EXPERIMENTING WITH HOUSING ALLOWANCES

EXECUTIVE SUMMARY

IRA S. LOWRY

R-2880-HUD
APRIL 1982

The Final Comprehensive Report
of the

HOUSING ASSISTANCE SUPPLY EXPERIMENT

Sponsored by

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

Rand
SANTA MONICA, CA. 90406

The research reported here was performed pursuant to Contract No. H-1789 with the Office of Policy Development and Research, U.S. Department of Housing and Urban Development.

Published by The Rand Corporation

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PREFACE

Findings of the Housing Assistance Supply Experiment, a 10-year research project conducted by Rand for the U.S. Department of Housing and Urban Development, are documented in over 60 interim reports and 7 final topical reports. The latter in turn have been condensed and integrated to form a comprehensive final report that contains several hundred pages of text and 130 tables and figures.[1]

Many people interested in the outcome of the experiment would prefer a briefer account, which is provided by the present volume. Its summary (pp. v-vii) presents the salient findings in the briefest possible form. The main text condenses the comprehensive final report to 64 pages and 31 tables and figures by omitting methodological explanations, subsidiary findings, and much of the statistical detail that is appropriate for a research report. In other words, this volume presents conclusions and interpretations without their supporting evidence. Interested readers can find full documentation in the main report and publications listed in the appendix.

Literally hundreds of people participated in planning, management, operations, data processing, and research for the Housing Assistance Supply Experiment during its 10-year existence. To the extent feasible, their contributions have been acknowledged by name in the main report; in this summary a general acknowledgment will have to serve, except for those who worked directly on the present volume: Gwen Shepherdson, who prepared most of the text and tables, and Jane Abelson, who supervised production.

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[1]The comprehensive final report, *Experimenting with Housing Allowances,* The Rand Corporation, R-2740-HUD, forthcoming, will be available to the public as a book.

SUMMARY

This report summarizes and interprets the findings of the Housing Assistance Supply Experiment conducted by Rand in two metropolitan housing markets between 1974 and 1980. The experiment was part of a broader effort by the U.S. Department of Housing and Urban Development (HUD) to test the concept of housing allowances as a method for delivering housing assistance to low-income households. The specific purpose of the Supply Experiment was to learn how a full-scale, "permanent" program would affect the housing markets and communities in which it operated.

The experiment was conducted in Brown County, Wisconsin, and St. Joseph County, Indiana, metropolitan housing markets centered on Green Bay and South Bend, respectively. The sites were chosen for contrast in market structure and condition. Green Bay had a "tight" market (low vacancy rates), undivided by racial segregation; South Bend had a "loose" housing market with a large segregated minority population and a considerable inventory of older, poorly maintained dwellings.

In each county, a 10-year allowance program was operated by a nonprofit housing allowance office (HAO) under contract to HUD and the local housing authority. During the first 5 years (the experimental period), enrollment was continuously open to all eligible households in the county. Low-income renters and homeowners were offered monthly cash payments, scaled to household size and income, that would enable them to afford adequate housing. To qualify for payments, enrollees had to find decent, safe, and sanitary dwellings on the private market and maintain those dwellings to specified standards. Their allowances enabled them to increase their housing expenditures as needed to obtain adequate housing; for those whose dwellings were already adequate, the allowance offset part of their housing expenses.

The HAOs dealt only with participating households, not landlords, builders, or mortgage lenders. The participants themselves were wholly responsible for finding their homes, negotiating rents and conditions of occupancy, and meeting their obligations to landlords, mortgage lenders, or other parties to their transactions. Participants could move or change tenure (renting or owning) without losing their allowance entitlements. Housing quality was checked by periodic inspections of participants' dwellings, and defects needing attention were reported to the participants; arranging for repairs was their responsibility.

The allowance program was monitored by Rand for five years in each site, during which time a total of 25,000 households enrolled and 20,000 received one or more payments. Rand also conducted annual surveys in each site addressed to the owners and occupants of a marketwide sample of residential properties, to learn how the respondents and properties were affected by the program. Joint analysis of program and survey data yield the following findings of fact:

- In the mature program, about a third of those who were currently eligible were currently receiving payments. The main reasons for nonparticipation were the small entitlements of those who were only marginally or briefly eligible; and the unwillingness of some whose dwellings were unacceptable to either repair them or move to better housing. The neediest were most likely to participate, but more of them would have participated in the absence of minimum housing standards. However, the standards did prompt considerable housing improvement, as noted below.

- About half of those who enrolled were then living in dwellings that did not meet the program's quality standards. Among those who had to repair or move in order to qualify for payments, about two-thirds did so and one-third dropped out. Overall, 80 percent of the enrollees eventually qualified for payments. Most of those who dropped out could have recovered repair costs from their first few allowance payments.
- Participation in the program increased the likelihood of occupying standard housing from about 50 to about 80 percent, and reduced preenrollment housing expense burdens from about 50 percent of gross income to about 30 percent. In addition to making required repairs, three-fourths of the owners voluntarily improved their dwellings each year and two-fifths of the renters moved to larger or better dwellings. However, the average participant increased his housing expenditures by only 8 percent over his estimated expenditures absent the program.
- Enrollees were able to meet program standards without much increase in expenditure because their housing defects were mostly minor health and safety hazards, rather than major structural defects or lack of basic domestic equipment. Repairs were generally made by the participants themselves, their friends, or their landlords, rather than by professional contractors. The average cost of repairing a failed dwelling was about $100, including an imputed wage for unpaid labor. Although allowances augmented the typical renter's income ($4,100) by about a fourth and the typical owner's income ($4,600) by a sixth, they chose to spend only a fifth of the extra money on housing. Thus, four-fifths of all allowance payments were allocated to nonhousing consumption.
- A full-scale open-enrollment allowance program had no perceptible effect on rents or property values in either a tight housing market (Green Bay) or a loose market (South Bend). One reason was that the program increased aggregate housing demand by less than 2 percent. Another was that it proved relatively easy and inexpensive to transform substandard to standard dwellings. When a renter joined the program without moving, his rent typically increased by less than 2 percent, even though his landlord may have made minor repairs to bring the dwelling up to program standards.
- The program had little effect on the physical appearance or social composition of residential neighborhoods. Even in neighborhoods where participants made up a fifth or more of all residents, the housing improvements were inconspicuous because program standards were not concerned with cosmetics. Though many renters moved, the origins and destinations of the moves were too diffuse to alter neighborhood populations. The degree of racial segregation did not change perceptibly because of the program.
- After three years of experience with the program, a majority of all household heads and 90 percent of all participants thought it was a "good idea." Landlords were less enthusiastic, but a majority of those whose tenants included recipients approved of the program. In general, the public approved of who got help, what the help was for, and how the program was run.
- The allowance programs in Green Bay and South Bend were administered by nonprofit corporations under the supervision of Rand and HUD. Hiring staff locally at prevailing wages, these housing allowance offices performed their functions promptly, equitably, and humanely at the surprisingly low cost of $163 per recipient-year. Many of the program's administrative features that contributed to this outcome are transferable to other federal programs.

Reflecting on the experimental evidence, and consulting available national data, we offer the following judgments about the effects of a national program that followed the same design as the experimental one:

- Some poor households live in inexpensive and inadequate dwellings; others are adequately housed by dint of spending half or more of their incomes for housing. Housing allowances are flexible enough to remedy whichever circumstances apply to a particular case, and can serve homeowners as easily as renters. Nationally, as well as in the experimental sites, budgetary relief is probably a higher priority for low-income households than is better housing.
- The public cost per assisted household would be far below that entailed in programs that build new housing for the poor; moreover, we estimate that 85 cents of each program dollar would directly benefit participants. A comparable estimate for the Section 8 Existing Housing program is 57 cents; for the federal public housing program, 34 cents; and for an income maintenance program with no housing requirements, 89 cents.
- At most, 10 percent of all households (half of those eligible) would participate in a permanent national program, at an average public cost of about $1,100 per recipient-year (1976 dollars), including administration. About 30 percent of the participants would occupy safer and more sanitary dwellings than they otherwise would, and all would be able to spend more for nonhousing consumption.
- We judge that a national housing allowance program would affect only participants and their housing; the broader community would be unaffected for good or ill. Specifically, we think that a program open to all low-income renters is not at all likely to cause significant rent increases for either participants or others, even in moderately tight housing markets. On the other hand, we do not think that a full-scale program would much alter the appearance or social composition of low-income neighborhoods, nor would it much expedite the residential integration of racial minorities.

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I. INTRODUCTION

The Housing Assistance Supply Experiment, conducted by The Rand Corporation under sponsorship of the U.S. Department of Housing and Urban Development (HUD), was a full-scale test in two metropolitan housing markets of a housing allowance program to help low-income families with their housing expenses. It is the largest, longest, and possibly the most complex "social experiment" ever conducted.

Between 1974 and 1980, over 25,000 households in Green Bay, Wisconsin, and South Bend, Indiana, enrolled in an experimental program that provided them with monthly cash payments on condition that they occupy decent, safe, and sanitary dwellings. The experiment was designed to reveal how such a program would affect both participants and nonparticipants who were competing for housing in the same market.

Using data from program administration and from annual marketwide surveys of landlords, renters, and homeowners, Rand researchers analyzed patterns of voluntary participation, changes in housing consumption among participants, market responses to participants' attempts to obtain better housing, community attitudes toward the program, and program costs. This report summarizes the experimental findings and explores their implications for national housing policy.

The Supply Experiment was one of several experiments undertaken by HUD to learn whether housing allowances were a desirable supplement or alternative to traditional federal housing programs that subsidize local authorities and private investors who build and operate low-rent housing. The results of these tests were reviewed in 1981 by the President's Commission on Housing, which recommended that housing allowances (also known as "housing vouchers" and "consumer assistance grants") be adopted as the principal form of federal housing assistance. Legislation pursuant to that recommendation has been drafted by HUD for submission to Congress in 1982. Consequently, the experimental findings presented here are directly relevant to current decisions about national housing policy.

HOW HOUSING ALLOWANCES WORK

Housing allowances are cash payments to help recipients with their housing expenses. Many variations are possible, but the following features jointly distinguish allowances from alternative forms of housing assistance.

- Allowance entitlement pertains to a specific household, not to a specific dwelling. When an assisted household moves, its allowance moves with it.
- Allowance recipients find their housing in the private market. They negotiate the terms and conditions of occupancy with housing suppliers and are entirely responsible for fulfilling such agreements. The administering agency makes no commitment to housing suppliers and has no contingent liability for recipients' performances.
- The allowance is at least indirectly earmarked for housing consumption, which distinguishes it from a general income transfer. The earmarking device may be either a minimum consumption standard or graduated compensation for increased consumption.

In short, housing allowances provide low-income families with the means to pay for decent housing on condition that they obtain it from the private market by their own efforts. The concept applies as readily to owners as to renters. An allowance program does not sponsor housing construction or rehabilitation, although private developers, landlords, or the participants themselves might undertake such actions in response to the program.

BACKGROUND FOR THE EXPERIMENT

HUD's Experimental Housing Allowance Program (EHAP) was begun in 1971 pursuant to a Congressional mandate "to demonstrate the feasibility of providing families of low-income with housing allowances to assist them in obtaining rental housing of their choice in existing standard housing units" (Housing and Development Act of 1970). That mandate reflected general dissatisfaction with the accumulated assortment of housing assistance programs that operated through capital grants, interest subsidies, direct loans, rent-supplement payments, and mortgage insurance plans directed to local public authorities, nonprofit housing sponsors, private developers, financial institutions, and housing consumers.

As it developed during 1971-73, HUD's experimental program had four major components:

- The Housing Allowance Demand Experiment (conducted by Abt Associates, Inc.), designed to test the effects of alternative benefit formulas and earmarking devices on both participation rates and the housing consumption of participants.
- The Housing Assistance Supply Experiment (conducted by The Rand Corporation), designed to test the market and community effects of a full-scale allowance program.
- The Administrative Agency Experiment (conducted by Abt Associates, Inc.), designed to test alternative styles of program administration and gather data on administrative costs in an operational setting.
- The Integrated Analysis (conducted by the Urban Institute), which drew information from all three experiments to assess the advantages and disadvantages of housing allowances as a method of delivering housing assistance.

The Supply Experiment was thus only one element of a broader program of experimentation involving 12 geographically scattered sites, three research contractors, and eight local public agencies. It was not intended to deal with all questions pertinent to housing allowances, only to learn about their market and community effects—specifically, whether an allowance program could improve the housing circumstances of a large number of low-income families without causing difficulties for other members of the community who were competing for housing in the same market. However, the experimental charter was subsequently expanded to include analysis of eligibility and participation, effects on participants, and program administration.

Because of its mission, the Supply Experiment was the longest and largest component of EHAP. It was planned during 1972-73, conducted field operations from 1973 through 1979, and completed analysis of the experimental data in 1981. It operated in two small metropolitan housing markets centered on Green Bay, Wisconsin, and South Bend, Indiana. In each place, it conducted a full-scale allowance program for low-income renters and homeowners,

enrolling over 25,000 households during the first five years.[1] To measure market effects, it conducted four annual field surveys addressed to the owners and occupants of about 2,000 residential properties in each site. Its findings are presented in over 70 topical reports and notes, culminating in the comprehensive final report that is summarized here (see the appended bibliography).

THE EXPERIMENTAL SITES

We expected the effects of an allowance program to vary with market structure and condition. Many people believed that in a tight housing market (low vacancy rate), or one with much substandard housing, the program would drive up rents for both participants and others. In a residentially segregated market, low-income racial minorities might use their allowances either to improve their present housing or to move to better neighborhoods; in the latter case, market effects would differ for neighborhoods of origin and destination. Market intermediaries (such as real-estate brokers and home improvement lenders) might either facilitate or impede the achievement of program objectives. Community attitudes toward the program might differ, depending on the types and severity of market or neighborhood disturbances.

To test the market effects of housing allowances, we operated identical programs in two contrasting housing markets. Brown County, Wisconsin, was selected as an example of a metropolitan area with a growing urban center, whose housing market was undivided by racial segregation. St. Joseph County was chosen as an example of an area with a declining urban center and a segregated minority population. Table 1 shows the population statistics that supported these choices.[2]

Neither site is large relative to the national norm for Standard Metropolitan Statistical Areas, which in 1970 averaged about 600,000 inhabitants. Because the cost of an open-enrollment program increases with population size, we restricted our choices to places with under 250,000 inhabitants. Within that constraint, our two sites were remarkably different not only as indicated by the selection criteria, but in other ways as well.[3]

Because of steady population growth, Brown County's housing stock was relatively new and in relatively good condition. Vacancy rates were low and property values high, despite the steady pace of new construction. St. Joseph County's population was decreasing, especially in its urban core, and there was a price-depressing surplus of older homes in the central city. By 1975, suburban vacancy rates were also high. The different market conditions reflected in property values, but not (to our surprise) in rents, which were about the same for comparable dwellings in Brown County, central South Bend, and the rest of St. Joseph County (see Table 2).

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[1]To create the appropriate experimental context, the programs were funded for 10 years, and continued to operate under local control after the end of the 5-year experimental period. Knowing that the program would continue for 10 years encouraged enrollees to plan long-term readjustments in their housing consumption. With a 10-year program in prospect, landlords could plan to amortize program-induced repairs, and lenders would be likely to treat allowances as part of income in judging credit-worthiness.

[2]Tables and figures in this summary are adapted from the main report. For simplicity, we omit some of their notes and qualifications.

[3]Brown County is similar to many of the nation's smaller, rapidly growing metropolitan areas. St. Joseph County is similar to the larger and older metropolitan areas whose central cities have been losing white and gaining minority populations. However, no two metropolitan areas are precisely alike; and no sample of two, however carefully chosen, can provide direct evidence about program effects in places not sampled. Generalization from the Supply Experiment therefore requires nonstatistical inference, mediated by an analytical interpretation of the observed outcomes in the experimental sites.

Table 1

POPULATION CONTRASTS AT BASELINE: BROWN COUNTY (1974) AND ST. JOSEPH COUNTY (1975)

Area	Number of Persons	Average Annual Growth (%)		Households	
		1960–70	After 1970	Number	Percent Black or Latin
Brown County					
Green Bay	88,500	3.3	.2	28,100	1.9
Rest of county	81,900	1.2	3.0	19,800	.6
Total	170,400	2.4	1.5	47,900	1.4
St. Joseph County					
South Bend	112,500	- .5	-2.2	39,300	18.6
Rest of county	123,000	1.2	.6	36,300	1.3
Total	235,500	.3	- .8	75,600	10.4

SOURCE: U.S. Bureau of the Census, *Census of Housing: 1970* and *Census of Population: 1970*; and estimates by HASE staff from weighted records of the baseline surveys of households in each site.

Brown County's racial homogeneity virtually eliminated the possibility of residential segregation by race, and ethnic differences among the white residents were not much reflected in neighborhood settlement patterns. Urban neighborhoods were unusually well mixed as to age, cost, and condition of dwellings, so that only a few of the oldest areas seemed at all endangered by a general loss of amenity. Housing problems tended to be those of specific dwellings and specific households, not neighborhoods.

St. Joseph County, on the other hand, combined the problems of racial segregation and neighborhood decline. Its substantial minority of low-income blacks lived almost entirely in South Bend, most of them in an area (central South Bend) of older dwellings, many of which needed repair. White ethnic groups also formed neighborhood settlements, so that the housing market was sharply divided along racial lines and, less strongly, along ethnic lines. Recent residential construction had been mostly on the urban fringe—very large developments of dwellings that are uniform in age, cost, and condition; the older neighborhoods have changed mostly by demolition of dilapidated houses. Thus, housing problems in St. Joseph County tended to be associated with specific neighborhoods and recognizable types of households.

These differences between Brown and St. Joseph counties were reflected in program development. Because property values were lower in St. Joseph County, more of its low-income households were homeowners, and homeowners made up a larger share of program participants than in Brown County. Because St. Joseph County's blacks had much lower incomes than whites, they were heavily represented among enrollees. Because St. Joseph

Table 2

HOUSING MARKET CONDITIONS IN BROWN COUNTY (1974) AND ST. JOSEPH COUNTY (1975)

Market Area	Number of Habitable Units	Average Vacancy Rate (%)	Price Index (Brown County = 100)	
			Gross Rent	Property Value
Rental Housing				
Brown County	14,700	5.1	100	100
St. Joseph County:				
Central South Bend	8,000	12.3	98	56
Rest of county	8,400	8.9	98	76
Homeowner Housing				
Brown County	31,700	.8	(a)	100
St. Joseph County:				
Central South Bend	13,600	4.2	(a)	48
Rest of county	43,400	1.9	(a)	77

SOURCE: Estimated by HASE staff from weighted records of the baseline surveys of residential properties in each site.

NOTE: Price indexes compare average or median market prices for comparable dwellings in each area as of 1974.

[a]Not applicable.

County's housing was in worse condition, applicants' dwellings more often needed repairs to qualify for occupancy by allowance recipients. Perhaps because there were more vacant dwellings in St. Joseph County, program participants did more moving than in Brown County. Again, because property values were lower in St. Joseph County, more participants there changed from renting to owning homes.

THE HOUSING ALLOWANCE PROGRAMS

The experimental housing allowance programs were administered in the two sites by nonprofit corporations called housing allowance offices (HAOs). The programs were funded by annual contributions contracts between HUD and a local housing authority in each county; the local authority delegated operating responsibility for the program to the HAO. Each HAO was governed by a board of trustees that included both members of The Rand Corporation and local citizens.

Through the first 5 program years (ending June 1979 in Brown County and December 1979 in St. Joseph County), over 25,000 households enrolled and over 20,000 received one or more allowance payments. The programs grew rapidly during the first three years, but thereafter terminations (usually caused by loss of eligibility) nearly offset new enrollments (see Fig. 1). At the end of year 5, about 11,500 households were enrolled and nearly 9,500 were receiving payments.

During those 5 years, the program provided financial assistance to 11,350 renters and 8,650 homeowners. At the end of year 5, the average monthly payment was $97, augmenting the average recipient's gross income by 25 percent. The annual equivalent of all payments made in the first month of the sixth program year was $4.0 million in Brown County and $7.2 million in St. Joseph County, or about $11 million in all.

Benefit Standards and Payments

Each enrollee's allowance entitlement was scaled to his income and to the standard cost of adequate housing (called R^*) in his community. If he was able to find certifiable housing whose cost exactly equaled R^*, his housing expenses would amount to his allowance payment plus 25 percent of his adjusted gross income. If he spent more than R^* for housing, the excess came from nonallowance income; if he spent less, a larger fraction of his nonallowance income was available for other consumption.

For program purposes, enrollees' gross incomes were computed to include transfer payments such as welfare benefits and unemployment compensation. For homeowners, we included imputed returns to the owners' equity investments in their homes.[4] Adjustments required by law generally reduced gross income by $300 to $3,000, the amount increasing with household size and age of head. Annual benefits were calculated by subtracting a fourth of adjusted gross income from the appropriate annualized value of R^*; the monthly payment was one-twelfth of that amount.

Table 3 shows how enrollees' incomes and allowance entitlements changed between program years 2 and 5. The growth in average allowance payments reflects the fact that housing costs rose faster than incomes during those years. The table also shows that both renters and homeowners who enrolled in St. Joseph County's program were less prosperous than their counterparts in Brown County.

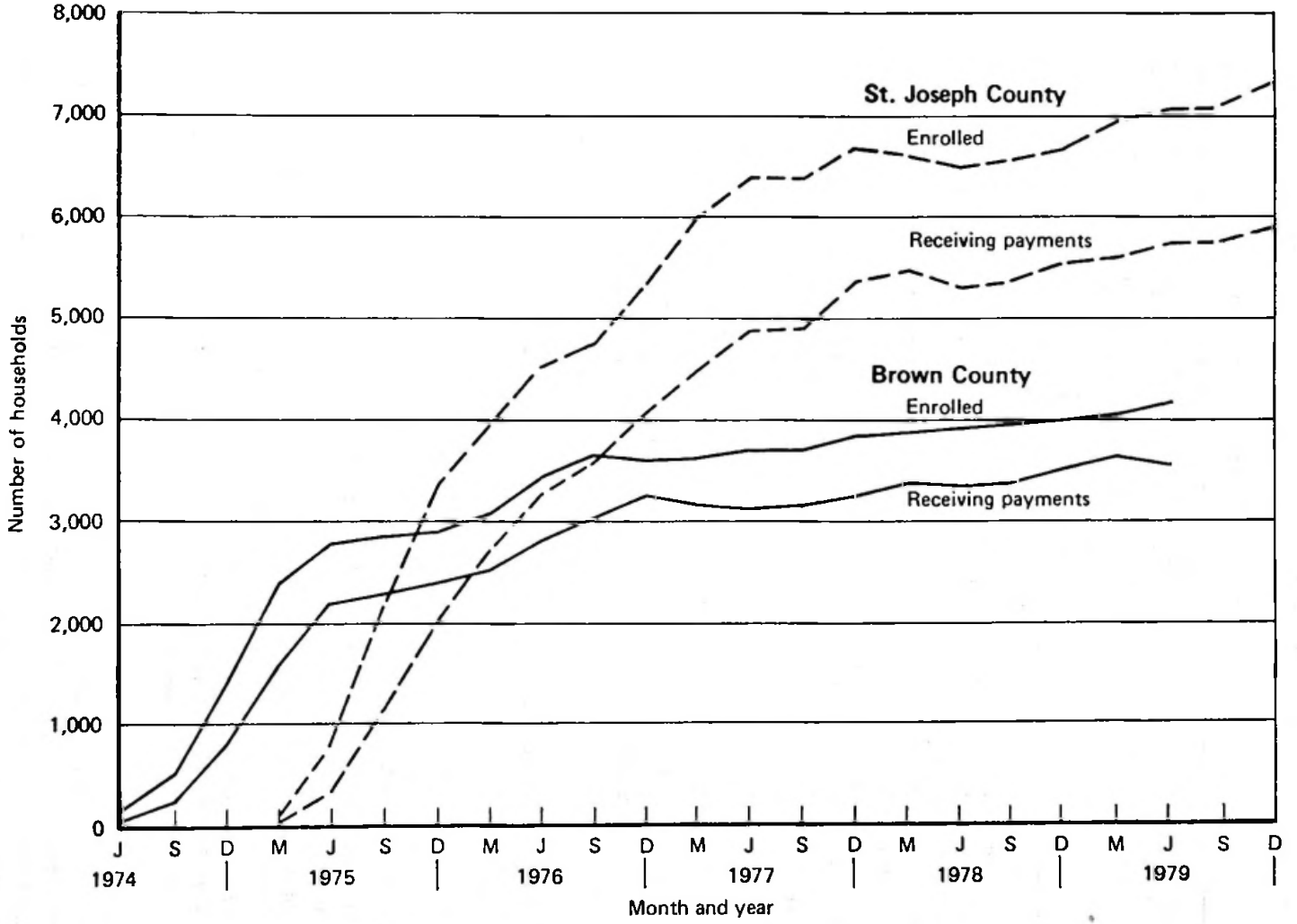
Enforcing Housing Standards

Shortly after a household enrolled in the program, the HAO evaluated its dwelling against program standards for living space, essential facilities, and health or safety hazards. Through year 5, 48 percent of all enrollment dwellings in Brown County and 55 percent in St. Joseph County failed such evaluations. Table 4 shows the incidence of various defects reported during the first two years; thereafter, the defect rate dropped sharply in both sites.[5]

The occupant of a defective dwelling could take either of two actions to qualify for payments—either arrange for the dwelling's repair or move to another that met program standards. Homeowners usually either repaired their homes (80 percent) or dropped out of the

[4]A homeowner's equity is an income-producing asset, but the income is received in kind (housing services) rather than in cash. We valued such income at 5 percent of estimated equity (assessed value minus mortgage debt).

[5]The reasons for this decline are discussed below; see text and note, p. 25.



SOURCE: HAO management information reports through year 5.

Fig. 1—Households enrolled and receiving payments: housing allowance programs in Brown and St. Joseph counties, through year 5

Table 3

PARTICIPANTS' INCOMES AND ALLOWANCE PAYMENTS: HOUSING ALLOWANCE PROGRAMS IN BROWN AND ST. JOSEPH COUNTIES THROUGH YEAR 5

Item	Average Amount ($) at End of Program Year[a]							
	Brown County				St. Joseph County			
	Year 2	Year 3	Year 4	Year 5	Year 2	Year 3	Year 4	Year 5
Renters								
Annual gross income	4,311	4,493	4,602	4,708	3,266	3,380	3,453	3,542
After adjustment	3,551	3,709	3,841	3,942	2,491	2,660	2,744	2,827
Monthly allowance payment	77	80	87	97	91	92	98	114
Annual equivalent	924	960	1,044	1,164	1,092	1,104	1,176	1,368
Homeowners								
Annual gross income	4,910	5,206	5,494	5,697	4,403	4,534	4,679	5,068
After adjustment	3,824	4,150	4,447	4,619	3,457	3,636	3,738	4,040
Monthly allowance payment	70	69	75	84	63	63	71	85
Annual equivalent	840	828	900	1,008	756	756	852	1,020
All Participants								
Annual gross income	4,569	4,777	4,901	5,020	3,931	4,080	4,172	4,415
After adjustment	3,668	3,885	4,044	4,155	3,056	3,252	3,326	3,521
Monthly allowance payment	74	76	83	93	75	74	82	98
Annual equivalent	888	912	996	1,116	900	888	984	1,176

SOURCE: HAO management information reports for the end of each program year indicated.

NOTE: Gross income for a homeowner includes an imputed amount equal to 5 percent of equity in the home. Adjustments are those required by law and vary with age of head, number of dependents, and number of secondary wage earners. The monthly allowance payment is based on adjusted gross income and the standard cost of adequate housing.

[a] Comparable detail is not available for program year 1.

program (20 percent); about 60 percent of the renters arranged for repairs, 20 percent moved, and 20 percent dropped out.

During the first 5 program years in Brown County, over 3,700 initially defective dwellings (including those to which enrollees moved) were repaired at the instance of enrollees seeking to qualify for payments, and over 1,000 enrollees moved before qualifying for payments. In St. Joseph County, over 6,900 dwellings were repaired and nearly 2,000 enrollees moved before qualifying for payments.

For those whose housing was initially acceptable, neither repairing nor moving was required to qualify for allowance payments. However, the payments alleviated budgetary stresses likely to lead to nonpayment of rent or utility bills or to undermaintenance of homes. Moreover, about 2,000 recipients in Brown County and 2,300 in St. Joseph County moved *after* qualifying for payments, presumably having reconsidered their housing alternatives in the light of their increased resources.

The repairs needed to bring a dwelling up to program standards were rarely expensive,

Table 4

SPECIFIC DEFECTS IN ENROLLEES' DWELLINGS: HOUSING ALLOWANCE PROGRAMS IN BROWN AND ST. JOSEPH COUNTIES THROUGH PROGRAM YEAR 2

Type of Defect	Defects per 100 Dwellings[a]			
	Brown County		St. Joseph County	
	Renters	Owners	Renters	Owners
Inadequate Living Space				
Too few habitable rooms or bedrooms[b]	18	15	23	13
Inadequate Facilities				
Kitchen (lacking any of 7 items)[c]	6	5	16	8
Bathroom (lacking any of 8 items)[d]	15	14	30	17
Hazardous Conditions				
Exterior property area (4 items)	3	3	3	2
Building exterior:				
Stairs, porches, railings	6	7	3	3
Windows	10	7	20	13
Other (4 items)	4	3	6	4
Building interior:				
Stairs, railings	23	31	35	34
Other (7 items)	7	8	11	8
Utility systems (4 items)	12	11	17	7
All defects	104	104	164	109

SOURCE: Tabulated by HASE staff from HAO records through June 1976 for Brown County and December 1976 for St. Joseph County.

NOTE: Entries are based on initial evaluation records for 4,533 enrollment dwellings in Brown County and 6,266 in St. Joseph County. Any defect tabulated here caused the dwelling to be rated not acceptable.

[a]Because some entries cover more than one item on the evaluation form, "defects per 100 dwellings" is not necessarily equivalent to "percent of dwellings with indicated defect."

[b]To be habitable, a room must be above a minimum size and have adequate heat, light, and ventilation. A habitable bedroom must offer privacy to the occupant.

[c]Required facilities include refrigerator, cooking range, hot-and-cold sink, electrical switches and outlets, lighting, ventilation, and minimum ceiling height. Facilities must be in safe, operable condition.

[d]Required facilities include flush toilet, hot-and-cold sink, hot-and-cold tub or shower, electrical switches and outlets, heat, ventilation, and privacy. Facilities must be in safe, operable condition.

even though genuine hazards to the occupants were often remedied. Most repairs were done by the occupant himself or his landlord; out-of-pocket expenses for materials and hired labor seldom exceeded $100; about a fourth of the repairs in each site were made without cash expenditure, using unpaid labor and materials on hand.

Each dwelling occupied by an allowance recipient was evaluated annually to ensure that it continued to meet program standards. A fifth of the dwellings occupied by recipients in Brown County and a third in St. Joseph County drifted below standards in the year preceding their annual evaluations. Most of those whose dwellings failed promptly repaired the new defects; some subsequently moved; and payments were suspended for those who did neither.

II. ELIGIBILITY AND PARTICIPATION

Enrollment in the experimental allowance program was continuously open to all households in Brown and St. Joseph counties that met the program's standards as to income, assets, and family composition. Allowances were paid to enrollees whose dwellings had passed their most recent housing evaluations. As we had expected from preexperimental analysis, about a fifth of all households were eligible for enrollment at any given time. Participation grew rapidly during the first two program years, but abruptly leveled off in year 3. To our surprise, only a third of those eligible in year 3 were then receiving payments.

Table 5 shows selected characteristics of those receiving payments at the end of year 3, and the recipiency rate for each category of eligibles. The two sites differed sharply in the mix of owners and renters, partly because low-income owners were more common in St. Joseph County and partly because more low-income renters there were accommodated in public housing (virtually absent from Brown County). Households headed by single parents accounted for about a third of the total in each site; elderly singles and couples accounted for 46 percent in Brown County and 57 percent in St. Joseph County. The remainder, nonelderly couples, were mostly households whose breadwinners were temporarily unemployed.

Within the eligible population, participation rates differed substantially for renters and owners; for whites and nonwhites; and for households headed by couples and single persons, by old and young persons, and by parents and childless persons. However, we find that most of these differences are explained by underlying differences between the groups either as to benefits and costs of participation or attitudes toward assistance. The underlying determinants of participation turn out to be the amount and expected duration of allowance payments, asset holdings that provide an economic cushion, the cost of meeting the program's housing standards, and general attitudes toward government assistance. Once these variables are controlled, the only statistically significant demographic difference is between households with and without children: The former are more likely to participate than the latter.

The underlying determinants suggest a model of generally rational choice in which housing improvements are not much valued. Eligibles and enrollees seem to balance the expected stream of cash payments against the expected trouble and out-of-pocket costs of meeting housing standards. Their decisions may also be influenced by perceptions of need that covary with expected benefits and are clearly affected by predispositions concerning the proper role of government.

The interaction of program features with household and housing characteristics yields the outcomes displayed in Fig. 2. The main reasons for nonparticipation, shown in the figure, are explained below.

- *Low benefits:* small allowance entitlements for marginally eligible households, which discouraged many from enrolling; some did enroll, but subsequently dropped out before qualifying for payments.
- *Poor housing:* the program's housing standards, which discouraged some eligibles from enrolling, but more often discouraged enrollees from qualifying for payments.
- *Delay:* brief durations of eligibility, so that some became ineligible before they applied, or did not apply because they expected only a short period of benefits.

Table 5

CHARACTERISTICS OF RECIPIENTS AND RECIPIENCY RATES: HOUSING ALLOWANCE PROGRAMS IN BROWN AND ST. JOSEPH COUNTIES, END OF YEAR 3

Characteristic	Percent of All Recipients		Recipients as Percent of All Eligibles	
	Brown County	St. Joseph County	Brown County	St. Joseph County
Housing Tenure				
Renter	63	38	45	38
Owner	37	62	28	27
Household Composition				
Single parent	32	31	46	39
Elderly single person	35	43	56	37
Young couple, young children	12	5	21	12
Other nonelderly couple	10	7	25	22
Elderly couple	11	14	23	24
Race of Head				
White non-Latin	97	78	(a)	29
Other	3	22	(a)	36
All cases	100	100	36	31

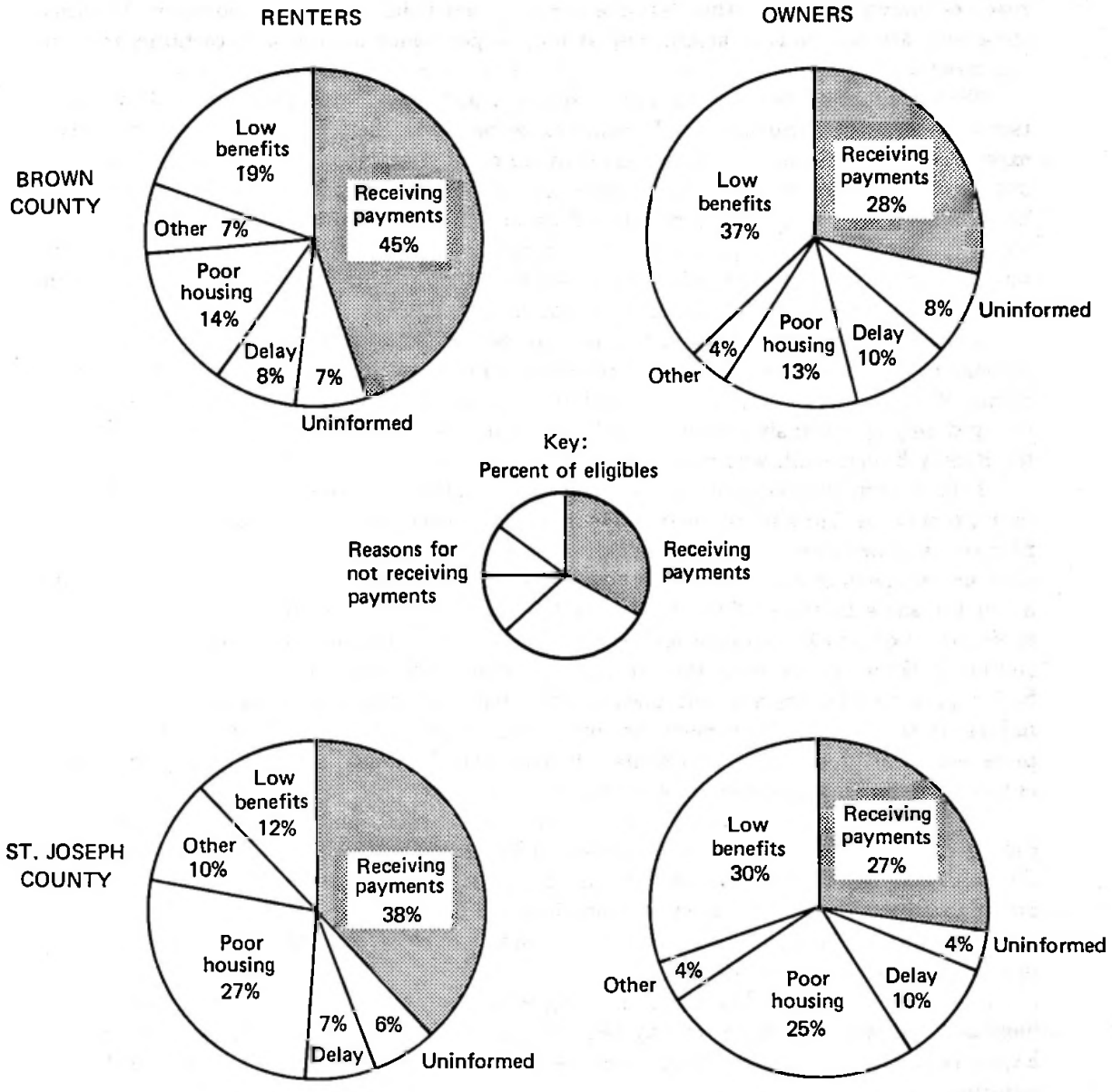
SOURCE: Distribution of recipients tabulated by HASE staff from HAO records for June 1977 in Brown County and December 1977 in St. Joseph County; distribution of eligibles estimated by HASE staff from household survey records for wave 4 in Brown County and wave 3 in St. Joseph County.

NOTE: Entries exclude single persons under 62 who became eligible in August 1977.

[a]Distribution of eligibles by race was not estimated for Brown County, where over 98 percent of all household heads were non-Latin whites.

- *Uninformed:* lack of information about the program, which forestalled enrollment.
- *Other:* mainly, reluctance to accept assistance from government, which inhibited some eligibles from applying.

These obstacles to participation are not necessarily program defects. That those who are marginally or briefly eligible screen themselves out may be a program virtue rather than a defect; enrolling them would entail substantial administrative cost but would yield meager benefits. Without housing standards, the program would be indistinguishable from a negative income tax and would result in little housing improvement; however, we have learned that the exact specification of housing standards has important effects on participation (see below). Not many eligibles were uninformed about the program, and most who applied quickly completed the steps needed to become recipients; substantial improvements in out-



SOURCE: Estimated by HASE staff from HAO records for program year 3 in each site, and from records of the survey of households, wave 4, in each site.

Fig. 2—Distribution of eligible households by recipiency status and reasons for not receiving payments: renters and owners in Brown and St. Joseph counties

reach or processing are neither feasible nor very beneficial to program purposes. Whether those who are reluctant to accept help should be persuaded otherwise is certainly open to argument.

Evidence that housing specifications are important comes from a comparison of participation outcomes in the Supply and Demand experiments. Although the designers of the two experiments did not intend to apply radically different standards, they did choose somewhat different operational tests for decent, safe, and sanitary housing. For example, the Demand Experiment required a minimum ratio of window size to room area, whereas the Supply Experiment required enough natural light in each room to permit "normal domestic activities" during daylight hours. The Supply Experiment required handrails on stairways of six or more steps, whereas the Demand Experiment did not.

Thus, some dwellings that passed one set of standards would fail the other, and the reverse. Moreover, the average cost of repairing a failed dwelling differed in the two experiments. Window area, a leading cause of failure in the Demand Experiment, can usually be changed only by expensive remodeling. The lack of a handrail, a leading cause of failure in the Supply Experiment, was remedied by an average cash outlay under $10.

Table 6 compares outcomes at different stages on the path from eligibility to recipiency, for renters in the four sites of the Supply and Demand experiments who were offered approximately the same schedule of benefits. Differences between experiments as to program knowledge are artifacts of experimental design.[1] Among informed eligibles, enrollment rates are about the same in three of the four sites, but above average in Phoenix for reasons that eluded the Demand Experiment analysts. The incidence of initial evaluation failures is also similar in three of four sites; the exception is Green Bay, whose housing was generally of better quality.[2] The clearest difference attributable to housing standards is the response to failure: In the Supply Experiment, an average of 66 percent of those who had to repair or move eventually qualified for payments, whereas in the Demand Experiment, only 38 percent of the corresponding group became recipients.

In both experiments, larger entitlements encouraged, and evaluation failures discouraged, participation. Larger entitlements reflect lower incomes relative to family size, so the needier were, other things equal, more likely to enroll. However, overcrowded and deteriorated dwellings were more common among large families and those with low incomes, so the needier households were also more likely than others to be required to improve their housing in order to qualify for payments.

In the Demand Experiment, the housing effect dominated participation outcomes, perhaps because repair costs to remedy Demand-specified defects were larger. In the Supply Experiment, the entitlement effect dominated, as is shown below for all eligibles in the two counties:

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[1]In the Demand Experiment, households in a screened sample of eligibles were individually told how the program worked, then invited to enroll. Thus, all members of the "eligible" population were informed about the program. In the Supply Experiment, program information and invitations to apply were disseminated through the media to the general public; not all eligibles paid attention.

[2]A cross-experimental field test of evaluation standards indicates that somewhat fewer dwellings in Pittsburgh and Phoenix would have failed Supply Experiment standards, and many more dwellings in Brown and St. Joseph counties would have failed Demand Experiment standards. By Demand standards, Brown County's housing was of about the same quality as that of Pittsburgh and Phoenix, but St. Joseph County's was much worse.

Table 6

COMPARISON OF PARTICIPATION RATES IN THE SUPPLY AND DEMAND EXPERIMENTS: RENTER HOUSEHOLDS OFFERED "HOUSING-GAP," MINIMUM HOUSING STANDARDS PROGRAM, BY SITE

Eligibility Status and Outcome	Percent of Indicated Total			
	Supply Experiment		Demand Experiment	
	Brown County	St. Joseph County	Pittsburgh	Phoenix
Summary				
Eligible to enroll	100	100	100	100
Ever enrolled	65	64	75	84
Ever qualified for payments	55	46	30	45
Detail				
Eligible to enroll	100	100	100	100
Informed about program	85	85	100	100
Not informed	15	15	--	--
Informed eligible	100	100	100	100
Ever enrolled	77	75	75	84
Never enrolled	23	25	25	16
Enrollee	100	100	100	100
Qualified for payments[a]	46	28	33	29
Had to repair or move[b]	54	72	67	71
Had to repair or move[b]	100	100	100	100
Ever qualified for payments	71	61	34	42
Never qualified for payments	29	39	66	58

SOURCES: For Supply Experiment, same as Table 5; for Demand Experiment, Kennedy and MacMillan (1980), Tables 2-4 and 2-9.

NOTE: Differences between experiments in program design and record systems qualify the parallelism of entries. Difference in outcomes reflects both differences in program design and differences in the eligible populations. See text for discussion.

[a]Qualified immediately after enrolling and completing an initial housing evaluation.

[b]For the Supply Experiment, this group includes enrollees who did not complete an initial evaluation on the enrollment dwelling, failed such an evaluation, or passed the evaluation but did not submit a lease agreement. In the Demand Experiment, all were evaluation failures.

Estimated Monthly Entitlement ($)	Recipiency Rate (%)
10-19	17.5
20-39	21.2
40-79	36.5
80-119	46.1
120 or more	44.4

Housing quality had only a slight negative effect on the propensity to enroll, but among enrollees who failed their initial evaluations, the cost of repair was inversely related to the probability of qualifying for payments (see Table 7). Curiously, that negative relationship prevailed despite the higher average allowance entitlements of those facing the larger repair bills: Their allowances would soon have compensated them for such one-time repair outlays. Among enrolled owners in both sites who terminated after an initial dwelling failure, we estimate that repair outlays would typically have been compensated by less than two months' allowances. For renters, the corresponding recapture times were six months in Brown County and three months in St. Joseph County, assuming that the tenants paid all repair costs rather than sharing them with their landlords; moreover, large repair bills could have been avoided by moving.

We conclude that low-income households do not much value the housing improvements required by the HAOs, considering them a cost, not a benefit of participating. It also appears that they heavily discounted future benefits as recompense for present outlays.[3]

[3]Over three-fourths of the enrolled owners who terminated rather than repair or move said they couldn't pay repair costs that averaged about $125, including unpaid labor valued at the minimum wage. Only about 15 percent of these terminees actively sought credit. Among renter terminees facing average repair costs of $350, most blamed their landlords for not repairing—but declined to move.

Table 7

REPAIR COST, ALLOWANCE ENTITLEMENT, AND RECIPIENCY RATE FOR ENROLLED HOUSEHOLDS, BY TENURE AND SITE

Initial Repair Cost ($)	Average Monthly Allowance Entitlement ($)		Percentage Qualifying for Payments	
	Renters	Owners	Renters	Owners
Brown County				
Under $10	75	69	96	97
10-24	85	77	84	73
25-49	86	84	73	79
50-99	88	85	67	76
100 or more	91	(a)	80	(a)
St. Joseph County				
Under $10	78	55	97	98
10-24	94	61	81	89
25-49	95	66	71	84
50-99	98	71	63	78
100-249	110	73	56	64
250 or more	89	92	56	58

SOURCE: Tabulated by HASE staff from HAO records for all households that enrolled in 1977 and completed an initial housing evaluation.

NOTE: Repair costs were estimated for each evaluated dwelling using standard cost figures for each type of housing defect reported for the dwelling. Overcrowding was not considered a housing defect. Dwellings that passed initial evaluations are included in the category of repair costs under $10.

[a]Too few cases for reliable estimation.

III. EFFECTS ON PARTICIPANTS

About 80 percent of all enrollees eventually qualified for payments; in the two sites combined, more than 20,000 households became allowance recipients during the first 5 program years. Below, we estimate how the program affected those who were recipients at the end of the third program year, a group that we think fairly represents the characteristic mix of participants in a mature program.

Our assessment of program effects focuses on changes in housing consumption and changes in household budgets. That focus reflects the program's dual purposes: (a) to improve the housing of low-income households that occupy substandard housing and (b) to ease the housing expense burdens (or, equivalently, to increase the nonhousing consumption) of those already occupying standard housing. The HAOs' housing standards and recipients' housing preferences together determine the balance that was achieved between the two purposes.

The program's effect on recipients' housing consumption equals their consumption while in the program minus what their consumption would have been without the program; and similarly for housing expense burdens. Typically, researchers estimate without-program outcomes by observing a group of subjects receiving no experimental treatment, whose characteristics are like those of the treated subjects. Because open enrollment was important to other HASE research objectives, the experimental design did not designate a group of eligible households to serve as a formal control group. Instead, we used household survey data that span the period from before the program began through program year 3 to construct a control *model* that serves the same analytical function as a control *group*.[1]

HOUSING CONSUMPTION CHANGES

We found that the allowance program caused recipients to consume about 8 percent more housing than they would have consumed without the program, and that the proportion living in dwellings of standard quality increased from about half to over four-fifths. Renters achieved their housing improvements partly by repairing and partly by moving; owners achieved theirs almost entirely by repairing their homes.

Table 8 shows estimates of the consumption increase separately for renters and owners in each site. These increases are measured by housing expenditures—for renters, gross rent; and for owners, outlays for repairs and improvements.[2] Although all of the entries in the table are statistically different from zero at the 90 percent confidence level or better, the reader can see that the estimates, especially for homeowners, have high sampling variances. However, the closeness of the four independently estimated values, ranging from 7.8 to 8.9 percent, reinforces our confidence in the individual point estimates.

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[1]The technical issues are too complex for detailing here. Briefly, we compared the preprogram housing consumption behavior of future allowance recipients with that of all other households, and found that both groups varied their consumption in nearly the same way in response to the same factors (income and demographic characteristics). We then used year 3 data for both groups to estimate how much housing the recipients would have consumed absent the program.

[2]The comparisons of with-program and without-program expenditures are not changes over time in rents or repair costs of those who became participants. The comparisons are between observed expenditures by year 3 participants and estimates of the same households' expenditures absent the program. See note 1 above for a brief explanation of those estimates.

Table 8

PROGRAM-INDUCED HOUSING CONSUMPTION INCREASE: YEAR 3 ALLOWANCE RECIPIENTS IN BROWN AND ST. JOSEPH COUNTIES, BY HOUSING TENURE

Site	Percent Increase in Housing Consumption			
	Renters		Owners	
	Point Estimate	Standard Error	Point Estimate	Standard Error
Brown County	7.8	3.1	8.9	4.0
St. Joseph County	8.2	4.3	7.9	5.0
Average	8.0	2.7	8.4	3.2

SOURCE: Estimated by HASE staff from HAO records and models fit to countywide household survey data.

NOTE: Estimates are based on the characteristics of those receiving payments at the end of program year 3 in each site.

Table 9 shows estimates of the proportion of recipients whose dwellings would, on a randomly chosen day, pass an HAO evaluation, compared with the corresponding estimated outcome absent an allowance program. Even with a program, not all recipients would be in standard dwellings, because dwellings deteriorate between annual evaluations. However, the improvement amounts to about 36 percentage points for both renters and owners in Brown County and 24 for both renters and owners in St. Joseph County; the overall average improvement is 30 percentage points.

The large increase in standard housing for recipients contrasts sharply with the small increase in housing consumption because the latter is measured in dollars, and many violations of the HAOs' housing standards were inexpensive to remedy. With their housing allowances as incentives, enrollees fixed many such defects that they would otherwise have ignored; but the HAO-required repairs had little effect on the market rents and values of the repaired dwellings.

The allowance program affected recipients' housing consumption by altering both their repair and moving behavior. Moving offers wider possibilities for consumption change than does repairing. When a household moves, it can change all the attributes of its dwelling—space, quality, style, and neighborhood environment. Repairs, on the other hand, primarily address quality and style. Adding rooms is expensive and often inefficient, and a repair cannot change the dwelling's neighborhood.

Because their characteristics and circumstances differ greatly, owners and renters used much different combinations of moving and repairing to change their housing consumption.

Table 9

EFFECT OF THE ALLOWANCE PROGRAM ON HOUSING QUALITY: YEAR 3 ALLOWANCE RECIPIENTS IN BROWN AND ST. JOSEPH COUNTIES, BY HOUSING TENURE

Site	Percent Occupying Standard Housing			
	Renters		Owners	
	Without Program[a]	With Program[b]	Without Program[a]	With Program[b]
Brown County	50	87	56	91
St. Joseph County	47	70	58	84
Average	48	78	57	87

SOURCE: Estimated by HASE staff from HAO housing evaluation records and a housing deterioration model fit to HAO data.

NOTE: Estimates are based on the characteristics of those receiving payments at the end of program year 3 in each site.

[a]Percent of year 3 recipients whose enrollment dwellings passed their initial evaluations.

[b]Percent of year 3 recipients whose dwellings would have passed evaluations administered at random dates between regularly scheduled evaluations.

Because owners controlled their own repair policies, and because moving would entail selling one house and buying another, they nearly always made program-induced housing adjustments by repairing their dwellings rather than by moving. Renters had less control over repair policies, and moves were less expensive for them. Landlords usually maintain their properties with the *expected* tenant in mind; if the current tenant wants much different housing, he is more likely to move than to persuade his landlord to repair or remodel the dwelling. However, the expense of many HAO-required repairs was so low that renters often repaired their dwellings without consulting their landlords.

PROGRAM-INDUCED REPAIRS

Both renters and owners made many repairs to remedy housing defects that were cited by the HAOs during initial and annual evaluations. We call these actions *required* repairs because they were made in order to qualify for allowance payments. Both renters (or their landlords) and owners also repaired defects that had not been cited by the HAOs, and improved their dwellings in ways not required by program standards. We call these actions

voluntary repairs. Required repairs were clearly program-induced (though some might have been made eventually absent the program); voluntary repairs may have been program-induced, either to anticipate a scheduled housing evaluation, or because their allowances enabled the recipients to undertake housing improvements they wanted but could not otherwise afford.

Required repairs that were completed by enrollees and recipients (itemized in Table 10) ranged from clearing unsanitary debris to residing or reroofing entire buildings. To qualify for allowance payments, enrollees and recipients installed stairway handrails, replaced broken windows, sealed leaky vent pipes, fixed plumbing leaks, and repaired walls and roofs. A few installed kitchen or bathroom facilities, added fire exits, or rewired their dwellings. Some undertook several such actions, and a few homeowners virtually rehabilitated their dwellings.

About a third of the households receiving payments in a mature program did some required repairs in the course of a year, either in connection with their initial qualification for payments or in order to avoid suspension following an annual evaluation or a move. Including the value of unpaid labor, the average cost of those repairs was about $100, or about $30 per recipient when averaged over both repairers and nonrepairers.[3]

Repair costs were low because most defects could be and were remedied by nonprofessional labor. Owners and their friends did four-fifths of the work on owner-occupied homes (see Fig. 3). Tenants and their friends did over half the work on rented dwellings, and their landlords did most of the rest. Professional contractors were involved in less than a fifth of homeowners' repairs and less than a tenth of renters' repairs.

Program-induced voluntary repairs may have been made to rental properties that housed allowance recipients,[4] but our evidence is conclusive only for homeowners. Owners' voluntary repairs often dealt with structural problems that posed no immediate hazard, or added amenities that were not required by the HAOs.

Almost three-quarters of the owners made some voluntary repairs each year. Averaged over all owner recipients, the annual cash expense was $403 per recipient (see Table 11). This figure includes both repairs they would have made without the program ($263 average for the two sites) and the voluntary repairs that were caused by the program ($140 average), but not the required repairs ($25 average).

Comparing owners' total annual repair expenses while in the program with our estimate of their expenses without the program, we conclude that the program caused them to increase their cash outlays for repairs and improvements by $165 annually. Required repairs by renters and their landlords averaged $33 per dwelling, and there may have been additional program-induced voluntary repairs to those dwellings.

PROGRAM-INDUCED MOVES

The allowance program affected both the timing of recipients' moves and the amount of their housing changes when they moved. It caused some households to cancel or postpone

[3]For this computation, unpaid labor by recipients, their friends, and their landlords was valued at the minimum wage. We estimate that about 16 percent of homeowners' required repair costs and 32 percent of renters' required repair costs were unpaid labor. It should be noted that the average total repair cost of $100 was far above the median, because about a fourth of the repairs were accomplished with unpaid labor and materials on hand. The average cash outlay was about $70, and the median was about $10.

[4]Regressions of annual repair expenditures for rental properties on property and occupant characteristics indicate a positive program effect, but the data are so "noisy" that even a large average effect might be attributable to sampling variability.

Table 10

REPAIRS MADE IN RESPONSE TO EVALUATION FAILURES: ALLOWANCE PROGRAM PARTICIPANTS IN BROWN AND ST. JOSEPH COUNTIES, BY HOUSING TENURE

Item Repaired	Percent of All Repair Actions			
	Brown County		St. Joseph County	
	Renters	Owners	Renters	Owners
Handrail, steps	16	25	12	20
Window, door	37	31	37	34
Structure	16	16	19	16
Plumbing system	11	12	13	14
Heating system	2	2	4	3
Electrical system	4	4	4	3
Refrigerator, range	2	(a)	2	1
Outbuildings, grounds	6	6	4	5
Other	6	4	5	4
All repair actions	100	100	100	100

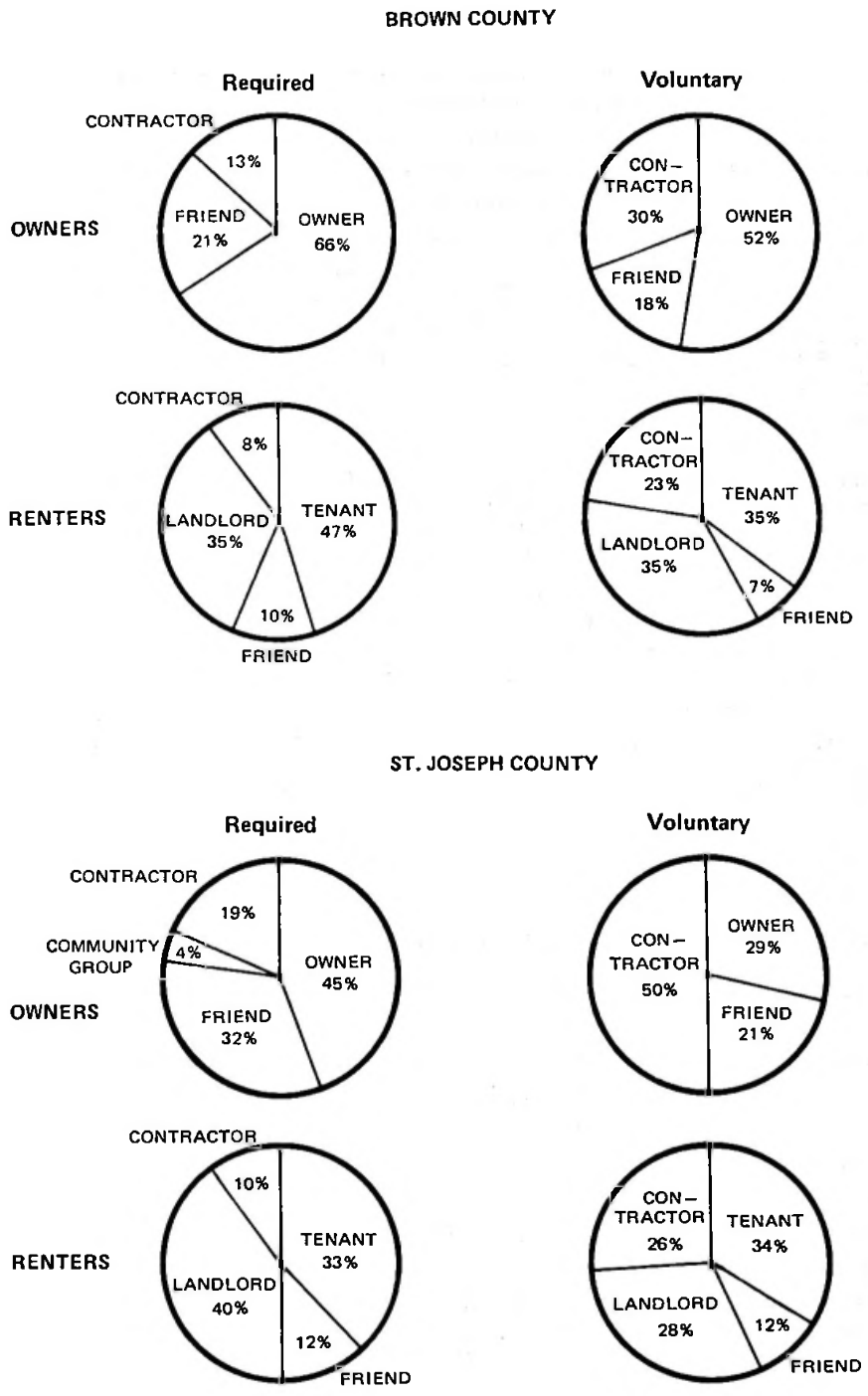
SOURCE: Tabulated by HASE staff from HAO housing evaluation records for January 1976 through June 1979 in Brown County and through December 1979 in St. Joseph County.

NOTE: Data include both repairs made by enrollees seeking to qualify for payments and those made by recipients in response to subsequent annual evaluation failures. For renters, entries include repairs undertaken by either the landlord or the tenant. Percentages may not add exactly to 100 because of rounding.

[a]Less than 0.5 percent.

moves that would have decreased their housing consumption, and it caused others to speed up moves that increased their housing consumption. When recipients moved, the program caused them to increase housing consumption by more than they would have done in its absence.

Homeowners' mobility was only slightly affected by the program. For renters, participation reduced mobility overall. We estimate that 59 percent of the renter recipients would normally have moved during the 18-month average interval from their enrollment to the end of year 3. However, only 40 percent actually moved, implying that the program's net effect was to delay moves. Some may have been reluctant to move after qualifying for payments because each move entails a new housing evaluation with attendant risk of failure. However, there is also evidence that recipients were less likely than others to move to less expensive



SOURCE: HAO Records from January 1976 through June 1977.

Fig. 3—Sources of labor for required and voluntary repairs

Table 11

ANNUAL COST OF PROGRAM-INDUCED REPAIRS MADE BY YEAR 3 OWNER RECIPIENTS: HOUSING ALLOWANCE PROGRAMS IN BROWN AND ST. JOSEPH COUNTIES

Site	Average Annual Repair Expense ($)				
	Total Without Program[a]	With Program			Program-Induced Repairs[d]
		Required Repairs[b]	Voluntary Repairs[c]	Total	
Brown County	236	23	391	414	178
St. Joseph County	290	27	416	443	153
Average	263	25	403	428	165

SOURCE: Estimated by HASE staff from HAO housing evaluation records for January 1976 through June 1979 in Brown County and through December 1979 in St. Joseph County; and from repair expenditure models fit to household survey data for each site.

NOTE: Except as indicated, repair costs reported in this table do not include any allowance for unpaid labor. When valued at the minimum wage, such labor adds about 12 percent to repair costs in Brown County, 7 percent in St. Joseph County.

[a]Estimated without-program repair expenses of year 3 owner-recipients.

[b]Includes a small amount of unpaid labor, valued at the minimum wage.

[c]Voluntary repairs equals total minus required repairs.

[d]Total with-program minus total without-program repairs.

dwellings in response to financial adversity; the program provided allowances that increased as income fell and as housing costs generally rose.[5]

Although the program appears to have reduced the overall mobility of renter recipients, the 40 percent who did move after enrolling accounted for most of the renters' increased housing consumption. As shown in Table 12, the typical year 3 recipient who moved after enrolling increased his gross rent expenditures (in constant dollars) by about 16 percent,

[5]In contrast to the findings reported above, renters in the comparable part of the Demand Experiment moved slightly *more* often than did that experiment's control households. One would expect the Demand Experiment to generate more moves than the Supply Experiment because more enrollment dwellings failed initial housing evaluations, and their defects (e.g., windows too small) were harder to remedy. However, among those in the Supply Experiment whose enrollment dwellings were acceptable, mobility decreased; for the comparable group in the Demand Experiment, mobility was about the same as for the control group. The Demand Experiment's findings are reported in MacMillan (1980).

Table 12

PROGRAM-INDUCED HOUSING CONSUMPTION INCREASES BEFORE AND AFTER ENROLLMENT: YEAR 3 RENTER RECIPIENTS IN BROWN AND ST. JOSEPH COUNTIES, BY MOBILITY STATUS

Site	Percent Increase in Housing Consumption				
	Total	Before Enrolling[a]	After Enrolling[b]		
			Total	Nonmovers	Movers
Brown County	7.8	.4	7.4	1.7	16.4
St. Joseph County	8.2	2.6	5.6	.5	16.6
Average	8.0	1.5	6.5	1.1	16.5

SOURCE: Estimated by HASE staff from HAO records for households receiving payments at the end of program year 3 and from models fit to household survey data for each site.

[a]Ratio of average gross rent at enrollment to average gross rent without the program, expressed as a percentage. Both rent variables were adjusted to year 3 dollars.

[b]Ratio of average gross rent at the end of year 3 to average gross rent at enrollment, expressed as a percentage. Both rent variables were adjusted to year 3 dollars. Mobility status indicates whether or not a recipient moved between enrollment and the end of year 3.

whereas those who did not move increased their expenditures by only 1 percent, presumably because of repairs.

Part of renter recipients' consumption increase occurred *before* they enrolled. We find that their gross rents at the time of enrollment exceeded the values we predicted for them by about 1.5 percent (Table 12, col. 2), even though the prediction took into account the observed housing preferences of future recipients. This finding may partly reflect preenrollment housing choices that anticipated future receipt of allowance payments, but there is stronger evidence that some households moved from dwellings they thought would fail the housing standards to other dwellings they thought would pass, perhaps to avoid the embarrassment of being told they lived in substandard housing. For this and other reasons,[6] initial evaluation failure rates declined over program years 1 to 5.

Even though moves offered more opportunity for housing change than did repairs, renter recipients who moved did not much change the attributes that are only affected by moving—dwelling size and neighborhood characteristics. Movers' destination dwellings averaged the

[6]As knowledge of program rules spread, applicants sometimes repaired their dwellings *before* arranging for an evaluation; and some eligibles who thought their dwellings would fail did not bother to apply. In addition, dwellings repaired by one enrollee often later reentered the program when occupied by another enrollee. All these factors contributed to the drop in failure rates.

same number of rooms as their origin dwellings, and were usually located in either the same or a similar neighborhood. The changes that resulted from moving were in *habitable* space (rooms meeting HAO standards) and dwelling quality (high ratings on HAO checklist items), clearly indicating the program's influence.

HOUSEHOLD BUDGET ALLOCATION

Both renters and homeowners in Brown and St. Joseph counties gave housing consumption a high priority in their budgets; but once they achieved average levels of space and quality, further improvement had a low priority relative to other forms of consumption. In the jargon of economists, that behavior corresponds to a low income elasticity of demand for housing. For a typical renter household, we estimate that a permanent 10-percent increase in income would cause only a 2-percent increase in housing consumption; for a typical owner, housing consumption would increase by 5 percent.[7]

Because when they enrolled most recipients occupied adequate or nearly adequate housing, the HAOs' standards did not cause them to increase their housing consumption very much; and because their income elasticities of housing demand were so low, they did not use much of the allowance payment for additional housing consumption. Table 13 shows that renters on average spent $16 of every $100 of allowance payments for increased housing consumption, and owners spent $21. About four-fifths of all allowance payments were allocated to other consumption.

It should be emphasized that the allocation of allowances to nonhousing consumption was entirely consistent with program purposes. When they joined the program, most subsequent recipients were spending far larger shares of their meager budgets for housing than the limit set by federal law for public housing tenants and embodied in the housing allowance formula as a target. Under the Brooke Amendment (PL 91-152, 1969), public housing rents were limited to 25 percent of the tenant's adjusted gross income.[8] Table 14 shows that allowance recipients were spending more than twice that limit when they enrolled. Even with the allowances, their housing expense burdens exceeded the prescribed limit because most recipients chose dwellings whose rents were slightly higher than our estimate of the standard cost of adequate housing.

A final point of importance is that the 8-percent overall average increase in recipients' housing consumption was larger than would have been achieved by an unrestricted income transfer of the same amount as the allowance payment. We estimate that the increased

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[7]When the experiment began, most economists believed that the income elasticity of housing demand was close to unity. Better data analyzed during the past decade led to lower estimates. Those from the Supply Experiment (0.19 for renters, 0.45 for homeowners) are among the lowest on record. Renters' and owners' elasticities differ considerably in every study, probably for two reasons: Those who have stronger interest in housing consumption tend to buy homes, and those who buy homes have an investor's as well as a consumer's interest in the property. Some economists argue that renters' low income elasticities of housing demand are attributable to saving for future home purchases. The weak tests of this hypothesis that are possible with HASE data do not support it.

[8]Normative ratios of housing expense to income have been calculated in several different ways in the housing literature, yielding substantially different results for given household circumstances. For example, the 25-percent rule is often applied to gross income, which is larger than the adjusted gross income used in the public housing program. Different results are also obtained when housing subsidies are added to income rather than subtracted from housing expense.

Table 13

ALLOCATION OF ALLOWANCES BETWEEN HOUSING AND OTHER CONSUMPTION: YEAR 3 RECIPIENTS IN BROWN AND ST. JOSEPH COUNTIES, BY HOUSING TENURE

Site	Average Annual Allowance ($)	Allocation of Allowance (%)		
		Additional Housing Consumption	Other Consumption	Total
Renter				
Brown County	961	17	83	100
St. Joseph County	1,066	15	85	100
Average	1,014	16	84	100
Owner				
Brown County	796	22	78	100
St. Joseph County	767	20	80	100
Average	781	21	79	100

SOURCE: Estimated by HASE staff from HAO records for households receiving payments at the end of program year 3 in each site and from housing expenditure models fit to household survey data for each site.

income accounts for at most half the increased housing consumption; the rest was due to other program features, primarily the housing space and quality standards that enrollees had to meet in order to qualify for payments.[9]

[9]Using our estimated income elasticities of housing demand, we calculate that renters whose incomes were augmented by about 25 percent would have chosen to increase housing consumption by 4 percent, absent any housing standards. Our data on homeowners indicate that recipients whose incomes were augmented by about 17 percent would have increased their consumption by nearly 8 percent, given time to make all adjustments; however, we counted only repairs and improvements to their current homes as evidence of increased consumption, and they increased their repair expenditures by substantially more than either the extra income or the program's housing standards can explain. It may be that the moral pressure of receiving a *housing* allowance caused them to allocate more of their allowance payments to repairs than they would have allocated from ordinary income.

Table 14

Program Effect on Ratio of Housing Expense to Income: Year 3 Recipients in Brown and St. Joseph Counties, by Housing Tenure

Site	Average Annual Amount (%)					Ratio of Housing Expense to Income (%)	
	Household Income		Housing Expense				
	Gross[a]	Adjusted Gross[b]	Without Program	With Program	Housing Allowance	Without Program[c]	With Program[d]
Renters							
Brown County	4,569	3,504	2,053	2,212	961	59	36
St. Joseph County	3,632	2,484	1,975	2,137	1,066	80	43
Average	4,101	3,027	2,014	2,175	1,014	66	38
Owners							
Brown County	5,081	4,039	2,004	2,182	796	50	34
St. Joseph County	4,198	3,421	1,944	2,097	767	57	39
Average	4,640	3,744	1,974	2,139	781	53	36

SOURCE: Same as Table 13.

NOTE: Expense burdens shown in the last two columns are computed as they would be for public housing tenants; the denominator in all cases is adjusted gross income.

[a] Includes transfers other than housing allowances.

[b] Adjusted for age of head, number of dependents, and extraordinary work, child-care, or health expenses.

[c] Without-program housing expense divided by adjusted gross income.

[d] With-program housing expense minus housing allowance, divided by adjusted gross income.

IV. MARKET AND NEIGHBORHOOD EFFECTS

The primary purpose of the Supply Experiment was to learn how a full-scale housing allowance program would affect local housing markets. Below, we summarize what we learned about the experimental program's effect on housing prices, neighborhood conditions, and the policies of market intermediaries (such as mortgage lenders) and indirect suppliers (such as repair contractors). We conclude that all three effects were negligibly small; with minor qualifications, only participants and their dwellings were affected by the program.

Before the experiment, many people expected differently. It was generally agreed that disbursing housing allowances would increase low-income families' purchasing power and that the program's housing standards would focus their increased spending on housing. Because the allowance would be portable, the increased demand for housing services would not necessarily be confined to participants' preenrollment dwellings or neighborhoods, but might spill over into other parts of the housing market. Whether participants were in fact able to move or change tenure would depend partly on the policies of market intermediaries such as rental agents, real-estate brokers, and mortgage lenders. Whether or not they moved, participants' attempts to upgrade their dwellings would require the services of home improvement contractors and perhaps lending institutions. However, observers disagreed among themselves about the most probable market responses to such demand pressures and how those responses would vary with market structure and initial market conditions.

Optimists expected that the market would respond smoothly, meeting increased demands for housing and intermediary services without exorbitant price increases, poor service, or fraud. Aided by their allowances, black residents of segregated neighborhoods could, if they chose, move to white neighborhoods. Dilapidated dwellings would become hard to rent, so would be either rehabilitated or withdrawn from the market. Housing conditions would improve generally, low-income families would have more housing choices, deteriorating neighborhoods would be spruced up, and all would be accomplished without significant price increases.

The pessimistic scenario stressed other possibilities, in particular the prospect of initial market disturbances and neighborhood destabilization. The most widely voiced concern was that in a tight housing market, program-induced demand would drive up the price of housing services not just for participants, but for others as well. Some observers worried about a general exodus from deteriorating neighborhoods that would cause property values there to fall precipitously; moreover, prices might rise in the neighborhoods to which participants moved, and so might social tensions. Others thought that market intermediaries would cooperate to prevent low-income families, especially racial minorities, from moving to better neighborhoods; and that participants who attempted to improve their dwellings would need protection from unscrupulous contractors and lenders.

Five years of program operations in two metropolitan housing markets provide conclusive evidence that both optimists and pessimists greatly overestimated the market stimulus that would result from an open-enrollment program. Although about a fifth of all households in each site were eligible for assistance, only about 8 percent were enrolled at any given time and only about 7 percent were actually receiving payments. Even in neighborhoods where enrollees were concentrated (e.g., central South Bend), allowances added less than 1 percent to the neighborhood's aggregate income. Moreover, only a fraction of the added income was

spent for housing. In Brown County's rental market, where over a fifth of all renters were enrolled, increased spending by participants added less than 2 percent to total rent expenditures. Although thousands of dwellings in each site were repaired, program-related repair expenditures added less than 3 percent to preprogram residential repair outlays in each community.

Given the modest demand stimulus provided by the allowance program, it is not surprising that the market effects were mild, but it is worth noting that the housing market responded more efficiently to the program than many observers expected. For example, although renter participants increased their consumption of housing services by about 8 percent, the price of those services increased by only 2 percent for allowance recipients and not at all for others. The increased demand was met initially by improving existing dwellings and shifting vacancies from better to worse dwellings, and subsequently by modest changes in the housing inventory (see Sec. III, above, "Program-Induced Moves" and "Program-Induced Repairs").

Other market effects were similarly mild. Although thousands of recipients moved in each site, their moves were too diffuse as to origins and destinations to measurably alter the composition of neighborhood populations or to cause new social tensions. Although thousands of dwellings were repaired, we found no evidence of strain on either the resources or ethics of the home repair industry. Although commercial banks and thrift institutions were conspicuously uninterested in mortgage loans on low-valued properties, over 300 low-income renters in the program nonetheless found lenders willing to finance home purchases for them.

When we compare the characteristics of the experimental sites with those of a national sample of metropolitan housing markets, we do not find any persuasive reason to suppose that the experimental outcomes are aberrant. We conclude that the effects of a national housing allowance program would be limited to participants and their dwellings; the broader community would be virtually unaffected for good or ill. Although that outcome is less than the optimists hoped for, it is far better than the pessimists feared. In any case, it does simplify the assessment of allowances as an instrument of federal policy to know that spillover effects are negligible.

PRICE EFFECTS IN THE RENTAL MARKET

Concern about the program's effect on housing prices appropriately centered on the rental market. To learn about those effects, we measured rent changes within a marketwide panel of rental properties during the first three program years—the period of rapid enrollment growth. We also analyzed landlords' revenue and expense accounts for the same period.

Although rents rose rapidly in both sites, the rent-change data, examined both marketwide and for special groups of dwellings, show no evidence of *marketwide* increases that could reasonably be attributed to the program; participants, however, apparently paid a small premium upon entering the program.

We expected rents to rise during the experimental period because of general price inflation that would affect both tenants' incomes and landlords' costs. Nationally, contract rents[1]

[1]*Contract rent* is the amount that a tenant pays his landlord. It always pays for shelter, and sometimes includes heat, gas, electricity, and other services. Tenants usually pay directly for at least some utilities. *Gross rent* is contract rent plus the cost of any tenant-paid utilities, so is more nearly comparable across dwellings as a measure of housing cost to the tenant.

rose by about 5.8 percent annually during the period covered by our experimental data; in the north-central region, where the experimental sites are located, the annual rate of increase was 5.2 percent. In Brown County, contract rents rose by 5.6 percent annually; and in St. Joseph County, by 4.4 percent. Thus, external comparisons do not signal any unusual rent increases in our sites.

Direct evidence from HAO records shows that few landlords chose to raise rents when their tenants entered the allowance program, even though program rules required a new one-year lease agreement. The HAOs recorded the rents paid by applicants at the time of their enrollment interviews and again about 2 months later when their dwellings had been evaluated, repaired if need be, and certified for occupancy. Table 15 shows that the rents entered on the lease agreements of tenants who did not move averaged less than 2 percent more than their preenrollment rents. The increase was even smaller among dwellings that did not need repairs in order to meet program standards.

Our marketwide survey data enable us to identify dwellings occupied by program participants and compare their annual gross rent increases with those for all other dwellings (Table

Table 15

RENT CHANGES FOR DWELLINGS WHOSE OCCUPANTS ENROLLED IN THE ALLOWANCE PROGRAM IN BROWN AND ST. JOSEPH COUNTIES, YEARS 1-3

Repair Status	Average Monthly Gross Rent ($)		Average Increase (%)
	Enrollment Interview	Certification for Payments	
Brown County			
No repair required	164	167	1.6
Repair required	151	155	2.5
All cases	159	162	1.9
St. Joseph County			
No repair required	157	158	.7
Repair required	152	155	1.7
All cases	155	156	1.2

SOURCE: Tabulated by HASE staff from HAO records through program year 3 in each site.

NOTE: Entries are for renter enrollees who did not move when they entered the program. They reported their contract rents when they enrolled and again when their dwellings were certified for occupancy; the HAO estimated the value of tenant-paid utilities in each case from standard tables. The average interval between the enrollment interview and first certification was 1.6 months in Brown County and 2.1 months in St. Joseph County.

16). Those comparisons indicate that during the first program year, participants' gross rents rose by about 3 percent more than nonparticipants' gross rents, but the difference subsequently diminished.[2] That result includes the effects of other characteristics of participants' housing: For example, low rents rose faster than high rents, regardless of the tenants' participation status. Controlling on dwelling characteristics, we estimate that the pure participation effect was a one-time rent increase averaging 1.4 percent in Brown County and 2.1 percent in St. Joseph County.

Table 16

RENT CHANGES FOR PARTICIPANTS' AND NONPARTICIPANTS' DWELLINGS DURING THE FIRST THREE PROGRAM YEARS IN BROWN AND ST. JOSEPH COUNTIES

Period[a]	Average Annual Change (%) in Gross Rent			
	Participants' Dwellings	Nonparticipants' Dwellings	Difference	
			Amount	Standard Error
Brown County				
Period 1	8.8	5.6	3.2	1.7
Period 2	12.2	9.6	2.6	1.3
Period 3	9.2	7.2	2.0	1.1
All periods	9.9	7.4	2.5	.8
St. Joseph County				
Period 1	7.4	4.3	3.1	2.5
Period 2	9.5	7.4	2.1	2.1
Period 3	6.3	5.3	1.0	1.5
All periods	7.5	5.5	2.0	.9

SOURCE: Estimated by HASE staff from linked records of the annual surveys of households in each site.

NOTE: Entries in the first column are estimates of average rent changes for dwellings occupied by participants during at least part of the observation interval. Entries in the second column are for dwellings not occupied by participants during the interval of observation. A given dwelling could appear in both columns but for different periods. Annual differences between participants' and nonparticipants' rent increases are not cumulative; see text for explanation.

[a]Periods correspond roughly to program years; calendar intervals differ by site.

[2]We are now comparing gross rents, not the contract rents discussed above. For comparison between dwellings within our sites, gross rent is more suitable for reasons stated in note 1 above.

It is important to note that the participation effect does not appear to be cumulative. Participants' extra rent increases occurred when or shortly after they entered the program or moved into dwellings not previously occupied by participants. As continuing tenants, their subsequent rent increases were only slightly if at all affected by their status as participants. The decline over time in the participation effect (see Table 16) is mostly attributable to the fact that later observations of rent changes on participants' dwellings pertain to relatively fewer newly participating tenants and relatively more continuing participants.

TRENDS IN RENTAL OPERATING INCOME AND EXPENSE

From four annual surveys of landlords in each site, we obtained data that enabled us to compile annual operating statements for each property. Trends in rental income, expenses, and profits help us assess the causes of the contract rent increases discussed earlier. If they resulted from excess demand for housing services (whether induced by the program or other causes), we would expect landlords' profits to rise.

Table 17 compares the first- and fourth-year operating statements for regular rental properties in each site.[3] Gross rent, the amount that a tenant pays for an occupied dwelling, increased by 28.5 percent in Brown County and 26.5 percent in St. Joseph County. Operating expenses increased by about 39 and 28 percent in the two counties, respectively. The rapid rise in operating costs was driven by rising energy prices; the increase was larger in Brown County because our baseline data there precede the petroleum crisis of 1973.

Absent any other changes, net operating income—the amount available to the landlord for debt service and equity return—would have fallen in both sites. However, the occupancy rate rose in both sites, so the landlords' revenues rose by more than the average rent increase. Net operating income went up by nearly 11 percent in Brown County and by nearly 30 percent in St. Joseph County. Thus, if the allowance program affected landlords' profits, it must have done so by increasing the occupancy rate rather than by enabling landlords to raise rents exorbitantly. Even so, as shown in the last column of the table, the constant-dollar value of net operating income fell in Brown County and rose only slightly in St. Joseph County.

Subtracting mortgage interest payments from net operating income leaves the return to the landlord's equity in his property. In both sites and both years, the current equity return was under 3 percent of equity value, not enough to warrant holding the average property as an investment. However, nominal appreciation in property values raised the total equity return at baseline to 12 percent in Brown County and 7 percent in St. Joseph County. Three years later, the corresponding figures were 10 and 6 percent. In short, landlords' accounts do not suggest that the allowance program enabled them to earn extra profit.

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[3]As the note to Table 17 explains, both gross rent and operating expenses include direct tenant payments for fuel and utilities, and vacancy losses include some tenant expenses not accounted for elsewhere. These accounting conventions improve cross-property comparability and do not affect the outcome with respect to net operating income. We should also note that the entries in Table 17 are based on a weighted sample of properties, whereas those in Table 16 are based on a weighted sample of dwellings. Table 17 thus gives more weight to single-family houses and less to multiple dwellings than does Table 16. The comparable 3-year change in gross rent from Table 16 is 24.9 percent for Brown County and 18.1 percent for St. Joseph County.

Table 17

Trends in Rental Property Operating Expense and Income during the First Three Program Years in Brown and St. Joseph Counties

Item	Annual Amount ($) per Dwelling		Ratio (Year 4: Year 1)	Price Index (Year 1 = 1.000)	Real Change (%)
	Year 1[a]	Year 4[b]			
Brown County					
Operating expense[c]	1,063	1,482	1.394	1.348	3.4
Vacancy loss and related items[d]	121	142	1.174	1.285	- 8.6
Net operating income[e]	576	638	1.108	1.281	-13.5
Gross rent[f]	1,760	2,262	1.285	1.281	.3
St. Joseph County					
Operating expense	1,323	1,696	1.282	1.332	- 3.8
Vacancy loss and related items[d]	216	244	1.130	1.265	-10.6
Net operating income[e]	228	296	1.298	1.229	5.6
Gross rent[f]	1,767	2,236	1.265	1.229	2.9

SOURCE: Estimated by HASE staff from records of the surveys of rental properties in each site and from price indexes constructed by HASE staff for each site.

NOTE: Entries are averages for regular rental properties (excluding farms, mobile home parks, rooming houses, and properties with commercial space) operating in each site for the full calendar year preceding the baseline and wave 4 surveys respectively. To make the accounts comparable between properties, all expenses are included whether paid directly by the tenant or included in contract rent. The entries were formed by computing average values per dwelling on each sampled property, then weighting the properties to reflect their sampling probabilities.

[a] For Brown County, 1973; for St. Joseph County, 1974.

[b] For Brown County, 1976; for St. Joseph County, 1977.

[c] Includes fuel and utilities, maintenance, janitorial service, management, property tax, and insurance. Excludes capital improvements.

[d] Vacancy rent loss, including an allowance for utilities that would have been paid by the tenant; uncollectable rent; and the rental value of appliances supplied by the tenant. The corresponding price index is the rate of increase in gross rent.

[e] Income available to the landlord for debt service and equity return; the corresponding price index is the national consumer price index.

[f] Gross rent, assuming 100-percent occupancy; the corresponding price index is the national consumer price index.

MODELING MARKET OUTCOMES

As a further check on our direct observations of rent changes and landlords' profits, we modeled market outcomes from known initial conditions, abstracting from general price inflation and assuming that the only demand changes were those caused by the allowance program. Briefly, we used program data to model the time-path of program-induced demand changes, and data mostly from the Annual Housing Survey to model the time-path of suppliers' aggregate response to market signals of excess demand. Then, we estimated the time-path of price changes that would be needed to continuously balance the shifting demand for housing services against the available supply.

The model distinguished two submarkets in each site, one consisting of dwellings potentially acceptable to program participants (dwellings they could afford that also either already met the HAOs' housing standards or could be inexpensively improved), and the other consisting of the remainder of the rental stock (both dwellings that were too expensive for participants and those that were irremediably substandard).

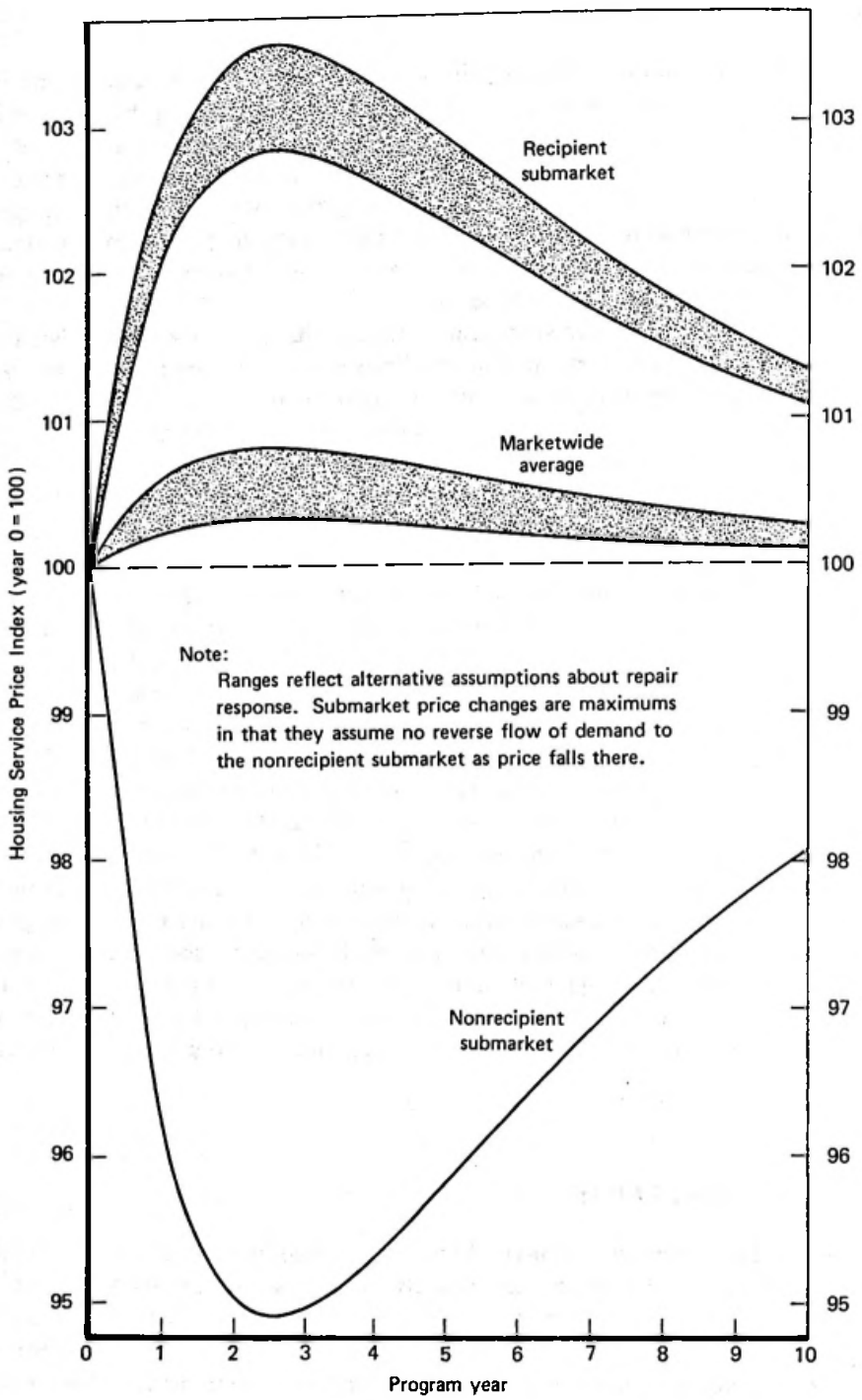
Figures 4 and 5 show the modeled market outcomes for Brown and St. Joseph counties over a period of ten years following the introduction of the allowance program. The model predicts housing price increases in the recipient submarkets of each county during the first two program years as newly enrolled households compete for standard housing. By the end of the third program year, the price of housing is falling in the recipient submarkets because (through repairs to existing dwellings) the supply of standard housing is catching up with the augmented demand for it. Under the most adverse assumptions about repair activity, the price of housing services in the recipient submarket reaches its peak in year 3 at 103.5 in Brown County and 102.5 in St. Joseph County (year 0 = 100 in each site).

Events in the nonrecipient submarket follow the opposite course; the price of housing services first falls as program participants vacate substandard dwellings that cannot easily be repaired, then gradually rises to preprogram levels as the least rentable dwellings are removed from inventory. The marketwide average price, reflecting offsetting price changes in the recipient and nonrecipient submarkets, hardly changes during the 10-year period.

The model results are generally consistent with the empirical evidence concerning the size of price increases in the recipient submarket relative to those in the market as a whole; but because our observations were made in a context of general price inflation, we cannot accurately assess whether prices in the nonrecipient market would have fallen absent that general inflation.

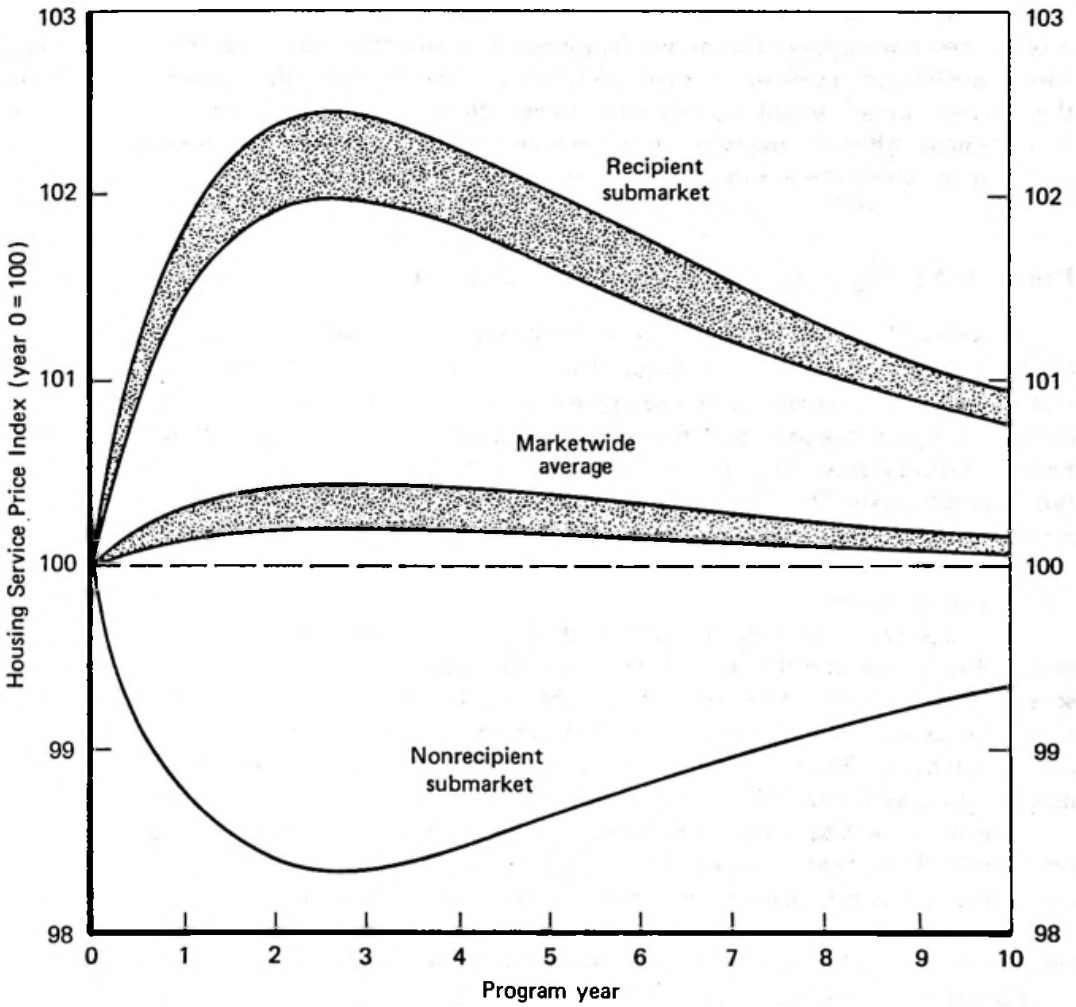
NEIGHBORHOOD EFFECTS

Housing assistance programs have often been designed to focus on specific neighborhoods that need preservation or renewal, and usually provide assistance only to the occupants of selected dwellings. In contrast, the experimental allowance program was open to low-income households throughout Brown and St. Joseph counties, and the allowances were portable in the sense that enrollees could move without losing their entitlements. One purpose of the experiment was to learn how a program with those features would affect deteriorated neighborhoods. A related purpose was to learn how such a program would affect existing patterns of residential segregation that tend to concentrate both low-income households and racial minorities in segregated neighborhoods.



SOURCE: Estimated by HASE staff from a demand model fit to data from HAO records for Brown County and a supply model fit to data from The U.S. Bureau of the Census's Annual Housing Survey.

Fig. 4—Price changes caused by the allowance program: a model of the rental housing market in Brown County



SOURCE: Estimated by HASE staff from a demand model fit to data from HAO records for St. Joseph County and a supply model fit to data from the U.S. Bureau of the Census's Annual Housing Survey.

Note: Ranges reflect alternative assumptions about repair response. Submarket price changes are maximums in that they assume no reverse flow of demand to the nonrecipient submarket as price falls there.

Fig. 5—Price changes caused by the allowance program: a model of the rental housing market in St. Joseph County

Briefly, we find that because of such segregation, allowance payments did focus on deteriorated low-income neighborhoods, especially those predominantly occupied by blacks. Although the allowances augmented the incomes of participants and caused many to repair their homes, we are unable to discern spillover effects in the form of general neighborhood improvement. Although many participants moved, their moves did not significantly alter the economic or ethnic composition of neighborhood populations.

Program Activity and Neighborhood Improvement

To assess the spatial distribution of assistance, we divided each county into small, residentially homogeneous neighborhoods (108 in Brown County and 86 in St. Joseph County) and classified each according to the amount of allowance payments per resident household during the first three program years (Table 18). Although the program did not have explicit neighborhood targets, the pattern of participation did cause payments to concentrate in certain neighborhoods. The 23 most active neighborhoods in Brown County, containing less than a fifth of all households in the county, jointly received over two-fifths of all allowance payments. In St. Joseph County, nearly half of all payments went to residents of the 21 most active neighborhoods.

Although the neighborhoods with high levels of program activity do not form a single geographic cluster in either county, they are distinguishable from inactive neighborhoods in several respects. They have on average the lowest incomes and property values and the lowest incidence of homeowners. Their residential properties are below average in quality and maintenance. Thus, by most standards, the allowance program focused on the neighborhoods as well as the individual households that most needed help.

However, we find very little evidence that the program altered even the most active neighborhoods. In both counties, the greatest increases in population and income occurred in the less active neighborhoods, and the greatest increases in property value and dwelling quality occurred in neighborhoods with intermediate levels of program activity. Although these results do not preclude program effects, they certainly do not signal them.

Considered in context, program activity even in the most active neighborhoods was simply not great enough to generate observable neighborhood change; allowance payments augmented neighborhood income by less than one percent, so the general standard of living could not have been much affected. The program caused many participants to repair their dwellings, but when their repair expenditures are averaged over all neighborhood residents, they amount to only a few dollars per dwelling.

However, we did find that neighborhood residents noticed the program and perceived it as improving property upkeep and raising property values (Table 19). In part, these perceptions can be attributed to a general tendency to respond positively to questions about efforts at civic betterment; but the difference in responses between high-activity and low-activity neighborhoods indicates that respondents in the former group were at least more aware of program activity, even if their own households were not directly involved. Probably, they generalized program effects from particular instances of friends or neighbors whose homes had visibly benefited from the program.

Table 18

CLASSIFICATION OF NEIGHBORHOODS BY LEVEL OF PROGRAM ACTIVITY: BROWN AND ST. JOSEPH COUNTIES

Neighborhood Group		Resident Population[b]		Cumulative Allowance Payments, Years 1-3	
Program Activity Level[a]	Number of Neighbor-hoods	Number of Households	Percent Enrolled (Year 3)	Total ($000)	Per Resident Household ($)[c]
Brown County					
1 (high)	23	8,231	13	2,074	252
2	21	9,017	9	1,362	151
3	14	8,578	6	832	97
4	20	9,084	4	500	55
5 (low)	18	8,868	2	328	37
St. Joseph County					
1 (high)	21	14,113	21	3,105	220
2	12	14,780	10	1,759	119
3	16	13,886	6	847	61
4	15	15,786	4	695	44
5 (low)	18	16,254	2	260	16

SOURCES: Tabulated by HASE staff from records of the survey of households, waves 1 and 4, in each site; and from HAO records through program year 3.

NOTE: Population statistics are based on samples of about 2,600 households in Brown County and 2,100 in St. Joseph County. Neighborhood groups exclude 12 thinly populated neighborhoods in Brown County and 4 in St. Joseph County because sample sizes were too small for reliable classification by level of program activity.

[a]Neighborhoods were grouped according to cumulative allowance payments per resident household.

[b]Population data are from survey wave 1, conducted just before the allowance program began. Participation rate is based on the resident population at survey wave 4, corresponding to the end of program year 3.

[c]Resident households at survey wave 1.

Table 19

PERCEIVED NEIGHBORHOOD CHANGE BY LEVEL OF PROGRAM ACTIVITY: ST. JOSEPH COUNTY

Perceived Program Effect	Percentage Distribution of Responses by Level of Program Activity in Respondent's Neighborhood			
	Groups 1 and 2 (High)		Groups 3-5 (Low)[a]	All Neighborhoods
	Recipients	Nonrecipients		
Effect of Program on Neighborhood Property Values?				
Increased	67	45	38	45
No effect	32	49	57	50
Decreased	1	6	5	5
Effect of Program on Neighborhood Property Upkeep?				
Increased	84	50	48	54
No effect	16	46	49	43
Decreased	--	4	3	3
Effect of Program on Repairs?				
Increased	67	55	40	50
No effect	32	42	53	46
Decreased	1	3	7	4
Has the Program Affected Your Household?				
A lot	75	3	4	9
Somewhat	15	2	5	5
Very little	4	4	4	4
Not at all	6	91	87	82

SOURCE: Tabulated by HASE staff from records of the survey of households, wave 4, for St. Joseph County.

NOTE: Entries are based on responses from 1,665 household heads who were familiar with program details. Except for rounding error, all distributions should add to 100 percent.

[a]About 88 percent of the residents of these neighborhoods were nonrecipients.

Residential Mobility and Neighborhood Change

The portability of housing allowances led some observers to speculate that a full-scale program would result in substantial spatial rearrangements of low-income households, particularly those belonging to racial minorities. Some thought the program would help achieve a desirable pattern of residential integration, dispersing low-income and minority households among more prosperous white neighborhoods. Others worried that participants would abandon deteriorating neighborhoods and move in unwelcome numbers to a few better neighborhoods. Still others were skeptical that the program would much alter the residential distribution of participants.

We found that about 40 percent of all renter recipients and 4 percent of all homeowner recipients moved after enrolling in the program; about half moved in order to qualify for payments and the others moved voluntarily while they were receiving payments. The annualized mobility rate for renter participants is distinctly lower than the rate for comparable nonparticipants. We think that participation dampens mobility by enabling some renters to stay in dwellings they could not otherwise afford; and possibly by deterring others from moving, because they do not understand that their allowance entitlements are portable, or worry about possible repair requirements that might be imposed by the HAOs on a new residence.

To learn how program-related moves affected residential neighborhoods, we compared the origins and destinations of all postenrollment moves made by allowance recipients during the first five program years in each site. Generally, these moves were either to new addresses within the origin neighborhoods, or to similar nearby neighborhoods; the average distance moved was less than a mile, and we found no strong directional patterns or focuses in either site.

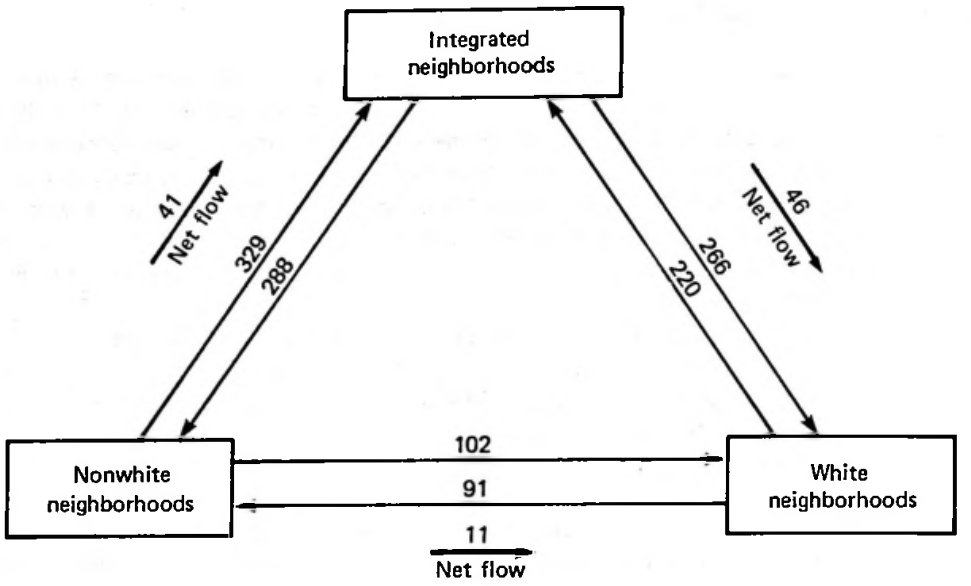
In St. Joseph County, we tabulated moves by whites and nonwhites separately,[4] and distinguished between neighborhoods that were predominantly nonwhite, integrated, and white. Only a third of the moves were from one type of neighborhood to another, and the counterflows between each pair of neighborhood types were nearly balanced (see Fig. 6). There was a net shift from nonwhite to integrated and from integrated to white neighborhoods, but these net flows were very small relative to the total populations of either origin or destination neighborhoods, and did not significantly alter the racial balance in any neighborhood.

THE ROLE OF MARKET INTERMEDIARIES

Because the housing allowance program relies on the private market, program outcomes could be affected by the policies or practices of a variety of market intermediaries and indirect suppliers of housing services. The former include mortgage and home improvement lenders, insurance underwriters, real-estate brokers, rental agents, and property management firms; the latter include residential repair and improvement contractors and providers of janitorial and maintenance services.

We investigated how these industries were organized in Brown and St. Joseph counties, who used their services, and how their policies affected participants in the allowance program. Briefly, we found that the industries were amorphous, that some were seldom used by

[4]The nonwhites were nearly all blacks who, when they enrolled, were living in central South Bend.



SOURCE: Compiled by HASE staff from HAO records through program year 5.

Note: Entries are based on 3,641 moves made by households while enrolled, of which 1,296 were between the different types of neighborhoods described in the text.

Fig. 6—Moves by program participants between nonwhite, integrated, and white neighborhoods in St. Joseph County, 1974-79

either landlords or homeowners, and that program-related transactions never accounted for a substantial share of any intermediary's or supplier's activity. Consequently, few firms in any of the industries ever articulated special policies toward program participants who might deal with them, or actively sought participants' business.

The Intermediary Role in Home Improvement

Enrollees whose dwellings failed initial or annual evaluations had to repair or move in order to qualify for payments. Complicated repairs might require the skills of professional contractors and expensive repairs might require credit.

However, nearly all the required repairs and most of the voluntary repairs were made by the recipients themselves, their friends, or their landlords (see Fig. 3, above). Only the larger and more expensive jobs were delegated to professional contractors, whose work on participants' dwellings was valued at about $236,000 annually in Brown County and $757,000 in St. Joseph County. Although these are substantial sums, they amount to less than 3 percent of the total receipts of the home repair industry.

Because required repairs were so inexpensive, few participants or their landlords needed or sought credit to finance them. Although about half of those who dropped out of the program mentioned difficulty meeting the housing requirements as one of their reasons, analysis

of their circumstances convinces us that easier access to credit at market interest rates would have enabled only a few such terminees to qualify for payments. Most had other reasons for dropping out.

The Intermediary Role in Home Purchase

Renters enrolled in the allowance program could become homeowners without losing their entitlements; but aside from the monthly allowance payment, the program offered no special incentives or assistance for home purchase. The prospective buyer was responsible for finding a home that he could afford and that met HAO standards, for negotiating the sale, and for arranging mortgage or other credit to finance the purchase.

Less than a third of the renter enrollees in Brown County and less than a fourth in St. Joseph County were young couples, the type of household that accounts for most first-home purchases. Because of their low incomes, scant savings, and (sometimes) irregular credit records, few would be regarded as prime prospects by either real-estate brokers or institutional lenders. However, 2 percent of the renter enrollees in Brown County and 3 percent in St. Joseph County bought homes after they enrolled.

Commercial banks and thrift institutions in both sites were reluctant to lend on the low-valued properties that program participants could afford. Nonetheless, these participants bought inexpensive conventional or mobile homes, financing them either with FHA-insured loans from mortgage banks, with land contracts, or with consumer loans; some were helped by relatives or nonprofit organizations, or made a joint purchase with another family.

Racial Steering and Redlining

Real-estate brokers are often accused of "managing" racial segregation by steering their clients to or away from particular neighborhoods. Lenders are often accused of sealing the fates of deteriorating neighborhoods by refusing loans on properties there, regardless of the buyer's qualifications (redlining). We investigated these phenomena in our sites as they pertained to the outcome of the allowance program.

Neither steering nor redlining was an issue in Brown County, which lacks both racial minorities and seriously deteriorated neighborhoods. In St. Joseph County, anecdotes about racial steering abound, but reliable evidence on the extent of the practice is lacking. Most commercial banks and thrift institutions avoided lending on central South Bend properties, but other lenders did not.

The racial pattern of home purchases by renter enrollees is consistent with the steering hypothesis. Eighty-six percent of the black homebuyers in the program bought within central South Bend, where 82 percent of the black population lives. However, that area also contained the least expensive homes; and at least some of the buyers either preferred accustomed environments or did not know much about alternative possibilities. Once in place, a pattern of racial segregation tends to perpetuate itself even without special efforts by market intermediaries to maintain it.

V. COMMUNITY ATTITUDES

From the standpoint of public policy, how people feel about a social program may be fully as important as what it objectively does for them. As part of the Supply Experiment, we gathered considerable information on community knowledge of and attitudes toward the experimental allowance program. The most systematic information was collected in annual communitywide surveys of households and landlords. In addition, resident observers attended public meetings at which the program was discussed, talked informally to both influential and ordinary citizens, compiled statistical reports on the content of telephone calls received by the HAOs, and monitored the treatment of program-related news by local media.

Briefly, we found that knowledge of the program's existence spread rapidly because of the HAOs' aggressive outreach campaigns; but most people were vague about program details unless they were directly involved as participants or landlords of participants. Over time, both favorable and unfavorable attitudes toward the program hardened. Most household heads were favorably disposed toward the program, but only participants believed that it substantially affected the community. Landlords were less enthusiastic about the program than household heads, but landlords with participating tenants were more positive than those without such tenants.

The wide base of community support for this program and the solidification of that support as community experience accumulated are not characteristic of all new social programs. From detailed response to our attitude questions, we conclude that this program was especially popular because (a) it was a policy experiment; (b) it was well designed as a housing assistance program; and (c) it was managed competently and humanely.

THE SPREAD OF PROGRAM KNOWLEDGE

Operating the experimental allowance program in Brown and St. Joseph counties required formal approval from every local jurisdiction and acceptance by a local housing authority of its proposed role as a conduit for program funds. Local officials were thus the first to learn about the program; and their debates over its value to their communities were fully reported by the local media. However, ordinary citizens paid little attention to the program until enrollment began.

Thereafter, knowledge spread rapidly. The publicity attendant on the start of the program brought over 1,200 applications to the Brown County HAO within the first three months, and 1,350 to the St. Joseph County HAO within the first month. During this early period, the HAOs made dozens of informational presentations to local audiences, distributed brochures and application forms through many channels, and maintained a steady flow of press releases, most of which were published by the local media.

Once the first rush of applications had been processed, the HAOs kept up the flow of applicants by periodic advertising campaigns, saturating local television and radio channels as well as newspapers. After about two years of such campaigns, paid advertising was reduced to a "maintenance" level, and the HAOs concentrated on mailings and presentations to hard-to-reach groups.

Within less than a year after enrollment began, 80 to 90 percent of all household heads

and landlords in each county had heard of the program; but less than half could supply any correct details about whom it helped, what it was intended to accomplish, or how it worked. Two years later, 70 to 80 percent of all household heads and landlords knew some correct details, but only a fourth could distinguish the allowance program clearly from other housing assistance programs in the community.

ATTITUDE FORMATION

Civic leaders in the two counties were the first to learn about the program and had to decide whether their jurisdictions would participate. They were thus among the first to develop attitudes toward the program. The style of civic leadership differed sharply in the two counties, and so did the debate about the allowance program.

Although Brown County had hitherto virtually abstained from federal housing assistance, its leaders quickly agreed that the allowance program was desirable. Consensus came only after probing for dangers to the community. The principal concerns were allowance-motivated in-migration, distinguishing the needy from the undeserving, and the problems associated with ending the program.

St. Joseph County had considerable experience with federal housing programs. The mayor and council of South Bend enthusiastically endorsed the allowance program, but other jurisdictions were worried about the lack of local control of program administration and some were concerned that the program would encourage South Bend's low-income blacks to relocate to their communities. Local interest groups—labor unions, taxpayer associations, the NAACP, developers, and others—fought for concessions that would benefit their constituents. Over a year of step-by-step negotiation was required to bring all jurisdictions into the program.

The concerns of public officials about local control and broader community effects were not salient in the perceptions of ordinary citizens. As they learned about the program, they tended to judge it in terms of the features stressed in the HAOs' publicity: who would be helped and the purpose and form of the assistance. Early evaluations were strongly positive. By the end of the first program year, at least three-fifths of those in each site who knew about the program thought it was "a good idea" and only a tenth expressed negative views (see Table 20). Over time, approval ratings fell slightly, either because early expectations were disappointed or because those who were slow to learn about the program were also less enthusiastic.

Landlords—mostly owners of only one or two small properties—seemed, like the general public, to have learned about the program primarily from the HAOs' advertisements. However, they were less positive than household heads in their early evaluations (see Table 21). At the end of the first program year, about half thought that the program was a good idea and a fourth thought it was a bad idea. Their views subsequently became less positive in Brown County but more positive in St. Joseph County. Brown County's landlords had little prior experience with federal housing assistance programs, so had few benchmarks against which to judge this one. By the time of the last survey wave, they were clearly less enthusiastic both about the local allowance program and about federal housing assistance generally than were St. Joseph County's landlords, who seem to have been pleasantly surprised by the HAO's performance there.

Table 20

Program Evaluations by Informed Household Heads: Brown and St. Joseph Counties, Survey Waves 2 and 4

Respondent's Evaluation	Percentage Distribution			
	Brown County		St. Joseph County	
	Wave 2	Wave 4	Wave 2	Wave 4
Overall Program Evaluation[a]				
Good idea	60.0	61.6	64.4	61.8
Neutral, no opinion	29.7	21.6	22.4	25.1
Bad idea	10.4	16.9	13.2	13.2
Do HAO staff know what they are doing?				
Yes	38.9	71.5	57.5	59.9
Neutral, no opinion	48.0	15.1	21.0	18.8
No	13.0	13.3	21.5	21.2
Is the program run the way it should be?				
Yes	27.1	59.8	47.8	50.2
Neutral, no opinion	60.3	18.4	29.7	24.1
No	12.6	21.9	22.4	25.7
Would a national program be worth the taxes?				
Yes	*(b)*	46.9	50.8	47.8
Neutral, no opinion	*(b)*	10.8	11.8	13.4
No	*(b)*	42.1	37.4	38.9
Should the federal government help with housing costs?				
Yes	55.9	57.8	58.8	58.8
Neutral, no opinion	28.1	7.6	10.4	8.9
No	16.1	34.5	30.8	32.4

SOURCE: Tabulated by HASE staff from weighted records of the surveys of households.

NOTE: Distributions are based on records for household heads who were able to give at least some correct details about the allowance program. Except for rounding errors, each column in each panel of the table would add to 100.0 percent.

[a]Respondents rated the program on a 7-point scale, "good idea" to "bad idea." In this panel, ratings 1-3 are coded as "good idea" and ratings of 5-7 are coded as "bad idea." Ratings of 4 are coded as "neutral" and are combined with "no opinion" and "don't know" responses.

[b]This question was not asked of respondents to the wave 2 survey in Brown County.

Table 21

PROGRAM EVALUATIONS BY INFORMED LANDLORDS: BROWN AND ST. JOSEPH COUNTIES, SURVEY WAVES 2 AND 4

Respondent's Evaluation	Percentage Distribution			
	Brown County		St. Joseph County	
	Wave 2	Wave 4	Wave 2	Wave 4
Overall Program Evaluation[a]				
Good idea	54.9	43.3	48.7	55.3
Neutral, no opinion	15.2	25.6	27.4	25.0
Bad idea	29.9	31.1	23.9	19.7
Do HAO staff know what they are doing?				
Yes	26.6	47.5	46.4	53.3
Neutral, no opinion	60.9	28.4	31.3	27.0
No	12.6	24.1	22.3	19.7
Is the program run the way it should be?				
Yes	13.0	40.7	37.3	43.7
Neutral, no opinion	71.9	26.3	34.7	31.1
No	15.0	33.0	28.0	25.2
Would a national program be worth the taxes?				
Yes	*(b)*	25.2	36.4	37.3
Neutral, no opinion	*(b)*	16.1	17.4	17.3
No	*(b)*	58.7	46.1	45.4
Should the federal government help with housing costs?				
Yes	33.1	34.7	49.0	51.9
Neutral, no opinion	28.6	10.1	16.5	10.3
No	38.2	55.3	34.4	37.8

SOURCE: Tabulated by HASE staff from weighted records of the surveys of landlords.

NOTE: Distributions are based on records for landlords who were able to give at least some correct details about the allowance program. Except for rounding errors, each column in each panel of the table would add to 100.0 percent.

[a]Respondents rated the program on a 7-point scale, "good idea" to "bad idea." In this panel, ratings 1-3 are coded as "good idea" and ratings of 5-7 are coded as "bad idea." Ratings of 4 are coded as neutral and are combined with "no opinion" and "don't know" responses.

[b]This question was not asked of respondents to the wave 2 survey in Brown County.

ATTITUDES TOWARD A MATURE PROGRAM

The fourth wave of household and landlord surveys was fielded after three years of program operations. By then, nearly everyone in both counties knew about the program; about a fourth of all household heads had at least contacted the HAOs to inquire about their eligibility for assistance, and 12 percent had actually enrolled. About a third of all landlords could recall housing evaluations on their properties, and nearly a fifth had tenants who were in the program.

At that point, a solid majority of household heads approved of the program, its management, and staff. Support for the program seemed to reflect several beliefs about it: that it helped the right people; that it was well run; and that, as a local experiment funded by federal taxes, it yielded a net fiscal gain to the community. More people approved of the local program than thought a national program would be worth the taxes, though the latter proposition was supported by a plurality.

After three years of program operations, its housing and neighborhood effects were barely perceptible to nonparticipants, although many assumed that such effects existed elsewhere in the county. Participants, both because of their own experience and because they usually lived near others in the program, saw much more evidence of the program's benefits in their neighborhoods. Virtually no one perceived negative consequences such as rent increases, property deterioration, or undesirable new neighbors.

The experiences of those participating were, we think, important influences on the attitudes of their friends and neighbors. Although the beneficiaries of social programs usually approve of them, the allowance program achieved unusually high ratings from its participants (see Table 22). Over 90 percent approved both of the program and the performance of the HAO staffs, and nearly as many approved of program rules and procedures. Approval ratings varied little with household characteristics. Even majorities of those who applied but were ineligible or enrolled but never qualified for payments approved of the program concept, the staff, and the rules and procedures. We judge that participants' high regard for the program reflected some important features of both its design and management, discussed in the next section.

Few landlords, whatever their exposure to the program, thought that it had much affected the management of their own or nearby properties. Among those who had experience with the program, about half approved of it and about two-fifths approved of its standards and procedures. Only a third thought that a national program would be worth the taxes.

Considering that the program could only indirectly benefit landlords and often caused them inconvenience, their approval ratings were high. We think that those who approved were often responding to a genuine concern for the welfare of their low-income tenants, and were also impressed by the reasonableness of the program's housing standards. Remarkably, 80 percent of the landlords whose dwellings failed initial housing evaluations nonetheless thought those evaluations were fair. Although few landlords thought that allowance recipients were better tenants than others, only a tenth preferred not to rent to recipients.

Table 22

Recipients' Evaluations of Selected Federal Housing Assistance Programs

Respondent's Evaluation	Percentage Distribution of Households in Each Program			
	Housing Allowances (n = 381)	Sec. 236 Rent Subsidy (n = 556)	Sec. 235 Mortgage Subsidy (n = 391)	Public Housing (n = 511)
Own Experience with Program				
Satisfactory	95	84	86	77
Neutral, no opinion	3	5	3	9
Unsatisfactory	2	11	11	14
Is the program run the way it should be?				
Yes	91	69	68	63
Neutral, no opinion	5	13	16	20
No	4	18	16	17
Should the program be changed in any way?				
No	78	52	49	48
Neutral, no opinion	2	12	16	29
Yes	19	36	35	23

SOURCES: For housing allowances, tabulated by HASE staff from weighted records of the wave 4 surveys of households. For other programs, Louis Harris and Associates (1976), pp. 1427-31.

NOTE: HASE and Harris questions are nearly parallel in wording; however, responses to the "own experience" question were independently scaled by the two sources so may not be exactly comparable. Harris surveyed a national sample of participants in each program in 1973; the HASE data are for 1978-79.

VI. PROGRAM ADMINISTRATION

As compared with other methods for delivering housing assistance to low-income households, a housing allowance program has at least the virtue of administrative simplicity. In an allowance program, the administering agency does not build, buy, lease, or manage residential property; nor does it supervise, regulate, or audit private builders, owners, or managers. The agency deals only with households that apply for assistance, and those dealings are limited to two issues: determining applicants' eligibility and entitlements, and checking the physical adequacy of their dwellings. Enrollees conduct their own housing transactions on the private market without supervision or assistance from the agency.

Earlier sections of this report tell about the experimental program's degree of success in delivering assistance to those who were eligible, and explain how they used their benefits. Here, we summarize the program's administrative experience. Briefly, that experience indicates that a well-planned housing allowance office, hiring its staff locally at prevailing wages, can perform its functions promptly, equitably, and humanely at the surprisingly low cost of $163 per recipient-year (1976 dollars).

Both the structural features of the program, noted above, and its administrative procedures contributed to that result. Some of those features and procedures could be applied to other programs whose functions included income transfers or earmarked benefits. In particular, our findings are relevant to agencies that, like the HAOs, experience rapid turnover of clients.

The key administrative functions were eligibility certification and housing certification.[1] Both certifications were entailed in recruiting new recipients (intake) and were repeated periodically thereafter (maintenance). Eligibility certification, which includes determining the allowance entitlement, is characteristic of all transfer programs. Housing certification is only relevant to housing programs. Below, we assess the effectiveness and efficiency of the HAOs with respect to these functions.

ADMINISTRATIVE EFFECTIVENESS

During their first five years, the two HAOs jointly accepted 59,000 applications, enrolled or reinstated nearly 30,000 households, and authorized 23,000 for payments;[2] they administered 113,000 means tests and 79,000 housing evaluations, and disbursed 428,000 allowance checks. Both HAOs processed their workloads promptly, made payment errors infrequently, and stayed on good terms with their clients and the host communities.

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[1]Other important administrative functions were outreach (recruiting applicants by publicizing the program) and payment operations (preparing and mailing participants' monthly checks).

[2]These totals are larger than those given in Sec. I (25,000 enrollees and 20,000 recipients) for two reasons. Administrative statistics for St. Joseph County were collected for three months beyond the nominal end of year 5, adding about 1,000 enrollees; and in both sites, the administrative analysis treated a reinstatement as the equivalent of a new enrollment. Altogether, about 3,500 households dropped out of the program but were subsequently reinstated.

Workload Processing

Maintenance backlogs never accumulated at either HAO. Allowance checks were always mailed in time to reach recipients by the first of the month, and each cohort of recipients due for eligibility or housing recertification completed those processes without holdovers to the following month. This achievement reflected a firm administrative policy: If workloads expanded beyond capacity, maintenance functions had priority over intake.

A moderate backlog of applications was desirable for efficiently scheduling intake activities. The HAOs' target was an average processing time of 1.5 months from application to enrollment. Backlogs inconsistent with that target never accumulated in Brown County, but were usual in St. Joseph County because of (we now think) overconservative staffing. Even so, the applications backlog in St. Joseph County never became large enough to create problems in public relations.

Controlling Errors

Errors in a client's records are functionally important only if they affect his allowance payments. Most such errors occurred because a client deliberately or accidentally misreported information used by the HAO to calculate his entitlement; or because the staff erred in transcribing the data or in subsequent computations (see Table 23).

Misreporting errors were rare because the needed information was collected in carefully structured interviews with applicants and recipients, who had been asked beforehand to document as much of income and relevant expenses as was feasible. Undocumented declarations were accepted subject to third-party verification, which the HAOs routinely conducted on a sample of such declarations.

Staff errors were more common, but most were caught by routine checks that included a computer edit of each interview report (which checked for computational errors and inconsistent statuses) and a manual review by another staff member. These procedures were augmented by sample audits that included searches for unreported income and verification of documents submitted by the clients.

Client misreporting that affected payments occurred in less than 3 percent of all enrollment and annual recertification interviews. Most such errors were caught by third-party verification. Sample audits indicate that uncorrected errors of this type were only slightly biased in the client's favor, causing net overpayments during the client's first year that averaged only 3 cents in Brown County and $1.33 in St. Joseph County. Staff errors were more frequent (7 to 10 percent of all cases), and those not caught by routine controls led to average annual overpayments of $5.03 in Brown County and $3.13 in St. Joseph County. The experience with annual recertification interviews was similar. Overall, we estimate that the HAOs paid out less than 0.5 percent more than clients should have received.

The housing evaluations conducted by HAO staffs for both new enrollees and continuing clients were also routinely checked by independent reevaluations of a sample of dwellings. Discrepancies in item ratings (e.g., condition of bathroom plumbing) were well under 1 percent, and overall pass-fail determinations differed in only 1.5 percent of all cases tested.

Client and Community Relations

The evidence on the HAOs' relations with their clients and host communities was presented earlier. Survey respondents (both clients and others) gave high approval ratings to

Table 23

PAYMENT ERRORS IN INITIAL AND ANNUAL ELIGIBILITY CERTIFICATIONS: HOUSING ALLOWANCE PROGRAMS IN BROWN AND ST. JOSEPH COUNTIES

Type of Error and Disposition	Type of Certification, by Site			
	Brown County		St. Joseph County	
	Initial	Annual	Initial	Annual
Percent of Cases with Errors				
Client misreporting:				
Total	3.1	2.8	2.3	1.8
Uncorrected	.2	.5	.6	.9
Staff errors:				
Total	6.8	7.1	10.1	8.4
Uncorrected	1.0	2.7	4.4	3.0
Gross Error per Recipient-Year ($)[a]				
Client misreporting:				
Total	9.25	6.42	7.81	4.91
Uncorrected	.05	1.24	1.25	2.36
Staff errors:				
Total	14.97	5.72	18.56	7.06
Uncorrected	5.04	1.87	5.51	2.16
Net Error per Recipient-Year ($)[a]				
Client misreporting:				
Total	2.96	3.79	5.22	4.35
Uncorrected	.03	.99	1.33	2.36
Staff errors:				
Total	9.62	-1.30	5.53	2.60
Uncorrected	5.03	-1.45	3.13	1.98
Net Error as Percent of Annual Payments[b]				
All errors	1.4	.3	1.2	.8
Uncorrected errors	.6	(c)	.5	.5

SOURCE: Estimated from sample studies of HAO case records conducted by HAO staffs.

[a]For initial certification errors, the base is the first year of recipiency; for annual certification errors, the base is all subsequent years of recipiency. Consequently, initial and annual errors are not additive.

[b]For initial certification errors, the base is annual payments during the first year of recipiency; for annual certification errors, the base is annual payments during subsequent years of recipiency. Average payments in both cases are assumed to be the same, but error rates are not additive.

[c]Less than 0.1 percent.

HAO administration in both sites, even following administrative actions adverse to their interests.

ADMINISTRATIVE EFFICIENCY

During the five-year experimental period, administrative expense averaged $1.1 million annually in Brown County and $1.6 million in St. Joseph County. In both sites, about two-thirds of these expenses went for staff salaries and fringe benefits. Each HAO maintained reporting systems that enable us to allocate these expenses by function and workload, and thus to estimate the efficiency of various functions over time, at different scales of operation, and in comparison to other programs.

In both sites, administrative cost per unit of workload decreased as the HAOs gained experience, but were not much affected by the scale of operations. We estimate the steady-state intake cost at about $160 per new recipient in Brown County and $230 in St. Joseph County. The higher intake cost in St. Joseph County was principally because of its much more expensive outreach program; the HAO there spent $46 (mostly on television advertising) per new recipient, as against $5 in Brown County.[3] Maintenance costs in both sites were about $115 per recipient-year. Amortizing intake costs over the average duration of recipiency in each site yields the same total administrative cost in each site: $163 per recipient-year (1976 dollars). As shown in Table 24, that outcome compares favorably with other housing and income transfer programs, including some whose eligibility recertifications or housing evaluations were less frequent or less thorough than those conducted by the HAOs.

The HAOs scored high with respect to both administrative effectiveness and efficiency. One reason was the intentionally limited nature of HAO administrative functions, which made workloads controllable and susceptible to routine procedures; the staff seldom had to negotiate with clients or third parties and their responsibilities toward each client were clearly specified and limited. Another was the administrative style, which stressed formal procedures for most tasks, careful training, thorough and conspicuous checking of both client submissions and staff work, and a management information system that closely tracked individual performances as well as workloads and costs.

One uncontrollable factor that affected performance was the client mix. Many applicants proved ineligible only after expensive interviews, and a fifth of those who enrolled never qualified for payments; among those who became recipients, some dropped out or became ineligible within a few months. Administrative costs would have been substantially lower if the HAOs had been able to devise an inexpensive screening procedure that would weed out ineligibles and those who were unlikely to persevere in the program.

Excluding those who were only briefly eligible (if an equitable way could be found) would have greatly simplified program administration. Recessions in 1974 and 1980 caused enrollments to increase in both sites, and during those periods the temporarily unemployed made up a larger proportion of all recipients than they did at other times. Because such enrollees had little or no current income, their allowance entitlements were above average. The short-

[3]In the interests of rapid program growth, wanted for experimental reasons, the St. Joseph County HAO spent more on advertising than would be warranted for an operating program; however, as noted above, that HAO lacked the staff capacity to process all applications as promptly as was desirable. In retrospect, we see that the St. Joseph County HAO could have achieved a better balance between outreach effect and intake capacity. However, we did learn a good deal about the use of advertising as an outreach technique.

Table 24

Administrative Costs of Selected Housing and Welfare Programs

Program	Cost per Recipient-Year (1976 $)		
	Income Transfer	Housing Certification	Total
Supply Experiment			
Brown County	113	50	163
St. Joseph County	103	60	163
Average	108	55	163
Administrative Agency Experiment[a]			
Most expensive site	202	275	403
Least expensive site	92	61	194
Median	133	138	235
Section 8 Existing Housing			
0-49 recipients	(*b*)	(*b*)	216
50-99 recipients	(*b*)	(*b*)	191
100-299 recipients	(*b*)	(*b*)	170
300-499 recipients	(*b*)	(*b*)	214
500-999 recipients	(*b*)	(*b*)	191
1,000+ recipients	(*b*)	(*b*)	296
Average	(*b*)	(*b*)	190
Aid to Families with Dependent Children			
Most expensive state	582	(*c*)	582
Least expensive state	77	(*c*)	77
National average[d]	295	(*c*)	295

SOURCES: Supply Experiment data are from HAO accounting records; Administrative Agency Experiment data are from U.S. Department of Housing and Urban Development (1980) and Maloy, Madden, and others (1977); Section 8 data are from Coopers and Lybrand (1981); AFDC data are from Campbell and Bendick (1978).

NOTE: Costs for each program were converted to 1976 dollars. Intake costs for the Supply and Administrative Agency experiments and for the Section 8 program are amortized over the estimated average duration of recipiency (4 years). AFDC costs for determining eligibility and administering payments during fiscal 1976 were divided by average monthly caseloads for that year; costs for social services to recipients were excluded.

[a] Seven sites, excluding Jacksonville, Florida, where operating experience was unusual. Income transfer, housing certification, and total entries are for different sites, so the components do not add to the total.

[b] Not available.

[c] Not applicable.

[d] Average of state costs, each weighted by caseload.

run assistance provided by housing allowances did relieve their financial problems, but did not much affect their housing consumption.

Special Services to Participants

By design, the HAOs offered little in the way of special services to help clients resolve their housing problems, and the services that were offered found few takers. Initially, both HAOs invited participants to attend group information sessions to learn about the program's housing standards and to become more skillful consumers of housing. Topics included home-repair techniques, tips on moving and home-buying, lease agreements, fair-housing law, and others. The Brown County HAO stopped the sessions after a few months because few clients were interested. The St. Joseph County HAO continued to offer such sessions, but only a small fraction of all clients attended. Free legal services were also available to clients who thought they had been discriminated against in their searches for better housing, but again few clients asked for help.

This evidence, coupled with the fact that about 80 percent of all enrollees qualified for payments without special services, leads us to the conclusion that mandatory services for all enrollees would have been a costly error in program design. Even among the fifth of all enrollees who dropped out without qualifying for payments, we estimate that only 35 to 50 percent could have been helped by either technical information or advances on their future allowances. The others dropped out for reasons unrelated to housing problems.

VII. LESSONS FROM THE SUPPLY EXPERIMENT

In the following pages, we briefly note what we regard as important lessons that might be missed by readers of the preceding sections of this summary, because those sections focus on the specific questions that formed our research charter. Most of our comments bear on housing policy—the housing circumstances of the poor, how housing markets work, what housing programs accomplish; but we also offer advice on program design and administration.

THE HOUSING CIRCUMSTANCES OF THE POOR

Much discourse on federal housing policy is based on two widely held beliefs: (a) that most poor people live in seriously substandard dwellings, and (b) that they do so because they cannot afford adequate housing. Evidence from the Supply Experiment strongly qualifies both propositions.

Housing Quality

In Brown and St. Joseph counties, about half of all low-income families lived in dwellings that did or would fail the HAOs' housing standards. However, relatively few of the substandard dwellings were structurally unsound, lacked basic domestic facilities, or were severely overcrowded. Most of the defects reported by the HAOs' evaluators were easily remediable health and safety hazards such as stairways without handrails, broken or unopenable windows, leaky plumbing, unsafe electrical installations, and poorly vented space heaters. As evidenced by enrollees' responses to dwelling failure, these defects could usually be corrected by amateur labor, often using materials on hand. Professional contractors were hired for less than 15 percent of all required repairs. The average cost, including an imputed wage for the unpaid labor of program participants, their friends, and their landlords, was about $100; cash outlays were substantially less. Dwellings that were not repaired usually had more defects, but the estimated cost of repairing them averaged only $125 for owners and $350 for renters.

The findings in our sites are broadly consistent with the evidence of recent national surveys of housing quality. For example, the 1979 Annual Housing Survey (AHS) reports that 97 percent of all occupied dwellings in the United States have complete bathrooms and kitchens, hot and cold running water, and electricity. In the northeast and north-central states, where winters are severe, 94 percent of all occupied dwellings have either central heating or built-in electric heaters. In the southern states where summers are hot, 73 percent have air-conditioning. Nationwide, 96 percent have at least one room per occupant.

There are, of course, people who do live in dilapidated dwellings that lack toilets or baths or refrigerators, and who sleep five or six persons per room. But these are now rare cases—too rare to be reasonably addressed by a broadly targeted program of housing improvement. Whether it is an urgent national priority to remedy the health and safety hazards that do not much concern the occupants of defective dwellings is a different question; although such

hazards are manifestly undesirable, remedying them would only marginally improve the health, morale, or social performance of the poor.[1]

Housing Expenditures

One reason for the basically good quality of dwellings in Brown and St. Joseph counties was that even the poor spent substantial amounts on their housing. Although those who enrolled in the allowance program were drawn entirely from the lower half of each community's income distribution, the average housing expenditure of renter participants when they enrolled was close to the marketwide median rent in each site.

These housing expenses are surely burdensome for low-income households. For example, among renter participants in St. Joseph County, the average gross income at enrollment was $3,600 and the average gross rent expenditure (which includes fuel and utilities) was $1,975 or 55 percent of income (see Table 14, above). For owner participants with an average gross income of $4,200, the housing expense burden averaged 46 percent of income. National data consistently show comparably high housing expense burdens for low-income households.

These high expense burdens often serve as the premise for the proposition that if poor people had more money, they would buy better housing. As noted earlier ("Household Budget Allocation"), our data speak strongly against that inference. For a typical renter household in our sites, we estimate that a permanent 10-percent increase in income would cause only a 2-percent increase in housing consumption; for a typical owner, housing consumption would increase by 5 percent.

In the allowance program, renters' incomes were augmented by about a fourth and owners' incomes by about a sixth. Both groups increased their housing expenditures by about 8 percent, partly because of program standards that impelled them to correct housing defects they would otherwise have tolerated despite their augmented incomes.

Even so, renters typically spent only 16 cents and owners 21 cents of each allowance dollar on extra housing consumption; about four-fifths of all allowance payments were used by recipients to reduce their housing expense burdens—in other words, were spent on nonhousing consumption.

We conclude from this evidence that low-income households in our sites and probably elsewhere would much prefer help with their present housing expenses to any substantial increase in their housing consumption. It does not necessarily follow that the taxpayer who contributes to low-income housing assistance programs should share that view; but if the public purpose is a substantial change in the pattern of low-income housing consumption, unrestricted cash grants are not the answer. The desired consumption change as well as the means to pay for it must be imposed on the beneficiary.

HOW HOUSING MARKETS WORK

The main reason for conducting the Supply Experiment was that a number of influential observers believed or feared that a full-scale housing allowance program would drive up the

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[1]There is little scientific evidence about the effects of housing conditions on health or social adjustment. By far the best study was conducted by Daniel M. Wilner and his associates (1962). It exhaustively analyzes the effects on slum dwellers of moving into new public housing in Baltimore, and finds evidence of small but significant improvements in health, morale, and social performance (relations with neighbors, success in school, etc.), especially for children.

price of housing. The general reasoning was that housing allowances would increase the demand for housing services, but would not augment the supply. Especially in markets where vacancy rates were already low, competition for better dwellings would then cause prices to rise sharply.

The experiment demonstrated that a full-scale program did not have that undesirable effect in either Brown County's tight market or St. Joseph County's loose market. The absence of the predicted price increases is partly explained by the fact that program-induced housing demand was substantially less than most of us expected, for reasons discussed above. But it also appears that the supply of housing services is more flexible than it was generally believed to be. In the rental market, the increased demand was substantially met by rearranging the distribution of vacant dwellings and by improving the existing stock of dwellings.

The Price Elasticity of the Occupancy Rate

When the effective demand for rental housing increases in a local market, newly formed households occupy formerly vacant dwellings, and existing households move from small or poor-quality dwellings to larger or better ones. Such events increase the total amount of housing service sold to and consumed by renters without any change in the rental inventory. Unless the vacancy rate is very low, competition between the landlords of occupied and vacant dwellings serves to keep rent increases modest.

At baseline in Brown and St. Joseph counties, we encountered rental vacancy rates that differed dramatically; yet the rents charged for similar dwellings in the two sites were nearly identical (see Table 2, above). First using HASE data and later using Annual Housing Survey data for a national sample of 59 metropolitan areas, we estimated the price elasticity of the occupancy rate—that is, by how much the occupancy rate typically increases in response to a given increase in the market price of rental housing. The results indicate that relatively small price increases will call forth unoccupied dwelling space until the occupancy rate reaches about 95 percent (vacancy rate equals 5 percent); thereafter, the supply responsiveness to price changes drops off sharply.

Housing Deterioration and Maintenance Policy

Absent regular maintenance, the productivity of residential capital (structural improvements and equipment) declines rapidly. For a mixed-age sample of rental dwellings in our sites, we estimate that the deterioration rate under conditions of zero maintenance would be about 8 percent annually.

To offset that deterioration and improve their dwellings, property owners spend considerable amounts on repair, replacement, and improvements. In Brown and St. Joseph counties, annual outlays for these purposes averaged $280 per rental dwelling and $500 per owner-occupied home (1973 dollars), or about 17 percent of the annual value of the housing services provided by those dwellings, and 2.5 percent of property value. Nationally, such outlays account for about 44 percent of annual gross investment in housing (outlays for new construction plus repairs and improvements to existing dwellings).

When the demand for housing services increases, improvements to the existing inventory can accommodate part of the increase; when demand decreases, property owners can reduce the flow of services by cutting back on maintenance. From HASE data, we have estimated

production functions that indicate the profit-maximizing maintenance response to a demand shift. Thus, if the market price of rental housing services were to increase by 10 percent (relative to the cost of maintenance inputs), landlords would find it profitable to increase their maintenance efforts by 12 percent. If they also increased their inputs of fuel and routine building services in the same proportion, the output of housing services would rise by about 2 percent. In short, the supply of housing services from the existing stock should respond to demand changes not only by changes in the occupancy rate but also by changes in maintenance effort.

Housing Submarkets

Estimates of the probable effects of government intervention in local housing markets usually entail either explicit or implicit assumptions as to the division of a local market into essentially noncompeting submarkets. While planning the Supply Experiment, we and others worried that program-induced demand would drive up housing prices in the submarkets heavily patronized by program participants even if the rest of the market were unaffected. Various studies have proposed the existence of essentially noncompeting submarkets by location (central city versus suburban), race (black versus white), type of structure (apartments versus single-family houses), and tenure (rental versus ownership).

Conceptually, a housing submarket consists of a collection of housing suppliers and demanders who trade in dwellings or housing services for which there are no close substitutes. What we found in Brown and St. Joseph counties was a continuous gradation of housing preferences and dwelling configurations such that there were no sharp breaks in the chain of substitutability and therefore no sharp differences in the prices paid for comparable attributes—for example, the extra rent charged for an extra bedroom.

Although the flow prices of housing attributes were close to uniform across each of our metropolitan housing markets, it is important to add that stock prices were not. The most remarkable difference was between dwellings in central South Bend and elsewhere in St. Joseph County. After adjusting property values to control for differences in age of buildings and type of structure, we found that comparable rental dwellings in the two locations differed in value by about a fourth and owner-occupied homes by about a third (see Table 2, above). These differences were clearly related to vacancy rates. Thus, although rents for comparable dwellings in the two locations were nearly identical, rental revenues in central South Bend were 8 percent less because of higher vacancies there. After subtracting operating costs (about the same in both locations), the difference in net operating return roughly accounts for the difference in property value.

If it is generally true that rents do not fall in neighborhoods that are out of favor with consumers, but property values do fall, those facts have important implications for the futures of such neighborhoods. For renters, no price concessions are offered to offset the disadvantages of the neighborhood, so renters are unlikely to return there. The case may be different for a homebuyer, who can get more housing for his money if he is willing to accept less neighborhood. The rejuvenation of deteriorating neighborhoods may thus hinge on a shift from rental to owner occupancy, the possibilities for which vary with building configuration.

WHAT HOUSING ALLOWANCES DO—AND DON'T DO

Although the Supply Experiment's results should quiet the general concern about undesirable market disturbances that might result from a national housing allowance program, those results raise some very pointed questions about housing assistance programs generally. Nearly everyone expected the experimental program to have more effect on participants' housing consumption than it did, and some expected a conspicuous improvement in the general quality of low-income neighborhoods. Below, we summarize our own sense of the ways in which a national housing allowance program would serve the objectives of national housing policy.

Improving the Housing Circumstances of the Poor

By definition, low-income families cannot afford a socially adequate standard of living, but they choose different economies in order to match their living standards to their budgets. Some poor people live in inexpensive and inadequate dwellings; others are adequately housed by dint of spending half or more of their incomes for housing. Allowances are flexible enough to remedy whichever circumstance applies to a particular case.

The evidence from our experimental sites is that most of the poor live in fairly good dwellings but spend large fractions of their incomes for housing. Thus it is appropriate for a housing assistance program to devote more resources to budgetary relief than to housing improvement. On average, the recipients of housing allowances increased their housing expenditures by about 8 percent, of which only 4 percent was typically required to meet minimum quality standards. The largest increases, averaging 16 percent, were for a minority of renters who moved after enrolling, some from failed dwellings that were overcrowded or difficult to repair and some for reasons unrelated to program requirements.

However, using housing expenditure to measure the change in participants' housing may miss the point. The features of a dwelling that are vested with the public interest are not necessarily those that are valued in the marketplace. The health and safety hazards so common in enrollees' dwellings did not much affect rents or property values, either because those hazards did not greatly concern the occupants or because the defects were inexpensive to remedy. In steady state, we estimate that participation in the allowance programs increased by about 30 percentage points the chances that an eligible household would be adequately housed, according to our standards.

Put simply, what an allowance program does for housing quality is to enforce a model housing code by offering an incentive payment for compliance rather than by punishing violators. The incentive payment works because it considerably exceeds the cost of compliance for all but the worst dwellings. Aside from whatever value participants placed on their improved housing, they reaped a net cash gain from participation that averaged roughly $800 annually for renters and $600 for homeowners.

If one accepts the traditional federal standard that the housing expenses of low-income families should not exceed a fourth of income, those cash transfers were not excessive. Under the most conservative interpretation of this rule, the average renter participant's housing expense dropped from 49 to 28 percent of gross income; as that rule is applied in the public housing program, the drop would be from 68 to 38 percent.[2]

[2]See p. 26, note 8, for further explanation.

However one weights the housing improvement and income transfers achieved by housing allowances, the program is notably efficient in its use of public funds. We estimate that 85 percent of each federal dollar directly benefited the program participants; the remainder went mostly for program administration.

We know of no other low-income housing assistance program that approaches this record (see Table 25). Recently constructed public housing is plagued by high development and operating costs which, by one estimate, amount to twice the market value of the housing services provided. The Section 8 Existing Housing program is similar in concept to housing allowances, but at least in its early years did not control price increases effectively; landlords of dwellings entering the program obtained rent increases averaging 26 percent, and those price increases absorbed 30 percent of total program funds without benefit to participants; administrative costs accounted for another 13 percent.

Assistance to low-income families in the form of unrestricted cash grants would have a greater transfer efficiency than do housing allowances; we estimate that 89 percent of the federal cost would end as benefits to participants. We also note, however, that such an approach would yield substantially less increase in housing consumption and would not significantly affect housing quality as measured by public standards.

Housing Allowances and Other Policy Objectives

Although housing allowances are effective and efficient remedies for the housing quality and expense problems of low-income families, they do not contribute much to other objectives of federal housing policy, such as neighborhood improvement, racial and economic integration, home ownership, stabilization of the construction industry, and liquidity of housing investments.

Although priorities among these objectives shift with circumstances, neighborhood improvement and racial integration are among the more urgent. Both have proven intractable to a formidable array of ameliorative programs addressed directly to those issues. It may be that solutions will come only through redefinition of the problems and corresponding changes in our ideas about satisfactory solutions.

At any rate, we would not expect a national housing allowance program to do much more than enable low-income households to afford safe and decent housing on condition that they occupy such housing. Possibly, the program's implicit training in standards of home maintenance will have a long-run cumulative effect on the physical appearance of low-income neighborhoods and in the morale of neighborhood residents in and out of the program, but the experimental evidence does not warrant such a prediction. Certainly, the program widens the range of dwellings affordable to participants belonging to racial minorities and so should facilitate the gradual desegregation of our cities; but we suspect that the desegregation of private and public employment and the consequent changes in the economic and social status of minorities will be much more influential on residential integration than a transfer program addressed to low-income members of those minorities.

Who Gets Help

Because the experimental housing allowance program offered cash payments to eligible households, nearly everyone expected a high participation rate among those who were eligible. Although enrollment grew rapidly during the first two program years, it leveled off by

Table 25

DESTINATION OF PROGRAM DOLLARS IN SELECTED RENTAL HOUSING ASSISTANCE PROGRAMS

Destination of Program Dollars	Percent of Program Dollars			
	Public Housing	Sec. 8 Existing	Housing Allowances	Income Maintenance
Beneficiary				
Program participants	34	57	85	89
Other consumers[a]	6	--	-2	-1
Builders, landlords, administrators[b]	60	43	17	12
Total	100	100	100	100
End Use				
Housing consumption[c]	8	10	15	7
Other consumption[c]	92	90	85	93
Total	100	100	100	100

SOURCE: Comparisons by HASE staff of public housing, housing allowances, and income maintenance programs.

NOTE: Estimates are for programs serving a standard population of renter participants and providing the same average participant benefit. Programs differ with respect to the estimated cost to the government of supplying the standard benefit, the allocation of those costs, and the division of benefits between housing and other consumption.

[a]Program activities may affect the price of housing to nonparticipants. Positive entries reflect reduced market prices and negative entries reflect higher market prices, resulting in both consumption changes and budget reallocations for nonparticipants. Their gains and losses are balanced by landlords' gains and losses, included in the third entry of each column.

[b]Includes above-market development and operating cost (public housing), above-market rent charged by participating landlords (Sec. 8), and program administration (all programs). See also note *a*.

[c]Estimated net increase in consumption by both participants and nonparticipants due to the program. Payments enumerated in note *b* are assumed to result only in nonhousing consumption.

the end of the third year, when only 40 percent of those currently eligible were enrolled and only 33 percent were actually receiving payments.[3]

Both Rand and the Urban Institute have estimated that under the Supply Experiment's rules about a fifth of all households would be eligible to participate in a permanent national program; however, that number could be substantially increased or decreased by changing

[3]Reports from the HAOs after the end of the experimental period indicate that recent enrollment levels are about a third above those of year 3. Because our last surveys of households were conducted in 1977 (Brown County) and 1978 (St. Joseph County), we do not know whether this is because the eligible populations have grown or because participation rates have risen. HAO directors believe that the eligible populations have grown because of unemployment. These recent events warrant more analysis than they have received.

the income limits or categorically excluding specific groups (for instance, homeowners or nonelderly single persons). Assuming the same eligibility standards as in the experimental program and given also its benefit formula and housing standards, we think that a permanent national program would achieve only slightly higher participation rates than did the Supply Experiment.

The main reasons for expecting any higher level of participation in a permanent national program are wider knowledge of program details, more favorable attitudes toward participation, and prompter enrollment by newly eligible households. As compared with experience in Brown and St. Joseph counties (see Fig. 2, above), there is little room for improvement in these respects. Larger increases could only be achieved by program changes that affected the main reasons for nonparticipation: the expectation of low benefits and unwillingness to meet the program's housing standards.

Because the allowance formula causes benefits to decrease smoothly to zero as income rises, there was necessarily a large group of households that were nominally eligible but entitled only to small benefits. The low participation rate (17.5 percent) for eligibles with monthly entitlements under $20 undoubtedly reflects their disinterest in such small sums, but surely also reflects less than urgent need for any benefit at all. Similarly, many who expected to be eligible for only a short time did not bother to apply. By selecting themselves out of the program, the marginally eligible saved administrative expense with little consequence for program objectives.

More troublesome is the evidence that those in the worst housing were, on average, least likely to qualify for payments. That outcome is curious, because we estimate that most dropouts could have repaired their substandard dwellings (or moved) and recouped the costs from their first few allowance payments. A special study of dropouts persuades us that less than half could have been helped to qualify by casework services or front-end financial assistance; the rest dropped out for reasons unrelated to their housing defects.

The exact specification of housing standards is a very important factor in the outcome of a housing allowance program. Although the standards used in the Supply and Demand experiments had the same general intent and drew on the same precedents, slight differences in wording and evaluation style led to substantial differences in results when the same set of dwellings was evaluated under each experiment's rules. The different failure rates would have been unimportant if all failures were easily remediable; but a dwelling that fails because its windows are too small or its ceilings are too low by a few inches is unlikely to be repaired.

We strongly recommend additional research and field testing for housing standards that are applied in both federal housing assistance programs and local housing codes. Those in common use represent a consensus of expert opinion; but their premises are largely untested, and their consequences in the field are, except for the EHAP experiments, poorly documented.

In the experimental program, assistance was conditional on both need and performance. The low overall participation rate is not in itself an indication that the program's concept or design was faulty. Among those who were eligible, the needier were much more likely to participate than the less needy. It is also clear, however, that more of the neediest would have participated in the absence of performance requirements (housing standards). We leave it to the reader to decide whether the housing improvements achieved by the program warrant the exclusion from benefits of those who were unable or unwilling to meet the program's housing standards.

OPERATING LOW-INCOME ASSISTANCE PROGRAMS

Earlier, we showed that the housing allowance offices established under Rand's supervision to administer the experimental programs were both effective and, compared with other transfer programs, efficient in their operations. We credit that outcome in part to program features that limited administrative responsibilities (participants conducted their own housing transactions in the private market) and in part to an administrative style that emphasized the consistent application of detailed rules, thorough training of the staff, routine checks on their performance, and a good management information system.

The final lesson to be noted here is that the program's administrative success depended mostly on administrative features that are generalizable. Well-designed incentives for clients' performance in other transfer programs could lessen the need for expensive casework. Well-designed administrative procedures can expedite the flow of work and reduce the incidence of errors. Well-designed personnel systems can motivate good performance without resort to exorbitant payscales. Although skeptics usually focus on staff quality as the reason why a national program could not replicate the administrative success of a "hothouse" experiment, we think that a more likely reason is high-level inattention to the problems of administrative system design.

REFERENCES

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Appendix

SELECTED PUBLICATIONS OF THE HOUSING ASSISTANCE SUPPLY EXPERIMENT

This appendix lists 32 reports, 117 notes, and 20 professional papers prepared by Rand's staff for the Housing Assistance Supply Experiment. The list is a selection from over 279 documents published by HASE during its 10-year history, and encompasses all aspects of experimental design and research findings. Nearly all HASE publications not listed here are codebooks and audit reports documenting the HASE data files; these are listed separately in Appendix B of the main report.

The list is topically organized as follows:

- General Reports
- Research Design
- Program Design
- Program Analysis
- Market and Community Response to Program
- General Market Analysis
- Housing Cost and Price Indexes

Most topics are subdivided to help readers with specific interests locate the pertinent documents. Within each subdivision, documents are listed by publication series (R = report, N = note, P = professional paper) and number. Except for general reports, documents that deal substantially with more than one subject are listed under all pertinent headings.

Many of the documents listed here were initially published as working notes (WN series) designed for prompt communication of research results to HUD. During 1980 and 1981, those of more than passing interest were republished as notes (N series) for general distribution. Entries for these documents include the original publication number and date. Titles appearing in earlier lists but not shown here have been superseded by other documents or withdrawn because they are obsolete.

All documents listed here are available to the public from Rand or from nearly 350 libraries that subscribe to Rand publications. Many of them are also available from the National Technical Information Service (NTIS) and HUD User.[1]

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[1]The address of NTIS is Springfield, Virginia 22151. The address of HUD User is P.O. Box 280, Germantown, Maryland 20767.

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