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ELIGIBILITY AND ENROLLMENT IN THE HOUSING ALLOWANCE PROGRAM: BROWN AND ST. JOSEPH COUNTIES THROUGH YEAR 2

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#### **PREFACE**

This working note was prepared for the Office of Policy Development and Research, U.S. Department of Housing and Urban Development (HUD). It reports on eligibility and enrollment in HUD's experimental housing allowance program in Brown County, Wisconsin, and St. Joseph County, Indiana, during the first two years of program operations in each site. The analysis describes the eligible populations, compares them with the enrolled populations at the end of the second program year, investigates turnover in Brown County's population of eligibles, and analyzes terminations among program enrollees.

This note is one of a series examining the program's effects on participants during the first two years; others describe client attitudes, housing expenditures, mobility, and improvements in housing quality. \* Information reported here comes from the annual survey of households conducted in each site as part of the Housing Assistance Supply Experiment and the administrative records of each site's housing allowance office.

Ira S. Lowry, Kevin F. McCarthy, and Stanley Abraham reviewed an early draft and contributed substantially to its revision. McCarthy helped especially with the turnover analysis presented in Sec. IV. Judy Bartulski, Ned Harcum, and Barbara Wilson typed the drafts. Jean Houston and Marlene Giffen typed the final copy. Linda Colbert edited the final draft and supervised its production.

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Findings from all these studies are summarized in the Fourth Annual Report of the Housing Assistance Supply Experiment, The Rand Corporation, R-2302-HUD, May 1978, Sec. IV.

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#### SUMMARY

This note describes the numbers and characteristics of house-holds in Brown County, Wisconsin, and St. Joseph County, Indiana, that were eligible for the experimental housing allowance program conducted there; those that enrolled during the first two years of program operations in each site; and those that terminated their enrollment during the same periods. The data show that households eligible under current rules as to income, assets, and family composition differ substantially in their enrollment patterns and the nature of their benefits from the program. The differences are strongly associated with household type and source of nonallowance income.

Baseline (preprogram) sample surveys of households in each site show that about a fifth are eligible, and that more homeowners than renters are eligible. Four types of households constitute 85 percent of all eligibles in each site: young couples with young children, single parents, elderly couples, and elderly single persons. The likelihood of both enrolling and maintaining eligibility correlates strongly with differences in the sources, amounts, and stability of income. Minority households are more likely to be eligible than their white counterparts, reflecting their lower incomes and the higher proportion of single parents among them.

Comparing enrollment at the end of year 2 with baseline eligibility estimates, we find that about 42 percent of Brown County's eligibles and 34 percent of St. Joseph County's were then enrolled. Although enrollment was then leveling off in Brown County, it was still growing in St. Joseph County. Renters, single parents, minorities, and AFDC recipients were most likely to enroll. Homeowners, households headed by couples, whites, and those with earned incomes were least likely to enroll. In general, the program appealed more to the enduringly poor than to those with only temporarily low income.

Membership in the eligible population changes constantly because of shifts in household circumstances, especially income. As Brown County recovered from the recession of 1973-74, unemployed eligibles

returned to work and lost their eligibility as their incomes rose. Turnover among eligibles was thus substantial, particularly for nonelderly
couples. (However, elderly and single-parent households, seldom in
the labor force, were unaffected by the economic recovery; indeed,
the number eligible actually increased.)

Over one-third of all program enrollees in each site had terminated by the end of the second program year. The proportion terminating varied from nearly half of all young couples to about a third of all single parents and less than a fourth of all elderly households. Increases in income precipitated most terminations, and were most common among those with preenrollment income from earnings or unemployment compensation—i.e., young families. Terminations usually follow the semiannual and annual recertification checks; the probability of terminating drops sharply after the first year of enrollment.

These findings suggest that, to target housing allowances efficiently, eligibility tests other than income, assets, and family composition should be considered. Stage in the household life cycle and usual source of income both bear strongly on the persistence of need and household motivation to accept assistance. Young families usually do not remain eligible long, so their turnover in the populations of eligibles and enrollees is high. Thus, substantial administrative costs are incurred, whereas longlasting housing improvements are unlikely. Households dependent on pensions, Social Security, and public assistance remain eligible much longer, and those who enroll also stay in the program longer; for such cases, more durable housing improvement is achieved and administrative costs are lower. Among the second class of households, single parents show a much stronger interest in the program, presumably because of their familiarity with public assistance programs. The elderly seem less inclined to accept aid but, once enrolled, remain in the program longest. Single parents and the elderly tend to have long periods of eligibility and enrollment, whereas young couples tend to participate only briefly; over time, therefore, single parents and the elderly will make up an increasingly greater proportion of program enrollees.

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#### I. INTRODUCTION

The Housing Assistance Supply Experiment (HASE), sponsored by the U.S. Department of Housing and Urban Development (HUD), began a housing allowance program for low-income households in Brown County, Wisconsin, in June 1974; and in St. Joseph County, Indiana, in January 1975. The experiment is designed to test the effects of such a program on local housing markets and residents. The effects are to be measured principally from data collected in an annual cycle of field surveys conducted at each site.

This note describes the numbers and characteristics of those who were eligible for assistance and those who enrolled during the first two program years in each site. When the experiment began, we could only crudely estimate how many and what kinds of households in each county were eligible; we could only guess how many would enroll and how long they would stay in the program. Reliable and generalizable answers to those questions are important both for assessing the program's effectiveness and for estimating the size and cost of a similar national program. Consequently, the experimental program and the associated data collection plan were designed to yield such answers. The following design features are especially important:

- HUD contractually obligated funds to support the program in each site for 10 years, long enough to test the durability of its appeal to those it was meant to help.
- Although each contract limits the number of participants, the ceiling was set high enough to accommodate all those likely to enroll.
- The housing allowance office (HAO) in each site vigorously publicized the program so eligible households could make an informed choice about enrolling.
- Program records describe enrollees and their circumstances in considerable detail and trace the participation history of each.

 Annual household surveys in each site yield comparable sample data on the eligible population and include some who have enrolled. When the same household is interviewed in successive years, changes in eligibility status can be noted.

The Supply Experiment thus provides an unusual opportunity to analyze the factors affecting enrollment in an earmarked transfer program. Comparing counts of enrollees with eligibles yields enrollment rates for specific types of households, valuable for both understanding the program's selective appeal and estimating corresponding rates in a national program. Duration of enrollment and reasons for termination are important in assessing program efficacy as well as for administrative planning. The pattern of turnover in the population of eligibles bears on program design, indicating which groups are most efficiently served by a program intended more for longterm housing improvement than for relieving shortterm financial hardships.

Data from the first two years of a new program do not yield final conclusions about patterns of eligibility, enrollment, or turnover. Enrollment has grown in both sites since the end of the second year, although the composition of the enrolled populations has changed little. Despite considerable turnover in both the eligible and enrolled populations, the complete turnover cycle cannot yet be reliably described. Nevertheless, those data reveal enough to narrow our initial uncertainties about longrun outcomes and to focus our attention on salient issues for further study.

## SCOPE OF THIS ANALYSIS

This introduction briefly describes the two experimental sites, highlighting the features of their populations and housing markets that most directly affect program participation. Then it summarizes the rules that determine who is eligible to enroll in the program, setting the context for the subsequent analysis, which treats both those who were eligible for the program and those who enrolled.\* Section II draws

Enrollees receive allowances only while they occupy dwellings evaluated and approved by the HAO. Not more than about 80 percent of

on survey data to describe the eligible population of each site just before the program began. In principle, it comprises households with too little income to afford decent, safe, and sanitary dwellings at prices current in the community.

All who wished to enroll had ample opportunity to apply; and those who did apply were accepted into the program if they proved eligible. Consequently, enrollment tests the program's appeal to those who are eligible. However, enrollment in a new program is a cumulative process, not an instantaneous event. When the HAOs first invited applications from the general public, they received thousands. While application backlogs were being processed, knowledge of the program spread and more applications were submitted. During the first program year, 3,171 households were enrolled in Brown County and 3,639 in St. Joseph County.

During the second year, enrollment continued at a brisk pace, reaching 5,021 and 7,283 households in the two counties, respectively. However, net program growth was diminished by both voluntary and involuntary terminations of enrollment. At the end of year 2, current enrollment had fallen to 3,377 in Brown County and 5,284 in St. Joseph County—about 70 percent of those who had ever enrolled, and about 7.7 and 7.1 percent of the total household population in Brown and St. Joseph counties, respectively.

Section III describes those enrolled at the end of year 2 and compares them with the baseline population of eligibles. Comparing the enrollment rates of various types of eligible households gauges the relative attractiveness of the program to its various target populations.

those who enroll ever become recipients; and, at any given time, there are some whose payments have been suspended because their housing no longer meets program standards. How enrollees achieve and maintain recipient status is the subject of a separate study in this series, Bruce W. Lamar, How Clients Meet HAO Housing Requirements, The Rand Corporation, WN-9814-HUD, forthcoming. About half of those enrolling during the first two program years already inhabited acceptable housing, so qualified for payments within a week or two after enrolling. The others had to either repair their dwellings or move. Most became recipients within a few months after enrolling; some dropped out of the program without ever receiving allowances; some were still enrolled at the end of year 2 but had not yet qualified for payments.

 $<sup>^{\</sup>star}$  The number of enrollees divided by the number of eligibles.

Because enrollment was then still growing, however, the rates do not accurately predict the longrun level of participation; nor do they count all those served by the program during the first two years, since only those currently enrolled at the end of year 2 are counted.

Indeed, the key methodological problem of the present analysis arises from a substantive issue, turnover: The enrolled and the eligible populations change continuously, in both size and composition. Knowing the rates of turnover is methodologically important because the accuracy of enrollment rate estimates depends on synchronized comparisons of two changing quantities (numbers of enrollees and numbers of eligibles) measured by different methods. It is substantively important in appraising program efficacy as well as for administrative planning.

The eligible population will doubtless continue to fluctuate, changing as families move into or out of the program's jurisdiction and as the circumstances of those in residence change. Although our annual household surveys will eventually enable us to track changes in each site's eligible population through year 2 (and beyond), we can now report on changes only in Brown County during the first year. Our findings are presented in Sec. IV.

Of the enrollees who left the program by the end of the second year, some had dropped out voluntarily whereas others lost their eligibility. Section V analyzes the causes and rates of enrollee terminations.

Section VI integrates findings from previous sections and assesses their implications for program development in our experimental sites as well as for national housing policy. The latter assessment is of course tentative, inasmuch as further experience with changes in eligibility and enrollment will doubtless alter some judgments that now seem reasonable.

Throughout the analysis, we have divided households into categories helpful in explaining their behavior or evaluating the allowance program. The most commonly used are housing tenure (renter or owner), size of household, stage in household life cycle, and source of nonallowance income. Of the four, only life-cycle stage is likely to be unfamiliar to the reader; Appendix A defines the concept and the stages, and describes the data base. Appendixes B and C contain the detailed tabulations

that support this analysis. They are included to enable the reader to check inferences drawn from them in the text and to investigate issues not directly treated here.

# CHARACTERISTICS OF THE EXPERIMENTAL SITES\*

The two sites were selected for housing market contrasts that seemed likely to affect responses to an allowance program. Brown County has a rapidly growing urban center (hence a relatively tight housing market) and a racially homogeneous population (hence minimal problems of residential segregation or housing discrimination). St. Joseph County has a declining urban center with a large and growing population of blacks and some Latins. The racial minorities concentrate in segregated central-city neighborhoods where housing is old and deteriorated, while most new housing is built in surrounding all-white suburbs.

Rapid population growth has given Brown County a persistently tight housing market. The population grew by 26 percent between 1960 and 1970; three-fourths of the growth occurred in the urban center, Green Bay, and adjoining suburbs. Green Bay grew mostly by annexation, the population within its 1960 boundaries increasing by only 8 percent. In contrast, St. Joseph County's population grew by just 3 percent between 1960 and 1970. While the central city (South Bend) lost 5 percent of its population over the period, the remainder of the county grew by 12 percent. However, suburban growth after 1970 no longer offset South Bend's losses, and the countywide population had decreased several percentage points by 1975.

<sup>\*</sup>The population and housing market data reported below are drawn mostly from the baseline surveys of households and landlords in each site--conducted in Brown County early in 1974 and in St. Joseph County early in 1975. Subsequent annual cycles of field surveys are referred to as wave 2, wave 3, and so on.

<sup>\*\*</sup> The U.S. Census Bureau, working from indirect indicators of population change, estimates that by mid-1975 the county's population had decreased from 245,000 to 241,000 inhabitants ("Estimates of the Population of Indiana Counties and Metropolitan Areas: July 1, 1974 and 1975," Current Population Reports, Series P-26, No. 75-14, July 1976).

Market conditions in the two sites reflect the population changes. In Brown County, vacancy rates for homeowner and regular rental units in 1973 were 0.8 and 5.1 percent, respectively—below the 1.0 percent (homeowner) and 6.4 percent (rental) rates for the entire north—central region in early 1974, when baseline data were gathered. St. Joseph County's 1974 vacancy rates of 2.4 percent for homeowners and 10.6 percent for renters are well above the same region's respective rates of 1.0 and 5.1 percent in early 1975, when the baseline data were gathered there. In central South Bend, vacancy rates climbed to 4.2 percent for homeowner properties and 12.3 percent for rental properties.

Another salient difference between the two sites' housing markets is St. Joseph County's greater proportion of homeowners—77 vs. Brown County's 70 percent of all households. Perhaps that proportion naturally results from the oversupply of deteriorated housing available at bargain prices in central South Bend. In 1974, the average home value there was \$10,900, compared with \$22,100 elsewhere in the county and \$26,200 in Brown County. The greatest intercounty differences in homeowning occur at the extremes of the household life cycle, among young and elderly single persons. Such households, at the margins of the homeowning population, are nevertheless much more likely to own in St. Joseph County.\*

The housing market in Brown County is tight but untroubled by racial segregation. Under 2 percent of the population is nonwhite, most of them American Indians living in a rural township. Under one-quarter of one percent of the population is black. In St. Joseph County, however, over 11 percent of the population is nonwhite. Most are blacks living in deteriorated neighborhoods of South Bend; they constitute about 18 percent of that city's population.

<sup>\*</sup>The tenure differences between the two markets are startling. For example, two-fifths of the young single adult heads of households in St. Joseph County are homeowners, but less than 10 percent in Brown County. Only a fifth of all elderly single persons in St. Joseph County are renters, but two-fifths in Brown County. See Kevin F. McCarthy, Housing Choices and Residential Mobility in Site I at Baseline, The Rand Corporation, WN-9029-HUD, August 1976, p. 18; and Housing Choices and Residential Mobility in Site II at Baseline, The Rand Corporation, WN-9737-HUD, September 1977, p. 21.

Economic contrasts between the two sites reflect the demographic contrasts. Income and employment of households are lower in St. Joseph County. The median gross household income in Brown County was nearly \$12,800 in 1974, but only \$11,000 in St. Joseph County. About 78 percent of all household heads in Brown County were employed, but only 71 percent in St. Joseph County. Moreover, income and employment of black households in St. Joseph County were substantially lower than those of white households. Median income for blacks in 1974 was \$7,300, and only 58 percent of black household heads were employed; the corresponding numbers for whites are \$11,400 and 72 percent.

We expected the differences between Brown and St. Joseph counties to affect eligibility for and enrollment in each site's allowance program. For example, how many owners would be eligible and how many would enroll in Brown County's "tight" housing market as opposed to St. Joseph County's "loose" market? What kinds of households would have the greatest need for assistance in each site and how longlasting would be their needs? How would the presence of a racial minority in St. Joseph County affect the composition of the eligible and the enrolled populations?

## ELIGIBILITY CRITERIA

A household is eligible to enroll in the allowance program if it satisfies certain requirements for income, assets, family composition, and residency. The income limit is set by the assistance formula: a household's allowance entitlement is the difference between the standard cost of adequate housing for that size of household and a fourth of the household's adjusted gross income. The minimum entitlement for enrollment is \$120 annually, though once enrolled a household may continue to participate as long as its entitlement is greater than zero.

Adjusted gross income excludes 5 percent of gross income (10 percent for an elderly \*\* or disabled household) and \$300 annually for each dependent. Other deductions are allowed for extraordinary medical, work-related, or child-care expenses. Transfer income from public

<sup>\*</sup>Third Annual Report of the Housing Assistance Supply Experiment, The Rand Corporation, R-2151-HUD, February 1977, Sec. IV.

<sup>\*\*</sup>Head of household or spouse is 62 years or older.

assistance or Social Security is included in gross income. For homeowners, gross income includes an imputed income equal to 5 percent of home equity. Table 1.1 shows the schedule of standard costs of adequate housing for each site, along with the income limits implied by the assistance formula.\*

Table 1.1

INCOME LIMITS FOR ENROLLMENT BY HOUSEHOLD SIZE:
BROWN AND ST. JOSEPH COUNTIES, YEAR 1

Number	Standard C quate Hous	ost of Ade- ing (\$/mo)		Adjusted come (\$/yr)
of	Brown	St. Joseph	Brown	St. Joseph
Persons	County	County	County	County
1	100	100	4,320	4,320
2	125	125	5,520	5,520
3-4	155	145	6,960	6,480
5-6	170	160	7,680	7,200
7-8	190	170	8,640	7,680
9+	220	170	10,080	7,680

SOURCE: HAO Handbook, Vol. II, Sec. 10.06(10), for each site.

NOTE: Income limit for enrollment =  $4 \times$  (annualized standard cost of adequate housing - \$120), equivalent to a monthly entitlement of \$10.

The asset ceiling was set high enough to include homeowners with low current income. The limit is \$20,000 for nonelderly households, and \$32,500 for elderly. The family composition requirement excludes single persons under 62 unless handicapped, disabled, or displaced by public action. Applications are accepted only from residents of

The schedules were updated near the end of two program years to reflect inflation in housing costs, but the new schedules are not used in most of this analysis since the original schedules were in effect over nearly all of the period. The schedules were adjusted only for the analysis of turnover in the eligible population, reported below in Sec. IV.

In August 1977, program rules were changed to permit enrollment of a limited number of other nonelderly single persons, as discussed below, p. 12, fn.

Brown and St. Joseph counties. Also, most households receiving other forms of federal housing assistance are essentially excluded. They can enroll in the program, but can receive no allowance until they move to nonsubsidized housing.

#### DATA SOURCES

This study is based on two kinds of data—the administrative records of the housing allowance offices in the two experimental sites; and the annual surveys of households conducted in each site. HAO records are batched annually to form cumulative research files that detail enrollees and their housing. Second—year records describe program enrollees and their housing through June 1976 in Brown County, through December 1976 in St. Joseph. Those dates mark the second anniversaries of enrollment operations in the respective sites. In general, program events in St. Joseph County trail those in Brown County by six to nine months.

The annual surveys of households in each site are addressed to marketwide probability samples of residential properties, stratified by location (urban/rural), tenure (owner/renter), number of units, and cost (estimated market value or gross rent). To estimate the total population and its components, weights are assigned to individual records.

The baseline surveys, which supply most of the population estimates presented here, were administered in early 1974 in Brown County and early 1975 in St. Joseph County. A subset of records containing complete income, asset, and family composition data \*\*\* necessary for

<sup>\*</sup>As discussed above (p. 5), survey cycles are referred to as base-line, wave 2, wave 3, and so on. The HAO data, however, were all collected after the program began operation, so are referred to as year 1, year 2, year 3, and so on.

<sup>\*\*</sup> Enrollment began in Brown County in June 1974. A limited invitational enrollment began in St. Joseph County in January 1975, followed by open enrollment in April. Enrollment there was initially limited to South Bend residents but soon extended countywide.

<sup>\*\*\*</sup>The residency requirement is not an issue, since the survey was not fielded outside either county.

determining program eligibility was drawn from the set of all field-complete records. \* There were 3,338 such records for Brown County, 2,496 for St. Joseph. A considerably smaller subset described households that satisfied eligibility requirements; those form the basis for our estimates of the characteristics of the eligible population in each site. In Brown and St. Joseph counties 900 and 705 records, respectively, were flagged eligible.

When we began this analysis, only for Brown County was the second wave of household surveys weighted and ready for preliminary studies of longitudinal effects. Because postbaseline surveys are addressed to a smaller sample of properties, wave 2 in Brown County yielded just 2,173 records that met requirements for complete data on income, assets, and family composition. Since both income and housing costs rose in the year between the baseline and wave 2 surveys, eligibility was tested against an income standard adjusted to reflect a year's inflation in housing costs. Using that hypothetical income standard, 531 wave 2 records were flagged eligible. Those records update the eligibility estimates from the baseline survey and are used to trace eligibility changes for individual households. When available, the second wave of household surveys in St. Joseph County will support a parallel analysis there.

Incomes for homeowners are understated because the complex calculations needed to estimate home equity and the imputed income therefrom were not completed before this analysis was begun. Appendix D discusses the effects of that understatement for eligibility estimates.

#### II. CHARACTERISTICS OF THE ELIGIBLE POPULATION

Although federal housing assistance programs all have explicit eligibility tests, we rarely know how many or what kinds of people would pass the tests if they applied. The same is true of other transfer programs, such as Aid to Families with Dependent Children (AFDC) or Medicare. The Supply Experiment provides an unusual opportunity to learn who is eligible as distinguished from who applies for or actually receives assistance.

This section presents our baseline estimates of the sizes and characteristics of the populations eligible for housing allowances in Brown and St. Joseph counties. The estimates are derived from sample surveys of households conducted in each site just before the program began. The surveys gathered enough information on each interviewed household to test its eligibility against nearly all the pertinent program rules.

#### KEY FINDINGS

- About 20 percent of all households in each site are eligible for an allowance. In both sites, there are more eligible homeowners than renters. In Brown County, 53 percent of those eligible are homeowners; in St. Joseph County, 70 percent. Most eligible homeowners in both sites are elderly.
- Four types of households predominate among the eligibles in each site: young couples with young children, single heads with children, elderly couples, and elderly single persons. Together, those groups account for about 85 percent of all eligibles.\*
- Differences in the sources, amounts, and stability of the four groups' nonallowance incomes affect the appropriateness for them of a housing-earmarked transfer and the likelihood that they will enroll. Only the young couples have much

<sup>\*</sup>Their distribution is shown in Table 2.2 below, p. 17.

- prospect of earning enough to end their need for housing assistance.
- Minority households are more likely to be eligible than their white counterparts, reflecting their generally lower income and, for nonelderly families, larger household size. Their higher eligibility rates are due principally to the disproportionate number of single parents among them: Among all minority households, one in five consists of a single woman with children (see Table C.6); among all eligible minority households, more than one in three.

#### METHOD OF ANALYSIS

The baseline household surveys yielded complete interview records for 3,338 households in Brown County and 2,496 in St. Joseph County. They were weighted to represent the corresponding populations of 44,000 and 74,000 households, respectively. We determined which households were eligible to enroll in the allowance program by applying the program's income, asset, and family composition rules to each record. The surveys did not ask all the questions needed for a full test nor probe as deeply as the HAOs to check the accuracy of answers. Moreover, some survey records were flawed by nonresponse to pertinent questions. Therefore, eligibility determination by our method was less reliable than by an HAO enrollment interview.

By program rules, single persons under 62 were eligible only if handicapped, disabled, or displaced by public action. The surveys did not obtain that information, so we counted all singles under 62 as ineligible. In fact, 114 singles in Brown County and 103 in St. Joseph County had enrolled by the end of the second program year.

The HAOs estimate the value of each homeowner's equity in his property and impute income from that asset at the rate of 5 percent annually. Most interviewed homeowners gave us the information needed for the calculation, but it was complex to process and so not ready when this study

In August 1977, this rule was changed so that all singles qualified who met income, asset, and residency rules, but the number of healthy, nonelderly singles permitted to receive allowance payments is limited to 10 percent of all recipients.

began. Consequently, homeowner incomes are slightly understated, leading to overestimates of the number eligible. \* A homeowner's equity, where known, was included for the asset test; otherwise, we inferred a household's asset status from the equalized assessed value of its home and other asset data.

We found 900 records for Brown County and 705 for St. Joseph County that met our eligibility tests. Weighted, they represent about 8,000 and 15,600 households, respectively. Those counts exclude an estimated 600 renter households in Brown County and 1,700 in St. Joseph County who were eligible but lived in federally subsidized housing; they could participate in the allowance program only if they moved to unsubsidized dwellings.

Eligibility rates for specific groups were calculated by dividing the estimated number eligible by the estimated countywide population of the indicated group, both estimates coming from sample survey data. As in all such data, the estimates are subject to sampling errors, hence progressively less reliable as sample sizes decrease. For some small groups, enrollment exceeded the estimated number of eligibles, an event that may reflect either sampling errors, weaknesses in the eligibility test, or population changes between baseline and the date of the enrollment count.

#### WHO IS ELIGIBLE?

About 20 percent of all households in each site are eligible. Table 2.1 shows eligibility rates for owners and renters in four of the ten life-cycle stages described in Appendix A. The four groups are analyzed here because each is numerically large and presents special problems for a housing assistance program. What they have in common, of course, is low income relative to household size. They differ in the expected duration of their poverty, their asset holdings (especially real estate), and the kind of housing they need to live comfortably and decently.

<sup>\*</sup>Appendix D gives subsequent information.

<sup>\*\*</sup> In fact, Table 2.2 below shows that 85 percent of all eligible households come from these four stages.

Table 2.1

BASELINE ELIGIBILITY RATES BY HOUSING TENURE AND LIFE-CYCLE STAGE:
BROWN AND ST. JOSEPH COUNTIES

				<del> </del>		<del></del>
	Number	of Hous	eholds	Pero	ent Elig	gible
Life-Cycle Stage	0wners	Renters	Totals	Owners	Renters	Totals
	Brow	n County				
Young couple, young children	10,060	2,720	12,780	9	33	14
Single head with children	740	1,300	2,040	59	82	74
Elderly couple	3,510	460	3,970	30	63	34
Elderly single	2,090	1,320	3,410	52	70	59
All other stages <sup>a</sup>	14,190	7,440	21,630	5	8	6
All stages	30,590	13,240	43,830	14	28	18
	St. Jos	eph Coun	ty	_	-	
Young couple, young children	11,110	2,770	13,880	10	<b>3</b> 0	14
Single head with children	2,680	2,860	5,540	50	60	55
Elderly couple	6,380	630	7,010	44	41	44
Elderly single	6,000	1,460	7,460	70	73	71
All other stages <sup>a</sup>	31,060	9,380	40,440	4	8	5
All stages	57,230	17,100	74,330	19	27	21

SOURCE: Tabulated by HASE staff from baseline household survey records for each site.

NOTE: Numbers of households and percent eligible for the allowance program are estimated from 3,338 and 2,496 baseline records for Brown and St. Joseph counties, respectively. The four life-cycle stages are selected from the full set defined in Appendix A.

 $\alpha$ Excludes nonelderly single persons who are eligible because they are handicapped, disabled, or displaced by public action; the survey records do not identify those special circumstances.

For young couples with young children, eligibility usually arises from unemployment—a particular danger for that group because mothers of young children seldom work. Lacking the security of a second earner, all depends on the husband's finding and keeping a job at a stage in his life when he usually lacks both skills and seniority. But for most such cases, unemployment is temporary, so the duration of eligibility is likely to be correspondingly short.

Single heads with children are nearly all women--unmarried, separated from their husbands, divorced, or widowed. While the children are small, such persons cannot easily work outside the home, and many are in any case ill-prepared for gainful employment. Over 40 percent of all single parents in our sites receive public assistance in the form of AFDC, but the amounts fall short of the allowance program's income limits; over 60 percent of all eligibles receive AFDC. Barring marriage or remarriage, a single woman with children is likely to need financial help for many years.

Elderly couples usually become eligible when both have retired from the labor force. Although most are eligible for Social Security benefits, again the amounts do not exceed the allowance program's income limits unless supplemented by private pensions, annuities, or other income. Retirement income is usually fixed (except for the inflation indexing of Social Security) for life.

Eligible elderly singles are mostly women, mostly widows. As with elderly couples, their financial distress is likely to endure until they die. In addition, elderly women are typically less able to manage household chores and home maintenance than any of the preceding groups.

The remaining eligibles ("all other stages") comprise a few young or middle-aged couples without children and some middle-aged couples with children. Middle-aged couples are rarely eligible because the earner is usually secure in a job that pays reasonably well. Moreover, both members of a childless couple are likely to be employed.

The eligible populations of Brown and St. Joseph counties differ somewhat in composition. Although the same four life-cycle stages predominate in both, Brown County has relatively more eligible young couples and relatively fewer eligible elderly singles. And, as already noted, St. Joseph County has relatively more eligible homeowners.

Those differences mostly, but not entirely, reflect corresponding differences in the composition of the general populations. In both counties, about 14 percent of all young couples with children are eligible for allowances. But a larger fraction of Brown County's single parents and smaller fractions of its elderly households, both couples and singles, qualify. Fewer single parents in Brown County are employed, so more are dependent on AFDC; moreover, their families are slightly larger. Both factors may contribute to the higher eligibility rates there.\* On the other hand, relatively fewer elderly households are eligible in Brown County because more have additional income from wages and salaries, interest and dividends.

## COMPOSITION OF THE ELIGIBLE POPULATIONS

Given the characteristic emphasis of federal housing assistance programs on rental housing, it is interesting to note from Table 2.2 that homeowners predominate among eligibles in both sites, composing 53 percent of the total in Brown County and 70 percent in St. Joseph. Partly, the difference between counties reflects the fact that about 1,700 otherwise eligible households in St. Joseph County but only 600 in Brown County live in federally subsidized rental units and are thus excluded from the counts shown in Table 2.2. But even counting them as eligible renters would not equalize the tenure mix between the two counties.

The remaining difference is accounted for partly by St. Joseph County's higher number of elderly persons, likely to be both poor and homeowners; and partly by the much lower property values in St. Joseph County, especially central South Bend. It is often advantageous for a poor family to buy an inexpensive home for about \$10,000 rather than rent; for the same reason, it is less advantageous for the elderly to sell their homes and become renters.

The distribution of eligibles by life-cycle stage is due to both

<sup>\*</sup>Elaborated in McCarthy, Housing Choices and Residential Mobility in Site I at Baseline, Tables 3 and 5, pp. 12 and 15 (Brown County), and Housing . . . in Site II at Baseline, Tables 2 and 4, pp. 8 and 12 (St. Joseph County).

Table 2.3

ELIGIBLE HOUSEHOLDS AT BASELINE BY RACE, HOUSING TENURE,
AND LIFE-CYCLE STAGE: ST. JOSEPH COUNTY

	Whi	.te	Minor	ity	
Life-Cycle Stage	Number Eligible	Percent	Number Eligible	Percent	
	Owners				
Young couple, young children Single head with children Elderly couple Elderly single All other All stages	760 <sup>b</sup> 1,020 2,690 4,060 1,070 9,600	8 11 28 42 11 100	380 <sup>b</sup> 320 <sup>b</sup> 150 <sup>b</sup> 160 <sup>b</sup> 320 <sup>b</sup> 1,330	29 24 11 12 24 100	
	Renters				
Young couple, young children Single head with children Elderly couple Elderly single All other All stages	620 1,030 230 910 570 3,360	19 31 7 27 17 100	220 680 30 <sup>b</sup> 150 200 1,280	17 53 2 12 16 100	

SOURCE: Tabulated by HASE staff from baseline household survey records for St. Joseph County.

NOTE: Minority households include all headed by nonwhites or Latins; about 90 percent are black, and most of the remainder are Latin. Of the 705 survey records for eligible households, 181 are for minority households.

Excludes nonelderly single persons who are eligible because they are handicapped, disabled, or displaced by public action; the survey records do not identify those special circumstances.

Estimate based on fewer than 10 survey records.

single-parent renters. For all other groups, the median falls between \$400 and \$700 annually. In Brown County, renters in all stages but one are needier than homeowners. In St. Joseph County, tenure is a poor guide to relative need.

Although the amount of entitlement may measure need, the financial inducement to enroll is better measured by the ratio of entitlement to nonallowance income, also shown in Table 2.4. Among individual

Table 2.4

HOUSEHOLD INCOME AND ALLOWANCE ENTITLEMENT BY HOUSING TENURE AND LIFE-CYCLE STAGE: ELIGIBLE HOUSEHOLDS IN BROWN AND ST. JOSEPH COUNTIES

	Eligible Owners			Eligible Renters		
Life-Cycle Stage	Median Amount (\$/yr)			Median Amount (\$/yr)		
	Allowance Entitlement	Gross Income	Median Ratio <sup>a</sup>	Allowance Entitlement	Gross Income	Median Ratio <sup>a</sup>
	Brow	n County				
Young couple, young children	442	7,003	.06	602	6,030	.09
Single head with children	444 <i>b</i>	$7,032^{b}$	(b)	1,063	4,025	.27
Elderly couple	457	5,132	.09	585	4,137	.14
Elderly single	644	2,569	.25	638	2,574	.25
All other $^{\mathcal{C}}$	479	7,018	.09	625	4,800	.13
All stages	474	5,223	.10	728	4,032	.20
	St. Jos	eph Coun	ty			
Young couple, young children	684 <i>b</i>	5,078 <sup>b</sup>	(b)	660	5,600	.11
Single head with children	650	6,009	.11	1,148	3,268	.35
Elderly couple	410	4,847	.08	690	3,600	.19
Elderly single	639	2,600	.26	627	2,566	. 24
All other <sup>c</sup>	620	5,704	.09	506	4,995	.10
All stages	620	3,531	.15	743	3,600	.22

SOURCE: Tabulated by HASE staff from baseline household survey records for each site. NOTE: Allowance entitlement is based on adjusted gross income. Incomes shown here have not been adjusted.

20

aure of 3

lpha Median of individual ratios of allowance entitlement to gross income.

bEstimate based on fewer than 10 survey records.

<sup>&</sup>lt;sup>C</sup>Numbers of households and percent eligible for the allowance program are estimated from 3,338 and 2,496 baseline records for Brown and St. Joseph counties, respectively. The four life-cycle stages are selected from the full set defined in Appendix A.

households, the ratio ranges from nearly zero for those close to the income limit, to very high values for those with little nonallowance income. Even the median values for eligible households in the different tenure and life-cycle groups vary surprisingly, from 6 to 35 percent.

Whereas a 6 percent increment to income may not much excite even a poor family, a 35 percent increase would certainly generate interest in the allowance program. Such extreme values imply contrasting household circumstances. The low figure is for young homeowner families in Brown County whose median income is \$7,000, a group composed of wage earners who probably purchased a home before a temporary drop in income. The high figure is for single-parent renters in St. Joseph County whose median income is under \$3,300, a group composed mostly of unemployed women with small children, whose main support is AFDC.

The circumstances of elderly singles differ little by either site or tenure. The median income in every case is about \$2,600, approximately the amount of a widow's Social Security benefits in 1973-74. The housing allowances to which they would be entitled would typically increase their incomes by a fourth, a substantial increment to a tight budget.

The circumstances of elderly couples vary more. In both sites, eligible owners could typically add less than a tenth to their incomes; renters, 14 to 19 percent. Among young couples, the difference between owners and renters is less, but the difference between those in Brown County and those in St. Joseph County is greater. Remembering that in every category half of the households would have larger entitlements and larger ratios than the medians shown in the table, we would expect all types of eligibles to be represented among enrollees.

#### CONCLUSIONS

Identifying those eligible for housing allowances in our two experimental sites is akin to identifying the poor or near-poor, given income and the number of family members to be supported. The allowance program uses nearly the same standards as the public housing program, but less stringent than those used by the federal welfare or food stamp

programs. In each of two communities differing considerably in economic circumstances and population composition, we find that about 20 percent of all households are eligible for housing allowances. If the national target for housing assistance encompasses 20 percent of the nation's households, it is clear that existing programs help only a small fraction of those in need. Existing program coverage is skimpy partly because the large programs are addressed only to renters. Probably because little is known about homeowner housing costs and what is known is commonly misinterpreted, they have seldom been included in housing assistance programs. Yet our data show that the majority of those who need financial assistance to bring their housing expenses down to a fourth of income are homeowners. Unlike most federal housing assistance programs, housing allowances can easily serve both renters and homeowners, offering equal benefits to those with equal need.

<sup>\*</sup>An idea broached in Lawrence Helbers, Measuring Homeowner Needs for Housing Assistance, The Rand Corporation, WN-9079-HUD, February 1978, Sec. V, pp. 79-95.

#### III. ENROLLMENT AT THE END OF YEAR 2

Perhaps the best measure of the allowance program's attractiveness to its target population is the *enrollment rate*, defined as the ratio of households currently enrolled to households eligible for the program. This section examines enrollment rates in each site at the end of the second program year—June 1976 in Brown County, December 1976 in St. Joseph County.

Because both programs were then still growing, the rates presented are below those subsequently achieved and should not be interpreted as longrun enrollment rates either in the experimental sites or elsewhere. However, the interim rates, when computed for different groups of enrollees, do tell us about the relative appeal of the program to different classes of households. Here, we compare enrollment rates for owners and renters, for selected life-cycle stages, for whites and other races, and for selected income sources. In each comparison, we try to explain the observed differences.

## KEY FINDINGS

- At the end of the second year, 42 percent of all eligible households were enrolled in Brown County and 34 percent in St. Joseph. Subsequent data show that enrollment was then leveling off in Brown County but continued to grow rapidly in St. Joseph County during the third program year.
- Among eligibles, those with the highest propensities to enroll were renters, single household heads, minorities, and AFDC recipients. Those least likely to enroll were owners, households headed by couples, whites, and those with earned incomes. Enrollment rates ranged from as high as 81 percent for single-parent renters to as low as 16 percent for homeowner couples.
- By definition, an eligible household has low income relative to household size and the local cost of adequate housing.
   Among eligibles, greater financial need is reflected in

larger allowance entitlements, so those with the larger entitlements were more likely to enroll, especially if the entitlement was a significant proportion of total income.

- In general, the program appealed more to the enduringly poor than to those with only temporarily low incomes. Although most eligible households headed by elderly persons are persistently poor, those headed by elderly couples enrolled at much lower rates than those headed by elderly single persons.
- The higher enrollment rates for eligible nonwhite households are only partly explained by a greater incidence of household circumstances that imply enduring poverty. Eligible nonwhites are more likely to enroll than eligible whites in the same tenure class and life-cycle stage.

### METHOD OF ANALYSIS

The numerators of all enrollment rates presented here are exact counts of those enrolled at the end of the second program year. The denominators, however, are estimates of the number of households eligible for enrollment when the program began; their construction from sample survey data was described in Sec. II above. Unlike the enrollment figures, the eligibility estimates are subject to sampling error. More important, they describe each site's eligible population as it existed two years earlier than the enrollment counts. If the size or composition of the pool of eligibles in either site changed during that interval, estimated enrollment rates could be misleadingly high or low.

We use year 2 enrollment data because they are the latest available in a form that permits analysis. Although year 1 enrollment data are closer in time to the baseline eligibility estimates, enrollment increased so much subsequently that the year 1 data are only of historical

<sup>\*</sup>The eligibility test on survey records used here is based on income reported for the preceding calendar year, so may not accurately reflect the household's current circumstances. The HAOs' enrollment test, however, multiplies by 12 the applicant's report of income for the preceding month, and so takes current events into account in estimating income for the coming year.

interest; on the other hand, HAO records for year 3 were still being prepared for analysis when this study began. We use baseline eligibility estimates because only the baseline survey records have been thoroughly audited and weighted to represent county populations accurately. In due course, household survey records from waves 2 and 3 in each site will be similarly audited and weighted, and can be used to compile eligibility estimates that bracket the year 2 enrollment counts. In fact, the household records from wave 2 in Brown County are used in Sec. IV to explore turnover in the population of eligibles. However, only preliminary weights have been assigned to that file and crosswave checks continue to raise questions about their validity.

In using baseline eligibility estimates in the present section, we ignored demographic and economic changes over a two-year interval that may have changed the size and composition of the pool of eligibles enough to alter the enrollment rates reported here. Economic conditions have changed, especially in Brown County where the baseline survey's retrospective income data refer to the recession year of 1973. Unemployment and subsequent reemployment certainly induced program enrollments and terminations, and are clearly mirrored in the comparisons of baseline and wave 2 survey data in Sec. IV. Smaller changes are likely to be found in the distribution of households by size, tenure, life-cycle stage, and other variables bearing on the present analysis.

The enrollment rates reported here must therefore be regarded as first approximations, to be improved by subsequent research. Even so, they are worth reporting both because so little is known about participation rates in transfer programs and because they reveal strong patterns that will certainly survive better synchronization of source data even though particular rates may be somewhat revised.

# HISTORY OF ENROLLMENT\*

The significance of year 2 enrollment counts can best be appreciated in the context of the enrollment history of each site. That history is simple in Brown County, more complex in St. Joseph County.

<sup>\*</sup>Much of the information in this subsection is based on the Third Annual Report of the Housing Assistance Supply Experiment, Sec. II.

Brown County enrollment was opened to all eligible residents in late
June 1974. St. Joseph County enrollment began in early January 1975,
but was limited for the first three months to a small number of homeowners contacted by mail and invited to apply; open enrollment began
early in April 1975. Moreover, the program was initially restricted
to residents of South Bend. In June 1975, the program jurisdiction
was extended to encompass a five-mile belt of unincorporated but heavily
populated territory around South Bend. The neighboring city of
Mishawaka joined in March 1976, and the unincorporated remainder of
the county in August 1976. Outlying towns and villages joined sporadically between August 1975 and October 1976. The program thus did
not operate countywide until nearly the end of the second program year.
\*\*

Although negotiations to establish the allowance program in each site got considerable publicity, our surveys indicate that the general public paid little attention. After enrollment began, the HAOs used every promising medium (including newspaper, radio, and television advertisements) to tell the public how the program worked and who was likely to be eligible. Within a year, 80 percent of all household heads in Brown County and 87 percent in St. Joseph County had at least heard of the program.

As knowledge of the program spread, thousands of households in each site applied for admission, including many who were ineligible or who failed to complete enrollment procedures. At first, the HAOs had large backlogs of applicants awaiting enrollment interviews, so the pace of enrollment was set by administrative capacity. Once the

About 750 invitations were issued and 103 homeowners were enrolled during the first three months. That procedure was designed to permit enrollment to begin without contaminating the baseline survey, still in the field.

<sup>\*\*</sup> The program could not accept enrollees from any civil division until its governing body agreed to participate. In Brown County, such agreements were reached with all 26 civil divisions before open enrollment began. In St. Joseph County, only South Bend was at first willing to participate.

<sup>\*\*\*</sup> Phyllis L. Ellickson and David E. Kanouse, Public Perceptions of Housing Allowances: The First Two Years, The Rand Corporation, WN-9817-HUD, January 1978, Fig. 5, p. 67.

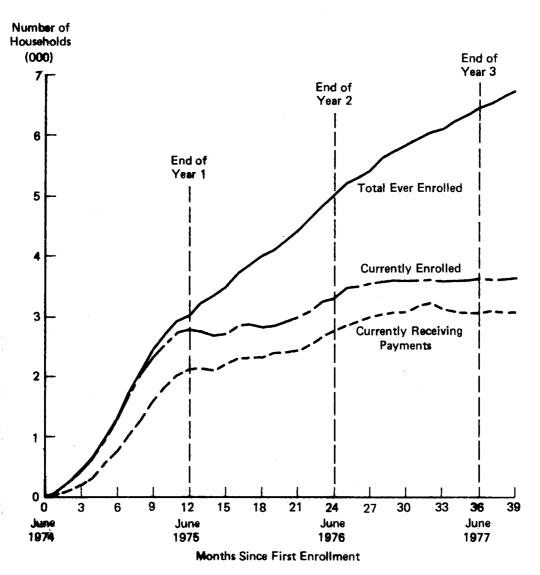
initial backlog was processed, the HAOs periodically stimulated more applications by advertising, seeking a steady workload without imposing long waits on new applicants.

During the first two program years, the Brown County HAO received 9,640 applications and enrolled 5,021 households. During the corresponding period in St. Joseph County, the HAO received 16,045 applications and enrolled 7,283 households. However, during the second year, new enrollments were increasingly offset by terminated enrollments, as Figs. 3.1 and 3.2 show, so program growth slowed. At the end of year 2, current enrollment was 3,377 in Brown County and 5,284 in St. Joseph County. Current enrollment amounted to 42 and 34 percent, respectively, of those eligible at baseline.

Subsequently, enrollment has grown slowly in Brown County but rapidly in St. Joseph. By September 1977, the Brown County HAO had enrolled 6,782 households, of which 3,675 were still enrolled; the St. Joseph County HAO had enrolled 10,026 households, of which 6,340 were still enrolled. Current enrollment then amounted to 46 and 41 percent, respectively, of those eligible at baseline.

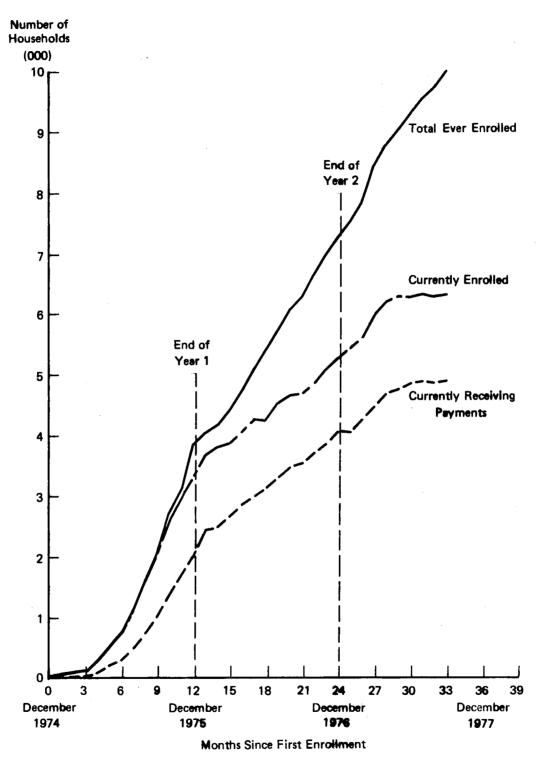
Over time, the mix of enrollees has changed only slightly in Brown County in terms of owners and renters, young and old, large and small households, and other characteristics to be examined here. Hence, year 2 enrollment rates for specific groups approximate those prevailing in September 1977; since growth is slow, the current rates are probably close to their longrun values.

In St. Joseph County, the steady state of enrollment is more elusive. Blacks from central South Bend enrolled heavily in the early months of the program, but their share of total enrollment declined as suburban jurisdictions joined the program and more whites enrolled. We judge that the mix of enrollees had nearly stabilized by the end of year 2, but the level of enrollment was still growing. Therefore, more attention should be given to the relative enrollment rates of different types of households than to the absolute value of the rate for each type.



SOURCE: HAO management information system, monthly program reports through September 1977

Fig. 3.1--Enrollment in the Brown County housing allowance program, June 1974 through September 1977



SOURCE: HAO management information system, monthly program reports through September 1977

Fig. 3.2--Enrollment in the St. Joseph County housing allowance program, January 1975 through September 1977

## ENROLLMENT RATES BY TENURE AND LIFE-CYCLE STAGE

Table 3.1 shows that the proportion of eligibles who enrolled in the allowance program varies with both housing tenure and life-cycle stage. In most respects, the patterns in the two sites are similar. In both sites, slightly over half of all eligible renters but only a fourth to a third of all eligible homeowners were enrolled at the end of year 2. The difference by tenure persists when each tenure class is disaggregated by life-cycle stage, so it reflects more than simply the correlation of tenure and life-cycle stage. The most likely reason is that eligible renters tend to have lower incomes and larger allowance entitlements than eligible owners, so the allowance offer is more attractive to them (see Table 2.4 above, p. 20).

Some argue that enrollment is also conditioned by an eligible household's expectations as to the cost of participating. If an enrollment dwelling fails the HAO's housing evaluation, the enrollee must either repair it or move in order to qualify for payments. Homeowners are in practice limited to the first alternative and may therefore be more reluctant than renters to apply.

Postbaseline surveys will address this issue by eliciting eligible respondents' reasons for not having applied for assistance. But few eligible households knew enough about the HAO's housing standards before enrolling to judge reliably whether a home would pass or fail evaluation. Moreover, the cost to an applicant of enrolling in the program is both small and widely known; it consists merely of an hour's visit to the HAO at an appointed time for an interview. And rented dwellings fail the evaluation more often than owner-occupied homes—especially in St. Joseph County, where renter enrollment rates are highest. On the whole, we judge that the housing-related cost of participating becomes an issue only after enrollment, since only then has it been determined.

<sup>\*</sup>Enrollment procedures are explained to potential applicants either when they first inquire or when they actually apply. During the interview, an applicant must reveal details of his family circumstances, income, and assets, a requirement that some potential applicants doubtless count as a cost of enrolling.

Table 3.1

ENROLLMENT RATES BY HOUSING TENURE AND LIFE-CYCLE STAGE:
BROWN AND ST. JOSEPH COUNTIES, YEAR 2

	1	mber Enrol End of Yea		Enrollment Rate (%)			
Life-Cycle Stage	Owners	Renters	Total	0wners	Renters	Total	
Brown County							
Young couple, young children	201	357	558	22	40	31	
Single head with children	225	730	955	52	69	64	
Elderly couple	231	86	317	22	30	24	
Elderly single	465	423	888	43	46	44	
Single under 62	10	104	114	(a)	(a)	(a)	
All other	236	309	545	33,	52	42	
All stages	1,368	2,009	3,377	33 <sup>b</sup>	53 <sup>b</sup>	<b>42</b> <sup>b</sup>	
S	st. Josep	h County					
Young couple, young children	177	278	455	16	33	23	
Single head with children	556	1,388	1,944	42	81	64	
Elderly couple	451	57	508	16	22	16	
Elderly single	1,151	393	1,544	27	37	29	
Single under 62	22	81	103	(a)	(a)	(a)	
All other	398	332	730	28,	43,	34,	
All stages	2,755	2,529	5,284	25 <sup>b</sup>	54 <sup><i>b</i></sup>	34 <sup>b</sup>	

SOURCE: Tabulated by HASE staff from baseline household survey records and year 2 HAO records for each site.

NOTE: The enrollment rate is the number of households enrolled at the end of year 2 expressed as a percentage of those eligible at baseline.

 $<sup>\</sup>alpha$ Not calculated because household surveys do not identify eligible nonelderly single persons, who must be handicapped, disabled, or displaced by public action.

 $<sup>^</sup>b$ Denominator of enrollment rate excludes eligible nonelderly single persons, who were not identified by the household surveys (see note a). Such households have enrolled and are in the numerator, slightly biasing this rate upwards.

Within each tenure class, enrollment rates vary by life-cycle stage. In both classes and both sites, the highest rates are for single parents, reaching 81 percent for single-parent renters in St.

Joseph County. In each site also, elderly single persons have the second-highest enrollment rate. The lowest rates are for homeowner couples—16 percent in St. Joseph County, 22 percent in Brown County.

Remarkably, the rates among owners in each site are identical for young couples with young children and elderly couples; among renters, the young couples are more likely to enroll. Although we lack tidy explanations for all the intergroup differences in enrollment rates shown in Table 3.1, we think they result from the interaction of several factors: intergroup differences in income, perception of need, and attitude toward public assistance.

## INFLUENCE OF FINANCIAL NEEDS

Table 2.4 above (p. 20) showed substantial intergroup variation in the median incomes of those eligible for enrollment and inverse variations in their median allowance entitlements. For most eligibles, the inducement to enroll should increase with the ratio of expected benefits to income; in fact, comparing the ratios in Table 2.4 to the enrollment rates in Table 3.1 reveals a strong direct relation between them. However, the relationship between income and entitlement is complex, and we cannot be sure what people expected when they decided whether or not to apply.\*

From household survey records, we estimated the entitlements of

Allowance entitlement varies inversely with income and directly with household size. However, the HAOs' initial attempts to publicize income limits and benefit levels floundered on the complexities of income accounting, so most subsequent advertising merely advised those with low or moderate incomes to call the HAO and find out if they were likely to be eligible. Those not clearly ineligible were invited to apply, but no applicant learned the amount of his allowance entitlement until the end of his enrollment interview. Of those interviewed through September 1977, about 17 percent in each site were found ineligible. Another 7 percent in Brown County and 14 percent in St. Joseph County either failed to complete the interview or completed it but declined to enroll even though eligible.

the eligible and used our estimates to calculate enrollment rates by amount of entitlement. The results, displayed in Table 3.2, show that larger entitlements are indeed associated with higher enrollment rates, although the correlation is weak. We think that weakness is due partly to different perceptions of need among households with similar entitlements. For young couples and "all other" households, eligibility usually is a consequence of temporary unemployment. Although an allowance may ease the immediate need for cash, few such households expect their

Table 3.2

ENROLLMENT RATES BY AMOUNT OF ALLOWANCE ENTITLEMENT:

BROWN AND ST. JOSEPH COUNTIES, YEAR 2

Maximum	Year 2 Enrollment Rate (%)							
Monthly Entitlement	Br	Brown County St. Joseph County			nty			
(\$)	Owners	Renters	Total	Owners	Renters	Total		
10-19	13	44	20	18	13	17		
20-29	32	26	29	34	25	31		
30-39	28	44	32	29	31	30		
40-49	61	67	64	37	42	39		
50~59	27	54	38	21	37	25		
60-69	23	54	40	25	63	35		
70-89	62	78	73	19	60	31		
90-119	<i>(b)</i>	39	42	20	96	49		
120+	(b)	81	69	(b)	80	57		
All amounts	33	53	42	25	54	34		

SOURCE: Tabulated by HASE staff from baseline household survey records and year 2 HAO records for each site.

NOTE: The enrollment rate is the number of households enrolled at the end of year 2 expressed as a percentage of those eligible at baseline. Allowance entitlements for enrollees were calculated by the HAOs; those for eligibles were estimated from household survey records. Entitlement intervals were chosen to provide adequate sample sizes for computing enrollment rates.

Households entitled to less than \$10 monthly cannot enroll, but the minimum entitlement for continued participation is zero.

 $<sup>^</sup>b$ Sample of eligibles is too small for a reliable estimate.

reduced circumstances to continue long. Single parents and the elderly, however, rarely have reason to expect substantial increases in income. Their budgetary problems are therefore longlasting and enrollment in the allowance program promises correspondingly longterm relief.

Table 3.3 supports our hypothesis. It shows enrollment rates for eligible households grouped by source of income (the sources are not mutually exclusive). Those with some earned income were least likely

Table 3.3

ENROLLMENT RATES BY SELECTED INCOME SOURCES:
BROWN AND ST. JOSEPH COUNTIES, YEAR 2

Enrollment Rate (%)		
Brown County	St. Joseph County	
21	16	
37	22	
40	28	
71	52	
42	34	
	Brown County 21 37 40 71	

SOURCE: Tabulated by HASE staff from baseline household survey records and year 2 HAO records for each site.

NOTE: The enrollment rate is the number of house-holds enrolled at the end of year 2 expressed as a percentage of those eligible at baseline. Eligible and enrolled households reporting income during the preceding year from the indicated source are included in the corresponding enrollment rate computation. Because most households reported more than one income source, the entries in each column are not mutually exclusive. Not all sources are listed, so only the last row accounts for all eligible and enrolled households.

to enroll despite low income during the preceding year. Those who drew unemployment compensation for part of that year were more likely to enroll. Households at least partly dependent on retirement income were

<sup>\*</sup>As shown in Sec. V below, many such households who have enrolled drop out of the program voluntarily when their incomes rise.

still more likely to enroll. Eligibles receiving AFDC had the highest enrollment rate; 1,000 such households in Brown County and 2,300 in St. Joseph County are nearly twice as likely to enroll as those who derive income from other sources.

## INFLUENCE OF ATTITUDES TOWARD PUBLIC ASSISTANCE

We suspect that marital status affects a household's attitude toward public assistance: Single household heads, lacking the moral support of a spouse, are probably readier to look to a public agency for help even when their financial problems are objectively no worse than those of couples. That hypothesis would explain why enrollment rates of elderly single persons exceed those of elderly couples even when their entitlements are lower—as among renters in St. Joseph County (see Table 2.4 above, p. 20). It would also help explain why elderly couples so closely resemble young couples in their propensity to enroll, despite other differences in their circumstances.

The high enrollment rates of AFDC recipients suggest another factor related to attitudes toward public assistance. Such households are already receiving public assistance and are thus familiar with the administrative procedures necessary to obtain aid; they may also feel less compromised by accepting additional aid than would someone heretofore self-supporting.

Attitudes differ also by race. Blacks and Latins in St. Joseph County are not only more likely to be eligible than whites, but also to enroll. Table 3.4 shows that among eligible nonwhite households, 44 percent of the owners and 79 percent of the renters were enrolled at the end of year 2; the comparable figures for whites were 23 and 45 percent. One reason for heavy enrollment by nonwhites is their concentration in the life-cycle stages, such as single-parent households, having high enrollment rates among both whites and nonwhites. Virtually all nonwhite single-parent renters were enrolled, but only 63 percent of the whites in similar circumstances. Such a finding is not unusual for assistance programs.\*

<sup>&</sup>quot;The differential participation rates by race are discussed in "Welfare and Female-Headed Families," Chap. 5 in Heather L. Ross and

Table 3.4

ENROLLMENT RATES BY RACE, HOUSING TENURE, AND LIFE-CYCLE STAGE:

ST. JOSEPH COUNTY, YEAR 2

	1	Enrolled at Year 2	1	llment e (%)				
Life-Cycle Stage	White	Minority	White	Minority				
Owners								
Young couple, young children	133	44	(a)	(a)				
Single head with children	316	240	31	(a)				
Elderly couple	371	80	14	(a)				
Elderly single	1,043	108	26	(a)				
Single under 62	14	9	(b)	(b)				
All other	286	111	27	(a) 44 <sup>c</sup>				
All stages	2,163	592	23°	44				
	Renters							
Young couple, young children	197	81	32	37				
Single head with children	648	740	63	(d)				
Elderly couple	45	12	20	(a)				
Elderly single	344	49	38	33				
Single under 62	42	39	(b)	(b)				
All other	234	98	41	48				
All stages	1,510	1,019	45 <sup>c</sup>	79 <sup>c</sup>				

SOURCE: Tabulated by HASE staff from baseline household survey records and year 2 HAO records for St. Joseph County.

NOTE: The enrollment rate is the number of households enrolled at the end of year 2 expressed as a percentage of those eligible at baseline.

aSample of eligibles is too small for a reliable estimate.

<sup>&</sup>lt;sup>b</sup>Not calculated because household surveys do not identify eligible nonelderly single persons, who must be handicapped, disabled, or displaced by public action.

<sup>&</sup>lt;sup>C</sup>Denominator of enrollment rate excludes eligible nonelderly single persons, who were not identified by the household surveys (see note b). Such households have enrolled and are in the numerator, slightly biasing this rate upwards.

dCalculated rate exceeds 100.

## CONCLUSIONS

Enrollment rates at the end of the second program year suggest that slightly more than half of the eligible renters and only a fourth to a third of the eligible owners are likely to be enrolled at a given time. To some observers, those figures seem low, considering that the program has been widely publicized for two years and offers substantial benefits. However, such is the general experience in this country even for long-established transfer programs. One recent study set participation in the federal food stamp program at 38 percent of those eligible. A study of New York's poor indicates that only 52 percent of all households and 60 percent of all persons eligible for public assistance actually drew benefits in March 1970.

The large variations in enrollment rates by tenure and life-cycle stage do not succumb to simple explanations. For some eligibles, the expected benefits are probably too small to be worth the trouble. Others apparently expect higher incomes soon. Attitude toward accepting public assistance seems to vary with household composition and race. And some may still not know about the program or realize that they are eligible. More research is needed to gauge the importance of these economic, social, and psychological factors.

Those who do enroll can be usefully divided into two groups. One comprises those whose need for assistance is due to temporary loss of earnings; for them, housing allowances are virtually equivalent to unemployment compensation, enabling them to keep up mortgage or rent payments during a few months of adversity. Others are more permanently poor, because of age or childcare responsibilities that prevent working;

Isabel V. Sawhill, Time of Transition: The Growth of Families Headed by Women, The Urban Institute, Washington, D.C., 1975.

<sup>\*</sup>Maurice MacDonald, Food Stamps and Income Maintenance, Academic Press, New York City, forthcoming; C. Peter Rydell and others, Welfare Caseload Dynamics in New York City, The Rand Corporation, R-1441-NYC, October 1974, Table 3.5, p. 37; and David M. de Ferranti and others, The Welfare and Nonwelfare Poor in New York City, The Rand Corporation, R-1381-NYC, June 1974, p. 59. The latter two reports were published jointly with the New York City Human Resources Administration.

for them, housing allowances provide a longterm income supplement, differing from "welfare" in that benefits are conditioned on the consumption of adequate housing. Roughly two-thirds to three-fourths of those enrolled at the end of year 2 were persistently poor.

# IV. TURNOVER IN THE POPULATION OF ELIGIBLES

The population eligible for housing allowances has a constantly fluctuating membership. If its income, assets, or size and composition changes, a household may become eligible or lose its eligibility under program rules. The net result of many such changes may be to either increase or decrease the number of eligible households or to alter their distribution by household type. Program rules may themselves change, augmenting or diminishing the eligible population.

This section reports our initial investigation of eligibility changes in Brown County during the first year of program operations. We compare independent baseline and wave 2 estimates of the eligible population's size and composition; and trace changes in the eligibility of individual households interviewed in both surveys. We are restricted to Brown County because only that site's wave 2 survey records had been audited and assigned preliminary weights in time for the present analysis. Although in using those data we encountered certain technical difficulties that significantly qualify the findings reported here, the broad patterns of eligibility change seem likely to survive later reanalysis.

### KEY FINDINGS

- As Brown County recovered from the recession of 1973-74, the number of households eligible for allowances decreased. Households headed by nonelderly couples initially eligible due to temporary unemployment lost their eligibility when the breadwinner returned to work.
- Households not in the labor force--single parents and elderly persons--were essentially unaffected by either recession or economic recovery. But more became eligible because the number of such households was growing in Brown County as elsewhere

<sup>\*</sup>Detailed below, "Method of Analysis."

- in the nation, and because their low incomes have apparently not kept pace with inflation in housing costs.
- The eligibility status of about a tenth of all households changed during the intersurvey year. The turnover among eligibles (those becoming eligible plus those becoming ineligible) involved more than a third of the population eligible at one or both surveys.
- Among eligibles, turnover was greatest for nonelderly couples and least for single parents and elderly single persons. It increased with the proportion of income derived from earnings. Virtually none of those who depended primarily on AFDC changed eligibility status during the year.

## METHOD OF ANALYSIS

To measure changes in the size and composition of the eligible population, we compared independent estimates of that population from baseline and wave 2 survey records for Brown County. The baseline survey yielded complete records for 3,338 households, of which 900 were counted as eligible. The smaller wave 2 survey yielded 2,173 complete records, including 531 for eligible households. In both cases, the records were weighted to estimate the corresponding eligible populations.

However, the wave 2 weights, newly computed when this analysis began, were devised by a method that did not guarantee their consistency with baseline weights. Although they passed several tests for validity and plausibility, they imply larger changes in some population groups than could have occurred in a single year. (Specifically, the number of households headed by single parents supposedly increased by 22 percent). Pending further refinements in crosswave weighting procedures, comparisons of population estimates are of uncertain reliability.

To trace household eligibility changes, we linked the records for each of 1,299 households interviewed at both baseline and wave 2. The linked records account for just 39 percent of the complete baseline records and 60 percent of the complete wave 2 records. Because the survey panel consists of properties and dwellings that are revisited

annually to interview the current occupants, households that move between surveys drop out of the sample. Our file of linked household records thus excludes all movers; and since the circumstances that result in a new eligibility status are also likely to prompt a move, the linked sample probably understates eligibility changes. Moreover, because renters move often and owners seldom, the linked sample is biased in favor of owners. Because we could not adequately assess and correct the biases, we present data on the linked file only in the form of unweighted record counts.

To determine a household's eligibility, one must compare its adjusted gross income with the standard cost of adequate housing (denoted  $R^*$ ). Baseline eligibility estimates reflect the initial schedule of  $R^*$ , based on housing market data from a survey conducted in september 1973, nine months before Brown County enrollment began. That schedule was revised in February 1976 to reflect interim inflation in housing costs due mostly to rising prices for fuel and utilities. When the revision was promulgated, income limits for enrollment were thereby increased by about 15 percent.

The wave 2 household survey was conducted in Brown County during the first half of 1975 and gathered income data for calendar 1974. What income limits should be used to determine the eligibility of the households surveyed then? Although in early 1975 the HAO still used the initial schedule of  $R^*$  to test eligibility, both household incomes and housing costs had risen significantly since baseline. Using baseline income limits would exclude from the pool of eligibles some whose income had risen, even though the increases were actually offset by higher housing costs.

For this study, it seemed to us that the "true" eligibility rate, reflecting the underlying principle of assistance, was more pertinent than the nominal rate, reflecting the administrative spacing of  $R^*$ 

The initial schedule of  $R^*$  is discussed throughout Ira S. Lowry, Barbara M. Woodfill, and Tiina Repnau, Program Standards for Site I, The Rand Corporation, WN-8574-HUD, January 1974.

<sup>&</sup>quot;Ira S. Lowry, Inflation in the Standard Cost of Adequate Housing: Site I, 1973-1976, The Rand Corporation, WN-9430-HUD, March 1976.

adjustments. Consequently, we interpolated wave 2 values between the September 1973 and February 1976  $R^*$  schedules to estimate standard housing costs and corresponding income limits for September 1974, one year after the original  $R^*$  schedule was estimated. The results appear in Table 4.1. For wave 2 eligibility tests, we raised income limits by 10 percent for single persons, 8 percent for couples, 5 to 6 percent for households of three to eight persons, and 2 percent for households of nine or more persons.

Possible wave 2 sample weighting errors, bias in the file of linked baseline and wave 2 household records, and uncertainty about appropriate income limits all combine to limit the validity of the

Table 4.1

INCOME LIMITS DETERMINING PROGRAM ELIGIBILITY:
HOUSEHOLD SURVEYS IN BROWN COUNTY,
BASELINE AND WAVE 2

Household	Standard Co		Income Limit for		
Size	quate Hous		Enrollment <sup>a</sup> (\$/yr)		
(Number of Persons)	_ 1 _ 1		Baseline	Wave 2	
1 2	100	110	4,320	4,800	
	125	135	5,520	6,000	
3-4	155	165	6,960	7,440	
5-6	170	180	7,680	8,160	
7–8	190	200	8,640	9,120	
<del>9+</del>	220	225	10,080	10,320	

SOURCE: Lowry, Inflation in the Standard Cost of Adequate Housing: Site I, 1973-1976, Table 5.7, p. 91; and calculations by the author.

NOTE: Wave 2 entries are interpolated for September 1974 from program standards based on data for September 1973 and February 1976.

Adjusted gross income.

The standard cost of adequate housing increased at different rates for dwellings of different sizes, as shown in Lowry, Inflation in the Standard Cost of Adequate Housing: Site I, 1973-1976.

numerical comparisons presented below. The weighting and bias problems can be ameliorated by further work on the data base; the uncertainty about income limits is intrinsic. But even given the necessary reservations about the data presented here, the patterns they reveal are so strong we think they will survive reanalysis.

# COMPARISON OF INDEPENDENT ESTIMATES OF THE ELIGIBLE POPULATION

We begin our analysis of changes in Brown County's eligible population by comparing the independent baseline and wave 2 estimates of eligibles. Such a cross-sectional approach yields only net changes in the eligible population across the interval. The estimates, derived using different weighting procedures, are presented in Table 4.2.

Overall, the eligible population appears to have declined from nearly 8,000 eligible households at baseline to only 7,100 at wave 2. The loss of nearly 600 eligible homeowners accounts for more than two-thirds of that decline. However, the net changes disguise the considerable variation occurring over life-cycle stages in the owner and renter categories. For example, a precipitous decline in the number of eligible owners in the "young couple" and "all other" categories more than offsets increasing eligibility in other stages. On the other hand, the smaller number of eligible renters results from a more consistent, although more modest, pattern of declining eligibility across all stages—single-parent households excepted. The overall trends, in which we place more confidence because they are based on larger samples, indicate that the number of eligible single parents and elderly households has increased, but the number of eligible young and middle-aged intact families has dropped sharply.

Those results suggest that Brown County's recovery from the 1973-74 recession has benefited younger couples more than other types of households, doubtless because younger households are more likely to contain wage earners recalled to their jobs as conditions improved. That finding will probably withstand further analysis. However, in light of the sampling and weighting problems that burden this analysis, we caution the reader against attaching too much significance to the often sizable fluctuations in the estimates. The indicated 22 percent

Table 4.2

ELIGIBLE POPULATION BY LIFE-CYCLE STAGE AND TENURE:
BROWN COUNTY, BASELINE AND WAVE 2

	Number of Eligible Households							
	Owner	$\mathbf{s}^a$	Renters		Total			
Life-Cycle Stage	Baseline	Wave 2	Baseline	Wave 2	Baseline	Wave 2		
Young couple, young children Single head with children Elderly couple Elderly single All other	910 440 1,060 1,080 710 4,200	230 <sup>b</sup> 450 1,290 1,500 150 3,620	900 1,060 290 920 590 3,760	730 1,380 200 780 390 3,480	1,810 1,500 1,350 2,000 1,300 7,960	950 1,830 1,480 2,280 560 7,100		

SOURCE: Tabulated by HASE staff from the baseline and wave 2 household survey records for Brown County.

NOTE: The eligible household estimates were derived from 900 baseline and 531 wave 2 records of eligible households in Brown County. The estimates at each wave were produced using different weighting procedures. Therefore, pending development of suitable crosswave weighting procedures, these data should be regarded as preliminary.

 $^{\ensuremath{\alpha}}$  These numbers are overestimated because, in identifying eligible homeowners, income imputed from home equity was not counted.

 $<sup>^{</sup>b}$ Estimate based on fewer than 10 survey records.

 $<sup>^</sup>c$ Excludes nonelderly single persons who are eligible because they are handicapped, disabled, or displaced by public action; the survey records do not identify those special circumstances.

increase in the number of eligible single-parent households is particularly suspect. Until an acceptable crosswave weighting scheme is developed, we regard the net changes in eligibility shown in Table 4.2 as preliminary and instead rely more heavily on our longitudinal analysis of individual records, described below, to explain the changes occurring in the eligible population.

## ELIGIBILITY CHANGES BETWEEN SURVEY WAVES

Almost 1,300 households in Brown County were interviewed at both baseline and wave 2. Table 4.3 crossclassifies those households by eligibility status. The table shows only record counts (not population estimates) because the sample of linked records excludes households that moved between surveys. Although we would expect movers (predominantly young renters) to change eligibility status more often than nonmovers (predominantly homeowners and older renters), we believe

Table 4.3

NONMOVER HOUSEHOLDS BY ELIGIBILITY STATUS:
BROWN COUNTY, BASELINE TO WAVE 2

Wave 2	Number of Households by					
Eligibility	Baseline Eligibility Status					
Status	Eligible	ligible Ineligible I	Total			
Eligible	265	42	307			
Ineligible	94	898	992			
Total	359	940	1,299			

SOURCE: Tabulated by HASE staff from linked records (baseline and wave 2) of the household surveys in Brown County.

NOTE: Entries are based on distributions of unweighted records. The linked file necessarily excludes households that moved during the intersurvey year.

that the general patterns of eligibility change reported below would also appear in a sample that included movers.\*

In the sample of nonmovers, the number of eligibles declined by 52 households, or 14 percent. However, that net change balances two opposing flows: 94 households or 26 percent of those eligible at baseline who became ineligible at wave 2; and 42 households or 14 percent of those eligible at wave 2 who were ineligible at baseline. Of the 401 households eligible at one or both surveys (ever-eligibles), 136 changed status, yielding a turnover rate among the ever-eligibles of 34 percent. In other words, although only a little over 10 percent of all households changed eligibility status, that 10 percent represents over a third of those ever eligible.

About 80 percent of the eligibility status changes in either direction result from changes in household income, as Table 4.4 shows. Failing the asset requirement causes almost a fifth of all eligible households to lose their eligibility, but meeting it is rarely the sole reason for households to become eligible between waves. In contrast, changes in family composition infrequently explain loss of eligibility but do account for a fourth of all households becoming eligible at wave 2.

The asymmetrical effect of assets on eligibility is easy to understand. The allowance program's asset limits (\$32,500 for elderly households, \$20,000 for nonelderly) were designed to enable homeowners with low current income to participate. Because of both rising property values and mortgage amortization, asset holdings tend to increase in value much more often than they decrease. Conversely, a household that had acquired substantial equity would be unlikely to lose it by default or disaster.

The reasons for asymmetry in the effect of family composition are less clear. Family composition can make an eligible household categorically ineligible only if it is headed by a childless couple both under

<sup>\*</sup>We excluded 2,039 baseline and 874 wave 2 records of households interviewed just once. The bias introduced by excluding those movers from the turnover analysis is examined in Table B.32 below, p. 120, which compares mobility patterns by life-cycle stage.

Table 4.4

REASONS FOR ELIGIBILITY STATUS CHANGES: NONMOVER HOUSEHOLDS
IN BROWN COUNTY, BASELINE TO WAVE 2

Eligibility Test Causing Status Change	Nonmover Households by Type of Change					
	_	t Baseline to e at Wave 2	Ineligible at Baseline Eligible at Wave 2			
	Number	Percenta	Number	Percent <sup>a</sup>		
Income Assets Family composition	78 17 5	83 18 5	32 1 11	76 2 26		

SOURCE: Tabulated by HASE staff from linked records (baseline and wave 2) of the household surveys in Brown County.

NOTE: Entries are based on distributions of unweighted records. The linked file necessarily excludes households that moved during the intersurvey year.

Percentages do not sum to 100 because households can change eligibility status by meeting or failing more than one test.

62, who separate to form two single-person households; or by a single parent under 62 whose children leave home. A single person under 62 is categorically ineligible, but can become eligible by marrying, having a child, or reaching age 62, if his or her income would then fall within program limits. The last two events occur fairly often. In particular, the number of young, single women who bear and raise children has been growing nationally and that trend is probably reflected in our data.

Table 4.5 classifies our sample of nonmovers by baseline life-cycle stage. The first two columns show that nearly all the net decrease in eligibility during the intersurvey year came from young couples with young children. From Table 4.4, we know that becoming

This rule was lifted in the fall of 1977, but was still in effect when these data were collected.

<sup>\*\*</sup> This phenomenon is discussed in Wilson H. Grabill, "Premarital Fertility," Bureau of the Census *Current Population Reports*, Special Studies, Series P-23, No. 63, U.S. Government Printing Office, Washington, D.C., August 1976.

Table 4.5

ELIGIBILITY CHANGES BY BASELINE LIFE-CYCLE STAGE: NONMOVER HOUSEHOLDS
IN BROWN COUNTY, BASELINE TO WAVE 2

	Percent E	ligible	<b>S</b>	Changing bility
Baseline Life-Cycle Stage	Baseline	Wave 2	All Households	Ever-Eligible Households
Young couple, young children Single head with children Elderly couple Elderly single All other All stages	26 79 44 76 9 28	15 75 44 77 6 24	14 14 16 11 8 10	50 17 30 13 66 34

SOURCE: Tabulated by HASE staff from linked records (baseline and wave 2) of the household surveys in Brown County.

NOTE: Entries are based on distributions of unweighted records. The linked file necessarily excludes households that moved during the intersurvey year.

ineligible was due to either increased income or increased assets, usually the former. The most common story is that the couple's income fell below normal during the 1973 recession because the breadwinner was laid off work, then returned to normal when employment conditions improved.

We have already noted that about 10 percent of all households and a third of those ever eligible for allowances changed status during the intersurvey year. The last two columns of Table 4.5 give details by life-cycle stage. The eligibility change rate for all households in every stage was 16 percent or less. However, the turnover among those ever eligible varied greatly by stage—highest among couples (especially young couples), lowest among single parents and elderly singles.

These findings correlate well with eligibility changes by source of baseline income, shown in Table 4.6. The upper part of the table shows data for those who received over 75 percent of their 1973 income from a single source. The lower part reports on those whose income derived from several sources—e.g., earnings and unemployment compensation, Social Security and Supplemental Security Income (SSI), interest on savings. In the first group, few who primarily earned their income

Table 4.6

ELIGIBILITY CHANGES BY BASELINE INCOME SOURCE: NONMOVER HOUSEHOLDS
IN BROWN COUNTY, BASELINE TO WAVE 2

	Percent Eligible		Percent Changing Eligibility		
Baseline Income $^{\alpha}$	Baseline	Wave 2	All Households	Ever-Eligible Households	
Over 75% from:					
Earnings	14	9	9	56	
Pension, Social Security	83	83	16	17	
AFDC	100	97	3	3	
1-75% from:			,		
Earnings	53	52	13	22	
Unemployment compensation $^{\prime\prime}$	24	16	17	60	
Pension, Social Security	36	38	15	33	
$\mathtt{SSI}^{\mathcal{C}}$	66	59	14	20	
AFDC	82	74	16	18	
Interest, dividends $^{\mathcal{C}}$	17	16	7	36	
All sources	28	24	10	34	

SOURCE: Tabulated by HASE staff from linked records (baseline and wave 2) of the household surveys in Brown County.

NOTE: Entries are based on distributions of unweighted records. The linked file necessarily excludes households that moved during the intersurvey year.

were ever eligible, so few changed status. But among earners who were ever eligible, more than half changed status during the intersurvey year. Retired households and those primarily dependent on AFDC were usually eligible, so again few changed status.

Eligibility rates for those with several sources of income, none of which accounts for over 75 percent of the total, vary considerably by source. Those drawing AFDC and those with parttime or intermittent jobs were most likely to be eligible and, if ever eligible, least

About 84 percent of all households in the linked file received over 75 percent of 1973 income from a single source. The other 16 percent received income from several sources, so entries in the lower part of the table are not mutually exclusive.

b Includes one ever-eligible household that received over 75 percent of 1973 income from this source.

 $<sup>^{</sup>c}$ Includes two ever-eligible households that received over 75 percent of 1973 income from this source.

likely to change status. Those who drew unemployment compensation, pensions, or Social Security for a smaller portion of their total income were less likely to be eligible and, if ever eligible, most likely to change status.

Although we consider here only eligibility, not enrollment, the data suggest four potential participation patterns that reflect differences in the sources of nonallowance income. If those sources are classified according to both the average amounts and variability over time of the income they provide, the implied pattern of program status is as follows:

Income		Program Status			
Amount	<u>Variability</u>	Eligibility Rate	Turnover Rate		
High	Low	Low	Low		
High	High	Low	High		
Low	High	High	High		
Low	Low	High	Low		

An example of the first type of household is one with a skilled breadwinner holding a secure job; of the second, one with a skilled breadwinner who works in a cyclical industry. The third category describes the situation of an unskilled breadwinner who is intermittently employed and supplements earnings with unemployment compensation or AFDC. The last typifies a household of retired persons living on Social Security, or a single parent caring for small children and living on AFDC.

One message of this paradigm is that the length of income accounting periods could significantly affect eligibility status: Those with highly variable incomes are more likely to be eligible if a short accounting period is used. On the other hand, administrative expenses are likely to be high and housing improvement small for those whose periods of eligibility are brief, even if they enroll. Finally, one might expect enrollment rates to be highest for the last group, who can be certain that their eligibility will persist.

## CONCLUSIONS

The findings in this section are based on data for just one site and, because of various limitations of both the data and the analysis, must be regarded as unreliable in detail. However, they strongly suggest two important conclusions about eligibility for housing allowances. First, the number of eligible households can change substantially over one year. Second, the annual turnover in the population of eligibles is considerably larger than the annual change in its size. In Brown County, for example, the number of eligible households decreased by about 11 percent as the local economy emerged from the 1973 recession; but about a third of those eligible at either the beginning or end of the intersurvey year changed status during the year.

Rapid changes in eligibility are likely to affect both participation in the allowance program and the achievement of its housing objectives. Those who expect only a brief period of eligibility are less likely to enroll than those whose needs are likely to persist; and if those briefly eligible do enroll, the duration of their participation and its effects on their housing will be correspondingly brief. Yet, because much of the program's administrative cost is associated with enrollment rather than continued participation, such enrollees are relatively expensive to serve.

About four-fifths of all changes in eligibility are associated with changes in income rather than assets or family composition. The most stable clientele for a housing allowance program thus consists of those with low but reliable incomes—mostly households outside the labor force, dependent on pensions, Social Security, SSI, or AFDC. Another needy group comprises households whose breadwinners are unskilled and untenured; for them, eligibility is likely to be intermittent but frequent. They pose the special problem for program administration of frequent terminations and reinstatements.

Longterm housing assistance is presumably appropriate for those groups. However, as currently designed, the program also helps those temporarily in need despite their good prospects for steady self-support. The sharp decrease from 1973 to 1974 in Brown County's population of eligible young couples demonstrates that the program in

effect offers supplementary unemployment compensation to those normally supported by earnings from well-paying jobs. Although only a fourth to a fifth of such eligibles actually enroll, and their allowances may enable them to maintain their normal standards of housing consumption during a period of budgetary stress, the program's housing quality requirements are largely irrelevant to their customary circumstances.

### V. TERMINATING ENROLLMENT

Many of the factors that determine eligibility and influence enrollment decisions also condition termination from the program—the
third element shaping the size and composition of the enrolled population. Changes in household income, for example, are principally responsible for turnover in the population of eligibles and, consequently,
might be expected to cause turnover among enrollees. Benefit levels,
program rules, and persistence of need affect eligibles' willingness
to enroll and, thus, might also be expected to influence the decision
to remain in the program. This section examines these issues by describing the characteristics of terminees from the allowance programs
in both sites, why enrollees terminate, and when terminations typically
occur.

#### KEY FINDINGS

- Nearly a third of all enrollees in each allowance program had terminated by the end of the second program year. Although termination rates are nearly equal for renters and owners and in both sites, they differ substantially by life-cycle stage. Nearly half of all young families enrolled in each site have terminated, compared with less than a third of the single parents with children and less than a quarter of the elderly households.
- Termination rates also vary with income source. Enrollees
  with income from earnings or unemployment compensation are
  much more likely to terminate than those with transfer or
  pension income.
- The most common method of termination was failure to recertify—by either not returning the semiannual recertification form or not attending the annual recertification interview. In most such cases, we lack information on the enrollee's reasons for dropping out. The most common known reason for termination was that the enrollee's income exceeded the limit for continued enrollment.

• Enrollees are most likely to terminate at the semiannual recertification cycle between 6 and 7 months after enrollment and again 6 months later at the annual recertification check.

After the first year of enrollment, the probability of termination drops sharply.

#### METHOD OF ANALYSIS

This section's examination of turnover among enrollees and the previous section's examination of turnover among eligibles differ in three ways. First, the enrollee turnover data are from both sites, whereas the eligible turnover data are from Brown County only. Second, the enrollee data describe all enrollees rather than just a sample, so are not subject to sampling error. Third, this section examines only movements out of the program, whereas the previous section described movements both into and out of the eligible population.

We primarily specify termination status as of the end of the second program year, regardless of the actual date of termination. We define termination rate as the number of terminees at the end of the second program year divided by the sum of that number and the number of current enrollees. Although that definition avoids double-counting, it does exclude from the count of terminees a small number of enrollees who at one time terminated but have since been reinstated.

We go beyond this simple termination rate to calculate the conditional probability that an enrolled household will terminate by a certain time after enrollment. Households are grouped according to duration of enrollment. The conditional probability of terminating between any pair of months after enrollment is simply a number of terminations occurring in that interval divided by the number enrolled at the beginning of the interval. For example, if 2,000 enrollees have been in the program for at least six months, and 200 terminate between the sixth and seventh months, the conditional probability of terminating in that interval is 10 percent. Combining such conditional probabilities

<sup>\*</sup>Sixty-two enrollees were reinstated in Brown County and 232 in St. Joseph County by the end of the second year.

leads to an estimate of the expected average duration of enrollment for a newly enrolled cohort. That number is called *program life expectancy* because it is analogous to the measure of life expectancy commonly used by demographers.\*

## WHICH ENROLLEES TERMINATE

Since most households that have invested the time and effort necessary to complete the enrollment process might be expected to continue their participation until they become ineligible or move away, differences in termination rates should be associated with the factors causing household circumstances to change. The previous section showed that eligibility changes were tied to life-cycle stage, tenure, and income. The first step toward identifying which factors cause enrollees to leave the program, then, is to compare termination rates by life-cycle stage and tenure across sites, as in Table 5.1.

In both sites, life-cycle differences account for most of the variation in termination rates. Nearly half the young families enrolled in each site have terminated by the end of the second program year, compared with less than a third of the single-parent households and less than a quarter of the elderly households. Those differences clearly parallel the turnover pattern among Brown County eligibles. Many of the young couples who enroll in the allowance program appear to be responding to either the husband's shortterm unemployment or the wife's withdrawal from the labor force to bear and raise children. When either resumes work, household earnings rise and cancel eligibility. Single-parent and elderly households, on the other hand, have a more permanent need for assistance.

Termination rates, unlike eligibility and enrollment rates, do not appear to vary significantly by tenure after controlling for life-cycle stage. For example, except for elderly single renters in Brown County, renters and owners in any given life-cycle stage and in both sites generally terminate at about the same rate. Consequently, the small

As demonstrated by Henry S. Shryock, Jacob S. Siegel, and others, The Methods and Materials of Demography, Vol. II, Chap. 15, U.S. Bureau of the Census study, U.S. Government Printing Office, Washington, D.C., May 1973.

Table 5.1

TERMINATION RATES BY LIFE-CYCLE STAGE AND TENURE: BROWN AND ST. JOSEPH COUNTIES, YEAR 2

	Ow	mers	Renters		Renters Total			
Life-Cycle Stage	Number Terminated	Termination Rate (%)	Number Terminated	Termination Rate (%)	Number Terminated	Termination Rate (%)		
Brown County								
Young couple, young children	186	48	318	47	504	48		
Single head with children	93	29	279	28	372	28		
Elderly couple	62	21	30	26	92	22		
Elderly single	90	16	182	30	272	23		
All other stages	152	38	251	38	403	38		
All stages	583	30	1,060	34	1,643	33		
	· · · · · · · · · · · · · · · · · · ·	St. Jos	eph County		*	<u> </u>		
Young couple, young children	178	50	260	48	438	49		
Single head with children	233	30	522	27	755	28		
Elderly couple	74	14	15	21	89	15		
Elderly single	173	13	77	16	250	14		
All other stages	223	35	247	37	470	36		
All stages	881	24	1,121	31	2,002	28		

SOURCE: Tabulated by HASE staff from the first two years of HAO records for each site.

NOTE: Termination rate is the ratio of number terminated to the sum of number terminated and number still enrolled at the end of the second year of program operations. Numbers terminated exclude those who may have terminated at one time but were reinstated.

differences in aggregate termination rates by tenure appear primarily due to the different life-cycle compositions of the two groups. Indeed, were renters and owners to be identically distributed across life-cycle stages in both sites, 40 percent of the small tenure differential in Brown County and 90 percent of the larger one in St. Joseph County would disappear. That finding suggests that, although eligible renters and owners face different obstacles to enrollment, they terminate at about the same rate once enrolled.

The small aggregate difference in termination rates between the two sites may also be more apparent than real. For example, controlling for differences in the life-cycle composition of enrollees between the two sites accounts for about half of the difference between their overall termination rates. Moreover, even without controlling for life-cycle composition, enrollees in both sites have the same program life expectancy-about 17.5 months. The intersite similarity in termination rates is surprising, given the pronounced differences between the two housing markets and their populations. It suggests that the principles by which the program selects or attracts participants influence termination patterns more than do the characteristics of the local population or housing market.

Termination rates are also highly correlated with enrollees' employment and earning patterns. Earlier results in Table 4.6 indicated, for example, that not only are households with earned incomes less likely to be eligible than other households but also, once eligible, remain so for a shorter period. Expecting to be eligible in the program for only a short time may, in turn, discourage enrollment. Consequently, source of household income may explain many of the variations in termination patterns. Table 5.2 presents the termination rates of enrollees (as of the end of the second year of program operations in each site)

If all life-cycle stages were weighted equally, then the termination rates could be found by the following equation: (aggregate termination rate for renters) - (aggregate termination rate for owners) equals the sum of the difference in termination rates by life-cycle stage.

<sup>\*\*</sup> This number applies to the first two years of program operations only, during which the maximum enrollment term is naturally 24 months.

Table 5.2

TERMINATION RATES BY INCOME SOURCE: BROWN AND ST. JOSEPH COUNTIES, YEAR 2

	Brown	County	St. Joseph County	
Major Income Source	Number Terminated	Termination Rate (%)	Number Terminated	Termination Rate (%)
Earnings Unemployment	555	44	620	37
compensation Pensions and	178	54	209	49
Social Security AFDC	356 225	22 26	392 301	15 25

SOURCE: Tabulated by HASE staff from the first two years of HAO records for each site.

NOTE: Termination rate is the ratio of number terminated to the sum of number terminated and number still enrolled at the end of the second year of program operations. Numbers terminated exclude those who may have terminated at one time but were reinstated.

grouped according to those who, at enrollment, received the major portion of their income from one of four sources: earnings, unemployment compensation, pensions and Social Security, or AFDC payments.

Not surprisingly, households reporting earnings or unemployment compensation at enrollment terminate more often than those dependent on transfer payments or pensions. That pattern, similar in both sites, reinforces our earlier conclusion that for younger households, the only group with substantial earnings, payments are a form of supplemental unemployment compensation that tides them over periods of temporary budgetary stress. On the other hand, elderly or single-parent households, usually dependent on reliable but small income sources such as pensions, Social Security, and AFDC, have low termination rates.

## WHY ENROLLEES TERMINATE

Once enrolled, households must report any change in income or family composition that may have occurred between enrollment and the semi-annual recertification six months later. In addition, each enrollee must complete an enrollment interview at the annual recertification. Households that fail to return the semiannual recertification form or

to attend the annual interview are automatically dropped. Although the HAOs try to ascertain the reasons for such failures to respond to program requirements, they are often unsuccessful. Consequently, the reason for many terminations is listed simply as "failed to recertify."

Table 5.3 lists general and specific reasons for terminating from the program and the frequency with which they were reported in each site. Voluntary terminations by enrollees who could have continued to receive payments are distinguished from involuntary terminations by enrollees who became ineligible or failed to comply with some program requirement. The frequency of failure to recertify makes it difficult to generalize about why people terminate from the program. We suspect that most of those terminees believed themselves no longer eligible, so saw no reason to communicate further with the HAO. But some had never qualified for payments and others may have concluded that their benefits were too small to justify continued enrollment.

Among the remaining reasons, ineligibility due to a change in income, assets, or family composition clearly predominates. Of the three, change in income is by far the most influential, accounting for 84 percent of those becoming ineligible in Brown County and 94 percent in St. Joseph \*County. Although Brown County enrollees appear twice as likely to terminate in order to obtain some other housing subsidy, in neither site do many enrollees exercise that option. Indeed, households in both sites are at least as likely to move out of the county as into subsidized housing. A few in each site failed to comply with program rules and a few explicitly declined to remain in the program even though eligible.

### WHEN ENROLLEES TERMINATE

The timing of enrollee terminations seems to be closely tied to the recertification cycles. For example, enrollees who fail to return the first semiannual recertification form are all terminated. Annual interviews turn up some clients who have lost their eligibility; others fail to appear for the interview. Thus, terminations cluster around the sixth and twelfth months of enrollment. Figure 5.1, which plots the conditional probability of termination by months since enrollment,

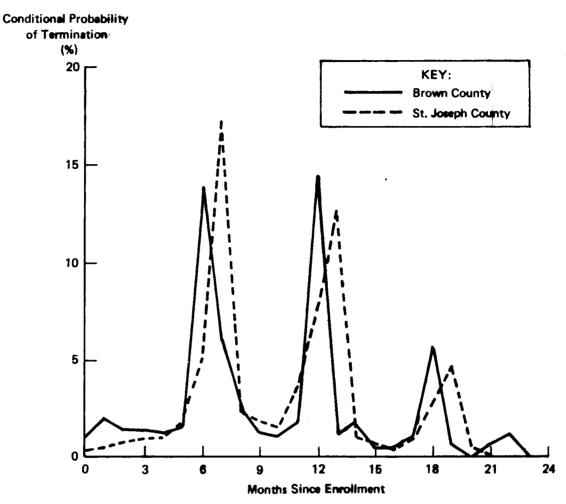
<sup>\*</sup>As shown by Tables B.27 and C.27, pp. 115 and 152.

Table 5.3

REASONS FOR TERMINATION: BROWN AND ST. JOSEPH COUNTIES

	General Reason Specific Reasons		Percent of Terminees		
General Reason			St. Joseph County		
Failed to recertify	Failed to recertify	37	54		
Determined ineligible	Income or assets too high, family composition	29	20		
Moved out of the county	Moved from program jurisdiction	8	7		
Chose another subsidy	Moved to other federally subsidized housing	}	1		
program		8	3		
Failed to comply with program rules Declined to continue	Won't allow housing evaluation, no lease signed, failed evaluation and won't repair or move Administrative burden, confidentiality, allowance	6	2		
in program	too small, doesn't need assistance, welfare image	4	5		
All other	Death, fraud, no reason given, other	9	8		
All reasons		100.0	100.0		

SOURCE: Tabulated by HASE staff from the first two years of HAO records for each site. NOTE: Percentage distributions may not sum to 100 because of rounding.



SOURCE: Plotted by HASE staff from the first two years of HAO records in sech site.

NOTE: The conditional probability of termination in month n since enrollment is the number terminating between months n and n+1 divided by those currently enrolled at month n.

Fig. 5.1--Conditional probability of termination by months since enrollment: Brown and St. Joseph counties

shows that pattern.\* We believe this figure foreshadows a program termination pattern in which rates peak at the initial semiannual and annual recertification points, then drop sharply and remain low thereafter, despite regular but small six- and twelve-month increases.

Such a longrun termination pattern suggests that the program serves two distinct types of enrollees—those who terminate within a year of enrolling and those who remain in the program longer. However, the natural separation of the enrolled population into two distinct groups by the end of the first year presages a gradual shift in the composition of enrollees toward those whose need is more permanent. Younger couples will continue to leave and return while single parents and the elderly will tend to remain in the program, and thus make up an increasingly greater proportion of program enrollees.

# CONCLUSIONS

Turnover among enrollees closely resembles the turnover noted earlier in Sec. IV among eligibles in Brown County. Households with the highest termination rates are the temporarily unemployed who leave the program on regaining a job. They are predominantly young families with children for whom allowance payments are equivalent to supplemental unemployment compensation. Their turnover pattern contrasts sharply with that of single-parent or elderly households whose dependence on reliable but low income from pensions and Social Security or public transfer payments insures a more permanent need for assistance.

Most terminations coincide with the semiannual and annual recertification cycles, when eligibility is checked. We infer that many enrollees terminate voluntarily because they believe they are no longer eligible, but some may have other reasons. The probability of terminating drops sharply after the first year of enrollment. Households remaining in the program after 12 months are less likely to terminate subsequently because their need for assistance is enduring. Such households are hence likely to make up an increasingly greater proportion of program enrollees than those with transient needs.

<sup>\*</sup>Peak termination rates for St. Joseph County trail those for Brown County by a month because terminations are dated differently by each HAO.

# VI. TARGETING HOUSING ASSISTANCE

HUD's experimental housing allowance program was designed to discover whether such allowances were a feasible and desirable way to help low-income households with their housing problems. Those problems boil down to essentially two: costs excessive relative to income, and quality inadequate for health, safety, and decency. The two problems are related because better housing presumably costs more.

This note examines the targeting of assistance under the rules and procedures of the experimental program. Who actually is helped depends on, first, eligibility rules; second, outreach (which informs eligibles about the program); third, individual decisions to seek assistance; fourth, the program's housing requirements that govern what enrollees must do to qualify for payments. However, the present analysis is limited to eligibility, enrollment, and termination. The findings reflect two years of experience with the experimental program in two midwestern housing markets. In some respects, however, they transcend both that program and the specific sites, bearing generally on housing assistance and other federal transfer programs, existing or contemplated.

Our data are uniquely informative because they include detailed information about the eligible as well as the enrolled populations. Although much remains to be done with those data to learn their full implications, the present reconnaissance sets the directions for further analysis and by itself yields some strong messages for policymakers. Here we apply this note's findings to issues of program design and administration.

# WHO SHOULD BE ELIGIBLE FOR HOUSING ASSISTANCE?

The experimental allowance program distributes housing assistance on the basis of financial need, without regard to tenure, location, or preenrollment housing conditions. That principle is a considerable

How enrollees meet the program's housing requirements and thus qualify for payments will be reported in Lamar, How Clients Meet HAO Housing Requirements.

departure from traditional forms of housing assistance targeted on specific groups (usually renters), often limited to residents of specific neighborhoods, and usually requiring clients to live in specific dwellings. In the experimental program, enrollment is open to nearly all who are judged unable to afford decent, safe, and sanitary housing without spending an excessive share of income on housing.\*

The issue then is how well the program's income and asset tests distinguish those who need housing assistance from those who do not. Using the income limits specific to our sites, we find that about 20 percent of all households in each place are likely to be eligible at any given time. Although some observers might argue for higher or lower limits (and thus for more or fewer eligibles), our data suggest that the circumstances leading to income-eligibility are more pertinent to effective program design that the exact income limit.

Within a considerable range of income limits, the eligible population comprises predominantly four types of households: young couples with young children, single parents, elderly couples, and elderly single persons. Households headed by young childless couples rarely qualify because both are usually in the labor force and are rarely unemployed simultaneously. Households headed by middle-aged couples usually have at least one spouse secure in a well-paying job.

Although those who are eligible at any given time are alike in having low income relative to household size, they differ in ways important for achieving program objectives and minimizing program costs. Redesigning eligibility tests to exclude those with temporary financial problems would reduce both program size and turnover without greatly altering the program's longrun effects on housing quality.

<sup>\*</sup>The only large group categorically excluded from the program during the period covered by our data comprised single persons under 62; as explained in Sec. I, eligibility was extended to that group in the summer of 1977.

<sup>\*\*</sup> Because benefits decrease linearly to zero as income increases, there is no sharp break between the benefits available to those just below the income limit and those just above. Consequently, the exact value of the limit is less important to those near it than might otherwise be the case.

Among those most commonly eligible, the marginal group is young couples with young children. At the time of our baseline surveys, 14 percent of all such households in each site were eligible; and that category accounted for nearly a fourth of all eligibles in Brown County, though only 13 percent in St. Joseph County. Their low incomes usually reflected the husband's temporary unemployment and the wife's absence from the paid labor force because of childcare responsibilities.

Though their financial stress is genuine, it is usually brief. Nonetheless, some enroll in the program because they are uncertain when they will be reemployed, because the benefits are large for a family whose current income is nearly zero, and because their financial obligations (especially if they are homeowners) are pressing. Although such enrollees may be willing and able to make minor home repairs if necessary to qualify for payments, their brief participation in the allowance program is not likely to significantly affect their housing conditions—unless it saves homeowners from foreclosure or renters from eviction. More generous unemployment compensation would serve the same purposes with less administrative effort.

Not all needy earners fall into that class. Household heads without much education or training and with large families may work full-time without earning enough to afford decent housing. Because they have regular earnings, their allowance entitlements are smaller than those of the temporarily unemployed, but their eligibility is likely to persist until their children enter the labor force and either leave home or contribute to the household budget. Hence, for low-wage earners, housing allowances contingent on occupancy of acceptable housing can affect housing standards as well as relieve financial stress. Moreover, administrative costs per case drop as duration of enrollment increases, because the initial enrollment expenses are amortized over a longer period. \*

<sup>\*</sup>Enrollment costs average about \$249 per eventual recipient; the continuing administrative cost is about \$133 per recipient year. See the Fourth Annual Report of the Housing Assistance Supply Experiment, The Rand Corporation, R-2302-HUD, May 1978, pp. 145-152.

The same considerations apply to single parents, although their low incomes usually derive from another transfer program, AFDC. Although the allowance program effectively relieves their housing problems, its administrative procedures duplicate the means test and payment system of AFDC. Making welfare payments more generous would simplify the transfer but would lose most of the housing effects.

The elderly poor are in many respects the ideal target for a housing allowance program. Once retired from the labor force, their incomes derive from Social Security, private pensions, small savings, and occasionally SSI. Only the last is a means-tested program, so enrollment in the allowance program rarely entails administrative duplication. Their poverty is enduring; once enrolled they are likely to receive benefits until death. If not subject to the program's housing requirements, they are likely to allow their homes to deteriorate, both because of their diminishing ability to do their own maintenance and because capital consumption is a sensible policy for those with short planning horizons.

We do not, however, wish to recommend restricting housing allowances to the elderly, or excluding young couples with young children. We merely wish to stress that an income test alone defines an eligible population of groups whose participation will entail sharply different costs and different mixtures of budgetary relief and housing improvement.

The traditional program categories for housing assistance—tenure and location of residence—also fail to distinguish groups for whom allowances are more or less effective. Using income and asset tests, we find that over half of the eligible households in Brown County and 70 percent in St. Joseph County are poor homeowners, a group virtually

<sup>\*</sup>Some AFDC recipients in St. Joseph County's depressed housing market have even bought low-priced (c. \$10,000) homes with the aid of housing allowances. See the Fourth Annual Report, pp. 81-83.

<sup>\*\*</sup>For both program participants and others, our data indicate a very low income elasticity of housing demand--about 0.1. Moreover, most dwellings that fail HAO housing evaluations cost little to repair, indicating that lack of income does not directly account for the persistence of unrepaired defects. See the Fourth Annual Report, pp. 83-85.

ignored by federal housing assistance programs. And although deteriorated neighborhoods such as central South Bend have the highest concentration of eligibles, we find them widely distributed throughout the central cities, suburbs, and rural areas of both sites.

# WHO WILL PARTICIPATE IN A HOUSING ALLOWANCE PROGRAM?

Because the experimental program defines eligibility broadly, we are able to test which of the poor find this type of assistance attractive. An appropriate measure is the enrollment rate—the percentage of eligibles who actually enroll in the program. Our most important finding is that fewer than half of those currently eligible are currently enrolled. For September 1977, we estimate enrollment rates of 46 and 41 percent, respectively, for Brown and St. Joseph counties.\*

Some observers therefore infer that the program is unpopular with its intended clients. We disagree. The two HAOs together have received nearly 35,000 applications from households who thought they might be eligible, and nearly 17,000 households have been enrolled. If all were still enrolled, they would compose about 60 percent of the eligible population. Moreover, interviews with those who have enrolled indicate great satisfaction with the program.

Another investigation of participation dynamics helps considerably to explain the apparently low percentages. It concludes than an equilibrium participation rate of 51 percent should be approached asymptotically in about 5.5 years from the beginning of enrollment. † Current

One reason homeowners constitute so large a fraction of all eligibles in St. Joseph County is that about a fourth of all low-income renters in the county receive housing assistance from some other federal program and are thus excluded from the allowance program. Counting them as eligible reduces the homeowner majority to a still substantial 63 percent. On the treatment of homeowners under federal housing assistance programs, see Helbers, Measuring Homeowner Needs for Housing Assistance, Sec. V.

The estimated enrollment rates are inexact because their denominator is the number eligible at baseline rather than currently, as specified in Sec. III above, pp. 23, 31.

<sup>\*\*\*</sup> Fourth Annual Report, pp. 85-90.

<sup>&</sup>lt;sup>†</sup>C. Peter Rydell, John E. Mulford, and Lawrence Kozimor, Dynamics of Participation in a Housing Allowance Program, The Rand Corporation.

participation falls far below its potential principally because the population of eligibles turns over so rapidly. Some newly eligible households enroll more promptly than others; and the ranks of those already enrolled are steadily depleted as they lose eligibility—most often because of income changes.

One can hardly regret income increases that lead to loss of eligibility. But it is worth noting that the propensity to enroll does not correlate well with the probability of maintaining eligibility and thus enrollment. As shown in Table 6.1, single parents in both sites have the highest propensity to enroll, elderly couples the lowest. Young couples with young children have the highest propensity to terminate and elderly persons, both couples and singles, the lowest.

Two groups combine a relatively high propensity to enroll with a relatively low propensity to terminate: single parents and elderly single persons. Over time, those two groups should therefore compose an increasing share of the enrolled population. Elderly couples are slow both to enroll and to terminate; their participation in the program should thus grow very slowly, but those enrolled will stay in the program for a long time. Young couples with young children are much readier to enroll than elderly couples, but tend to drop out quickly.

Considerably more analysis is needed to understand the differential enrollment and termination rates. The data presented here enable us to form certain plausible hypotheses and rule out others. In general, differential enrollment rates reflect self-selection, whereas differential termination rates mostly reflect loss of eligibility.

Enrollment self-selection is based on knowledge of the program. By the end of year 1, four out of five household heads in Brown County and seven out of eight in St. Joseph County said they had heard of the program, \*but some data indicate that knowledge was in fact unevenly

WN-10200-HUD, June 1978. As defined there, p. 2, the participation rate is the same concept as our enrollment rate, a term to which the authors assign a different meaning.

Rydell, Mulford, and Kozimor present annual enrollment and termination rates for elderly and nonelderly households. Those data are different from but consistent with the essentially biennial rates in Table 6.1.

<sup>\*\*</sup> Ellickson and Kanouse, Public Perceptions of Housing Allowances: The First Two Years, p. 66.

Table 6.1

PROPENSITY TO ENROLL VS. PROPENSITY TO TERMINATE
BY LIFE-CYCLE STAGE: BROWN AND ST. JOSEPH
COUNTIES, FIRST TWO YEARS

	Brown	County	St. Joseph County			
Life-Cycle Stage Single head with	Percent of Eligibles Ever Enrolled	Percent of Enrollees Ever Terminated	Percent of Eligibles Ever Enrolled	Percent of Enrollees Ever Terminated		
Single head with children All other Young couple, young children Elderly single Elderly couple All stages	88 82 <sup>c</sup> 59 58 30 63 <sup>c</sup>	29 39 49 24 24 34	88 60° 45 34 19	32 39 54 15 17 31		

SOURCE: Tabulated by HASE staff from baseline household survey records and year 2 HAO records for each site.

distributed among the groups distinguished here. Those actually informed about the program doubtless balanced their perceptions of their own needs against (possibly erroneous) estimates of the program's financial benefits as well as against the possible inconveniences of participation. For some, self-declaration of public dependence would be one "cost" of enrolling.

We find a stronger correlation between enrollment rates and income sources than between enrollment rates and benefit amounts. We interpret that result as partly reflecting the expected duration of need or

 $<sup>\</sup>alpha$ The sum of households either enrolled or terminated at the end of year 2 expressed as a percentage of those eligible at baseline.

The sum of households either terminated or reinstated at the end of year 2 expressed as a percentage of all households ever enrolled (enrolled or terminated at the end of year 2).

Denominator of enrollment rate excludes handicapped, disabled, and displaced single persons under 62 who may be eligible but were not identified by the household surveys. Such households have enrolled and are in the numerator, slightly biasing this rate upwards.

eligibility: Those with some income from earnings during the preceding year are unlikely to be unemployed long, whereas those depending on pensions or AFDC are likely to have persistently low income.

However, the data strongly suggest that "rational" fiscal calculations by eligibles fall considerably short of explaining their different propensities to enroll. Marital status, race, and experience with other transfer programs appear also to influence enrollment rates. Single persons, racial minorities, and AFDC recipients are apparently readier to concede their dependence on public assistance than couples, whites, or the heretofore self-sufficient—independent of the amount or duration of the expected benefits. The group with the highest propensity to enroll (88 percent in both sites) comprises single parents, most of whom receive AFDC and, in St. Joseph County, half of whom are black.

It has been argued that the neediest group of eligibles—those with the lowest income and worst housing conditions—are unlikely to benefit from an allowance program requiring its clients to occupy acceptable dwellings before payments begin. In fact, enrollees give little evidence that recipient status is often out of reach because of repair or moving costs. Some eligible households in defective dwellings may never apply because they think that qualifying for payments will cost more than they can raise or than they would recover from allowance payments. Postbaseline survey records for eligible households will illuminate that issue, but our present judgment is that the decision to apply rarely reflects such a calculation.

After enrollment, when the enrollee knows both his allowance entitlement and the housing repairs required by the HAO, some choose not to become recipients. Among those whose homes fail the initial evaluation, the termination rate rises from about 15 percent to about 40 percent as the number of housing defects rises from one to four or more.

<sup>\*</sup>Fourth Annual Report, pp. 59-66. Our analysis so far does not foreclose the possibility that a small minority of enrollees are financially unable to become recipients, but indeed does show that the number of such cases must be insignificant.

<sup>\*\*</sup> Fourth Annual Report, Table 4.6, p. 63.

Among all who fail the initial evaluation, households headed by younger persons are more likely than those headed by elderly persons to terminate without qualifying for payments.\*

Housing evaluation and repair records for both sites strongly suggest that "desperate" housing conditions are rare among enrollees. Although nearly half the dwellings evaluated by the HAOs are defective, the required repairs are seldom costly; by doing their own work or getting help from friends or landlords, enrollees in failed dwellings were able to meet the program's housing standards with a median cash outlay of \$11.

In general, housing cost burdens concern eligible households more than the housing defects. Among enrolled renters, for example, nearly 90 percent paid over a fourth of adjusted gross income for housing and about 50 percent paid half or more. We judge that participation in the allowance program was viewed by most enrollees primarily as a way to ease cost burdens. Relatively few increased their housing consumption substantially during the first two program years.

Testing all inferences about participants' motivations requires careful modeling of their decisions, controlling both on their characteristics and their choices. But our review of simple crosstabulations suggests that those who choose to participate expect either a substantial or a longlasting cash benefit from doing so. Those who expect small or temporary benefits are less tempted to enroll and, after enrolling, are more easily discouraged by housing repair requirements. Although some data indicate that sentiments concerning the legitimacy

Fourth Annual Report, Fig. 4.5, p. 64. Once age of head is taken into account, tenure does not affect the termination rate; but owners who qualify nearly always do so by repairing the defects, whereas renters sometimes move from inadequate to acceptable housing.

<sup>\*\*</sup>Fourth Annual Report, Table 4.10, p. 72.

<sup>\*\*\*</sup> Fourth Annual Report, Figs. 4.8 and 4.9, pp. 76 and 80. Comparable data for homeowners are difficult to assemble, but would show about the same proportions. See Helbers, Measuring Homeowner Needs for Housing Assistance, Sec. IV.

<sup>&</sup>lt;sup>†</sup>Fourth Annual Report, Table 4.13, p. 82.

of public assistance are also influential, we do not yet fully understand the circumstances in which such sentiments dominate financial considerations.

# WHY DO ENROLLEES DROP OUT OF THE PROGRAM?

Although we believe that termination usually reflects loss of eligibility, the data currently at our disposal are in inconclusive. HAO records show that over a third of the terminees in Brown County and over half in St. Joseph County were dropped from the program because they failed to respond to recertification notices (either semi-annual mailback or annual interview recertifications). We think but cannot prove that most such cases are households whose current incomes exceeded eligibility limits and who thus foresaw no benefit from the recertification proceedings. We know that over 40 percent of all terminees in each site derived most of their preenrollment incomes from either earnings or unemployment compensation.

Among those whose termination records contain explicit reasons, only about 15 percent in either county indicate dissatisfaction with the program or unwillingness to comply with its requirements; another 12 percent in Brown County and 7 percent in St. Joseph County were offered alternative federal housing assistance (usually public housing) and found it more attractive than housing allowances. The remainder were terminated because changes in income, assets, family composition, or location of residence made them ineligible.

Duration of enrollment (or recipiency) is important because it influences both the program's effect on housing quality and the cost per assisted family. Everyone who qualifies for payment must occupy acceptable housing; about a third of all enrollees specifically undertake repairs to meet the standards, and about a tenth move. But annual housing reevaluations show that about a fifth of recipients' dwellings in Brown County and two-fifths in St. Joseph County fall below standard and must again be repaired. Continued participation in the program is thus important to achieving its housing objectives. Moreover, brief participation is administratively expensive because the HAOs spend nearly twice as much to enroll someone as to continue his participation.

Our data show that a high proportion of all terminations occur at the time of the first semiannual and first annual recertifications; they each eliminate nearly 15 percent of the population at risk. Those who survive the first two recertifications appear to settle into the program for a long stay, and thus are both administratively economical to serve and necessarily responsive to the program's housing requirements.

Like the other indicators discussed earlier, the termination data suggest that perhaps those likely to be longterm participants can be distinguished in advance from those likely to drop out soon after enrollment. To use that information to achieve program economies would necessarily entail program redesign to exclude services and assistance for the temporarily straitened.

The most striking aspect of this analysis is that it produced the same basic messages and explanations in the separate sections on eligibility, enrollment, and terminations. Determining how to target housing assistance repeatedly reveals that life-cycle stage and sources of nonallowance income effectively distinguish those with a temporary need for such assistance from those whose need is likely to be more permanent. Certainly, many other factors influence allowances' efficacy as a vehicle for both budgetary relief and housing improvement. The strength of future work will lie in its ability to incorporate the various circumstances determining eligibility and enrollment into a general model of the entire process, in addition to explaining the different needs and behavior of specific population groups.

# Appendix A DATA SOURCES AND TERMINOLOGY

### DESCRIPTION OF THE DATA BASE

This note is based on two kinds of data--first, the administrative records of the two housing allowance offices; second, the annual marketwide survey of households conducted in each site. HAO records are batched annually to form cumulative research files describing enrollees and their housing in considerable detail. Second-year records cover June 1974 through June 1976 in Brown County and January 1975 through December 1976 in St. Joseph County. The 1976 dates mark the second anniversaries of enrollment operations. \*\* In general, program events in St. Joseph County trail those in Brown County by six to nine months.

Throughout the appendix tables describing enrollees and their characteristics, program status is defined by circumstances as of the end of the second year of program operations. Most tables thus show counts of households currently enrolled at that time. Exceptions are Tables 21 through 27 for each site, which compare characteristics of all first-and second-year enrollees and terminees. Since their objective is to examine possible trends in enrollment and termination, those tables contain counts of all households ever enrolled or terminated, regardless of status at the end of year 2. In all instances, income and household characteristics of HAO enrollees (and terminees) are those reported at the time of enrollment.

The household survey design provides for probability sampling in each of 18 strata of residential properties distinguished by location (urban/rural), tenure (owner/renter), number of units, and cost (estimated market value or gross rent). Individual record weights are assigned to calculate estimates of the total population and its components.

<sup>\*</sup>Enrollment began in Brown County in June 1974. A limited invitational enrollment began in St. Joseph County in January 1975, followed by open enrollment in April. Enrollment there was initially limited to South Bend residents but soon extended countywide.

The baseline surveys, which supply most of the population estimates presented in this note, were administered in early 1974 for Brown County, and early 1975 for St. Joseph County. Income data are for the preceding calendar year. A subset of records—3,338 for Brown County, 2,496 for St. Joseph County—containing all the income, asset, and family composition data necessary for determining program eligibility was drawn from the entire set of field—complete records. A considerably smaller subset for households that satisfied eligibility requirements supports our estimates of the characteristics of each site's eligible population. In Brown and St. Joseph counties 900 and 705 records, respectively, were flagged eligible.

The second wave of household surveys was weighted and ready for preliminary analyses of longitudinal effects only in Brown County. Because postbaseline surveys are addressed to a smaller sample of properties, wave 2 yielded just 2,173 Brown County records that met requirements for complete data on income, assets, and family composition. Since both income and housing costs rose in the year between the baseline and wave 2 surveys, eligibility was tested against an income standard adjusted to reflect a year's inflation in housing costs. Using that hypothetical income standard, 531 wave 2 records were flagged eligible. They update the eligibility estimates from the baseline survey and are used to trace status changes of individual households. When available, the second wave of household surveys in St. Joseph County will support a parallel analysis there.

#### DEFINITION OF TERMS

Terms are defined identically for both data bases, except where noted otherwise. There follows a list of the terms used throughout this note, including the appendix tables.

<sup>\*</sup>Homeowner incomes are understated because the complex calculations needed to estimate home equity and the imputed income therefrom were not completed prior to this analysis. Appendix D considers how that understatement affects eligibility estimates.

#### Tenure

All tables reflect a two-way tenure classification comprising owners and renters. Mobile home residents, whether or not they own the land on which the home is located, are classified as homeowners. In Brown County, nearly 700 households live in mobile homes, including about 100 eligible for the program. St. Joseph County has almost 1,500 mobile home residents, over 400 of whom are eligible.

# Life Cycle

To distinguish types of households that usually behave differently in the housing market, we have devised the system of classification shown in Table A.1, which is based jointly on the number of household heads (i.e., one or two), their marital status, their ages, the presence or absence of children in the household, and the age of the youngest child. Our system by no means exhausts the possible dimensions of demographic difference between households, but it defines 10 common household types in sufficiently general terms that only a small residual category is needed to account for those that do not fit into the scheme. We call it a life-cycle classification because most households pass through at least several of the stages in the order shown.

#### Gross Income

The household surveys and the HAOs use slightly different income accounting systems. The surveys count all income of each household member for the entire preceding calendar year. The HAOs use the most recent income information available, which is usually for the previous month. Annual income is derived by simply multiplying the monthly figure by 12. A household with fluctuating income must document a recent period, usually two months, from which its annual income is projected. If the household is self-employed, the last income tax return is required.

Besides accounting periods, other differences in computing income distinguish the surveys and the HAOs. The surveys include income from household members under 18 as well as fulltime students who are not household heads, whereas the HAOs specifically exclude such amounts from

Table A.1

LIFE-CYCLE CLASSIFICATION OF HOUSEHOLDS

-	Life-Cycle Stage	Definition
1.	Young single head, no children	Household headed by single adult (man or woman) under 46, no member under 18.
2.	Young couple, no children	Household headed by married couple, husband under 46, no member under 18.
3.	Young couple, young children	Household headed by married couple, husband under 46, at least one member under 6.
4.	Young couple, older children	Household headed by married couple, husband under 46, youngest member between 6 and 18.
5.	Older couple, older children	Household headed by married couple, husband between 46 and 61, youngest member between 6 and 18.
6.	Older couple, no children	Household headed by married couple, husband between 46 and 61, no member under 18.
7.	Older single head, no children	Household headed by single person (man or woman) between 46 and 61, no member under 18.
8.	Single head with children	Household headed by single person (man or woman) under 62, at least one member under 18.
9.	Elderly couple	Household headed by married couple, husband or wife 62 or older, no member under 18.
10.	Elderly single head	Household headed by single person (man or woman) 62 or older, no member under 18.
11.	All other	Residual category; most are households headed by single persons over 62 who live with married children and grandchildren.

- the calculation of gross income. On the other hand, the HAOs include income imputed to nonincome-producing assets, such as equity held in property without rental income, at a rate of 5 percent annually. Since the equity calculations for surveyed households were not complete before this analysis began, no similar imputed income is added to gross income for survey respondents. Both the surveys and the HAOs exclude

from gross income all nonrecurring amounts such as gifts, inheritances, and insurance payments. The following categories are used to classify gross income sources throughout this note:

- Earnings--includes wages, salaries, tips, commissions, bonuses, and profits from self-employment income.
- Unemployment compensation—also known as unemployment insurance.
- Pensions and Social Security--includes government and private pension payments, annuities, and Social Security benefits.
- Aid to Families with Dependent Children.
- Supplemental Security Income--includes Old Age Assistance, Aid to the Blind, and Aid to the Disabled.
- Interest and dividends—includes imputed return to homeowners' equities.
- Other--includes other welfare, workmen's compensation, alimony, child support, foster parent payments, scholarships in excess of fees, recurring cash contributions, veterans' benefits, strike benefits, net rental income, royalties, and other.

#### Adjusted Gross Income

The surveys and the HAOs also differ somewhat in their application of exemptions and deductions to gross annual income to calculate a household's adjusted gross income. Both exclude 10 percent of gross income for elderly households and 5 percent for all others. However, the HAOs also grant the 10 percent exclusion to households whose heads are handicapped or disabled. Since the survey instrument did not inquire about disabilities, that rule could not be applied to survey respondents.

Both the surveys and the HAOs subtract \$300 annually from gross income for each dependent and secondary wage earner. In addition, both allow additional deductions for child or sick care expenses, and for court-ordered alimony or child support payments. Only the HAOs deduct for uncompensated medical expenses in excess of 3 percent of gross income, and for unreimbursed occupational expenses for items such as special tools or equipment.

# Allowance Entitlement

Allowance entitlement is defined by the following formula:

Allowance =  $R^*$  - .25 (adjusted gross income).

where  $R^*$  is the estimated standard cost of adequate housing in the community for a household of a particular size. This calculation yields the maximum entitlement for a household, but the allowance payment cannot exceed actual housing expenses. In addition, the allowance must be at least \$10 monthly at the time of enrollment, to balance administrative costs. Once enrolled, however, the payment may fall below \$10 monthly without forcing termination from the program.

# Housing Expense

Renters. Housing expense for renters is simply the sum of contract rent and the cost of utilities paid by the household. The HAOs compute, update, and usually use standard cost schedules for all utilities instead of actual costs, thus reducing the documentation required. However, a household may elect to substitute documented actual costs.

Owners. Housing expense for owners is difficult to measure since ownership entails investment as well as consumption. For administrative simplicity, the HAOs developed a method of estimating homeowner expense that does not count all the expense elements identified for survey respondents. Both HAO and survey accounting systems include as expenses mortgage interest, real estate and special taxes, insurance, utilities, and maintenance. The HAOs estimate maintenance at \$10 monthly, but actual maintenance costs are reported by surveyed households. In addition, expense for surveyed homeowners includes the respondent's estimate of his own time spent on maintenance, valued at \$1.60 hourly.

For survey respondents, homeowner expense includes both an estimate of depreciation and a 5 percent noncash return on equity.  $^{\star}$ 

<sup>\*</sup> Counted as an opportunity cost.

Although the HAOs add 5 percent of their estimate of equity to gross income when calculating allowance entitlement, the corresponding amount is not added to housing expense when testing whether entitlement exceeds that expense. Because not all survey respondents provided full information on housing expenses, tables showing median owner expenses are based on somewhat fewer records than tables showing other owner characteristics.

# Neighborhoods

Neighborhoods appear in only a few of the tables in this note, but the civil divisions they represent must be specified. In Brown County, neighborhoods are of little analytical importance because they are so much alike. In St. Joseph County, both race and income vary by neighborhood. The major analytical groupings of numbered neighborhoods are described below; each can be located on the county maps shown in Figs. A.1 through A.4.

# • Brown County:

Green Bay west (336-358)

Green Bay east (521-539)

De Pere (309, 359-376, 401, 501-504, 540-556)

West county (301-308, 601-604)

South county (202-205, 402-406)

East county (101-103, 201)

#### • St. Joseph County:

Inner City I (400, 410, 600, 610, 650)—contains the most seriously deteriorated housing in the county and very heavy concentrations of minority households.

Inner City II (100, 200, 210, 230, 300, 310, 420-450, 500, 620, 640)—contains some deteriorated housing and many minority households.

South Bend fringe (110, 120, 130, 220, 240, 320, 330, 340, 460, 510, 520, 630, 660, 944, 945)—contains some deteriorated housing and a few minority households in addition to some of the older suburban developments.

Appendix D presents the different methods of estimating equity.

Mishawaka (751-754, 801-805, 852, 854)—a primarily white, working class community.

Suburbs (702, 704, 755, 806, 856, 900, 902, 912, 920-943). Rural county (904-910, 949, 950, 960-964, 970-975).

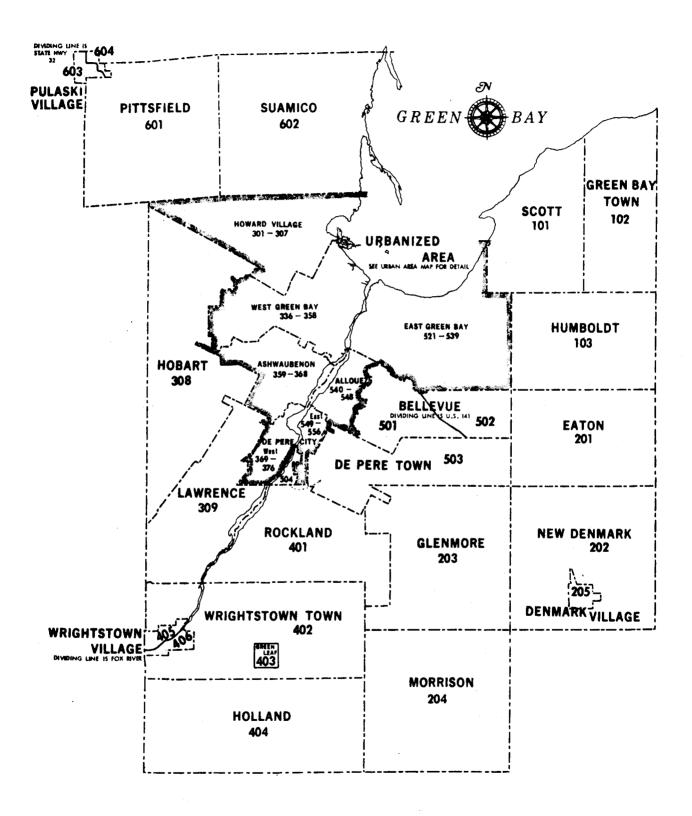


Fig. A.1--NEIGHBORHOODS IN BROWN COUNTY: RURAL AREAS

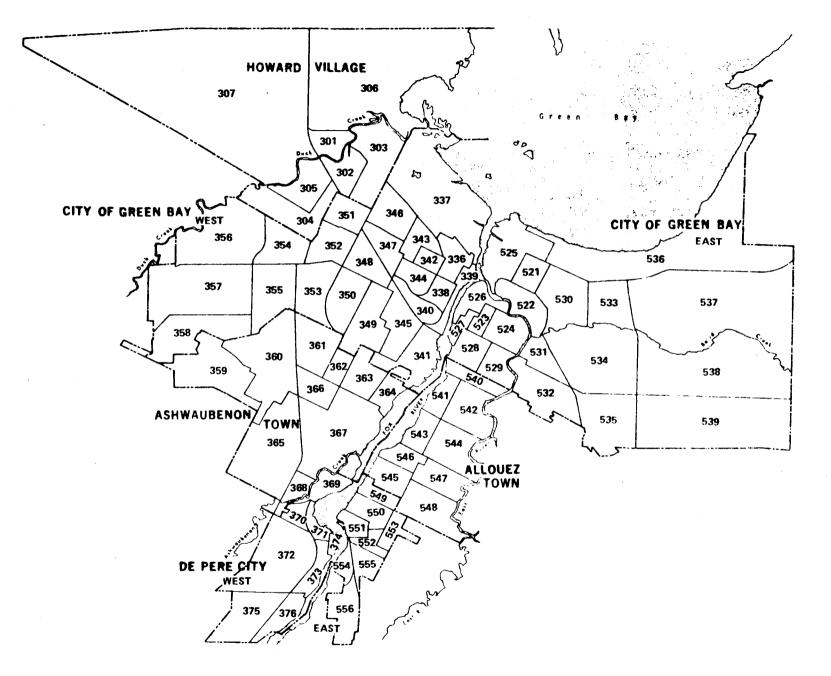


Fig. A.2--NEIGHBORHOODS IN BROWN COUNTY: URBAN AREAS

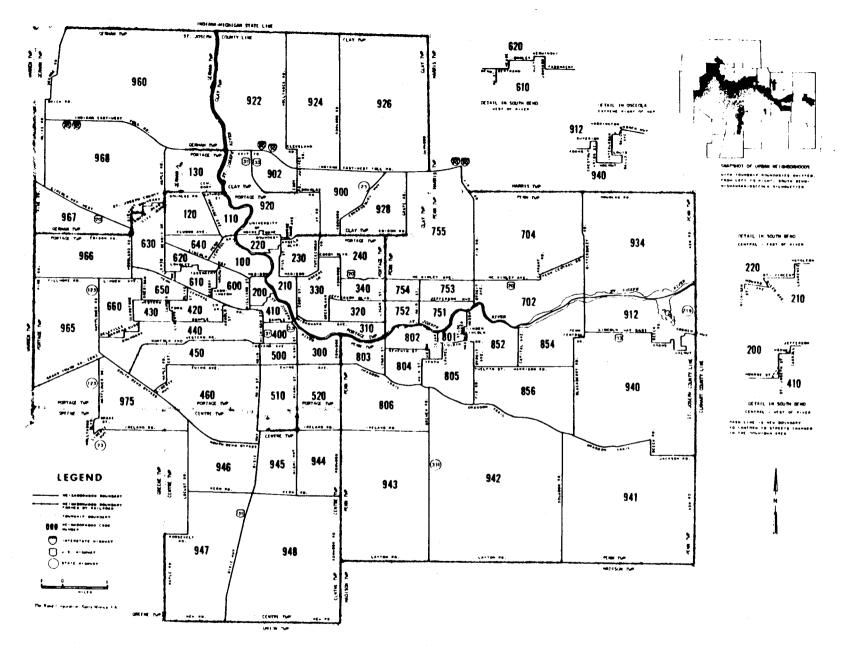


Fig. A.3--NEIGHBORHOODS IN ST. JOSEPH COUNTY: URBAN AREAS

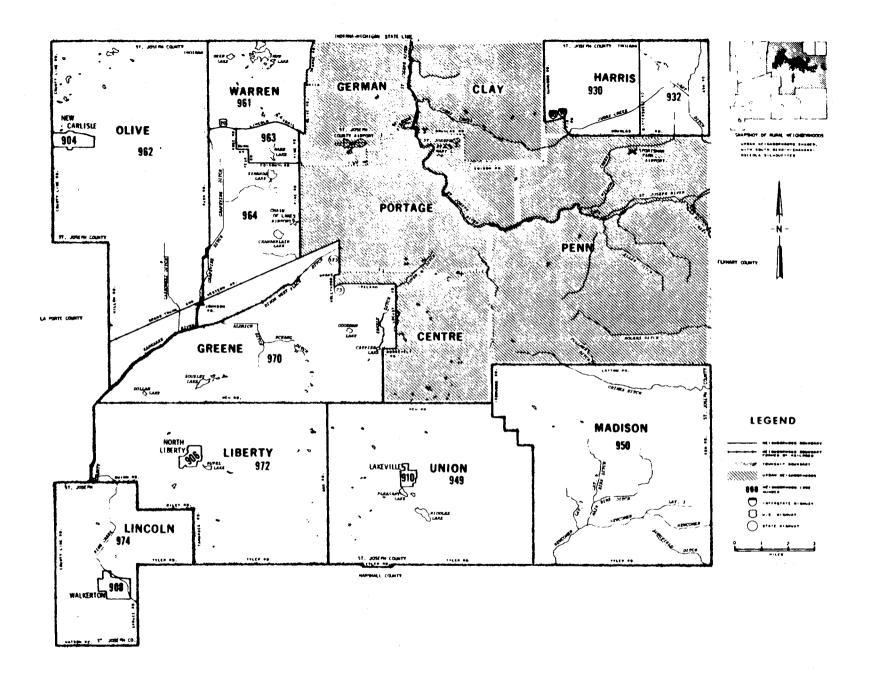


Fig. A.4--NEIGHBORHOODS IN ST. JOSEPH COUNTY: RURAL AREAS

# Appendix B

#### SUPPLEMENTARY TABULATIONS FOR BROWN COUNTY

- B.1. Number of Households by Life-Cycle Stage and Tenure: Brown County, 1974
- B.2. Number of Households by Gross Income and Household Size: Brown County, 1974
- B.3. Average Gross Income and Sources by Life-Cycle Stage: Households in Brown County, 1974
- B.4. Housing Expense vs. Gross Income by Life-Cycle Stage: Homeowners and Renters in Brown County, 1974
- B.5. Housing Expense vs. Adjusted Gross Income by Life-Cycle Stage: Homeowners and Renters in Brown County, 1974
- B.6. Number of Households by Race and Life-Cycle Stage: Brown County, 1974
- B.7. Number of Eligible Households by Life-Cycle Stage and Tenure: Brown County, 1974
- B.8. Number of Eligible Households by Gross Income and Household Size: Brown County, 1974
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- B.31. Probability of Termination and Program Life Expectancy by Program Age for First-Time Enrollees: Brown County, Years 1 and 2
- B.32. Residential Mobility by Life-Cycle Stage for Eligibles at Baseline and Wave 2: Brown County
- B.33. One-Year Turnover Rates for Households Changing Eligibility Status Between Survey Waves by Life-Cycle Stage at Baseline: Brown County, 1974-75
- B.34. One-Year Turnover Rates for Households Changing Eligibility Status Between Survey Waves by Age of Household Head and Tenure: Brown County, 1974-75
- B.35. One-Year Turnover Rates for Households Changing Eligibility Status Between Survey Waves by Adjusted Gross Income: Brown County, 1974-75

Table B.1

NUMBER OF HOUSEHOLDS BY LIFE-CYCLE STAGE
AND TENURE: BROWN COUNTY, 1974

	Number of Households by Tenure				
Stage in Life Cycle	Owners	Renters	Total		
Young single, no children Young couple, no children Young couple, young children Young couple, older children Older couple, older children Older couple, no children Older single, no children Single head with children Elderly couple Elderly single All other	368 1,417 10,059 4,275 4,909 2,422 781 741 3,507 2,086 25	3,612 2,258 2,722 411 182 294 683 1,299 459 1,316	3,980 3,675 12,781 4,686 5,091 2,716 1,464 2,040 3,966 3,402 29 <sup>a</sup>		
All stages	30,590	13,240	43,830		

SOURCE: Survey of households, Site I, baseline.
NOTE: See Appendix A for a description of the
data base and definitions of terms.

 $\alpha$ Estimate is based on less than 10 survey records.

Table B.2

NUMBER OF HOUSEHOLDS BY GROSS INCOME AND HOUSEHOLD SIZE: BROWN COUNTY, 1974

		Nu	mber of H	ouseholds	by Size		
Gross Income (\$) in 1973	l Person	2 Persons	3-4 Persons	5-6 Persons	7-8 Persons	9+ Persons	All Sizes
Under 1,000 1,000 - 1,999 2,000 - 2,999 3,000 - 3,999 4,000 - 4,999 5,000 - 5,999 6,000 - 6,999 7,000 - 7,999 8,000 - 8,999 9,000 - 9,999 10,000 - 10,999 11,000 - 11,999 12,000 - 12,999 13,000 - 13,999 14,000 - 14,999 15,000 - 15,999 16,000 - 16,999 17,000 - 17,999 18,000 - 18,999 19,000 - 19,999 20,000 - 20,999 21,000 - 21,999 22,000 - 22,999 23,000 + All amounts	126 641 1,056 709 747 686 391 297 340 220 197 131 201 83 71 65a 14a 41a 7a 6a 58a 220a 6,307	48 <sup>a</sup> 190 322 545 823 803 857 572 741 624 607 610 590 397 433 488 418 352 366 315 438 68 <sup>a</sup> 183 <sup>a</sup> 498 11,288	85 57 145 301 243 464 547 398 929 852 1,490 1,718 1,164 1,008 530 508 920 264 374 252 391 8a 44a 1,524 14,216	29 <sup>a</sup> 7 <sup>a</sup> 42 <sup>a</sup> 98 176 114 83 184 311 367 868 807 971 626 881 423 465 358 <sup>a</sup> 234 344 184 97 <sup>a</sup> 231 <sup>a</sup> 650 8,550	5a 5a 64a 19a 21a 18a 80a 60a 61a 229a 135a 131a 146a 131a 140a 169a 4a 205a 198a 29a 23a 660 2,533	  3 <sup>a</sup>  2 <sup>a</sup>  3 <sup>a</sup> 25 <sup>a</sup> 7 <sup>a</sup> 7 <sup>a</sup> 9 <sup>a</sup> 23 <sup>a</sup> 25 <sup>a</sup> 29 <sup>a</sup> 157 <sup>a</sup> 29 <sup>a</sup>  9 <sup>a</sup> 203 <sup>a</sup>  9 <sup>a</sup> 203 <sup>a</sup>  9 <sup>a</sup> 203 <sup>a</sup> 203 <sup>a</sup> 203 <sup>a</sup>	293 895 1,573 1,717 2,010 2,088 1,899 1,556 2,381 2,161 3,463 3,410 3,064 2,290 2,069 1,649 2,015 1,172 1,014 1,116 1,226 405 539 3,822 43,827
Median amount	4,804	10,040	11,827	13,040	16,000	21,787	11,500

 $<sup>^{</sup>lpha}$ Estimate is based on less than 10 survey records.

Table B.3

AVERAGE GROSS INCOME AND SOURCES BY LIFE-CYCLE STAGE: HOUSEHOLDS IN BROWN COUNTY, 1974

Stage in Life Cycle		Percent of All Gross Income Received from:							
	Average Gross Income (\$) in 1973	Wages and Salaries	Interest and Dividends	Pensions and Social Security	Unemploy- ment Com- pensation	$_{\rm AFDC}^{\alpha}$	Other Source	All Sources	
Young single, no children	8,307	93.1	0.7	1.3	1.0	0.0	3.9	100.0	
Young couple, no children	13,073	94.6	2.6	0.1	0.4	0.0	2.3	100.0	
Young couple, young children	13,332	96.0	0.9	0.1	0.5	0.2	2.3	100.0	
Young couple, older children	16,038	95.9	0.7	0.9	0.2	0.0	2.2	100.0	
Older couple, older children	19,138	95.0	0.6	0.7	0.3	0.1	3.3	100.0	
Older couple, no children	13,870	90.1	3.4	4.2	0.3	-	2.0	100.0	
Older single, no children	8,968	81.8	5.2	8.8	0.3	0.1	3.7	100.0	
Single head with children	6,727	56.3	1.4	9.2	0.5	16.4	16.2	100.0	
Elderly couple	10,969	51.0	7.3	35.6	0.6	0.0	5.5	100.0	
Elderly single	6,049,	30.3	29.2	37.4	0.1	0.0	3.0	100.0	
All other	7,551 <sup>b</sup>	80.0	4.1	16.0	_	-		100.0	
All stages	12,614	87.8	2.8	5.3	0.4	0.5	3.1	100.0	

NOTE: See Appendix A for a description of the data base and definitions of terms. Percentages may not add to 100 because of rounding.

Aid to Families with Dependent Children.

bEstimate is based on less than 10 survey records.

Table B.4

HOUSING EXPENSE VS. GROSS INCOME BY LIFE-CYCLE STAGE:
HOMEOWNERS AND RENTERS IN BROWN COUNTY, 1974

	Expen	Expenses and Incomes in 1973				
	Median Housing Expense (\$)		Median Gross Income (\$)		Median Ratio of Expense to Income (%)	
Stage in Life Cycle	Owners	Renters	Owners	Renters	Owners	Renters
Young single, no children	2,630 <sup>a</sup>		11,033 <sup>a</sup>		(b)	21.2
Young couple, no children Young couple, young children	3,356 3,226	1,758 1,870	17,500 12,055	11,010 10,005	17.6 24.8	15.8 17.9
Young couple, older children Older couple, older children	3,253 3,219	2,036 1,660	14,752 16,575	12,001 10,607	20.4 16.9	15.2 17.5
Older couple, no children Older single, no children	2,316 2,340	2,021 1,310	13,001 7,104	12,192 5,972	17.5 24.6	16.2 19.8
Single head with children Elderly couple	2,252 2,173	1,832 1,675	9,330 8,199	4,528 5,107	24.2	38.2
Elderly single All other	2,056 2,066 <sup>a</sup>	1,303	4,479 8,426	3,015	43.6 (b)	37.0
All stages	2,891	1,678	12,700	7,964	22.4	20.3

 $<sup>^{</sup>a}\mathrm{Estimate}$  is based on less than 10 survey records.

bRatio is not calculated because of small sample.

Table B.5

HOUSING EXPENSE VS. ADJUSTED GROSS INCOME BY LIFE-CYCLE STAGE:
HOMEOWNERS AND RENTERS IN BROWN COUNTY, 1974

	Expens	ses and I	M - 12 T			
Stage in	Median l Expens	Housing se (\$)	Median Adjusted Gross Income (\$)		Median Ratio of Expense to Income (%)	
Life Cycle Young single, no children	Owners	Renters	Owners	Renters	Owners	Renters
Young single, no children Young couple, no children Young couple, young children Young couple, older children Older couple, older children Older couple, no children Older single, no children Single head with children Elderly couple Elderly single All other	2,630 <sup>a</sup> 3,356 3,226 3,253 3,219 2,316 2,340 2,252 2,173 2,056 2,066 <sup>a</sup>	1,758 1,870 2,036 1,660 2,021 1,310 1,832 1,675 1,303	10,223 <sup>a</sup> 16,326 10,636 12,813 14,971 12,044 6,744 7,647 7,197 4,031 5,784 <sup>a</sup>	10,197 8,743 10,799 9,178 11,292 5,673 3,405 4,560 2,714	(b) 18.5 28.4 23.6 18.1 19.2 25.8 34.4 29.5 48.5 (b)	23.0 16.9 20.1 17.7 19.9 17.4 21.2 51.8 31.0 41.1
All stages	2,891	1,678	11,123	7,057	25.1	22.8

 $<sup>^{\</sup>alpha}\mbox{Estimate}$  is based on less than 10 survey records.

 $<sup>^{</sup>b}\mathrm{Ratio}$  is not calculated because of small sample.

Table B.6

NUMBER OF HOUSEHOLDS BY RACE AND LIFECYCLE STAGE: BROWN COUNTY, 1974

	Number of Households by Race of Head					
Stage in Life Cycle	White, Non-Spanish	American Indian	All Other	Total		
Young single, no children Young couple, no children Young couple, young children Young couple, older children Older couple, older children Older couple, no children Older single, no children Single head with children Elderly couple Elderly single All other	3,908 3,619 12,570 4,661 5,028 2,675 1,425 1,976 3,937 3,359 29 <sup>a</sup>	42 <sup>a</sup> 27 <sup>a</sup> 109 20 <sup>a</sup> 63 <sup>a</sup> 41 <sup>a</sup> 38 <sup>a</sup> 62 25 <sup>a</sup> 40 <sup>a</sup>	30 <sup>a</sup> 29 <sup>a</sup> 102 <sup>a</sup> 5 <sup>a</sup> 2 <sup>a</sup> 4 <sup>a</sup> 4 <sup>a</sup>			
All stages	43,187	467	176	43,830		

 $<sup>^{</sup>a}\mathrm{Estimate}$  is based on less than 10 survey records.

Table B.7

NUMBER OF ELIGIBLE HOUSEHOLDS BY LIFE-CYCLE STAGE
AND TENURE: BROWN COUNTY, 1974

	F .	of House by Tenure	
Young couple, older childre Older couple, older childre Older couple, no children Older single, no children Single head with children Elderly couple Elderly single All other	Owners	Renters	Total
Young couple, no children Young couple, young children Young couple, older children Older couple, older children Older couple, no children Older single, no children Single head with children Elderly couple Elderly single	36 <sup>a</sup> 909 118 <sup>a</sup> 431 52 <sup>a</sup> 58 <sup>a</sup> 436 1,055 1,084 24 <sup>a</sup>	 307 900 106 78 49 <sup>a</sup> 41 <sup>a</sup> 1,062 289 924 4 <sup>a</sup>	343 1,809 224 509 101 <sup>a</sup> 99 <sup>a</sup> 1,498 1,344 2,008 28 <sup>a</sup>
All stages	4,203	3,760	7,963

SOURCE: Survey of households, Site I, baseline.
NOTE: See Appendix A for a description of the
data base and definitions of terms.

 $<sup>^{\</sup>alpha} \text{Estimate}$  is based on less than 10 survey records.

Table B.8

NUMBER OF ELIGIBLE HOUSEHOLDS BY GROSS INCOME AND HOUSEHOLD SIZE: BROWN COUNTY, 1974

			···	<del></del>			
		N	umber of	Household:	s by Size		
Gross Income (\$) in 1973	1 Person	2 Persons	3-4 Persons	5-6 Persons	7-8 Persons	9+ Persons	All Sizes
Under 1,000 1,000 - 1,999 2,000 - 2,999 3,000 - 3,999 4,000 - 4,999 5,000 - 5,999 6,000 - 6,999 7,000 - 7,999 8,000 - 8,999 9,000 - 9,999 10,000 - 10,999 11,000 - 11,999 12,000 - 12,999 13,000 - 13,999 14,000 +	47 <sup>a</sup> 504 716 356 194	8 <sup>a</sup> 122 242 431 605 650 122 <sup>a</sup> 3 <sup>a</sup>	27 <sup>a</sup> 49 <sup>a</sup> 136 258 214 407 508 347 61	29 <sup>a</sup> 5 <sup>a</sup> 42 <sup>a</sup> 98 176 114 75 180 311 240 <sup>a</sup> 4 <sup>a</sup>	5 <sup>a</sup> 5a 64 <sup>a</sup> 19 <sup>a</sup> 21 <sup>a</sup> 18 <sup>a</sup> 81 <sup>a</sup> 60 <sup>a</sup> 57 <sup>a</sup> 229 <sup>a</sup>	  3 <sup>a</sup>  3 <sup>a</sup> 25 <sup>a</sup>  37 <sup>a</sup> 31 <sup>a</sup> 9 <sup>a</sup> 7 <sup>a</sup> 6 <sup>a</sup>	116 680 1,144 1,207 1,210 1,192 726 633 435 334 264 9 <sup>a</sup> 7 <sup>a</sup> 6
All amounts	1,817	2,183	2,007	1,274	559	123	7,963
Median amount	2,500	4,582	5,700	7,301	9,151	9,263	4,608

 $<sup>^{</sup>lpha}{\mbox{{\footnotesize Estimate}}}$  is based on less than 10 survey records.

Table B.9

NUMBER OF ELIGIBLE HOUSEHOLDS BY MONTHLY ALLOWANCE ENTITLEMENT AND HOUSEHOLD SIZE: BROWN COUNTY, 1974

			Size	of Househ	old		
Allowance Entitlement (\$)	1 Person	2 Persons	3-4 Persons	5-6 Persons	7-8 Persons	9+ Persons	All Sizes
10 - 19 20 - 29 30 - 39 40 - 49 50 - 59 60 - 69 70 - 79 80 - 89 90 - 99 100 - 109 110 - 119 120 - 139 140 - 159 160 - 179 180 + All amounts	118 170 232 243 457 477 70 46 <sup>a</sup> 5 <sup>a</sup> 	351 337 401 240 223 212 146 159 33 74 4a 4   2,184	94 316 262 209 191 205 103 122 186 76 141 61a 43 2,009	203 135 273 35 <sup>a</sup> 89 <sup>a</sup> 63 <sup>a</sup> 42 <sup>a</sup> 56 <sup>a</sup> 9 <sup>a</sup> 110 93 <sup>a</sup> 91 <sup>a</sup> 47 <sup>a</sup> 29 <sup>a</sup> 1,275	182 <sup>a</sup> 16 <sup>a</sup> 59 <sup>a</sup> 29 <sup>a</sup> 28 <sup>a</sup> 29 <sup>a</sup> 12 <sup>a</sup> 42 <sup>a</sup> 29 <sup>a</sup> 28 <sup>a</sup> 29 <sup>a</sup> 42 <sup>a</sup> 29 <sup>a</sup> 28 <sup>a</sup> 2 <sup>a</sup> 11 <sup>a</sup> 46 <sup>a</sup> 40 <sup>a</sup> 2 <sup>a</sup> 555	 3 <sup>a</sup>  17 <sup>a</sup> 32 <sup>a</sup> 3 <sup>a</sup> 6 <sup>a</sup> 25 <sup>a</sup>  6 <sup>a</sup>  28 <sup>a</sup>  2 <sup>a</sup>  122	948 977 1,227 773 1,020 989 379 450 262 294 240 195 136 71 2 <sup>a</sup> 7,963
Median amount	53	40	56	44	46	84	50

 $<sup>^{</sup>lpha}{\mbox{{\sc Estimate}}}$  is based on less than 10 survey records.

Table B.10

AVERAGE GROSS INCOME AND SOURCES BY LIFE-CYCLE STAGE: ELIGIBLE HOUSEHOLDS IN BROWN COUNTY, 1974

		Percent of All Gross Income Received from:								
Stage in Life Cycle	Average Gross Income (\$) in 1973	Wages and Salaries	Interest and Dividends	Pensions and Social Security	Unemployment Compensation	$\mathtt{AFDC}^a$	Other Source	All Sources	_	
Young single, no children										
Young couple, no children	4,312	89.1	0.6	1.0	3.1	0.2	6.0	100.0	i	
Young couple, young children	6,459	92.6	0.3	0.3	1.7	2.4	2.7	100.0		
Young couple, older children	7,061	95.4	0.0	<b> </b>	0.8	1.7	2.0	100.0		
Older couple, older children	6,867	88.5	0.8	1.2	3.2	1.1	5.2	100.0		
Older couple, no children	3,768	79.2	0.6	14.3	0.8		5.1	100.0		
Older single, no children	4,764	25.2	1.2	43.9	0.1	2.1	27.5	10,0.0		
Single head with children	5,089	42.4	0.5	5.2	0.4	28.6	22.8	100.0		
Elderly couple	4,808	19.1	6.1	68.0	1.3	0.3	5.2	100.0		
Elderly single	2,773,	8.9	9.5	72.8	0.1	0.0	8.6	100.0		
All other	7,551 <sup>b</sup>	79.7	4.1	16.2				100.0		
All stages	4,893	57.3	2.7	23.7	1.3	6.6	8.4	100.0	_	

NOTE: See Appendix A for a description of the data base and definition of terms. Percentages may not add to 100 because of rounding.

<sup>&</sup>lt;sup>a</sup>Aid to Families with Dependent Children.

 $<sup>^</sup>b\mathrm{Estimate}$  is based on less than 10 survey records.

Table B.12

NUMBER OF ELIGIBLE HOUSEHOLDS BY LIFE-CYCLE STAGE AND RACE: BROWN COUNTY, 1974

	Number of Households by Race			
Stage in Life Cycle	White	American Indian	All Other	
Young single, no children Young couple, no children Young couple, young children Young couple, older children Older couple, older children Older couple, no children Older single, no children Single head with children Elderly couple Elderly single All other	336 1,738 206 494 101 99 1,441 1,334 1,965 28	$-\frac{6}{6}^{\alpha}$ $43^{\alpha}$ $18^{\alpha}$ $15^{\alpha}$ $0$ $0$ $55$ $10^{\alpha}$ $39^{\alpha}$ $0$	 0 29 <sup>a</sup> 0 0 0 0 2 <sup>a</sup> 0 4 <sup>a</sup>	
All stages	7,742	186	35 <sup>a</sup>	

SOURCE: Survey of households, Site I, baseline.
NOTE: See Appendix A for a description of the data base and definitions of terms.

 $<sup>^{</sup>a}\mathrm{Estimate}$  is based on less than 10 survey records.

Table B.11

HOUSING EXPENSE VS. ADJUSTED GROSS INCOME BY LIFE-CYCLE STAGE:
ELIGIBLE OWNERS AND RENTERS IN BROWN COUNTY, 1974

	Expens	ses and I	1	n Ratio			
Stare de	Median Housing Expense (\$)		Median A	Adjusted come (\$)	of Expense to Income (%)		
Stage in Life Cycle	Owners	Renters	Owners	Renters	Owners	Renters	
Young single, no children							
Young couple, no children		1,641		4,074		42.3	
Young couple, young children	2,632	1,694	6,430	5,195	37.6	34.5	
Young couple, older children Older couple,	2,057 <sup>a</sup>	1,724	6,800 <sup>a</sup>	5,242	(b)	34.2	
older couple, older children Older couple,	3,747 <sup>a</sup>	1,537	6,406 <sup>a</sup>	5,379	(b)	32.4	
no children Older single,	1,679 <sup>a</sup>	2,022	4,089 <sup>a</sup>	2,176	(b)	59.1	
no children Single head	1,666 <sup>a</sup>	1,302	4,425 <sup>a</sup>	2,840	(b)	50.0	
with children	$2,740^{\alpha}$	1,803	7,368 <sup>a</sup>	2,820	(b)	59.5	
Elderly couple Elderly single All other	1,644 1,664	1,593 1,208	4,465 2,317 	3,660 2,284 	40.0 76.4 	39.4 49.1 	
All stages	1,975	1,604	4,666	3,316	41.4	44.8	

 $<sup>^{\</sup>ensuremath{\alpha}}\xspace$  Estimate is based on less than 10 survey records.

 $<sup>^{</sup>b}\mathrm{Ratio}$  is not calculated because of small sample.

Table B.13

## NONELDERLY SINGLES NOW ELIGIBLE BY AGE OF HEAD AND TENURE: BROWN COUNTY, 1974

	Number of Households by Tenure					
Age of Head	Owners Renters Total					
Under 30 years 30 - 39 40 - 49 50 - 61	17 <sup>a</sup> 70 <sup>a</sup> 48 <sup>a</sup> 99 <sup>a</sup>	1,289 59 54 197	1,306 129 102 296			
All ages	234 <sup>a</sup>	1,599	1,833			

SOURCE: Survey of households, Site I, baseline.

NOTE: See Appendix A for a description of the data base and definitions of terms.

 $^{\rm \alpha}{\rm Estimate}$  is based on less than 10 survey records.

Table B.14

ENROLLMENT RATES BY LIFE-CYCLE STAGE AND TENURE:
BROWN COUNTY, YEAR 2

		Owners		Renters				
Stage in Life Cycle	Number Eligible	Number Enrolled	Enrollment Rate (%)	Number Eligible	Number Enrolled	Enrollment Rate (%)		
Young single, no children		10			104			
Young couple, no children	36 <sup>b</sup>	11	(b)	307	92	30.0		
Young couple, young children Young couple,	909	201	22.1	900	357	39.7		
older children Older couple,	118 <sup>b</sup>	82	(b)	106	54	50.9		
older children Older couple,	431	49	11.4	78	19	24.4		
no children Older single,	52 <sup>b</sup>	42	(b)	49 <sup>b</sup>	20	(b)		
no children Single head	58 <sup>b</sup>	45	(b)	41 <sup>b</sup>	119	<b>(</b> b)		
with children	436	225	51.6	1,062	730	68.7		
Elderly couple	1,055	231	21.9	289	86	29.8		
Elderly single	1,084 <sub>b</sub>	465 7	42.9 (b)	924 4 <sup>b</sup>	423 5	45.8		
All other	24	,	(0)	4	3	(b)		
All stages	4,203	1,368	32.6	3,760	2,009	53.4		

SOURCE: Survey of households, Site I, baseline, and HAO administrative records. NOTE: See Appendix A for a description of the data base and definitions of terms.

 $<sup>^{\</sup>alpha}{\rm Rate}$  is not calculated because the surveys do not identify nonelderly singles who are eligible by reason of being disabled or displaced by public action.

 $<sup>^</sup>b{\tt Estimate}$  is based on less than 10 survey records and rates are not calculated for such small samples.

Table B.15

ENROLLMENT RATES BY ADJUSTED GROSS INCOME:
BROWN COUNTY, YEAR 2

Adjusted Gross	Number	Number	Enrollment
Income (\$)	Eligible	Enroll <b>ed</b>	Rate (%)
Under 2,000 <sup>α</sup> 2,000 - 2,999 3,000 - 3,999 4,000 - 4,999 5,000 - 5,999 6,000 - 6,999 7,000 - 7,999 8,000 +	1,358	482	35.5
	1,465	765	52.2
	1,249	992	79.4
	1,446	574	39.7
	990	319	32.2
	872	158	18.1
	345	71	20.6
	238	16	6.7
All amounts	7,963	3,377	42.4

NOTE: See Appendix A for a description of the data base and definitions of terms.

 $^{a}$ The intervals under \$1,000 and \$1,000 - \$1,999 were merged because of insufficient data on eligibles.

Table B.16

ENROLLMENT RATES BY ALLOWANCE ENTITLEMENT:
BROWN COUNTY, YEAR 2

Allowance Entitlement (\$)	Number Eligible	Number Enrolled	Enrollment Rate (%)
10 - 19	947	187	19.8
20 - 29	977	284	29.1
30 - 39	1,227	389	31.7
40 - 49	772	508	65.8
50 - 59	1,020	386	37.8
60 - 69	989	399	40.3
70 - 79	378	306	81.0
80 - 89	449	298	66.4
90 <b>- 9</b> 9	262	163	62.2
100 - 109	295	109	37.0
110 - 119	241	66	27.4
120 - 139	193	111	57.5
140 - 159	135	91	67.4
160 - 179	$70^{\alpha}_{s}$	51	(a)
180 +	8 <sup>a</sup>	29	(a)
All amounts	7,963	3,377	42.4

NOTE: See Appendix A for a description of the data base and definitions of terms.

 $\alpha_{\rm Estimate}$  is based on less than 10 survey records and rates are not calculated for such small samples.

Table B.17

ENROLLMENT RATES BY MAJOR INCOME SOURCE:
BROWN COUNTY, YEAR 2

Major Income Source	Number	Number	Enrollment
	Eligible	Enrolled	Rate (%)
Wages and salaries Unemployment compensation Pensions and social security AFDC SSI Interest and dividends All other No major source	3,684	702	19.1
	50 <sup>a</sup>	155	(a)
	2,859	1,225	42.8
	609	631	(b)
	79 <sup>a</sup>	124	(a)
	125	47	37.6
	296	327	(b)
	261	166	63.4
All sources	7,963	3,377	42.4

 ${\tt NOTE:}$  See Appendix A for a description of the data base and definitions of terms.

AFDC = Aid to Families with Dependent Children; SSI = supplemental security income.

 $<sup>^{\</sup>alpha}{\rm Estimate}$  is based on less than 10 survey records and rates are not calculated for such small samples.

 $<sup>^</sup>b\mathrm{Rate}$  exceeds 100, probably a reflection of an error in the original estimate.

Table B.18

ENROLLMENT RATES BY AGE OF HOUSEHOLD HEAD, TENURE, AND PERCENT OF INCOME SPENT ON HOUSING AT ENROLLMENT: BROWN COUNTY, YEAR 2

	25	Percent or	Less	25 Pe	rcent to 50	) Percent	s Income  More Than 50 Percent		
Age of Head	Number	Number	Enrollment	Number	Number	Enrollment	Number	Number	Enrollment
and Tenure	Eligible	Enrolled	Rate (%)	Eligible	Enrolled	Rate (%)	Eligible	Enrolled	Rate (%)
Owners Nonelderly Elderly All ages	33 <sup>a</sup>	29	(a)	1,448	277	19.1	584	366	62.7
	68 <sup>a</sup>	15	(a)	1,150	359	31.2	920	322	35.0
	101 <sup>a</sup>	44	(a)	2,598	636	24.5	1,504	688	45.7
Renters Nonelderly Elderly All ages	334	76	22.7	1,180	565	47.9	1,033	859	83.2
	160	49	30.6	582	215	36.9	471	245	52.0
	494	125	25.2	1,762	780	44.3	1,504	1,104	73.4

Estimate is based on less than 10 survey records and rates are not calculated for such small samples.

Table B.19

ENROLLMENT RATES BY AGE OF HOUSEHOLD HEAD, TENURE, AND RACE: BROWN COUNTY, YEAR 2

		-		Race	of Househo	old Head	·		
		White	· ·	American Indian				All Othe	er
Age of Head and Tenure	Number Eligible	Number Enrolled	Enrollment Rate (%)	Number Eligible	Number Enrolled	Enrollment Rate (%)	Number Eligible	Number Enrolled	Enrollment Rate (%)
Owners Nonelderly Elderly All ages	2,039 2,116 4,155	666 693 1,359	32.7 32.8 32.7	0 23 <sup>α</sup> 23 <sup>α</sup>	2 2 4	(a) (a)	25 <sup>α</sup> 0 25 <sup>α</sup>	4 1 5	(a)  (a)
Renters Nonelderly Elderly All ages	2,404 1,184 3,588	1,406 501 1,907	58.5 42.3 53.2	137 25 <sup>a</sup> 162	79 8 87	57.7 (a) 53.7	6 <sup>a</sup> 4 <sup>a</sup> 10 <sup>a</sup>	15 0 15	(a) (a) (a)

 $<sup>^{</sup>lpha}$ Estimate is based on less than 10 survey records and rates are not calculated for such small samples.

Table B.20
ENROLLMENT RATES BY NEIGHBORHOOD:
BROWN COUNTY, YEAR 2

Neighborhood	Number Eligible	Number Enrolled	Enrollment Rate (%)
Green Bay west	2,556	1,181	46.2
Green Bay east	2,858	1,255	43.9
De Pere	1,330	513	38.6
West county	438	189	43.2
East county	156	68	43.6
South county	625	171	27.3
All neighborhoods	7,963	3,377	42.4

Table B.21

COMPARISON OF FIRST- AND SECOND-YEAR ENROLLEES BY LIFE-CYCLE STAGE AND TENURE: BROWN COUNTY

		Own	ers		Renters				
	Yea	Year 1		Year 2		Year 1		Year 2	
Stage in Life Cycle	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Young single,									
no children	9	0.7	4	0.6	78	4.1	85	7.2	
Young couple,					,				
no children	20	1.6	11	1.6	108	5.7	93	7.9	
Young couple,				}					
young children	259	20.2	128	19.1	409	21.7	266	22.5	
Young couple,							Ì	İ	
older children	107	8.3	50	7.5	62	3.3	30	2.5	
Older couple,						_			
older children	55	4.3	26	3.9	22	1.2	6	0.5	
Older couple,		1							
no children	26	2.0	26	3.9	19	1.0	8	0.7	
Older single,								]	
no children	36	2.8	20	3.0	88	4.7	60	5.1	
Single head		1							
with children	190	14.8	128	19.1	603	31.9	406	34.4	
Elderly couple	197	15.4	96	14.3	88	4.7	28	2.4	
Elderly single	376	29.3	179	26.8	408	21.6	198	16.8	
All other	7	0.5	1	0.1	4	0.2	1	0.1	
All stages	1,282	100.0	669	100.0	1,889	100.0	1,181	100.0	

NOTE: See Appendix A for a description of the data base and definitions of terms. Percentages may not add to 100 because of rounding.

Table B.22

COMPARISON OF FIRST- AND SECOND-YEAR ENROLLEES BY INCOME AND AGE OF HEAD: BROWN COUNTY

	N	Nonelderly Enrollees				Elderly Enrollees			
Adjusted	Yea	r 1	Yea	Year 2		Year 1		Year 2	
Gross Income (\$)	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Under 1,000	215	10.2	170	12.6	23	2.2	7	1.4	
1,000 - 1,999	102	4.9	60	4.4	106	9.9	38	7.6	
2,000 - 2,999	319	15.2	173	12.8	423	39.6	147	29.3	
3,000 - 3,999	513	24.4	346	25.6	314	29.4	164	32.7	
4,000 - 4,999	405	19.3	246	18.2	141	13.2	85	17.0	
5,000 - 5,999	254	12.1	163	12.1	50	4.7	50	10.0	
6,000 - 6,999	207	9.8	114	8.5	8	0.7	7	1.4	
7,000 - 7,999	64	3.0	62	4.6	4	0.4	3	0.6	
8,000 - 8,999	16	0.8	14	1.0					
9,000 - 9,999	7	0.3	1	0.1					
10,000 +						l			
All amounts	2,102	100.0	1,349	100.0	1,069	100.0	501	100.0	
Median amount	3,	792	3,	751	2,	962	3,	349	

Table B.23

COMPARISON OF FIRST- AND SECOND-YEAR ENROLLEES BY INCOME SOURCE: BROWN COUNTY

	Year 1				Year 2			
Income Source $^a$	Number of Enrollees	Percent of All Year 1 Enrollees	Median Percent of Total Income	Number of Enrollees	Percent of All Year 2 Enrollees	Median Percent of Total Income		
Wages and salaries Unemployment compensation Pensions and social security AFDC SSI Interest and dividends All other	1,086 242 1,252 621 295 1,443 788	34.2 7.6 39.5 19.6 9.3 45.5 24.8	98.9 98.3 82.3 99.6 37.6 2.0 34.5	647 190 607 383 158 864 395	35.0 10.3 32.8 20.7 8.5 46.7 21.4	92.6 89.5 84.2 100.0 38.3 1.4 49.3		

NOTE: See Appendix A for a description of the data base and definitions of terms. AFDC = Aid to Families with Dependent Children; SSI = supplemental security income.

 $<sup>\</sup>alpha$ Sources from which households receive any income at enrollment. Few derive their income from a single source, so categories are neither mutually exclusive nor all-inclusive.

Table B.24

COMPARISON OF FIRST- AND SECOND-YEAR TERMINEES BY LIFE-CYCLE STAGE AND TENURE: BROWN COUNTY

		Own	ers			Ren	ters	
	Year 1		Yea	Year 2		r 1	Year 2	
Stage in Life Cycle	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Young single,								
no children	0	0.0	3	0.6	13	5.6	47	5.4
Young couple,							İ	
no children	8	6.0	13	2.7	21	9.0	92	10.6
Young couple,								
young children	36	27.1	156	32.8	61	26.3	273	31.6
Young couple,								
older children	17	12.8	60	12.6	5	2.2	34	3.9
Older couple,	_							
older children	5	3.8	27	5.7	3	1.3	6	0.7
Older couple,								
no children	0	0.0	11	2.3	3	1.3	5	0.6
Older single,	,	0.0		1 0	,	2 (		
no children	4	3.0	9	1.9	6	2.6	24	2.8
Single head	10	1, 2	30	16 /	(0)	06.7	200	05.7
with children	19	14.3	78	16.4	62	26.7	222	25.7
Elderly couple	18	13.5	51	10.7	10	4.3	21	2.4
Elderly single	26	19.5	66	13.9	48	20.7	140	16.2
All other	0	0.0	2	0.4	0	0.0	1	0.1
All stages	133	100.0	476	100.0	232	100.0	865	100.0

NOTE: See Appendix A for a description of the data base and definitions of terms. Percentages may not add to 100 because of rounding.

Table B.25

COMPARISON OF FIRST- AND SECOND-YEAR TERMINEES BY INCOME
AND AGE OF HEAD: BROWN COUNTY

	N	onelderly	Termine	es		Elderly T	erminees	
Adjusted	Yea	r 1	Yea	Year 2		r 1	Year 2	
Gross Income (\$)	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Under 1,000	22	8.4	121	11.4	3	2.9	8	2.9
1,000 - 1,999	17	6.5	44	4.1	13	12.7	24	8.6
2,000 - 2,999	30	11.4	127	11.9	37	36.3	107	38.5
3,000 - 3,999	38	14.4	227	21.4	20	19.6	72	25.9
4,000 - 4,999	49	18.6	215	20.2	16	15.7	42	15.1
5,000 - 5,999	45	17.1	132	12.4	9	8.8	18	6.5
6,000 - 6,999	37	14.1	137	12.9	4	3.9	3	1.1
7,000 - 7,999	17	6.5	46	4.3		<del>-</del> -	.4	1.4
8,000 - 8,999	6	2.3	11	1.0				
9,000 - 9,999	2	0.8	3	0.3				
10,000 +		[ <del></del>				ļ		
All amounts	263	100.0	1,063	100.0	102	100.0	278	100.0
Median amount	4,	555	4,	,063	2,928		2,994	

NOTE: See Appendix A for a description of the data base and definitions of terms. Percentages may not add to 100 because of rounding.

Table B.26

COMPARISON OF FIRST- AND SECOND-YEAR TERMINEES BY INCOME SOURCE: BROWN COUNTY

		Year l		Year 2			
Income Source $^a$	Number of Enrollees	Percent of All Year 1 Terminees	Median Percent of Total Income	Number of Enrollees	Percent of All Year 2 Terminees	Median Percent of Total Income	
Wages and salaries	173	47.4	99.8	561	41.8	99.6	
Unemployment compensation	26	7.1	96.0	191	14.2	98.6	
Pensions and social security	122	33.4	75.8	336	25.1	80.7	
AFDC	53	14.5	77.2	243	18.1	100.0	
SSI	39	10.7	38.9	73	5.4	36.5	
Interest and dividends	162	44.4	0.8	569	42.4	0.9	
All other	103	28.2	32.2	291	21.7	44.5	

NOTE: See Appendix A for a description of the data base and definitions of terms. AFDC = Aid to Families with Dependent Children; SSI = supplemental security income.

 $<sup>^{\</sup>alpha}$ Sources from which households receive any income at enrollment. Few derive their income from a single source, so categories are neither mutually exclusive nor all-inclusive.

Table B.27

REASONS FOR TERMINATION: BROWN COUNTY, YEARS 1 AND 2

	Yea	r 1	Yea	r 2
Reason for Termination $^{lpha}$	Number	Percent	Number	Percent
Assets too high	3	0.8	28	2.2
Income too high	65	18.5	322	25.9
Household composition	10	2.8	31	2.5
Moved from program area	33	9.4	99	8.0
Moved to subsidized housing	29	8.2	63	5.1
Moved to nursing home	11	3.1	16	1.3
Failed to recertify	73	20.7	518	41.6
Failed to allow housing evaluation	1	0.3	1	0.1
Spent too little on housing expenses	2	0.6	1	0.1
Fraud	0		0	
Death of household head	11	3.1	33	2.6
Administrative burden	4	1.1	3	0.2
Allowance too small	11	3.1	21	1.7
Failed housing evaluation; no move	37	10.5	33	2.6
No lease; no move	15	4.3	5	0.4
Confidentiality	0		1	0.1
Welfare image	1	0.3	0	:
Feels assistance not needed	8	2.3	14	1.1
Joined other assistance program	1	0.3	0	
Could not identify reason	3	0.8	- 4	0.3
All other	34	9.7	51	4.1
Total <sup>b</sup>	352	100.0	1,244	100.0

NOTE: See Appendix A for a description of the data base and definitions of terms. Percentages may not add to 100 because of rounding.

<sup>&</sup>lt;sup>a</sup>Multiple reasons are coded as principal reason.

 $<sup>^</sup>b$ Reason was missing for 13 cases in year 1 and 97 cases in year 2.

Table B.28

TERMINATION RATES BY LIFE-CYCLE STAGE AND TENURE:
BROWN COUNTY, YEAR 2

		Owners			Renter	8
Stage in Life Cycle	Number Enrolled	Number Terminated	Termination Rate (%)	Number Enrolled	Number Terminated	Termination Rate (%)
Young single,						
no children	10	3	23.1	104	59	36.2
Young couple, no children	11	20	64.5	92	109	54.2
Young couple, young children	201	186	48.1	357	318	47.1
Young couple, older children	82	75	47.8	54	38	41.3
Older couple, older children	49	32	39.5	19	9	32.1
Older couple,	7	]	37.3	17	′	72.1
no children Older single,	42	10	19.2	20	7	25.9
no children Single head	45	11	19.6	119	28	19.0
with children	225	93	29.2	730	279	27.6
Elderly couple	231	62	21.2	86	30	25.9
Elderly single	465	90	16.2	423	182	30.1
All other	7	1	12.5	5	1	16.7
All stages	1,368	583	29.9	2,009	1,060	34.5

Table B.29

TERMINATION RATES BY ALLOWANCE ENTITLEMENT:
BROWN COUNTY, YEAR 2

Allowance Entitlement (\$)	Number Enrolled	Number Terminated	Termination Rate (%)
10 - 19	187	164	46.7
20 - 29	284	178	38.5
30 - 39	389	180	31.6
40 - 49	508	222	30.4
50 - 59	386	173	31.0
60 - 69	399	159	28.5
70 - 79	306	130	29.8
80 - 89	298	130	30.4
90 - 99	163	64	28.2
100 - 109	109	54	33.1
110 - 119	66	27	29.0
120 - 139	111	58	34.3
140 - 159	91	72	44.2
160 - 179	51	15	22.7
180 +	29	6	17.1
All amounts	3,377	1,632 <sup>a</sup>	32.6

SOURCE: HAO administrative records, Site I.

NOTE: See Appendix A for a description of the data base and definitions of terms.

 $<sup>^{</sup>a}\mathrm{Eleven}$  cases missing allowance amount.

Table B.30

TERMINATION RATES BY MAJOR INCOME SOURCE:
BROWN COUNTY, YEAR 2

Major Income Source	Number Enrolled	Number Terminated	Termination Rate (%)
Wages and salaries	702	555	44.2
Unemployment compensation	155	178	53.5
Pensions and social security	1,225	356	22.5
AFDC	631	225	26.3
SSI	124	33	21.0
Interest and dividends	47	26	35.6
All other	327	168	33.9
No major source	166	102	38.1
All sources	3,377	1,643	32.7

NOTE: See Appendix A for a description of the data base and definitions of terms.

AFDC = Aid to Families with Dependent Children; SSI = supplemental security income.

Table B.31 PROBABILITY OF TERMINATION AND PROGRAM LIFE EXPECTANCY BY PROGRAM AGE FOR FIRST-TIME ENROLLEES: BROWN COUNTY, YEARS 1 AND 2

Age (mos.)	Onset	$d_{m{x}}$	q <sub>x</sub> (%)	$\iota_x$	$C_{\boldsymbol{x}}$	$l_x - c_x$	l <sub>x</sub> '	<i>d</i> <sub><i>x</i></sub> '	$L_{m{x}}$	$T_{m{x}}$	$e_x$
0 - 1		55	<del></del>		140					Ī	17.5
	5,018	96	1.10	4,963	1	4,823	10,000	110	9,890	174,672	•
	4,823	1	1.99	4,727	178	4,549	9,890	197	9,693	164,727	16.7
2 - 3	4,549	63	1.38	4,486	207	4,279	9,693	134	9,559	154,936	16.0
3 - 4	4,279	56	1.31	4,223	128	4,095	9,559	125	9,434	145,310	15.2
4 - 5	4,095	48	1.17	4,047	148	3,899	9,434	110	9,324	135,813	14.4
5 - 6	3,899	60	1.54	3,839	129	3,710	9,324	144	9,180	126,434	13.6
6 – 7	3,710	516	13.91	3,194	91	3,103	9,180	1,277	7,903	117,182	12.8
7 - 8	3,103	187	6.03	2,916	91	2,825	7,903	477	7,426	108,640	13.8
8 – 9	2,825	73	2.58	2,752	131	2,621	7,426	192	7,234	100,976	13.6
9 - 10	2,621	35	1.34	2,586	133	2,453	7,234	97	7,137	93,646	13.0
10 - 11	2,453	26	1.06	2,427	86	2,341	7,137	76	7,061	86,460	12.1
11 - 12	2,341	40	1.71	2,301	97	2,204	7,061	121	6,940	79,362	11.2
12 - 13	2,204	320	14.52	1,884	111	1,773	6,940	1,008	5,932	72,361	10.4
13 - 14	1,773	19	1.07	1,754	88	1,666	5,932	64	5,868	65,925	11.1
14 - 15	1,666	21	1.26	1,645	151	1,494	5,868	74	5,794	60,025	10.2
15 - 16	1,494	8	.54	1,486	187	1,299	5,794	31	5,763	54,194	9.4
16 - 17	1,299	1 7	.54	1,292	195	1,097	5,763	31	5,732	48,416	8.4
17 - 18	1,097	11	1.00	1,086	188	898	5,732	57	5,675	42,668	7.4
18 - 19	898	50	5.57	848	193	655	5,675	316	5,359	36,964	6.5
19 - 20	655	4	.61	651	150	501	5,359	33	5,326	31,448	5.9
20 - 21	501	١٥	0.01	501	154	347		33	5,326	26,105	4.9
21 - 22	347	2		345	135	210	5,326	31	1 -		4
22 - 23		2	.58				5,326		5,295	20,779	3.9
-	210	_	.95	208	104	104	5,295	50	5,245	15,468	2.9
23 - 24	104	0	0	104	86	18	5,245	0	5,245	10,198	1.9
24 - 25	18	2	11.11	16	16	0	5,245	583	4,662	4,954	.9

- 1. Age refers to program time from enrollment to termination, or the end of year 2.
- 2. Onset is the number of households within a given case-age group who are exposed to the risk of termination at that time.
  - 3.  $d_x$  = number of terminations with age x at termination.
- 4.  $q_x = d_x$ /onset, the probability of termination within a given age interval. This termination rate is equivalent to a "death rate" in demography.
  - 5.  $l_x$  = the number of enrollees remaining after terminations within an age group.
- 6.  $C_x$  = the number of persons still enrolled at the end of year 2 with age x.
  7.  $l_x C_x$  = the number of households exposed to the risk of termination in the x + 1 age interval.
- 8.  $l_x'$  = a large round number starting enrollment at the same time, to which the agespecific termination rates  $(q_x)$  are applied. Using such a hypothetical case removes the effect of persons entering the enrollment process at different times.
- 9.  $d_x' = (q_x \times l_x') =$  number of predicted terminations at age x. 10.  $L_x = l_x' d_x' =$  number of enrollees remaining at age x (also the number of months "lived" between age x and x + 1). 11.  $I_x =$  total years lived after program age x. It equals  $L_x$  plus  $.5d_x'$  summed from
- x = n to x = 1. Thus for the last age interval, it is the sum of all "survivors" in month 25 (who "lived" one month to the end of year 2) plus one-half of the terminations. The assumption is that terminations are spread evenly throughout the month, so that the average amount of time "lived" in the age interval is one-half month.
- 12.  $e_x$  = the case-age specific program "life expectancy."  $(T_x \div l_x')$ . Since our information extends only to the end of year 2, the life expectancy becomes very short by the twentyfifth month.

Table B.32

RESIDENTIAL MOBILITY BY LIFE-CYCLE STAGE FOR ELIGIBLES
AT BASELINE AND WAVE 2: BROWN COUNTY

	Eligi	ble at Base	line	Elig	ible at Wav	e 2
Stage in Life Cycle	Total Eligible	Number Moved in Preceding Year	Percent Moved	Total Eligible	Number Moved in Preceding Year	Percent Moved
Young single, no children Young couple,		<del></del> ·				
no children	343	298	87.1	221	178	80.5
Young couple, young children	1,809	759	41.9	952	386	40.6
Young couple, older children	224	$14^{a}$	(a)	91	34 <sup>a</sup>	(a)
Older couple, older children	509	9 <sup>a</sup>	(a)	168	12 <sup>a</sup>	(a)
Older couple, no children	101 <sup>a</sup>	26 <sup>a</sup>	(a)	76 <sup>a</sup>	$5^{\alpha}$	(a)
Older single, no children Single head	99 <sup>a</sup>	6 <sup>a</sup>	(a)			
with children	1,498	557	37.2	1,828	654	35.8
Elderly couple Elderly single All other	1,344 2,008 28 <sup>a</sup>	83 167 	6.2 8.3 	1,484 2,276 	60 <sup>a</sup> 106 	(a) 4.7 
All stages	7,963	1,919	24.1	7,096	1,435	20.2

SOURCE: Survey of households, Site I, baseline and wave 2.

NOTE: See Appendix A for a description of the data base and definitions of terms.

aEstimate is based on less than 10 survey records and rates are not calculated for such small samples.

Table B.33

ONE-YEAR TURNOVER RATES FOR HOUSEHOLDS CHANGING ELIGIBILITY STATUS
BETWEEN SURVEY WAVES BY LIFE-CYCLE STAGE AT BASELINE:
BROWN COUNTY, 1974-75

		holds Beco ble Betwee	-	i	Households Becoming Eligible Between Waves			
Stage in Life Cycle at Baseline	Number Eligible at Both Waves	Number Eligible at Baseline Only	Turnover Rate <sup>a</sup> (%)	Number Ineligible at Both Waves	Number Eligible at Wave 2 Only	Turnover Rate <sup>b</sup> (%)		
Young single,				174	5	2.8		
Young couple,		- <del></del>	ļ <b></b>	1/4	5	2.0		
no children	7	8	53.3	142	2	1.4		
Young couple,	'	Ĭ	33.3	1		1		
young children	43	38	46.9	229	5	2.1		
Young couple,					_			
older children	5	9	64.3	74	3	3.9		
Older couple,	[					1		
older children	9	8	47.1	76	0	0.0		
Older couple,						-		
no children	5	3	37.5	53	1	1.8		
Older single,								
no children	0	5	100.0	67	6	8.2		
Single head								
with children	79	10	11.2	18	6	25.0		
Elderly couple	33	7	17.5	43	7	14.0		
Elderly single	84	6	6.7	22	7	24.1		
All other	0	0		0	0			
All stages	265	94	26.2	898	42	4.5		

SOURCE: Survey of households, Site I, baseline and wave 2.

 $<sup>^{\</sup>alpha}{\rm Number}$  of households becoming ineligible between waves as a percentage of all households eligible at baseline.

 $<sup>^</sup>b$ Number of households becoming eligible between waves as a percentage of all households ineligible at baseline.

Table B.34

ONE-YEAR TURNOVER RATES FOR HOUSEHOLDS CHANGING ELIGIBILITY STATUS
BETWEEN SURVEY WAVES BY AGE OF HOUSEHOLD HEAD
AND TENURE: BROWN COUNTY, 1974-75

		holds Beco ble Betwee	_	Households Becoming Eligible Between Waves			
Age of Head and Tenure at Baseline	Number Eligible at Both Waves	Number Eligible at Baseline Only	Turnover Rate <sup>a</sup> (%)	Number Ineligible at Both Waves	Number Eligible at Wave 2 Only	Turnover Rate <sup>b</sup> (%)	
Owners Nonelderly Elderly All ages	10	18	64.3	279	4	1.4	
	38	8	17.4	33	7	17.5	
	48	26	35.1	312	11	3.4	
Renters Nonelderly Elderly All ages	138	63	31.3	554	24	4.2	
	79	5	6.0	32	7	18.0	
	217	68	23.9	586	31	5.0	

SOURCE: Survey of households, Site I, baseline and wave 2.

 $<sup>\</sup>alpha$ Number of households becoming ineligible between waves as a percentage of all households eligible at baseline.

 $<sup>^</sup>b {\tt Number}$  of households becoming eligible between waves as a percentage of all households ineligible at baseline.

Table B.35

ONE-YEAR TURNOVER RATES FOR HOUSEHOLDS CHANGING ELIGIBILITY STATUS
BETWEEN SURVEY WAVES BY ADJUSTED GROSS INCOME:
BROWN COUNTY, 1974-75

		holds Beco ble Betwee		Households Becoming Eligible Between Waves			
Adjusted Gross Income at Baseline (\$)	Number Eligible at Both Waves	Number Eligible at Baseline Only	Turnover Rate <sup>a</sup> (%)	Number Ineligible at Both Waves	Number Eligible at Wave 2 Only	Turnover Rate <sup>b</sup> (%)	
Under 1,000 1,000 - 1,999 2,000 - 2,999	14 41 76	0 7 8	0.0 14.6 9.5	3 15 15	1 1 4	25.0 6.2 21.0	
3,000 - 3,999 4,000 - 4,999	54 31	13 21	19.4 40.4	29 18	4 3	12.1	
5,000 - 5,999 6,000 - 6,999	22 23	17 17	43.6 42.5	38 42	9 2	19.2 4.6	
7,000 - 7,999 8,000 - 8,999 9,000 - 9,999	3	6 5	66.7 83.3	71 90 102	3 3	4.0 3.2 1.0	
10,000 - 10,999 11,000 - 11,999				102 107 81	2 1	1.8 1.2	
12,000 + All amounts	265	94	26.2	287 898	8	2.7 4.5	

SOURCE: Survey of households, Site I, baseline and wave 2.

 $<sup>\</sup>alpha$ Number of households becoming ineligible between waves as a percentage of all households eligible at baseline.

bNumber of households becoming eligible between waves as a percentage of all households ineligible at baseline.

## Appendix C

## SUPPLEMENTARY TABULATIONS FOR ST. JOSEPH COUNTY

- C.1. Number of Households by Life-Cycle Stage and Tenure: St. Joseph County, 1975
- C.2. Number of Households by Gross Income and Household Size: St. Joseph County, 1975
- C.3. Average Gross Income and Sources by Life-Cycle Stage: Households in St. Joseph County, 1975
- C.4. Housing Expense vs. Gross Income by Life-Cycle Stage: Homeowners and Renters in St. Joseph County, 1975
- C.5. Housing Expense vs. Adjusted Gross Income by Life-Cycle Stage: Homeowners and Renters in St. Joseph County, 1975
- C.6. Number of Households by Race and Life-Cycle Stage: St. Joseph County, 1975
- C.7. Number of Eligible Households by Life-Cycle Stage and Tenure: St. Joseph County, 1975
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- C.25. Comparison of First- and Second-Year Terminees by Income and Age of Head: St. Joseph County
- C.26. Comparison of First- and Second-Year Terminees by Income Source: St. Joseph County
- C.27. Reasons for Termination: St. Joseph County, Years 1 and 2
- C.28. Termination Rates by Life-Cycle Stage and Tenure: St. Joseph County, Year 2
- C.29. Termination Rates by Allowance Entitlement: St. Joseph County, Year 2
- C.30. Termination Rates by Major Income Source: St. Joseph County, Year 2
- C.31. Probability of Termination and Program Life Expectancy by Program Age for First-Time Enrollees: St. Joseph County, Years 1 and 2
- C.32. Termination Rates by Race: St. Joseph County, Year 2

Table C.1

NUMBER OF HOUSEHOLDS BY LIFE-CYCLE STAGE
AND TENURE: ST. JOSEPH COUNTY, 1975

Stoop in	Number of Households by Tenure				
Stage in Life Cycle	Owners	Renters	Total		
Young single, no children Young couple, no children Young couple, young children Young couple, older children Older couple, older children Older couple, no children Older single, no children Single head with children Elderly couple Elderly single All other	3,382 4,122 11,112 8,036 5,265 5,961 4,134 2,685 6,382 5,999 155	4,813 2,358 2,768 567 245 346 1,000 2,861 630 1,463 52 <sup>a</sup>	8,195 6,480 13,880 8,603 5,510 6,307 5,134 5,546 7,012 7,462 207		
All stages	57,233	17,103	74,336		

SOURCE: Survey of households, Site II, baseline.
NOTE: See Appendix A for a description of the
data base and definitions of terms.

<sup>a</sup>Estimate is based on less than 10 survey records.

Table C.2 NUMBER OF HOUSEHOLDS BY GROSS INCOME AND HOUSEHOLD SIZE: ST. JOSEPH COUNTY, 1975

	Number of Households by Size							
Gross Income (\$) in 1974	1 Person	2 Persons	3-4 Persons	5-6 Persons	7+ Persons	All Sizes		
Under 1,000 1,000 - 1,999 2,000 - 2,999 3,000 - 3,999 4,000 - 4,999 5,000 - 5,999 6,000 - 6,999 7,000 - 7,999 8,000 - 8,999 9,000 - 9,999 10,000 - 10,999 11,000 - 11,999 12,000 - 12,999 13,000 - 13,999 14,000 - 14,999 15,000 - 15,999 16,000 - 16,999 17,000 - 17,999 18,000 - 18,999 19,000 - 20,999 21,000 - 21,999 22,000 - 22,999 23,000 + All amounts	995 1,126 2,020 1,754 1,858 1,112 876 810 782 550 1,120 748 819 324 506 521 112a 98a 11a 77a 93a 125a 12a 181 16,630	266 267 1,183 1,136 1,599 1,331 1,320 1,424 1,315 648 1,218 1,045 1,751 420 297 989 919 306 734 483 <sup>a</sup> 721 98 <sup>a</sup> 47 <sup>a</sup> 1,932 21,449	99 644 320 646 218 947 778 765 740 1,458 1,815 899 3,088 1,362 1,345 1,786 1,342 501 1,094 794 612a 546a 83a 1,624 23,506	18 88 256 207 72 429 280 354 253 746 352 390 371 490 660 1,797 1,073 529 188 469 180 19 920 10,141	60a 41a 30a 56a 98a 459a 38a 123a 90a 83a 328a 202a 35a 90a 447a 9 22a 370a 370a 7 2,610	1,378 2,125 3,839 3,784 3,777 3,875 3,352 3,812 3,128 3,525 4,595 3,165 6,357 2,798 2,843 5,183 3,893 1,443 2,027 1,823 1,628 810 512 4,664 74,336		
Median amount	5,500	10,000	12,500	15,000	12,320	10,900		

SOURCE: Survey of households, Site II, baseline.
NOTE: See Appendix A for a description of the data base and definitions of terms.

 $<sup>\</sup>alpha_{\rm Estimate}$  is based on less than 10 survey records.

Table C.3

AVERAGE GROSS INCOME AND SOURCES BY LIFE-CYCLE STAGE: HOUSEHOLDS IN ST. JOSEPH COUNTY, 1975

		Percent of All Gross Income Received from						
Stage in Life Cycle	Average Gross Income (\$) in 1973	Wages and Salaries	Interest and Dividends	Pensions and Social Security	Unemploy- ment Com- pensation	1 ~	Other Source	All Sources
Young single, no children	9,358	86.3	1.6	2.0	0.5	0.0	9.6	100.0
Young couple, no children	14,440	94.1	0.6	0.8	0.4		4.1	100.0
Young couple, young children	14,154	77.8	5.3	0.6	2.5	0.2	13.7	100.0
Young couple, older children	14,621	97.1	0.2	0.4	0.3	0.1	1.9	100.0
Older couple, older children	15,779	95.1	1.4	0.4	0.2	0.6	2.2	100.0
Older couple, no children	17,829	93.9	1.5	0.7	0.1		3.7	100.0
Older single, no children	8,537	81.9	6.2	8.3	1.0	0.0	2.6	100.0
Single head with children	6,841	64.7	0.1	4.9	0.7	9.7	20.0	100.0
Elderly couple	8,577	43.5	2.8	45.2	0.2	0.2	8.0	100.0
Elderly single	4,143,	35.4	5.0	56.8	0.0	<b> </b>	2.8	100.0
All other	5,655 <sup>b</sup>	14.8	0.7	77.4	0.1	3.5	3.5	100.0
All stages	11,648	83.2	2.2	7.0	0.7	0.6	6.3	100.0

NOTE: See Appendix A for a description of the data base and definitions of terms. Percentages may not add to 100 because of rounding.

<sup>&</sup>lt;sup>a</sup>Aid to Families with Dependent Children.

 $<sup>^{</sup>b}{
m Estimate}$  is based on less than 10 survey records.

Table C.4

HOUSING EXPENSE VS. GROSS INCOME BY LIFE-CYCLE STAGE:
HOMEOWNERS AND RENTERS IN ST. JOSEPH COUNTY, 1975

	Expens	ses and I	Median Ratio of Expense to Income (%)			
Changing in	Median Housing Expense (\$)				Median Gross Income (\$)	
Stage in Life Cycle	Owners	Renters	Owners	Renters	Owners	Renters
Young single, no children Young couple, no children Young couple, young children Young couple, older children Older couple, older children Older couple, no children Older single, no children Single head with children Elderly couple Elderly single All other	1,964 3,830 2,885 2,886 2,313 2,622 1,767 2,073 1,794 1,584	1,566 1,767 1,804 1,873 1,785 1,764 1,334 1,689 1,566 1,148 1,799	12,511 16,501 13,000 15,000 15,015 15,002 9,805 7,189 7,563 3,167	7,500 10,000 9,250 10,000 10,424 10,200 5,960 3,996 6,988 2,796 2,453a	23.4 20.2 19.7 21.6 15.5 19.0 20.9 29.7 23.4 52.9	21.8 17.2 20.7 16.8 16.2 19.3 26.5 38.7 27.4 38.0 (b)
All stages	2,428	1,626	12,500	7,000	22.3	22.9

 $<sup>^{\</sup>alpha}\mbox{Estimate}$  is based on less than 10 survey records.

 $<sup>^{</sup>b}$ Ratio is not calculated because of small sample.

Table C.5

HOUSING EXPENSE VS. ADJUSTED GROSS INCOME BY LIFE-CYCLE STAGE:
HOMEOWNERS AND RENTERS IN ST. JOSEPH COUNTY, 1975

	Expen	ses and I	Maddan I			
Character in	Median Housing Expense (\$)		Median Adjusted Gross Income (\$)		Median Ratio of Expense to Income (%)	
Stage in Life Cycle	Owners	Renters	Owners	Renters	Owners	Renters
Young single, no children Young couple, no children Young couple, young children Young couple, older children Older couple, older children Older couple, no children Older single, no children Single head with children Elderly couple Elderly single All other	1,964 3,830 2,885 2,886 2,313 2,622 1,767 2,073 1,794 1,584	1,566 1,767 1,804 1,873 1,785 1,764 1,334 1,689 1,566 1,148 1,799	9,784 15,081 11,275 13,051 13,349 14,252 8,715 5,500 6,781 2,725	6,859 9,484 8,087 8 475 9,548 9,690 5,225 2,702 6,027 2,517 1,201	28,5 21.8 23.4 24.8 18.7 19.9 22.7 35.1 26.0 61.8	23.5 18.1 24.2 18.7 18.0 21.0 27.9 53.4 30.4 42.2 (b)
All stages	2,428	1,626	11,162	6,222	25.0	26.1

 $<sup>^{</sup>lpha}\mathrm{Estimate}$  is based on less than 10 survey records.

 $<sup>^{</sup>b}$ Ratio is not calculated because of small sample.

Table C.6

NUMBER OF HOUSEHOLDS BY RACE AND LIFECYCLE STAGE: ST. JOSEPH COUNTY, 1975

	Number of Households by Race of Head				
Stage in Life Cycle	White, Non-Spanish	Black	All Other	Total	
Young single, no children Young couple, no children Young couple, young children Young couple, older children Older couple, older children Older couple, no children Older single, no children Single head with children Elderly couple Elderly single All other	7,186 6,147 12,194 8,347 4,732 5,285 4,447 3,817 6,653 7,057 170	850 222 1,347 236 680 649 606 1,704 359 405 37 <sup>a</sup>	159 111 339 20 <sup>a</sup> 98 <sup>a</sup> 373 <sup>a</sup> 81 <sup>a</sup> 25 <sup>a</sup>	8,195 6,480 13,880 8,603 5,510 6,307 5,134 5,546 7,012 7,462 207	
All stages	66,035	7,095	1,206	74,336	

 $<sup>\</sup>alpha$ Estimate is based on less than 10 survey records.

Table C.7

NUMBER OF ELIGIBLE HOUSEHOLDS BY LIFE-CYCLE STAGE
AND TENURE: ST. JOSEPH COUNTY, 1975

Stone in	Number of Households by Tenure				
Stage in Life Cycle	0wners	Renters	Total		
Young single, no children Young couple, no children Young couple, young children Young couple, older children Older couple, older children Older couple, no children Older single, no children Single head with children Elderly couple Elderly single All other	524 <sup>a</sup>	430 845 160 67 <sup>a</sup> 46 <sup>a</sup> 36 <sup>a</sup> 1,708 258 1,057 38 <sup>a</sup>	 620 1,977 684 389 91 <sup>a</sup> 217 <sup>a</sup> 3,048 3,101 5,282 171 <sup>a</sup>		
All stages	10,935	4,645	15,580		

SOURCE: Survey of households, Site II, baseline.
NOTE: See Appendix A for a description of the
data base and definitions of terms.

 $<sup>\</sup>alpha$ Estimate is based on less than 10 survey records.

Table C.8

NUMBER OF ELIGIBLE HOUSEHOLDS BY GROSS INCOME AND HOUSEHOLD SIZE: ST. JOSEPH COUNTY, 1975

		Number of Households by Size								
Gross Income (\$) in 1974	l Person	2 Persons	3-4 Persons	5-6 Persons	7+ Persons	All Sizes				
Under 1,000 1,000 - 1,999 2,000 - 2,999 3,000 - 3,999 4,000 - 4,999 5,000 - 5,999 6,000 - 6,999 7,000 - 7,999 8,000 - 8,999 9,000 - 9,999 10,000 - 10,999 11,000 - 11,999 12,000 + All amounts	633 767 1,585 1,171 454      4,610	226 223 1,009 956 1,408 950 559    5,331	95 555 269 584 185 774 715 258 17 <i>a</i> 4 <i>a</i> 6	11a 81a 215a 131 58a 59a 252 336 140a 7a  77a 1,367	 42 <sup>a</sup> 24 <sup>a</sup> 30 <sup>a</sup> 42 <sup>a</sup> 84 <sup>a</sup> 453 <sup>a</sup> 38 <sup>a</sup> 96 <sup>a</sup>   810	965 1,626 3,120 2,866 2,135 1,825 1,610 1,047 195 107 <sup>a</sup> 6 <sup>a</sup> 77 <sup>a</sup> 15,580				
Median amount	2,568	4,266	5,000	6,416	7,870	3,532				

 $<sup>^{</sup>a}\mathrm{Estimate}$  is based on less than 10 survey records.

Table C.9

NUMBER OF ELIGIBLE HOUSEHOLDS BY MONTHLY ALLOWANCE ENTITLEMENT
AND HOUSEHOLD SIZE: ST. JOSEPH COUNTY, 1975

	Size of Household							
Allowance Entitlement (\$)	1 Person	2 Persons	3-4 Persons	5-6 Persons	7+ Persons	All Sizes		
10 - 19 20 - 29 30 - 39 40 - 49 50 - 59 60 - 69 70 - 79 80 - 89 90 - 99 100 - 109 110 - 119 120 - 139 140 - 159 160 + All amounts	408 360 408 928 891 649 333 97 537 4,611	860 344 1,108 466 343 615 403 714 172 79 <sup>a</sup> 195 <sup>a</sup> 32 <sup>a</sup> 	405 216 290 203 548 174 93 <sup>a</sup> 130 483 125 271 434 91 <sup>a</sup> 3,463	13 <sup>a</sup> 191 <sup>a</sup> 131 <sup>a</sup> 156 125 <sup>a</sup> 51 <sup>a</sup> 185 <sup>a</sup> 24 <sup>a</sup> 45 <sup>a</sup> 40 <sup>a</sup> 54 <sup>a</sup> 244 111 <sup>a</sup> 1,370	7 <sup>a</sup> 82 <sup>a</sup> 23 <sup>a</sup> 6 <sup>a</sup> 383 <sup>a</sup> 77 <sup>a</sup> 7 <sup>a</sup> 13 <sup>a</sup> 83 <sup>a</sup> 36 <sup>a</sup> 34 <sup>a</sup> 7 <sup>a</sup> 40 <sup>a</sup> 805	1,693 1,193 1,960 1,759 2,290 1,566 1,021 972 1,250 327 556 744 209 40 <sup>a</sup>		
Median amount	52	46	65	72	52	53		

 $<sup>\</sup>alpha$ Estimate is based on less than 10 survey records.

	A		Percent o	f All Gross	Income Receive	d from	:		
Stage in Life Cycle	Average Gross Income (\$) in 1974	Wages and Salaries	Interest and Dividends	Pensions and Social Security	Unemployment Compensation	${\tt AFDC}^a$	Other Source	All Sources	
Young single, no children									
Young couple, no children	4,128	88.0	1.1	1.0	3.0		6.8	100.0	
Young couple, young children	5,481	90.9	0.2	0.9	1.9	0.8	5.3	100.0	
Young couple, older children	7,070	95.0	0.0	0.3	0.5	0.3	4.0	100.0	
Older couple, older children	5,686	84.2	0.0	1.2		1.8	12.8	100.0	
Older couple, no children	4 ,718 b	61.7	0.2	28.2	0.6		9.3	100.0	<u>:</u> 13
Older single, no children	3,029 <sup>b</sup>	29.3		46.2	9.3	0.5	14.6	100.0	ξ
Single head with children	4,226	60.9	0.2	2.6	0.8	21.8	13.7	100.0	•
Elderly couple	4,254	5.4	2.3	86.2	0.0	0.2	5.9	100.0	
Elderly single	2,527,	7.8	3.6	83.7			4.8	100.0	
All other	3,687 <sup>b</sup>	10.0		81.4	0.2	2.6	5.8	100.0	
All stages	3,952	46.6	1.4	39.0	0.8	4.9	7.2	100.0	

SOURCE: Survey of households, Site II, baseline.

NOTE: See Appendix A for a description of the data base and definitions of terms. Percentages may not add to 100 because of rounding.

 $<sup>^{</sup>lpha}$ Aid to Families with Dependent Children.

bEstimate is based on less than 10 survey records.

Table C.11

HOUSING EXPENSE VS. ADJUSTED GROSS INCOME BY LIFE-CYCLE STAGE:
ELIGIBLE OWNERS AND RENTERS IN ST. JOSEPH COUNTY, 1975

	Expens	ses and 1	Incomes in	n 1974	Median Ratio of Expense to Income (%)		
Stage in	Median H Expense		Median A	Adjusted come (S)			
Life Cycle	Owners	Renters	Owners	Renters	Owners	Renters	
Young single, no children							
Young couple, no children	3,945 <sup>a</sup>	1,563	3,590 <sup>a</sup>	4,053	(b)	37.9	
Young couple, young children	4,172 <sup>a</sup>	1,690	4,236 <sup>a</sup>	4,550	(b)	37.3	
Young couple, older children	2,880 <sup>a</sup>	1,324	5,412 <sup>a</sup>	4,837	(b)	38.8	
Older couple, older children	2,391 <sup>a</sup>	1,868	2,534 <sup>a</sup>	5,431	(b)	(b)	
Older couple, no children	1,464 <sup>a</sup>	1,570	5,225 <sup>a</sup>	4,996	(b)	(b)	
Older single, no children Single head	1,094 <sup>a</sup>	1,837	464 <sup>a</sup>	3,994	(b)	(b)	
with children Elderly couple Elderly single	2,055 1,769 1,562	1,725 1,738 1,140	4,448 4,359 2,362	2,166 3,240 2,309	45.9 47.6 64.0	78.3 40.9 45.5	
All other		2,002		2,054		(b)	
All stages	1,865	1,584	3,429	2,880	57.6	49.6	

SOURCE: Survey of households, Site II, baseline.

NOTE: See Appendix A for a description of the data base and definitions of terms.

 $<sup>\</sup>alpha$ Estimate is based on less than 10 survey records.

 $<sup>^{</sup>b}\mathbf{Ratio}$  is not calculated because of small sample.

Table C.12

NUMBER OF ELIGIBLE HOUSEHOLDS BY LIFE-CYCLE STAGE AND RACE: ST, JOSEPH COUNTY, 1975

	Number of Households by Race			
Stage in Life Cycle	White	Black	All Other	
Young single, no children Young couple, no children Young couple, young children Young couple, older children Older couple, older children Older couple, no children Older single, no children Single head with children Elderly couple Elderly single All other	 440 1,381 656 187 <sup>a</sup> 91 <sup>a</sup> 127 <sup>a</sup> 2,045 2,919 4,971 145 <sup>a</sup>	0	 56 <sup>a</sup> 94 13 <sup>a</sup> 21 <sup>a</sup> 0 0 24 <sup>a</sup> 0 0	
All stages	12,962	2,410	208	

SOURCE: Survey of households, Site II, baseline.
NOTE: See Appendix A for a description of the
data base and definitions of terms.

 $<sup>^{\</sup>ensuremath{\alpha}}\xspace$  Estimate is based on less than 10 survey records.

Table C.13

# NONELDERLY SINGLES NOW ELIGIBLE BY AGE OF HEAD AND TENURE: ST. JOSEPH COUNTY, 1975

	Number of Households by Tenure						
Age of Head	Owners Renters Total						
Under 30 years 30 - 39 40 - 49 50 - 61	161 <sup>a</sup> a 523 <sup>a</sup> 714 <sup>a</sup>	1,242 108 122 288	1,403 108 645 1,002				
All ages	1,398	1,760	3,158				

SOURCE: Survey of households, Site II, baseline.

NOTE: See Appendix A for a description of the data base and definitions of terms.

aEstimate is based on less than 10 survey records.

Table C.14

ENROLLMENT RATES BY LIFE-CYCLE STAGE AND TENURE:
ST. JOSEPH COUNTY, YEAR 2

			<u> </u>			
		0wners			Renters	
Stage in Life Cycle	Number Eligible	Number Enrolled	Enrollment Rate (%)	Number Eligible	Number Enrolled	Enrollment Rate (%)
Young single, no children		22			81	
Young couple, no children	190 <sup>b</sup>	22	(b)	430	92	21.4
Young couple, young children	1,132	177	15.6	845	278	32.9
Young couple, older children	524 <sup>b</sup>	77	(b)	160	55	34.4
Older couple, older children	322 <sup>b</sup>	68	(b)	67 <sup>b</sup>	27	(b)
Older couple, no children	45 <sup>b</sup>	56	(b)	46 <sup><i>b</i></sup>	23	(b)
Older single, no children Single head	181 <sup>b</sup>	127	(b)	36 <sup>b</sup>	128	(b)
with children	1,340	556	41.5	1,708	1,388	81.3
Elderly couple Elderly single All other	2,843 4,225 133 <sup>b</sup>	451 1,151 48	15.9 27.2 (b)	258 1,057 38 <sup>b</sup>	57 393 7	22.1 37.2 (b)
All stages	10,935	2,755	25.2	4,645	2,529	54.4

SOURCE: Survey of households, Site II, baseline, and HAO administrative records. NOTE: See Appendix A for a description of the data base and definitions of terms.

aRate is not calculated because the surveys do not identify nonelderly singles who are eligible by reason of being disabled or displaced by public action.

 $<sup>^</sup>b$ Estimate is based on less than 10 survey records and rates are not calculated for such small samples.

Table C.15

ENROLLMENT RATES BY ADJUSTED GROSS INCOME:
ST. JOSEPH COUNTY, YEAR 2

Adjusted Gross	Number	Number	Enrollment
Income (\$)	Eligible	Enrolled	Rate (%)
Under 1,000	1,382	494	35.8
1,000 - 1,999	2,425	1,118	46.1
2,000 - 2,999	3,942	1,317	33.4
3,000 - 3,999	2,003	1,065	53.2
4,000 - 4,999	2,866	697	24.3
5,000 - 5,999	2,111	420	19.9
6,000 - 6,999	756	140	18.5
7,000 +	95	33	(a)
All amounts	15,580	5,284	33.9

NOTE: See Appendix A for a description of the data base and definitions of terms.

 $\alpha_{\rm Estimate}$  is based on less than 10 survey records and rates are not calculated for such small samples.

Table C.16

ENROLLMENT RATES BY ALLOWANCE ENTITLEMENT:
ST. JOSEPH COUNTY, YEAR 2

Allowance	Number	Number	Enrollment
Entitlement (\$)	Eligible	Enrolled	Rate (%)
10 - 19 20 - 29 30 - 39 40 - 49 50 - 59 60 - 69 70 - 79 80 - 89 90 - 99 100 - 109 110 - 119	1,693	270	15.9
	1,193	395	33.1
	1,960	583	29.8
	1,759	647	36.8
	2,290	589	25.7
	1,566	523	33.4
	1,021	356	34.9
	972	290	29.8
	1,250	376	30.1
	327	327	100.0
	556	353	63.4
120 - 139	744	299	40.2
140 - 159	209	161	77.0
160 +	40 <sup>a</sup>	110	(a)

NOTE: See Appendix A for a description of the data base and definitions of terms.

 $<sup>^{\</sup>alpha}{\rm Estimate}$  is based on less than 10 survey records and rates are not calculated for such small samples.

 $<sup>^{</sup>b}\mathrm{Five}$  cases with missing data.

Table C.17

ENROLLMENT RATES BY MAJOR INCOME SOURCE:
ST. JOSEPH COUNTY, YEAR 2

Major Income Source	Number Eligible	Number Enrolled	Enrollment Rate (%)
Wages and salaries	5,721	1,058	18.5
Unemployment compensation	82 <sup>a</sup>	221	(a)
Pensions and social security	7,865	2,259	28.7
AFDC	851_	893	(b)
SSI	39 <sup>a</sup>	130	(a)
Interest and dividends	87 <sup>a</sup>	28	(a)
All other	441	356	80.7
No major source	494	339	68.6
All sources	15,580	5,284	33.9

NOTE: See Appendix A for a description of the data base and definitions of terms.

AFDC = Aid to Families with Dependent Children; SSI = supplemental security income.

 $<sup>^{\</sup>alpha}{\rm Estimate}$  is based on less than 10 survey records and rates are not calculated for such small samples.

 $<sup>^</sup>b\mathrm{Rate}$  exceeds 100, probably a reflection of an error in the original estimate.

Table C.18

ENROLLMENT RATES BY AGE OF HOUSEHOLD HEAD, TENURE, AND PERCENT OF INCOME SPENT ON HOUSING AT ENROLLMENT: ST. JOSEPH COUNTY, YEAR 2

	25	Percent or	Less	25 Pe	25 Percent to 50 Percent			More Than 50 Percent		
Age of Head	Number	Number	Enrollment	Number	Number	Enrollment	Number	Number	Enrollment	
and Tenure	Eligible	Enrolled	Rate (%)	Eligible	Enrolled	Rate (%)	Eligible	Enrolled	Rate (%)	
Owners Nonelderly Elderly All ages	135 <sup>a</sup>	85	(a)	1,341	520	38.6	2,389	548	22.9	
	226 <sup>a</sup>	110	(a)	2,410	1,005	41.7	4,432	487	11.0	
	361	195	54.0	3,751	1,525	40.7	6,821	1,035	15.2	
Renters Nonelderly Elderly All ages	278	252	90.6	1,333	439	32.9	1,718	1,388	80.7	
	114	26	22.8	655	165	25.2	547	259	47.4	
	392	278	70.9	1,988	604	30.4	2,265	1,647	72.7	

SOURCE: Survey of households, Site II, baseline, and HAO administrative records. NOTE: See Appendix A for a description of the data base and definitions of terms.

aEstimate is based on less than 10 survey records and rates are not calculated for such small samples.

Table C.19

ENROLLMENT RATES BY AGE OF HOUSEHOLD HEAD, TENURE, AND RACE:
ST. JOSEPH COUNTY, YEAR 2

				Race	of Househo	old Head			•	
		White			Black			All Other		
Age of Head and Tenure	Number Eligible	Number Enrolled	Enrollment Rate (%)	Number Eligible	Number Enrolled	Enrollment Rate (%)	Number Eligible	Number Enrolled	Enrollment Rate (%)	
Owners Nonelderly Elderly All ages	2,848 6,753 9,601	749 1,414 2,163	26.3 20.9 22.5	1,014 <sup>a</sup> 314 <sup>a</sup> 1,328	377 185 562	(a) (a) 42.3	6 <sup>a</sup> 0 6 <sup>a</sup>	27 3 30	(a)  (a)	
Renters Nonelderly Elderly All ages	2,223 1,137 3,360	1,121 389 1,510	50.4 34.2 44.9	905 178 1,083	885 57 942	97.8 32.0 87.0	202 0 202	73 4 77	36.1  38.1	

SOURCE: Survey of households, Site II, baseline, and HAO administrative records. NOTE: See Appendix A for a description of the data base and definitions of terms.

aEstimate is based on less than 10 survey records and rates are not calculated for such small samples.

Table C.20
ENROLLMENT RATES BY NEIGHBORHOOD:
ST. JOSEPH COUNTY, YEAR 2

Neighborhood	Number Eligible	Number Enrolled	Enrollment Rate (%)
Inner City I	1,689	986	58.4
Inner City II	5,471	1,943	35.5
South Bend fringe	1,734	828	47.8
Mishawaka	1,880	735	39.1
Suburbs	3,368	565	16.8
Rural county	1,071	227	21.2
Unknown	367		, <b></b> -
All neighborhoods	15,580	5,284	33.9

NOTE: See Appendix A for a description of the data base and definitions of terms.

Table C.21

COMPARISON OF FIRST- AND SECOND-YEAR ENROLLEES BY LIFE-CYCLE STAGE AND TENURE: ST. JOSEPH COUNTY

	Ĺ	Own	ers		Renters				
	Year 1		Year 2		Year 1		Year 2		
Stage in Life Cycle	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Young single,									
no children	24	1.3	12	0.7	55	3.0	74	4.0	
Young couple,									
no children	20	1.1	20	1.1	85	4.7	87	4.7	
Young couple,									
young children	190	10.4	165	9.1	287	15.9	250	13.6	
Young couple,									
older children	80	4.4	65	3.6	67	3.7	37	2.0	
Older couple,									
older children	66	3.6	50	2.8	28	1.5	18	1.0	
Older couple,	,,		1 , 2		21		1.0		
no children	41	2.2	42	2.3	21	1.2	18	1.0	
Older single,	79	4.3	78	4.3	66	3.6	95	5.2	
Single head	19	4.3	/ 0	4.3	00	3.0	95	3.2	
with children	452	24.7	337	18.7	964	53.3	946	51.4	
Elderly couple	241	13.2	284	15.7	36	2.0	36	2.0	
Elderly couple Elderly single	593	32.4	730	40.4	192	10.6	277	15.1	
All other	44	2.4	22	1.2	8	0.4	1	0.1	
All stages	1,830	100.0	1,805	100.0	1,809	100.0	1,839	100.0	

 ${\tt NOTE:}$  See Appendix A for a description of the data base and definitions of terms. Percentages may not add to 100 because of rounding.

Table C.22

COMPARISON OF FIRST- AND SECOND-YEAR ENROLLEES BY INCOME
AND AGE OF HEAD: ST. JOSEPH COUNTY

	N	onelderly	Enrolle	es	Elderly Enrollees			
Adjusted	Year 1		Yea	ear 2 Ye		r 1	Year 2	
Gross Income (\$)	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Under 1,000	405	15.7	407	17.6	12	1.1	19	1.4
1,000 - 1,999	595	23.1	518	22.4	154	14.5	180	13.6
2,000 - 2,999	440	17.1	374	16.1	408	38.4	443	33.4
3,000 - 3,999	392	15.2	363	15.7	268	25.2	391	29.5
4,000 - 4,999	340	13.2	277	12.0	148	13.9	205	15.4
5,000 - 5,999	267	10.4	248	10.7	60	5.6	78	5.9
6,000 - 6,999	115	4.5	102	4.4	12	1.2	10	0.8
7,000 - 7,999	23	0.9	28	1.2	l		1	0.1
8,000 +								
All amounts	2,577	100.0	2,317	100.0	1,062	100.0	1,327	100.0
Median amount	2,591		2,561		2,910		3,038	

NOTE: See Appendix A for a description of the data base and definitions of terms. Percentages may not add to 100 because of rounding.

Table C.23

COMPARISON OF FIRST- AND SECOND-YEAR ENROLLEES BY INCOME SOURCE: ST. JOSEPH COUNTY

		Year 1			Year 2			
Income Source $^{a}$	Number of Enrollees	Percent of All Year l Enrollees	Median Percent of Total Income	Number of Enrollees	Percent of All Year 2 Enrollees	Median Percent of Total Income		
Wages and salaries	1,050	28.8	99.8	924	25.4	99.8		
Unemployment compensation	291	8.0	100.0	201	5.5	100.0		
Pensions and social security	1,333	36.6	90.3	1,556	42.7	92.4		
AFDC	961	26.4	100.0	661	18.1	100.0		
SSI	246	6.8	30.0	238	6.5	42.9		
Interest and dividends	975	26.8	2.0	1,256	34.5	3.9		
All other	823	22.6	29.9	870	23.9	33.7		

NOTE: See Appendix A for a description of the data base and definitions of terms. AFDC = Aid to Families with Dependent Children; SSI = supplemental security income.

 $<sup>\</sup>alpha$ Sources from which households receive any income at enrollment. Few derive their income from a single source, so categories are neither mutually exclusive nor all-inclusive.

Table C.24

COMPARISON OF FIRST- AND SECOND-YEAR TERMINEES BY LIFE-CYCLE STAGE AND TENURE: ST. JOSEPH COUNTY

		Own	ers		Renters				
	Year 1		Yea	ır 2 Yea		r 1	Year 2		
Stage in Life Cycle	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Young single, no children Young couple,	0	0.0	16	1.8	3	6.1	49	4.0	
no children	0	0.0	19	2.1	2	4.1	85	6.9	
Young couple, young children	12	19.4	183	20.3	12	24.5	280	22.7	
Young couple, older children Older couple,	5	8.1	69	7.6	3	6.1	53	4.3	
older children Older couple,	0	0.0	51	5.6	0	0.0	20	1.6	
no children	0	0.0	28	3.1	1	2.0	16	1.3	
Older single, no children Single head	3	4.8	30	3.3	0	0.0	39	3.2	
with children	10	16.1	247	27.4	21	42.9	593	48.1	
Elderly couple	6	9.7	78	8.6	1	2.0	15	1.2	
Elderly single All other	22 4	35.5 6.4	167 15	18.5 1.7	6	12.2	81 3	6.6	
All stages	62	100.0	903	100.0	49	100.0	1,234	100.0	

NOTE: See Appendix A for a description of the data base and definitions of terms. Percentages may not add to 100 because of rounding.

Table C.25

COMPARISON OF FIRST- AND SECOND-YEAR TERMINEES BY INCOME AND AGE OF HEAD: ST. JOSEPH COUNTY

	N	onelderly	Termine	es		Elderly T	erminees	
Adjusted	Year 1		Yea	r 2	Yea	r 1	1 Year 2	
Gross Income (\$)	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Under 1,000	11	14.5	372	20.7	0		10	2.9
1,000 - 1,999	14	18.4	315	17.5	7	20.0	55	16.1
2,000 - 2,999	11	14.5	254	14.1	11	31.4	111	32.6
3,000 - 3,999	12	15.8	288	16.0	9	25.7	74	21.7
4,000 - 4,999	10	13.2	240	13.4	7	20.0	49	14.4
5,000 - 5,999	8	10.5	209	11.6	0		34	10.0
6,000 - 6,999	8	10.5	97	5.4	0		8	2.3
7,000 - 7,999	2	2.6	21	1.2	1	2.9		
8,000 +								
All amounts	76	100.0	1,796	100.0	35	100.0	341	100.0
Median amount	3,	3,162 2,816		2,9	2,995		2,938	

NOTE: See Appendix A for a description of the data base and definitions of terms. Percentages may not add to 100 because of rounding.

Table C.26

COMPARISON OF FIRST- AND SECOND-YEAR TERMINEES BY INCOME SOURCE: ST. JOSEPH COUNTY

	Year 1			Year 2			
Income Source <sup>a</sup>	Number of Enrollees	Percent of All Year l Terminees	Median Percent of Total Income	Number of Enrollees	Percent of All Year 2 Terminees	Median Percent of Total Income	
Wages and salaries	38	34.2	100.0	757	35.4	100.0	
Unemployment compensation	7	6.3	93.8	251	11.8	100.0	
Pensions and social security	44	39.6	79.4	466	21.8	89.9	
AFDC	20	18.0	69.9	502	23.5	100.0	
SSI	11	9.9	46.0	103	4.8	42.7	
Interest and dividends	34	30.6	1.8	420	19.6	1.0	
All others	29	26.1	25.0	476	22.3	37.1	

NOTE: See Appendix A for a description of the data base and definitions of terms. AFDC = Aid to Families with Dependent Children; SSI = supplemental security income.

 $<sup>\</sup>alpha$ Sources from which households receive any income at enrollment. Few derive their income from a single source, so categories are neither mutually exclusive nor all-inclusive.

Table C.27

REASONS FOR TERMINATION: ST. JOSEPH COUNTY, YEARS 1 AND 2

	Yea	r 1	Yea	r 2
Reason for Termination $^a$	Number	Percent	Number	Percent
Assets too high	1	0.9	3	0.1
Income too high	15	13.8	404	18.9
Household composition	2	1.8	21	1.0
Moved from program area	24	22.0	133	6.2
Moved to subsidized housing	9	8.3	42	2.0
Moved to nursing home	2	1.8	15	0.7
Failed to recertify	8	7.3	1,206	56.4
Failed to allow housing evaluation	1	0.9	2	0.1
Spent too little on housing expenses	1	0.9	32	1.5
Fraud	2	1.8	19	0.9
Death of household head	7	6.4	46	2.2
Administrative burden	4	3.7	9	0.4
Allowance too small	3	2.8	24	1.1
Failed housing evaluation; no move	6	5.5	28	1.3
No lease; no move	1	0.9	10	0.5
Confidentiality	1	0.9	. 5	0.2
Welfare image	2	1.8	1	0.0
Feels assistance not needed	9	8.3	63	2.9
Joined other assistance program	3	2.8	3	0.1
Could not identify reason	5	4.6	2	0.1
All other	3	2.8	69	3.2
Total $^b$	109	100.0	2,137	100.0

NOTE: See Appendix A for a description of the data base and definitions of terms. Percentages may not add to 100 because of rounding.

 $<sup>^{</sup>a}\mathrm{Multiple}$  reasons are coded as principal reason.

 $<sup>^</sup>b\mathrm{Reason}$  was missing for 2 cases in year 1.

Table C.28

TERMINATION RATES BY LIFE-CYCLE STAGE AND TENURE:
ST. JOSEPH COUNTY, YEAR 2

		Owners			Renters			
Stage in Life Cycle	Number Enrolled	Number Terminated	Termination Rate (%)	Number Enrolled	Number Terminated	Termination Rate (%)		
Young single,								
no children	22	14	38.9	81	48	37.2		
Young couple,				1		1.		
no children	22	18	45.0	92	80	46.5		
Young couple,		1						
young children	177	178	50.1	278	260	48.2		
Young couple,		(0)	16.0			, , , ,		
older children	77	68	46.9	55	49	47.1		
Older couple, older children	68	48	41.4	27	19	41.3		
Older couple,	00	40	41.4	27	19	41.3		
no children	56	27	32.5	23	16	41.0		
Older single,	]	-	32.3		1	41.0		
no children	127	30	19.1	128	33	20.5		
Single head								
with children	556	233	29.5	1,388	522	27.3		
Elderly couple	451	74	14.1	57	15	20.8		
Elderly single	1,151	173	13.1	393	77	16.2		
All other	48	18	27.3	7	2	22.2		
All stages	2,755	881	24.2	2,529	1,121	30.7		

NOTE: See Appendix A for a description of the data base and definitions of terms.

Table C.29

TERMINATION RATES BY ALLOWANCE ENTITLEMENT:
ST. JOSEPH COUNTY, YEAR 2

Allowance Entitlement (\$)	Number Enrolled	Number Terminated	Termination Rate (%)
10 - 19	270	136	33.5
20 - 29	395	147	27.1
30 - 39	583	195	25.1
40 - 49	647	177	21.5
50 - 59	589	173	22.7
60 - 69	523	172	24.8
70 - 79	356	115	24.4
80 - 89	290	120	29.3
90 - 99	376	139	27.0
100 - 109	327	127	28.0
110 - 119	353	147	29.4
120 - 139	299	162	35.1
140 - 159	161	139	46.3
160 +	110	51	31.7
All amounts	5,279 <sup>a</sup>	2,000 <sup>b</sup>	27.5

SOURCE: HAO administrative records, Site II.

NOTE: See Appendix A for a description of the data base and definitions of terms.

 $a_{
m Five\ cases\ missing\ allowance\ amount.}$ 

 $b_{\mbox{\scriptsize Two cases missing allowance amount.}}$ 

Table C.30

TERMINATION RATES BY MAJOR INCOME SOURCE: ST. JOSEPH COUNTY, YEAR 2

Major Income Source	Number Enrolled	Number Terminated	Termination Rate (%)
Wages and salaries	1,058	620	36.9
Unemployment compensation	221	209	48.6
Pensions and social security	2,259	392	14.8
AFDC	893	301	25.2
SSI	130	37	22.2
Interest and dividends	28	24	46.2
All other	356	182	33.8
No major source	339	.237	41.1
All sources	5,284	2,002	27.5

 $\ensuremath{\mathsf{NOTE}}\xspace$  See Appendix A for a description of the data base and definitions of terms.

AFDC = Aid to Families with Dependent Children; SSI = supplemental security income.

Table C.31 PROBABILITY OF TERMINATION AND PROGRAM LIFE EXPECTANCY BY PROGRAM AGE FOR FIRST-TIME ENROLLEES: ST. JOSEPH COUNTY, YEARS 1 AND 2

Age (mos.)	Onset	$d_x$	$q_x^{-(x)}$	$l_x$	$c_x$	$l_x - c_x$	l <sub>x</sub> '	$d_x$	$L_{x}$	$T_{\boldsymbol{x}}$	$e_x$
		<del> </del>	<i>u</i>	<del></del>					<del></del>	<del></del>	<del> </del>
0 - 1	7,283	17	.23	7,266	107	7,159	10,000	23	9,977	173,837	17.4
1 - 2	7,159	28	.39	7,131	385	6,749	9,977	39	9,938	163,848	16.4
2 - 3	6,746	50	.74	6,696	280	6,416	9,938	74	9,864	153,891	15.5
3 - 4	6,416	56	.87	6,360	253	6,107	9,864	86	9,778	143,990	14.6
4 - 5	6,107	53	.87	6,054	263	5,791	9,778	85	9,693	134,169	13.7
5 – 6	5,791	92	1.59	5,699	278	5,421	9,693	154	9,539	124,434	12.8
6 - 7	5,421	283	5.22	5,138	361	4,777	9,539	498	9,041	114,818	12.0
7 - 8	4,777	828	17.33	3,949	237	3,712	9,041	1,567	7,474	105,528	11.7
8 - 9	3,712	88	2.37	3,624	264	3,360	7,474	177	7,297	97,270	13.0
9 - 10	3,360	63	1.88	3,297	251	3,046	7,297	137	7,160	89,884	12.3
10 - 11	3,046	46	1.51	3,000	190	2,810	7,160	108	7,052	82,656	11.5
11 - 12	2,810	101	3.59	2,709	249	2,460	7,052	253	6,799	75,550	10.7
12 - 13	2,460	196	7.97	2,264	188	2,076	6,799	542	6,257	68,624	10.1
13 - 14	2,076	263	12.67	1,813	221	1,592	6,257	792	5,465	62,096	9.9
14 - 15	1,592	16	1.01	1,576	262	1,314	5,465	55	5,410	56,236	10.3
15 - 16	1,314	9	.68	1,305	286	1,019	5,410	37	5,373	50,798	9.4
16 - 17	1,019	4	.39	1,015	251	764	5,373	21	5,352	45,406	8.4
17 - 18	764	7	.92	757	251	506	5,352	49	5,303	40,044	7.5
18 - 19	506	14	2.77	492	153	339	5,303	147	5,156	34,716	6.5
19 - 20	339	16	4.72	323	122	201	5,156	243	4,913	29,487	5.7
20 - 21	201	1	.50	200	132	68	4,913	25	4,888	24,452	5.0
21 - 22	68	0	0	68	35	33	4,888	0	4,888	19,552	4.0
22 - 23	. 33	0	0	33	17	16	4,888	اة	4,888	14,664	3.0
23 - 24	16	Ō	Ö	16	15	1	4,888	Ö	4,888	9,776	2.0
24 - 25	1	0	Ö	1	1	ō	4,888	ŏ	4,888	4,888	1.0

- 1. Age refers to program time from enrollment to termination, or the end of year 2.
- 2. Onset is the number of households within a given case-age group who are exposed to the risk of termination at that time.
  - 3.  $d_x$  = number of terminations with age x at termination.
- 4.  $q_x = d_x/\text{onset}$ , the probability of termination within a given age interval. This termination rate is equivalent to a "death rate" in demography.
  - 5.  $l_x$  = the number of enrollees remaining after terminations within an age group.
  - 6.  $C_x$  = the number of persons still enrolled at the end of year 2 with age x.
- 7.  $l_x c_x$  = the number of households exposed to the risk of termination in the x + 1 age interval.
- 8.  $l_x{'}$  = a large round number starting enrollment at the same time, to which the age-specific termination rates  $(q_z)$  are applied. Using such a hypothetical case removes the effect of persons entering the enrollment process at different times.
- 9.  $d_{x}' = (q_{x} \times l_{x}') = \text{number of predicted terminations at age } x$ . 10.  $L_{x} = l_{x}' d_{x}' = \text{number of enrollees remaining at age } x$  (also the number of months "lived" between age  $\tilde{x}$  and x + 1).
- 11.  $T_x$  = total years lived after program age x. It equals  $L_x$  plus  $.5d_x$ ' summed from x = n to x = 1. Thus for the last age interval, it is the sum of all "survivors" in month 25 (who "lived" one month to the end of year 2) plus one-half of the terminations. The assumption is that terminations are spread evenly throughout the month, so that the average amount of time "lived" in the age interval is one-half month.
- 12.  $e_x$  = the case-age specific program "life expectancy."  $(T_x \div l_x')$ . Since our information extends only to the end of year 2, the life expectancy becomes very short by the twentyfifth month.

Table C.32

TERMINATION RATES BY RACE:
ST. JOSEPH COUNTY, YEAR 2

Race of	Number	Number	Termination
Household Head	Enrolled	Terminated	Rate (%)
White	3,673	1,237	25.2
Black	1,504	693	31.5
All other	107	72	40.2

SOURCE: HAO administrative records, Site II.
NOTE: See Appendix A for a description of the data base and definitions of terms.

#### Appendix D

## HOMEOWNER ELIGIBILITY ESTIMATES AND IMPUTED INCOME

To estimate the number of eligible households in each site, we applied the program's eligibility tests to individual records of the baseline survey of households, with one important exception. Whereas the HAOs include 5 percent of the value of a homeowner's equity in his gross annual income, we counted only cash income. Therefore, as noted in Sec. II, we presumably underestimated homeowner income and overestimated the number of eligible homeowners.

Subsequently, the relevant income calculations were made for those among the surveyed "regular" homeowners who provided all the information needed to estimate home equity (market value minus mortgage debt). The requisite data were available for 70 and 79 percent of the regular homeowner samples for Brown and St. Joseph counties, respectively. Here, we use those calculations to appraise the effect of the omitted data on eligibility estimates.

The issue is complicated enough to prevent clear conclusions in the appraisal below; adjusting homeowner eligibility estimates has therefore been deferred for a more definitive resolution. After the equity calculation and sampling problems have been considered, Table D.1 below compares estimates made under alternative assumptions.

#### ESTIMATING THE MARKET VALUE OF OWNER-OCCUPIED HOMES

In applying the general rule that 5 percent of equity should count as noncash income, the HAOs must calculate equity. For practicality, they accept equalized assessed value (which is a matter of public record) as a proxy for market value, and subtract from that amount the outstanding mortgage or land contract debt reported by the homeowner.

We have considerable evidence of underassessment in both sites.

HASE analysts compared the owner's estimate of market value to the

This category excludes residents of mobile homes. Throughout the main body of this note, however, mobile home residents were counted as homeowners.

equalized assessed value of all properties for which both figures are available. We find that urban properties in Brown County are assessed at about 78 percent of market value, rural properties about 93 percent. The assessment pattern is more complex in St. Joseph County, but South Bend's equalized assessments average about 62 percent of market value and Mishawaka's only about 48 percent. Consequently, the HAOs underestimate equity income and enroll some homeowners who would be ineligible if the test were a market-value appraisal.\*

Because owners' estimates of market value are also subject to error, we averaged them for each tax jurisdiction and compared each such average to that of assessed values for the same sample of dwellings. The ratio of the two averages was used to re-equalize assessed values independently of the official equalization. Next, for individual properties, we defined market value as the geometric average of the owner's estimate and the HASE-equalized assessed value. For each record with complete housing expense data, we then calculated owner's equity as the difference between market value and all outstanding debts for which the property was collateral.

Given the official underassessments, that accounting procedure characteristically assigns a larger value to owner's equity than would the HAOs'; some homeowners that we declare ineligible would thus be considered eligible by the HAO. Although in principle we could replicate the HAO calculations for those cases, we have not done so pending resolution of the sampling problems discussed below.

#### SAMPLE SIZES AND SAMPLING WEIGHTS

The homeowner eligibility estimates presented in Sec. II are based on records for all homeowners reporting income, assets, and family

<sup>\*</sup>The effect on allowance payments is relatively small. A home in South Bend that would sell for \$20,000 would typically be valued by the HAO at \$12,400. If added to gross income, 5 percent of the difference, or \$380, would reduce annual allowance payments by only about \$90 annually, approximately 15 percent of the current median allowance for homeowners.

<sup>\*\*</sup> The details of the accounting procedure will be discussed in Lawrence Helbers, Measuring Homeowner Needs for Housing Assistance, Appendix B. The appendix was omitted from the published document, but is forthcoming.

composition (sample A plus eligible mobile home residents). The calculation of imputed income to owner's equity, on the other hand, was limited to a smaller set of records—those that also gave the necessary housing expense data, including details of debt financing (sample B). The samples compare as follows:

Number of Records

	Brown	County	St. Jose	ph County
Component of Sample	Sample A	Sample B	Sample A	Sample B
All regular homeowners Eligible regular homeowners: Without imputing income to	743	633	520	426
equity With imputed income	142 <del></del>	99 84	117	92 85

The sample size reduction due to the elimination of records lacking adequate expense data necessitated reweighting sample B to represent the population from which both samples were drawn. As for sample A, weights for sample B were estimated by comparing record counts with known population totals by sampling stratum. For reasons not entirely clear at this writing, the weighting algorithm for sample B produced a substantially smaller estimate (16 percent) of the number of eligible regular homeowners in Brown County, even when imputed income was excluded from the eligibility test (see Table D.1). For St. Joseph County, the estimates differ by less than 1 percent. In both sites, disaggregation of eligibles by life-cycle stage yields further discrepancies, some considerable (up to 20 percent).

With samples of the sizes indicated in the last three columns of Table D.1, considerable sampling variation is expectable, but we find the discrepancies between what should be comparable numbers incredibly

For Brown County, the difference may be partly due to Helber's use of the more homogeneous panel stratum, instead of the baseline stratum used here. Slightly different population totals were also used, but since Helber's totals were the larger, that does not help explain the difference in eligibility estimates.

Table D.1

ALTERNATIVE ELIGIBILITY ESTIMATES FOR REGULAR HOMEOWNERS BY LIFE-CYCLE STAGE: BROWN AND ST. JOSEPH COUNTIES

	Estimated Number Eligible			Eligible Sample Size		
	Sample A Sample B		Sample A Samp		le B	
Life-Cycle Stage	Without Imputing   I		With Imputed Income $^{a}$	Without Imputing Income to Equity		With Imputed Income $^{\alpha}$
Brown County						
Young couple, young children Single head with children Elderly couple Elderly single All other All stages	860 432 1,051 1,055 708 4,106	725 <sub>b</sub> 331 862 845 670 3,433	540 <sub>b</sub> 173 <sup>b</sup> 644 715 642 2,714	30 12 39 39 22 142	20 7 29 29 14 99	18 6 22 25 13 84
St. Joseph County						
Young couple, young children Single head with children Elderly couple Elderly single All other All stages	1,074 1,282 2,843 4,046 1,278 10,523	1,138 <sup>b</sup> 1,352 3,324 3,362 1,402 10,578	948 <sup>b</sup> 969 3,142 3,188 1,374 9,621	10 15 31 44 17 117	6 13 27 36 10 92	5 12 25 34 9

SOURCE: Tabulated by HASE staff from baseline household survey records for each site.

NOTE: Sample A for each site comprises all records complete as to income, assets, and family composition. Sample B comprises records that are also complete as to housing expense. Because the samples were weighted independently, estimates of the eligible population by life-cycle stage differ even when income accounting is comparable. Different income accounting for sample B also yields different eligibility estimates.

Annual income includes 5 percent of the household's equity in its home, estimated as current market value less outstanding secured debt.

Estimate based on fewer than 10 survey records.

large. Until we reconcile the different samples, we cannot rely on either.

### ALTERNATIVE ESTIMATES OF ELIGIBILITY

Table D.1 shows how the estimated numbers of eligible homeowners vary when (a) estimated from different samples but using the same accounting rules, and (b) estimated from the same sample but using different accounting rules. Comparing the first two columns shows the "sample effect"; comparing cols. 2 and 3 shows the effect of income imputation.

Considering only the totals for each site, the estimates for Brown County range from 2,714 to 4,106 eligible homeowners; for St. Joseph County, from 9,621 to 10,578. In Brown County, changing either the sample or the accounting procedure significantly affects the estimates (16 and 21 percent reductions, respectively). In St. Joseph County, changing the sample has little effect (1 percent reduction) and changing the accounting procedure reduces the number of eligibles by only 9 percent. Since the HAOs' income test is considerably less stringent than ours (i.e., they systematically undervalue equity), we speculate that our failure to count imputed income in deriving the eligibility estimates used here leads to at least a 10 percent overestimate of the number of eligible homeowners in Brown County and perhaps a 5 percent overestimate in St. Joseph County. Those errors are swamped by the more troublesome sampling errors revealed by comparing entries in cols. 1 and 2.

If the number of eligible homeowners is smaller than we have specified, it follows that their enrollment rates are larger, as shown below. From that perspective also, therefore, the estimates for Brown County are much less reliable than those for St. Joseph County:

<sup>\*</sup>These enrollment rates are biased slightly upwards by the exclusion of mobile home residents from the denominator. Since the HAOs do not classify mobile home residents separately, they could not be excluded from the numerators. However, since only 97 and 413 such households are eligible in Brown and St. Joseph counties, respectively, we expect that few have enrolled and the effect is correspondingly insignificant.

# Enrollment Rate (%)

	Brown County	St. Joseph County
Sample A, without imputing		
income to equity	33	26
Sample B, without imputing		
income to equity	40	26
Sample B, with imputed		
income	50	29

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