475654	0.499535	0.000000	1.00000	(1) if educ < 12 yrs
UNDPROG	0.719631	0.449295	0.000000	1.00000	Understand PGM?
WANTHQ	0.513583	0.499944	0.000000	1.00000	Want Better Housing?
WANTLC	0.625833	0.484031	0.000000	1.00000	Want Lower Cost?

Criteria for Assessing Model Fit

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	779.254	776.168	.
SC	784.830	909.994	.
-2 LOG L	777.254	728.168	49.087 with 23 DF (p=0.0012)
Score	.	.	56.449 with 23 DF (p=0.0001)

The LOGISTIC Procedure

Analysis of Maximum Likelihood Estimates

Variable	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Variable Label
INTERCPT	-4.2726	0.9960	18.4027	0.0001	.	Intercept
MINORITY	0.1191	0.2927	0.1657	0.6840	0.030769	Minority?
OLD	-0.1022	0.5088	0.0404	0.8407	-0.026206	Old?
HANDIC	-0.1492	0.4765	0.0981	0.7541	-0.038234	Handicapped?
WRKING	-0.5816	0.6446	0.8140	0.3670	-0.084121	Employed?
COUPCHLD	-0.1762	0.6846	0.0662	0.7969	-0.020055	Couple w/Child?
SHARER	-0.3200	0.3990	0.6430	0.4226	-0.085710	Does Enrollee Share?
HOMELSS	0.00475	0.6185	0.0001	0.9939	0.000706	Is Enrollee Homeless?
UNTRAT	-0.5206	0.4805	1.1737	0.2786	-0.104609	FULLGROSS/FMR
PPBB	-0.4126	0.2270	3.3030	0.0692	-0.182730	PPBEDOK * BEDROOMS
PPBNOK	0.2727	0.2047	1.7744	0.1828	0.162766	BR Required if PP BR Not Ok
BADCREDT	-0.3227	0.4614	0.4890	0.4844	-0.048686	BAD CREDIT
VOUCHER	0.4622	0.4559	1.0278	0.3107	0.056475	(1) if voucher, else certif
UNTRATH	-0.6441	0.5118	1.5835	0.2083	-0.112602	FULLGROSS/FMR (Adjusted)
PREFNEIG	-0.2950	0.2492	1.4013	0.2365	-0.076509	Prefer Neighborhood?
PPBEDOK	1.1551	0.4269	7.3199	0.0068	0.317919	Pre-Program BR Ok?
NOCARE	0.0315	0.4940	0.0041	0.9491	0.004873	No Child Care Avail When Needed?
FMRINC	0.3891	0.3670	1.1245	0.2890	0.095607	FMR/INC
ACCCAR	-0.0179	0.2719	0.0044	0.9474	-0.004102	Have Access to Car?
MOVE3YRS	0.7149	0.1428	25.0722	0.0001	0.261620	Average Moves Per 3 Years
EDUCLT12	0.1116	0.2380	0.2199	0.6391	0.030741	(1) if educ < 12 yrs
UNDPROG	0.0162	0.2564	0.0040	0.9495	0.004022	Understand PGM?
WANTHQ	-0.00892	0.2506	0.0013	0.9716	-0.002459	Want Better Housing?
WANTLC	-0.1247	0.2466	0.2557	0.6131	-0.033278	Want Lower Cost?

Association of Predicted Probabilities and Observed Responses

Concordant = 67.1%	Somers' D = 0.359
Discordant = 31.2%	Gamma = 0.365
Tied = 1.8%	Tau-a = 0.034
(181594 pairs)	c = 0.679

The LOGISTIC Procedure

Data Set: WORK.NY
Response Variable: WANT
Response Levels: 2
Number of Observations: 1880
Link Function: Logit

Response Profile

Ordered Value	WANT	Count
1	1	547
2	2	1333

WARNING: 74 observation(s) were deleted due to missing values for the response or explanatory variables.

Simple Statistics for Explanatory Variables

Variable	Mean	Standard Deviation	Minimum	Maximum	Variable Label
MINORITY	0.662766	0.472891	0.000000	1.00000	Minority?
OLD	0.327660	0.469485	0.000000	1.00000	Old?
HANDIC	0.289362	0.453587	0.000000	1.00000	Handicapped?
WRKING	0.077128	0.266865	0.000000	1.00000	Employed?
COUPCHLD	0.046277	0.210139	0.000000	1.00000	Couple w/Child?
OTHNOKD	0.022872	0.149536	0.000000	1.00000	Other no Children
SHARER	0.357979	0.479533	0.000000	1.00000	Does Enrollee Share?
HOMELSS	0.081915	0.274308	0.000000	1.00000	Is Enrollee Homeless?
PREFHOME	0.075532	0.264318	0.000000	1.00000	Prefer Home?
UNTRAT	0.397584	0.363456	0.000000	1.27116	FULLGROSS/FMR
PPBB	0.266489	0.816764	0.000000	4.00000	PPBEDOK * BEDROOMS
PPBNOK	0.555851	1.097711	0.000000	4.00000	BR Required if PP BR Not Ok
UNTRATH	0.094429	0.322530	0.000000	1.49057	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.342553	0.474690	0.000000	1.00000	Prefer Neighborhood?
PPBEDOK	0.487766	0.499983	0.000000	1.00000	Pre-Program BR Ok?
NOCARE	0.089362	0.285341	0.000000	1.00000	No Child Care Avail When Needed?
FMRINC	1.262293	0.453718	0.323780	3.12426	FMR/INC
ACCCAR	0.228723	0.420122	0.000000	1.00000	Have Access to Car?
MOVE3YRS	0.842868	0.664167	0.075000	5.00000	Average Moves Per 3 Years
BADCREDT	0.084574	0.278321	0.000000	1.00000	BAD CREDIT
BADREFS	0.056383	0.230721	0.000000	1.00000	BAD LANDLORD REFERENCES
DRUGS	0.030319	0.171510	0.000000	1.00000	DRUG ARREST
EDUCLT12	0.493617	0.500092	0.000000	1.00000	(1) if educ < 12 yrs
VOUCHER	0.053723	0.225531	0.000000	1.00000	(1) if voucher, else certif
UNDPROG	0.709043	0.454325	0.000000	1.00000	Understand PGM?
WANTHQ	0.495213	0.500110	0.000000	1.00000	Want Better Housing?
WANTLC	0.611702	0.487493	0.000000	1.00000	Want Lower Cost?

Criteria for Assessing Model Fit

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	2269.305	2088.365	.
SC	2274.844	2243.458	.
-2 LOG L	2267.305	2032.365	234.940 with 27 DF (p=0.0001)
Score	.	.	237.974 with 27 DF (p=0.0001)

The LOGISTIC Procedure

Analysis of Maximum Likelihood Estimates

Variable	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Variable Label
INTERCPT	-1.1610	0.5700	4.1487	0.0417	.	Intercept
MINORITY	0.2246	0.1601	1.9673	0.1607	0.058561	Minority?
OLD	0.7286	0.3010	5.8611	0.0155	0.188596	Old?
HANDIC	0.8249	0.2810	8.6158	0.0033	0.206294	Handicapped?
WRKING	-0.6205	0.2830	4.8067	0.0283	-0.091288	Employed?
COUPCHLD	-0.4140	0.3500	1.3994	0.2368	-0.047964	Couple w/Child?
OTHNOKD	-0.2270	0.4632	0.2402	0.6241	-0.018717	Other no Children
SHARER	-0.9103	0.2385	14.5745	0.0001	-0.240676	Does Enrollee Share?
HOMELSS	-0.1370	0.3793	0.1306	0.7178	-0.020726	Is Enrollee Homeless?
PREFHOME	-0.1315	0.2296	0.3282	0.5667	-0.019165	Prefer Home?
UNTRAT	0.1785	0.2490	0.5138	0.4735	0.035769	FULLGROSS/FMR
PPBB	0.2422	0.1229	3.8849	0.0487	0.109079	PPBEDOK * BEDROOMS
PPBNOK	-0.0423	0.1193	0.1258	0.7228	-0.025600	BR Required if PP BR Not Ok
UNTRATH	0.1651	0.2303	0.5137	0.4736	0.029350	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.1385	0.1297	1.1406	0.2855	0.036253	Prefer Neighborhood?
PPBEDOK	-0.9582	0.2455	15.2318	0.0001	-0.264128	Pre-Program BR Ok?
NOCARE	-0.1153	0.2386	0.2334	0.6290	-0.018136	No Child Care Avail When Needed?
FMRINC	0.2964	0.2152	1.8980	0.1683	0.074150	FMR/INC
ACCCAR	0.1312	0.1451	0.8183	0.3657	0.030397	Have Access to Car?
MOVE3YRS	-0.3682	0.1040	12.5392	0.0004	-0.134815	Average Moves Per 3 Years
BADCREDT	1.8032	0.2535	50.6029	0.0001	0.276692	BAD CREDIT
BADREFS	-1.6364	0.3315	24.3622	0.0001	-0.208150	BAD LANDLORD REFERENCES
DRUGS	1.2503	0.3947	10.0350	0.0015	0.118231	DRUG ARREST
EDUCLT12	-0.2896	0.1279	5.1240	0.0236	-0.079839	(1) if educ < 12 yrs
VOUCHER	0.4005	0.2739	2.1382	0.1437	0.049797	(1) if voucher, else certif
UNDPROG	0.1445	0.1395	1.0735	0.3001	0.036197	Understand PGM?
WANTHQ	0.2182	0.1277	2.9225	0.0874	0.060170	Want Better Housing?
WANTLC	0.0255	0.1281	0.0397	0.8420	0.006861	Want Lower Cost?

Association of Predicted Probabilities and Observed Responses

Concordant = 68.3%	Somers' D = 0.377
Discordant = 30.6%	Gamma = 0.381
Tied = 1.1%	Tau-a = 0.156
(729151 pairs)	c = 0.689

The LOGISTIC Procedure

Data Set: WORK.NY
Response Variable: AGREE
Response Levels: 2
Number of Observations: 547
Link Function: Logit

Response Profile

Ordered Value	AGREE	Count
1	1	166
2	2	381

WARNING: 63 observation(s) were deleted due to missing values for the response or explanatory variables.

Simple Statistics for Explanatory Variables

Variable	Mean	Standard Deviation	Minimum	Maximum	Variable Label
MINORITY	0.674589	0.468957	0.000000	1.00000	Minority?
OLD	0.316271	0.465446	0.000000	1.00000	Old?
HANDIC	0.354662	0.478849	0.000000	1.00000	Handicapped?
WRKING	0.040219	0.196653	0.000000	1.00000	Employed?
COUPCHLD	0.025594	0.158066	0.000000	1.00000	Couple w/Child?
OTHNOKD	0.014625	0.120157	0.000000	1.00000	Other no Children
SHARER	0.294333	0.456159	0.000000	1.00000	Does Enrollee Share?
HOMELSS	0.155393	0.362611	0.000000	1.00000	Is Enrollee Homeless?
PREFHOME	0.065814	0.248183	0.000000	1.00000	Prefer Home?
UNTRAT	0.369687	0.346952	0.000000	1.27116	FULLGROSS/FMR
PPBB	0.230347	0.739983	0.000000	4.00000	PPBEDOK * BEDROOMS
PPBNOK	0.531993	1.064057	0.000000	4.00000	BR Required if PP BR Not Ok
UNTRATH	0.073366	0.285784	0.000000	1.49057	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.341865	0.474769	0.000000	1.00000	Prefer Neighborhood?
PPBEDOK	0.431444	0.495731	0.000000	1.00000	Pre-Program BR Ok?
NOCARE	0.076782	0.266490	0.000000	1.00000	No Child Care Avail When Needed?
FMRINC	1.342154	0.521350	0.323780	3.12426	FMR/INC
ACCCAR	0.237660	0.426039	0.000000	1.00000	Have Access to Car?
MOVE3YRS	0.864677	0.706562	0.075000	5.00000	Average Moves Per 3 Years
BADCREDT	0.175503	0.380745	0.000000	1.00000	BAD CREDIT
BADREFS	0.038391	0.192315	0.000000	1.00000	BAD LANDLORD REFERENCES
DRUGS	0.082267	0.275022	0.000000	1.00000	DRUG ARREST
EDUCLT12	0.449726	0.497921	0.000000	1.00000	(1) if educ < 12 yrs
VOUCHER	0.063985	0.244951	0.000000	1.00000	(1) if voucher, else certif
UNDPROG	0.716636	0.451044	0.000000	1.00000	Understand PGM?
WANTHQ	0.539305	0.498909	0.000000	1.00000	Want Better Housing?
WANTLC	0.641682	0.479945	0.000000	1.00000	Want Lower Cost?

Criteria for Assessing Model Fit

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	673.474	630.951	.
SC	677.778	751.475	.
-2 LOG L	671.474	574.951	96.523 with 27 DF (p=0.0001)
Score	.	.	89.687 with 27 DF (p=0.0001)

The LOGISTIC Procedure

Analysis of Maximum Likelihood Estimates

Variable	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Variable Label
INTERCPT	-2.7795	1.0307	7.2717	0.0070	.	Intercept
MINORITY	0.4086	0.2991	1.8665	0.1719	0.105635	Minority?
OLD	-0.2381	0.5882	0.1638	0.6856	-0.061097	Old?
HANDIC	-0.1066	0.5469	0.0380	0.8455	-0.028133	Handicapped?
WRKING	-0.8395	0.6502	1.6672	0.1966	-0.091022	Employed?
COUPCHLD	1.0380	0.8067	1.6555	0.1982	0.090456	Couple w/Child?
OTHNOKD	1.4883	0.9770	2.3208	0.1277	0.098595	Other no Children
SHARER	1.5385	0.4275	12.9496	0.0003	0.386915	Does Enrollee Share?
HOMELSS	2.0108	0.6428	9.7858	0.0018	0.401986	Is Enrollee Homeless?
PREFHOME	-2.2178	0.6371	12.1174	0.0005	-0.303458	Prefer Home?
UNTRAT	0.4051	0.5234	0.5991	0.4389	0.077485	FULLGROSS/FMR
PPBB	-0.5304	0.2660	3.9767	0.0461	-0.216370	PPBEDOK * BEDROOMS
PPBNOK	0.4448	0.2350	3.5833	0.0584	0.260942	BR Required if PP BR Not Ok
UNTRATH	-0.1781	0.4902	0.1320	0.7163	-0.028064	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.2538	0.2616	0.9419	0.3318	0.066446	Prefer Neighborhood?
PPBEDOK	2.2376	0.4597	23.6946	0.0001	0.611555	Pre-Program BR Ok?
NOCARE	0.0318	0.4593	0.0048	0.9449	0.004666	No Child Care Avail When Needed?
FMRINC	-0.3662	0.3707	0.9758	0.3232	-0.105260	FMR/INC
ACCCAR	-0.5057	0.2859	3.1296	0.0769	-0.118784	Have Access to Car?
MOVE3YRS	1.0314	0.2056	25.1624	0.0001	0.401771	Average Moves Per 3 Years
BADCREDT	-0.9855	0.3744	6.9285	0.0085	-0.206865	BAD CREDIT
BADREFS	-1.3864	0.8614	2.5903	0.1075	-0.147002	BAD LANDLORD REFERENCES
DRUGS	-0.3043	0.5264	0.3341	0.5633	-0.046139	DRUG ARREST
EDUCLT12	0.1316	0.2587	0.2589	0.6109	0.036137	(1) if educ < 12 yrs
VOUCHER	-0.1617	0.5302	0.0930	0.7604	-0.021832	(1) if voucher, else certif
UNDPROG	-0.2753	0.2733	1.0148	0.3138	-0.068457	Understand PGM?
WANTHQ	0.0836	0.2440	0.1175	0.7317	0.023008	Want Better Housing?
WANTLC	-0.3655	0.2314	2.4953	0.1142	-0.096704	Want Lower Cost?

Association of Predicted Probabilities and Observed Responses

Concordant	= 74.3%	Somers' D	= 0.492
Discordant	= 25.1%	Gamma	= 0.495
Tied	= 0.6%	Tau-a	= 0.208
(63246 pairs)		c	= 0.746

The LOGISTIC Procedure

Data Set: WORK.NY
Response Variable: INSP
Response Levels: 2
Number of Observations: 167
Link Function: Logit

Response Profile

Ordered Value	INSP	Count
1	1	137
2	2	30

WARNING: 1 observation(s) were deleted due to missing values for the response or explanatory variables.

Simple Statistics for Explanatory Variables

Variable	Mean	Standard Deviation	Minimum	Maximum	Variable Label
MINORITY	0.688623	0.464449	0.000000	1.00000	Minority?
OLD	0.323353	0.469163	0.000000	1.00000	Old?
HANDIC	0.383234	0.487637	0.000000	1.00000	Handicapped?
WRKING	0.029940	0.170935	0.000000	1.00000	Employed?
COUPCHLD	0.029940	0.170935	0.000000	1.00000	Couple w/Child?
SHARER	0.287425	0.453923	0.000000	1.00000	Does Enrollee Share?
HOMELSS	0.137725	0.345647	0.000000	1.00000	Is Enrollee Homeless?
PREFHOME	0.029940	0.170935	0.000000	1.00000	Prefer Home?
UNTRAT	0.408042	0.371519	0.000000	1.27116	FULLGROSS/FMR
PPBB	0.209581	0.666155	0.000000	3.00000	PPBEDOK * BEDROOMS
PPBNOK	0.485030	1.063390	0.000000	4.00000	BR Required if PP BR Not Ok
UNTRATH	0.066093	0.278908	0.000000	1.49057	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.305389	0.461957	0.000000	1.00000	Prefer Neighborhood?
PPBEDOK	0.532934	0.500415	0.000000	1.00000	Pre-Program BR Ok?
NOCARE	0.071856	0.259026	0.000000	1.00000	No Child Care Avail When Needed?
FMRINC	1.317001	0.494105	0.323780	3.12426	FMR/INC
ACCCAR	0.209581	0.408234	0.000000	1.00000	Have Access to Car?
MOVE3YRS	1.051211	0.901696	0.083333	5.00000	Average Moves Per 3 Years
BADCREDT	0.101796	0.303290	0.000000	1.00000	BAD CREDIT
DRUGS	0.053892	0.226484	0.000000	1.00000	DRUG ARREST
EDUCLT12	0.461078	0.499982	0.000000	1.00000	(1) if educ < 12 yrs
UNDPROG	0.658683	0.475578	0.000000	1.00000	Understand PGM?
WANTHQ	0.526946	0.500775	0.000000	1.00000	Want Better Housing?
WANTLC	0.580838	0.494906	0.000000	1.00000	Want Lower Cost?

Criteria for Assessing Model Fit

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	159.263	171.550	.
SC	162.381	249.500	.
-2 LOG L	157.263	121.550	35.713 with 24 DF (p=0.0585)
Score	.	.	33.594 with 24 DF (p=0.0921)

The LOGISTIC Procedure

Analysis of Maximum Likelihood Estimates

Variable	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Variable Label
INTERCPT	3.6818	2.4385	2.2797*	0.1311	.	Intercept
MINORITY	0.1261	0.7848	0.0258	0.8724	0.032285	Minority?
OLD	0.0670	1.3212	0.0026	0.9596	0.017328	Old?
HANDIC	-0.8193	1.2179	0.4526	0.5011	-0.220279	Handicapped?
WRKING	-0.9638	1.5110	0.4069	0.5236	-0.090832	Employed?
COUPCHLD	0.3768	1.9363	0.0379	0.8457	0.035508	Couple w/Child?
SHARER	-0.9483	0.9960	0.9066	0.3410	-0.237323	Does Enrollee Share?
HOMELSS	-1.4967	1.5338	0.9522	0.3292	-0.285212	Is Enrollee Homeless?
PREFHOME	-0.7898	1.5218	0.2693	0.6038	-0.074432	Prefer Home?
UNTRAT	-0.3335	1.1371	0.0860	0.7693	-0.068319	FULLGROSS/FMR
PPBB	-1.0930	0.6474	2.8505	0.0913	-0.401411	PPBEDOK * BEDROOMS
PPBNOK	0.1237	0.5533	0.0500	0.8231	0.072517	BR Required if PP BR Not Ok
UNTRATH	-0.1593	1.1740	0.0184	0.8921	-0.024493	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.3835	0.6605	0.3372	0.5615	0.097683	Prefer Neighborhood?
PPBEDOK	-0.3414	1.0150	0.1131	0.7366	-0.094198	Pre-Program BR Ok?
NOCARE	-2.6044	1.2657	4.2339	0.0396	-0.371937	No Child Care Avail When Needed?
FMRINC	-0.9430	0.8468	1.2402	0.2654	-0.256890	FMR/INC
ACCCAR	0.2125	0.7350	0.0836	0.7725	0.047830	Have Access to Car?
MOVE3YRS	0.4670	0.3786	1.5212	0.2174	0.232156	Average Moves Per 3 Years
BADCREDT	-0.2488	0.8498	0.0857	0.7697	-0.041596	BAD CREDIT
DRUGS	-1.3674	0.9057	2.2792	0.1311	-0.170741	DRUG ARREST
EDUCLT12	-0.3550	0.6452	0.3027	0.5822	-0.097855	(1) if educ < 12 yrs
UNDPROG	1.0754	0.6565	2.6831	0.1014	0.281978	Understand PGM?
WANTHQ	-1.1168	0.6310	3.1327	0.0767	-0.308345	Want Better Housing?
WANTLC	0.9500	0.5201	3.3368	0.0677	0.259221	Want Lower Cost?

Association of Predicted Probabilities and Observed Responses

Concordant	= 81.0%	Somers' D	= 0.626
Discordant	= 18.4%	Gamma	= 0.629
Tied	= 0.5%	Tau-a	= 0.186
(4110 pairs)		c	= 0.813

The LOGISTIC Procedure

Data Set: WORK.NY
Response Variable: SUCCESS
Response Levels: 2
Number of Observations: 146
Link Function: Logit

Response Profile

Ordered Value	SUCCESS	Count
1	1	98
2	2	48

WARNING: 1 observation(s) were deleted due to missing values for the response or explanatory variables.

Simple Statistics for Explanatory Variables

Variable	Mean	Standard Deviation	Minimum	Maximum	Variable Label
MINORITY	0.678082	0.468820	0.000000	1.00000	Minority?
OLD	0.376712	0.486230	0.000000	1.00000	Old?
HANDIC	0.342466	0.476168	0.000000	1.00000	Handicapped?
WRKING	0.027397	0.163800	0.000000	1.00000	Employed?
OTHNOKD	0.034247	0.182488	0.000000	1.00000	Other no Children
SHARER	0.294521	0.457396	0.000000	1.00000	Does Enrollee Share?
HOMELSS	0.109589	0.313452	0.000000	1.00000	Is Enrollee Homeless?
UNTRAT	0.432773	0.370200	0.000000	1.27116	FULLGROSS/FMR
PPBB	0.143836	0.538065	0.000000	3.00000	PPBEDOK * BEDROOMS
PPBNOK	0.561644	1.156526	0.000000	4.00000	BR Required if PP BR Not Ok
UNTRATH	0.067142	0.281124	0.000000	1.49057	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.335616	0.473831	0.000000	1.00000	Prefer Neighborhood?
PPBEDOK	0.520548	0.501297	0.000000	1.00000	Pre-Program BR Ok?
NOCARE	0.054795	0.228362	0.000000	1.00000	No Child Care Avail When Needed?
FMRINC	1.255980	0.472836	0.323780	3.12426	FMR/INC
ACCCAR	0.212329	0.410364	0.000000	1.00000	Have Access to Car?
MOVE3YRS	1.017349	0.923294	0.083333	5.00000	Average Moves Per 3 Years
BADCREDT	0.075342	0.264852	0.000000	1.00000	BAD CREDIT
EDUCLT12	0.472603	0.500967	0.000000	1.00000	(1) if educ < 12 yrs
VOUCHER	0.068493	0.253460	0.000000	1.00000	(1) if voucher, else certif
UNDPROG	0.705479	0.457396	0.000000	1.00000	Understand PGM?
WANTHQ	0.500000	0.501721	0.000000	1.00000	Want Better Housing?
WANTLC	0.616438	0.487927	0.000000	1.00000	Want Lower Cost?

Criteria for Assessing Model Fit

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	186.924	188.761	.
SC	189.908	260.367	.
-2 LOG L	184.924	140.761	44.164 with 23 DF (p=0.0050)
Score	.	.	35.365 with 23 DF (p=0.0478)

The LOGISTIC Procedure

Analysis of Maximum Likelihood Estimates

Variable	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Variable Label
INTERCPT	0.7106	1.9861	0.1280	0.7205	.	Intercept
MINORITY	-1.0487	0.6849	2.3445	0.1257	-0.271068	Minority?
OLD	-1.7471	1.2151	2.0676	0.1505	-0.468361	Old?
HANDIC	-1.5831	1.1068	2.0460	0.1526	-0.415605	Handicapped?
WRKING	-0.7194	1.5072	0.2278	0.6332	-0.064964	Employed?
OTHNOKD	-3.1186	1.5297	4.1566	0.0415	-0.313768	Other no Children
SHARER	-1.7642	0.8880	3.9467	0.0470	-0.444876	Does Enrollee Share?
HOMELSS	-2.8526	1.4777	3.7267	0.0536	-0.492978	Is Enrollee Homeless?
UNTRAT	-2.5125	0.9623	6.8162	0.0090	-0.512801	FULLGROSS/FMR
PPBB	0.3311	0.6490	0.2602	0.6100	0.098219	PPBEDOK * BEDROOMS
PPBNOK	0.0634	0.4199	0.0228	0.8800	0.040412	BR Required if PP BR Not Ok
UNTRATH	-2.0047	0.9216	4.7319	0.0296	-0.310718	FULLGROSS/FMR (Adjusted)
PREFNEIG	-0.5748	0.4733	1.4750	0.2246	-0.150162	Prefer Neighborhood?
PPBEDOK	1.0845	0.8860	1.4984	0.2209	0.299731	Pre-Program BR Ok?
NOCARE	1.3808	1.3838	0.9957	0.3184	0.173848	No Child Care Avail When Needed?
FMRINC	2.0903	0.8665	5.8194	0.0159	0.544916	FMR/INC
ACCCAR	-0.1513	0.5760	0.0690	0.7928	-0.034228	Have Access to Car?
MOVE3YRS	1.0453	0.4131	6.4027	0.0114	0.532101	Average Moves Per 3 Years
BADCREDT	-0.0454	0.9867	0.0021	0.9633	-0.006626	BAD CREDIT
EDUCLT12	0.7960	0.5390	2.1812	0.1397	0.219863	(1) if educ < 12 yrs
VOUCHER	2.0591	1.2030	2.9295	0.0870	0.287741	(1) if voucher, else certif
UNDPROG	-0.3500	0.5810	0.3628	0.5470	-0.088251	Understand PGM?
WANTHQ	0.3361	0.4819	0.4863	0.4856	0.092965	Want Better Housing?
WANTLC	-0.2328	0.4942	0.2219	0.6376	-0.062626	Want Lower Cost?

Association of Predicted Probabilities and Observed Responses

Concordant	= 81.9%	Somers' D	= 0.641
Discordant	= 17.8%	Gamma	= 0.643
Tied	= 0.3%	Tau-a	= 0.285
(4704 pairs)		c	= 0.821

APPENDIX G

REGRESSIONS—INCLUDING MSA VACANCY RATE NATIONAL SAMPLE

Each regression contains two tables. The first presents the variables, with their means, standard deviations, minimums and maximums. The second table contains the logit regression results.

The LOGISTIC Procedure

Data Set: WORK.NONNY
Response Variable: OUTCOME
Response Levels: 2
Number of Observations: 1016
Link Function: Logit

Response Profile

Ordered Value	OUTCOME	Count
1	1	901
2	2	115

WARNING: 74 observation(s) were deleted due to missing values for the response or explanatory variables.

Simple Statistics for Explanatory Variables

Variable	Mean	Standard Deviation	Minimum	Maximum	Variable Label
MINORITY	0.566929	0.495744	0.00000	1.0000	Minority?
OLD	0.059055	0.235844	0.00000	1.0000	Old?
HANDIC	0.161417	0.368097	0.00000	1.0000	Handicapped?
WRKING	0.259843	0.438764	0.00000	1.0000	Employed?
COUPCHLD	0.100394	0.300672	0.00000	1.0000	Couple w/Child?
OTHNOKD	0.035433	0.184963	0.00000	1.0000	Other no Children
SHARER	0.246063	0.430928	0.00000	1.0000	Does Enrollee Share?
HOMELSS	0.176181	0.381162	0.00000	1.0000	Is Enrollee Homeless?
PREFHOME	0.250000	0.433226	0.00000	1.0000	Prefer Home?
UNTRAT	0.494346	0.370524	0.00000	1.3586	FULLGROSS/FMR
INCLE100	0.026575	0.160916	0.00000	1.0000	Income LE $100/Month?
PPBB	0.966535	1.105678	0.00000	5.0000	PPBEDOK * BEDROOMS
PPBNOK	1.118110	1.281865	0.00000	7.0000	BR Required if PP BR Not Ok
PREFNEIG	0.375000	0.484361	0.00000	1.0000	Prefer Neighborhood?
PPBEDOK	0.500984	0.500245	0.00000	1.0000	Pre-Program BR Ok?
NOCARE	0.116142	0.320553	0.00000	1.0000	No Child Care Avail When Needed?
FMRINC	1.229679	0.783708	0.00000	7.8713	FMR/INC
ACCCAR	0.800197	0.400049	0.00000	1.0000	Have Access to Car?
MOVE3YRS	2.069298	3.559596	0.10000	96.0000	Average Moves Per 3 Years
UNTRATH	0.033607	0.218371	0.00000	2.4264	FULLGROSS/FMR (Adjusted)
PCTVACX	7.855769	3.057208	3.95459	15.1777	% VACANT UNITS
BADCREDT	0.359252	0.480017	0.00000	1.0000	BAD CREDIT
BADREFS	0.120079	0.325214	0.00000	1.0000	BAD LANDLORD REFERENCES
DRUGS	0.057087	0.232122	0.00000	1.0000	DRUG ARREST
EDUCLT12	0.303150	0.459846	0.00000	1.0000	(1) if educ < 12 yrs
VOUCHER	0.268701	0.443502	0.00000	1.0000	(1) if voucher, else certif
UNDPROG	0.711614	0.453235	0.00000	1.0000	Understand PGM?
WANTHQ	0.498031	0.500242	0.00000	1.0000	Want Better Housing?
WANTLC	0.714567	0.451843	0.00000	1.0000	Want Lower Cost?

Criteria for Assessing Model Fit

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	719.563	716.110	.
SC	724.486	863.819	.
-2 LOG L	717.563	656.110	61.452 with 29 DF (p=0.0004)
Score	.	.	57.362 with 29 DF (p=0.0013)

National Sample

The LOGISTIC Procedure

Analysis of Maximum Likelihood Estimates

Variable	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Variable Label
INTERCPT	0.5412	0.8049	0.4520	0.5014	.	Intercept
MINORITY	-0.0687	0.2300	0.0892	0.7652	-0.018768	Minority?
OLD	-0.7314	0.5175	1.9975	0.1576	-0.095106	Old?
HANDIC	-0.7441	0.2962	6.3130	0.0120	-0.151013	Handicapped?
WRKING	-0.4273	0.2518	2.8808	0.0896	-0.103375	Employed?
COUPCHLD	-0.3449	0.3169	1.1846	0.2764	-0.057179	Couple w/Child?
OTHNOKD	-0.6989	0.6421	1.1849	0.2764	-0.071273	Other no Children
SHARER	-0.0685	0.2874	0.0568	0.8116	-0.016270	Does Enrollee Share?
HOMELSS	0.0756	0.3493	0.0468	0.8287	0.015879	Is Enrollee Homeless?
PREFHOME	0.4214	0.2992	1.9833	0.1590	0.100653	Prefer Home?
UNTRAT	1.2772	0.3787	11.3717	0.0007	0.260900	FULLGROSS/FMR
INCLE100	1.2738	0.8820	2.0858	0.1487	0.113006	Income LE $100/Month?
PPBB	-0.4561	0.2188	4.3442	0.0371	-0.278049	PPBEDOK * BEDROOMS
PPBNOK	-0.3017	0.1758	2.9461	0.0861	-0.213235	BR Required if PP BR Not Ok
PREFNEIG	-0.2470	0.2364	1.0922	0.2960	-0.065961	Prefer Neighborhood?
PPBEDOK	0.1631	0.6478	0.0634	0.8011	0.044996	Pre-Program BR Ok?
NOCARE	0.8353	0.4568	3.3439	0.0675	0.147617	No Child Care Avail When Needed?
FMRINC	0.4716	0.2058	5.2499	0.0219	0.203764	FMR/INC
ACCCAR	0.2692	0.2587	1.0830	0.2980	0.059370	Have Access to Car?
MOVE3YRS	0.0712	0.0738	0.9313	0.3345	0.139779	Average Moves Per 3 Years
UNTRATH	0.1565	0.4360	0.1289	0.7196	0.018846	FULLGROSS/FMR (Adjusted)
PCTVACX	0.0744	0.0398	3.4903	0.0617	0.125367	% VACANT UNITS
BADCREDT	0.4820	0.2419	3.9694	0.0463	0.127558	BAD CREDIT
BADREFS	0.3300	0.3893	0.7188	0.3966	0.059178	BAD LANDLORD REFERENCES
DRUGS	0.1751	0.5147	0.1158	0.7337	0.022411	DRUG ARREST
EDUCLT12	0.1400	0.2342	0.3575	0.5499	0.035496	(1) if educ < 12 yrs
VOUCHER	-0.0245	0.2363	0.0107	0.9175	-0.005981	(1) if voucher, else certif
UNDPROG	0.2177	0.2327	0.8752	0.3495	0.054408	Understand PGM?
WANTHQ	0.1779	0.2198	0.6548	0.4184	0.049057	Want Better Housing?
WANTLC	0.0667	0.2340	0.0813	0.7756	0.016619	Want Lower Cost?

Association of Predicted Probabilities and Observed Responses

Concordant	= 70.7%	Somers' D	= 0.421
Discordant	= 28.6%	Gamma	= 0.424
Tied	= 0.7%	Tau-a	= 0.085
(103615 pairs)		c	= 0.711

The LOGISTIC Procedure

Data Set: WORK.NONNY
Response Variable: SUCCESS
Response Levels: 2
Number of Observations: 685
Link Function: Logit

Response Profile

Ordered Value	SUCCESS	Count
1	1	262
2	2	423

WARNING: 57 observation(s) were deleted due to missing values for the response or explanatory variables.

Simple Statistics for Explanatory Variables

Variable	Mean	Standard Deviation	Minimum	Maximum	Variable Label
MINORITY	0.573723	0.494896	0.00000	1.0000	Minority?
OLD	0.072993	0.260315	0.00000	1.0000	Old?
HANDIC	0.148905	0.356255	0.00000	1.0000	Handicapped?
WRKING	0.280292	0.449470	0.00000	1.0000	Employed?
COUPCHLD	0.106569	0.308790	0.00000	1.0000	Couple w/Child?
OTHNOKD	0.035036	0.184006	0.00000	1.0000	Other no Children
SHARER	0.075912	0.265051	0.00000	1.0000	Does Enrollee Share?
PREFHOME	0.329927	0.470530	0.00000	1.0000	Prefer Home?
UNTRAT	0.637652	0.300906	0.00000	1.3586	FULLGROSS/FMR
INCLE100	0.014599	0.120027	0.00000	1.0000	Income LE $100/Month?
PPBB	1.433577	1.069396	0.00000	5.0000	PPBEDOK * BEDROOMS
PPBNOK	0.706569	1.280773	0.00000	7.0000	BR Required if PP BR Not Ok
PCTVACX	7.876200	2.993857	3.95459	15.1777	% VACANT UNITS
PREFNEIG	0.417518	0.493510	0.00000	1.0000	Prefer Neighborhood?
PPBEDOK	0.743066	0.437262	0.00000	1.0000	Pre-Program BR Ok?
NOCARE	0.118248	0.323138	0.00000	1.0000	No Child Care Avail When Needed?
FMRINC	1.082304	0.648004	0.00000	5.6080	FMR/INC
ACCCAR	0.800000	0.400292	0.00000	1.0000	Have Access to Car?
MOVE3YRS	1.867605	3.868642	0.10000	96.0000	Average Moves Per 3 Years
UNTRATH	0.044595	0.253239	0.00000	2.4264	FULLGROSS/FMR (Adjusted)
BADCREDT	0.363504	0.481360	0.00000	1.0000	BAD CREDIT
BADREFS	0.099270	0.299243	0.00000	1.0000	BAD LANDLORD REFERENCES
DRUGS	0.043796	0.204790	0.00000	1.0000	DRUG ARREST
EDUCLT12	0.306569	0.461406	0.00000	1.0000	(1) if educ < 12 yrs
VOUCHER	0.297810	0.457630	0.00000	1.0000	(1) if voucher, else certif
UNDPROG	0.716788	0.450888	0.00000	1.0000	Understand PGM?
WANTHQ	0.500730	0.500365	0.00000	1.0000	Want Better Housing?
WANTLC	0.770803	0.420623	0.00000	1.0000	Want Lower Cost?

Criteria for Assessing Model Fit

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	913.414	685.102	.
SC	917.944	816.456	.
-2 LOG L	911.414	627.102	284.312 with 28 DF (p=0.0001)
Score	.	.	249.122 with 28 DF (p=0.0001)

The LOGISTIC Procedure

Analysis of Maximum Likelihood Estimates

Variable	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Variable Label
INTERCPT	-1.6985	0.9349	3.3009	0.0692	.	Intercept
MINORITY	-0.3569	0.2162	2.7243	0.0988	-0.097375	Minority?
OLD	0.0206	0.4978	0.0017	0.9671	0.002949	Old?
HANDIC	0.3059	0.3252	0.8848	0.3469	0.060078	Handicapped?
WRKING	-0.1578	0.2507	0.3961	0.5291	-0.039104	Employed?
COUPCHLD	-0.0298	0.3506	0.0072	0.9323	-0.005068	Couple w/Child?
OTHNOKD	0.5519	0.6312	0.7646	0.3819	0.055993	Other no Children
SHARER	-3.6755	1.0630	11.9548	0.0005	-0.537109	Does Enrollee Share?
PREFHOME	2.2554	0.2512	80.6417	0.0001	0.585076	Prefer Home?
UNTRAT	-0.0390	0.3950	0.0097	0.9214	-0.006466	FULLGROSS/FMR
INCLE100	-1.4204	0.9056	2.4601	0.1168	-0.093992	Income LE $100/Month?
PPBB	0.00666	0.1874	0.0013	0.9717	0.003927	PPBEDOK * BEDROOMS
PPBNOK	0.4702	0.2452	3.6768	0.0552	0.332007	BR Required if PP BR Not Ok
PCTVACX	-0.0544	0.0351	2.4026	0.1211	-0.089746	% VACANT UNITS
PREFNEIG	-0.1448	0.2381	0.3698	0.5431	-0.039394	Prefer Neighborhood?
PPBEDOK	1.8198	0.7960	5.2264	0.0222	0.438711	Pre-Program BR Ok?
NOCARE	0.0383	0.3246	0.0139	0.9061	0.006818	No Child Care Avail When Needed?
FMRINC	-0.2023	0.1912	1.1194	0.2901	-0.072286	FMR/INC
ACCCAR	-0.4542	0.2570	3.1236	0.0772	-0.100248	Have Access to Car?
MOVE3YRS	0.0202	0.0330	0.3751	0.5402	0.043152	Average Moves Per 3 Years
UNTRATH	-0.1178	0.4440	0.0704	0.7907	-0.016447	FULLGROSS/FMR (Adjusted)
BADCREDT	0.0548	0.2214	0.0613	0.8045	0.014543	BAD CREDIT
BADREFS	-0.0906	0.3486	0.0676	0.7949	-0.014951	BAD LANDLORD REFERENCES
DRUGS	-0.6487	0.5405	1.4403	0.2301	-0.073239	DRUG ARREST
EDUCLT12	0.1140	0.2238	0.2594	0.6105	0.028997	(1) if educ < 12 yrs
VOUCHER	0.3652	0.2238	2.6628	0.1027	0.092142	(1) if voucher, else certif
UNDPROG	0.2331	0.2303	1.0239	0.3116	0.057937	Understand PGM?
WANTHQ	-0.8867	0.2137	17.2256	0.0001	-0.244624	Want Better Housing?
WANTLC	0.2554	0.2478	1.0619	0.3028	0.059217	Want Lower Cost?

Association of Predicted Probabilities and Observed Responses

Concordant	= 84.9%	Somers' D	= 0.699
Discordant	= 15.0%	Gamma	= 0.700
Tied	= 0.1%	Tau-a	= 0.330
(110826 pairs)		c	= 0.849

The LOGISTIC Procedure

Data Set: WORK.NONNY
Response Variable: SUCCESS
Response Levels: 2
Number of Observations: 1016
Link Function: Logit

Response Profile

Ordered Value	SUCCESS	Count
1	1	625
2	2	391

WARNING: 74 observation(s) were deleted due to missing values for the response or explanatory variables.

Simple Statistics for Explanatory Variables

Variable	Mean	Standard Deviation	Minimum	Maximum	Variable Label
MINORITY	0.566929	0.495744	0.00000	1.0000	Minority?
OLD	0.059055	0.235844	0.00000	1.0000	Old?
HANDIC	0.161417	0.368097	0.00000	1.0000	Handicapped?
WRKING	0.259843	0.438764	0.00000	1.0000	Employed?
COUPCHLD	0.100394	0.300672	0.00000	1.0000	Couple w/Child?
OTHNOKD	0.035433	0.184963	0.00000	1.0000	Other no Children
SHARER	0.246063	0.430928	0.00000	1.0000	Does Enrollee Share?
HOMELSS	0.176181	0.381162	0.00000	1.0000	Is Enrollee Homeless?
PREFHOME	0.250000	0.433226	0.00000	1.0000	Prefer Home?
UNTRAT	0.494346	0.370524	0.00000	1.3586	FULLGROSS/FMR
INCLE100	0.026575	0.160916	0.00000	1.0000	Income LE $100/Month?
PPBB	0.966535	1.105678	0.00000	5.0000	PPBEDOK * BEDROOMS
PPBNOK	1.118110	1.281865	0.00000	7.0000	BR Required if PP BR Not Ok
UNTRATH	0.033607	0.218371	0.00000	2.4264	FULLGROSS/FMR (Adjusted)
PREFNEIG	0.375000	0.484361	0.00000	1.0000	Prefer Neighborhood?
PPBEDOK	0.500984	0.500245	0.00000	1.0000	Pre-Program BR Ok?
NOCARE	0.116142	0.320553	0.00000	1.0000	No Child Care Avail When Needed?
FMRINC	1.229679	0.783708	0.00000	7.8713	FMR/INC
ACCCAR	0.800197	0.400049	0.00000	1.0000	Have Access to Car?
MOVE3YRS	2.069298	3.559596	0.10000	96.0000	Average Moves Per 3 Years
PCTVACX	7.855769	3.057208	3.95459	15.1777	% VACANT UNITS
BADCREDT	0.359252	0.480017	0.00000	1.0000	BAD CREDIT
BADREFS	0.120079	0.325214	0.00000	1.0000	BAD LANDLORD REFERENCES
DRUGS	0.057087	0.232122	0.00000	1.0000	DRUG ARREST
EDUCLT12	0.303150	0.459846	0.00000	1.0000	(1) if educ < 12 yrs
VOUCHER	0.268701	0.443502	0.00000	1.0000	(1) if voucher, else certif
UNDPROG	0.711614	0.453235	0.00000	1.0000	Understand PGM?
WANTHQ	0.498031	0.500242	0.00000	1.0000	Want Better Housing?
WANTLC	0.714567	0.451843	0.00000	1.0000	Want Lower Cost?

Criteria for Assessing Model Fit

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	1356.094	1016.738	.
SC	1361.018	1164.447	.
-2 LOG L	1354.094	956.738	397.357 with 29 DF (p=0.0001)
Score	.	.	349.238 with 29 DF (p=0.0001)

The LOGISTIC Procedure

Analysis of Maximum Likelihood Estimates

Variable	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Variable Label
INTERCPT	0.1590	0.6400	0.0617	0.8038	.	Intercept
MINORITY	0.2629	0.1755	2.2444	0.1341	0.071854	Minority?
OLD	-0.8839	0.4441	3.9621	0.0465	-0.114937	Old?
HANDIC	-0.6232	0.2460	6.4170	0.0113	-0.126475	Handicapped?
WRKING	-0.1449	0.1997	0.5266	0.4680	-0.035051	Employed?
COUPCHLD	-0.1423	0.2656	0.2872	0.5920	-0.023597	Couple w/Child?
OTHNOKD	-0.7095	0.5172	1.8816	0.1702	-0.072347	Other no Children
SHARER	1.1045	0.2495	19.5923	0.0001	0.262401	Does Enrollee Share?
HOMELSS	0.4746	0.2969	2.5562	0.1099	0.099739	Is Enrollee Homeless?
PREFHOME	-1.8873	0.2184	74.6947	0.0001	-0.450783	Prefer Home?
UNTRAT	0.4830	0.2913	2.7499	0.0973	0.098674	FULLGROSS/FMR
INCLE100	1.5316	0.6871	4.9692	0.0258	0.135879	Income LE $100/Month?
PPBB	-0.3182	0.1694	3.5291	0.0603	-0.193970	PPBEDOK * BEDROOMS
PPBNOK	-0.4705	0.1565	9.0386	0.0026	-0.332509	BR Required if PP BR Not Ok
UNTRATH	0.1190	0.4142	0.0826	0.7738	0.014333	FULLGROSS/FMR (Adjusted)
PREFNEIG	-0.0916	0.1865	0.2414	0.6232	-0.024474	Prefer Neighborhood?
PPBEDOK	-1.0321	0.5270	3.8360	0.0502	-0.284649	Pre-Program BR Ok?
NOCARE	0.3028	0.2678	1.2785	0.2582	0.053516	No Child Care Avail When Needed?
FMRINC	0.3929	0.1454	7.3028	0.0069	0.169781	FMR/INC
ACCCAR	0.3853	0.2040	3.5657	0.0590	0.084975	Have Access to Car?
MOVE3YRS	0.0125	0.0199	0.3960	0.5292	0.024582	Average Moves Per 3 Years
PCTVACX	0.0682	0.0294	5.3867	0.0203	0.114972	% VACANT UNITS
BADCREDT	0.1680	0.1776	0.8946	0.3442	0.044461	BAD CREDIT
BADREFS	0.2805	0.2705	1.0755	0.2997	0.050291	BAD LANDLORD REFERENCES
DRUGS	0.4564	0.3738	1.4906	0.2221	0.058404	DRUG ARREST
EDUCLT12	-0.1159	0.1803	0.4131	0.5204	-0.029376	(1) if educ < 12 yrs
VOUCHER	-0.2831	0.1824	2.4097	0.1206	-0.069231	(1) if voucher, else certif
UNDPROG	0.0156	0.1819	0.0073	0.9318	0.003889	Understand PGM?
WANTHQ	0.7661	0.1696	20.4011	0.0001	0.211293	Want Better Housing?
WANTLC	-0.0118	0.1855	0.0040	0.9495	-0.002928	Want Lower Cost?

Association of Predicted Probabilities and Observed Responses

Concordant = 83.7%	Somers' D = 0.675
Discordant = 16.2%	Gamma = 0.676
Tied = 0.2%	Tau-a = 0.320
(244375 pairs)	c = 0.838

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