



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

Experimental Housing Allowance Program

Conclusions The 1980 Report



This report is organized to serve different levels of reader interest. A summary is presented first, including highlights of the important findings, a discussion of how the Experimental Housing Allowance Program was designed and the major conclusions drawn from it. The summary should satisfy the needs of those who want a brief review of what has been learned from the EHAP. The seven chapters which follow cover each of the major subject areas in greater detail and include supporting tables and figures. The appendices provide history and background information, as well as technical details about the experimental designs. A bibliography completes the report for those who wish to examine the data and analyses from which the material in this report was drawn.

EXPERIMENTAL HOUSING ALLOWANCE PROGRAM

CONCLUSIONS

THE 1980 REPORT

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

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FOREWORD

This report on conclusions from the Experimental Housing Allowance Program (EHAP) provides, for the first time in the history of Federal involvement with housing policy, the results of empirical evidence on how housing markets and low-income families respond to various forms and levels of housing allowances. After decades of debate, the major questions about housing allowances are now answered.

The value of the 1980 EHAP Report does not end with answering questions about allowances. Although the report is confined to describing conclusions, its policy implications are far-reaching. For example, some housing programs require relocation of households. If these programs are to serve a target population, then the behavior of the households must be taken into account when implementing a program. EHAP identified factors that families consider in making decisions about moving or remaining in place.

Prior to EHAP, information about the housing conditions of low-income families was extremely crude. In response to this situation, HUD launched its vast Annual Housing Survey in 1973, two years after EHAP was initiated. Even so, EHAP contains more detailed information on the housing conditions of low-income families than any other source. One particularly useful application of this information is in our improved understanding of the levels of rehabilitation and repairs needed in the Nation's housing stock.

When the President's 1977 working group, composed of representatives from Federal agencies, worked on welfare reform, they did not include housing programs among their proposals, in part because EHAP showed them that housing policy objectives are difficult to achieve through the incomes approach of welfare programs.

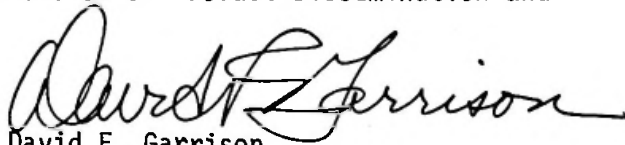
These are only a few examples of the extended value of this social science research. In addition, we have already seen how early experience with EHAP program design and field operations has been used to shape and implement the Section 8 Housing Assistance Payments Program. The Department is using EHAP research results to modify the Section 8 Existing Program. Thus, EHAP findings are resulting in dollar savings to the Government that will exceed the research costs of the experiments themselves.

Nor do the benefits to the Government of our EHAP research stop there. Critical issues in which our work will become increasingly important are in the areas of comparative program analysis and the determination of appropriate housing program mixes. Additional research papers will be completed on program comparisons, residential mobility, and deconcentration of lower-income families.

The Office of Policy Development and Research is also in the process of creating a data center to store, retrieve, and make accessible to researchers across the country the enormous fund of information accumulated on EHAP.

The EHAP experiments, which are the responsibility of our Office of Research, were prepared under then Assistant Secretary Donna E. Shalala. Two Deputy Assistant Secretaries were responsible for the intellectual and administrative leadership in completing the final report: Raymond J. Struyk from 1977 to 1979 and Michael A. Stegman from 1979 to the present. The research itself was conducted under contract by some of the country's leading researchers. We are grateful to them all.

This report was prepared by the Division of Housing Assistance Research under the direction of Jerry J. Fitts, formerly Director of that Division, who supervised EHAP for the Department from 1973 to early 1980. He, Garland E. Allen, Terrence L. Connell, Evelyn S. Glatt, Howard M. Hammerman, and Jennifer L. Stucker wrote the various sections; Mary Anthony Trujillo typed them; Ruth Limmer of the Division of Product Dissemination and Transfer edited them.



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PREFACE

Section 504 of the Housing and Urban Development Act of 1970 as amended by Section 804 of the 1974 Act authorized the Department of Housing and Urban Development to establish an experimental program to test the concept of housing allowances.

Pursuant to the reporting requirements of the 1970 and 1974 Acts, the Department submitted to the Congress the First Annual Report of the Experimental Housing Allowance Program (EHAP) in May 1973, a Second Annual Report in June 1974, and a Report to Congress in February 1976. In addition, the Department submitted a Report on Initial Impressions and Findings from EHAP in April 1975, a Summary Report of Current Findings from EHAP in April 1975, and a Report of Findings from EHAP in April 1979.

Although beyond the specific reporting requirements of the 1970 and 1974 Acts, the present report is made available so that Congress and others may be aware of conclusions that have been drawn from the experiments.

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I. INTRODUCTION

The first Federal housing policy emerged with the passage of the 1934 National Housing Act. From then until quite recently, the most systematic knowledge about the housing conditions and needs of American families came from the U. S. Bureau of the Census, which tallied every ten years the number of occupied housing units which lacked complete plumbing facilities or which were considered (by mainly subjective means) to be in dilapidated condition. On such technical data the Nation based its housing policies.

Although these measures of housing adequacy were gross for a while they did indicate the general trend of housing conditions. Between 1940 and 1960, for example, the percentage of all occupied housing units that lacked complete plumbing facilities or were dilapidated decreased from 49 to 17 percent. (Congressional Budget Office, 1978:6) But because the incidence of units without plumbing became very small and the determination of dilapidation was both crude and unreliable, by 1970 these measures were no longer very helpful, even for tracking general trends. Nonetheless, it was generally acknowledged that housing for low-income families continued to be a problem, and that programs that served them were experiencing, in some instances, difficulties.

In response to the need for additional and more refined measures of housing conditions, the Annual Housing Survey was launched in 1973, two years after the planning of the Experimental Housing Allowance Program was initiated. In 1971, the paucity of firm information was not limited just by the lack of meaningful data on the physical conditions of this country's housing stock. Few comprehensive evaluations of existing programs had been undertaken. Empirical data, for example, that would allow a comparison of the benefits families received from a housing program with what they would have obtained in the absence of the program, were not available. More specifically, measurements of the change in housing circumstances families experienced upon entering a housing program had not been made. In summary, as one housing expert stated: "... the lack of solid information on housing programs, some of which have been in existence for decades, is appalling". (Aaron: 1979:43)

Within the context just described, EHAP is unique. It represents the first time ever that a housing program concept was submitted to systematic testing. It provides more detailed information on the housing conditions of low-income families than any other single source. It is the only effort that has followed families over a period of several years and measured the changes they made in their housing circumstance in response to several different types of assistance. In a similar way, it provides information on housing markets that is unequalled.

In the chapters that follow, we present the major learnings gleaned from EHAP. Many of the results challenge the "conventional" wisdom held prior to the experiments. In addition to providing empirical evidence about housing allowances, the value of the insights gained from EHAP about the behavior of low-income families should not be overlooked when assessing other housing and general assistance programs.

The subject of Chapter II is participation. Given the long waiting lists of public housing agencies, many program administrators expected that when families were offered cash to obtain better housing, nearly all would participate. They did not. The results show that participation varies considerably with demographic characteristics and is sensitive to such program parameters as housing standards and payment levels.

Prior to EHAP, available data suggested that if a family's income increased by 10 percent, it would in turn increase its housing expenditures by about 10 percent. Chapter III, which describes how families used their allowance payments, shows results that are quite different from the earlier data.

Both the freedom and the opportunity to move are primary characteristics of the housing allowance concept. The extent to which families are induced to move by an offer of additional money for housing is the central focus of Chapter IV. Again, the results challenge some of the theories held prior to EHAP.

Critics of housing allowances have argued that giving low-income families cash linked to their occupation of standard housing would cause housing prices to rise substantially. Others argued that such a program would not increase the supply of acceptable dwelling units. These and related issues are addressed in Chapter V.

What has been learned about the costs of an allowance program is summarized in the last Chapter (VI). Both administrative and payment costs are presented. Also provided are separate cost estimates of a national housing allowance program for renters and homeowners.

REFERENCES

Chapter I

Congressional Budget Office, Federal Housing Policy: Current Programs and Recurring Issues, June 1978.

Aaron, Henry, "Policy Implications of the Housing Allowance Experiment: A Progress Report." Paper prepared for presentation at the Conference on the Experimental Housing Allowance Program, Brookings Institution, Washington, D. C., November 15-16, 1979.

II. PARTICIPATION

Among the most crucial issues to be addressed by an evaluation of an assistance program are questions about participation. For EHAP, in particular, the evaluation must examine:

- How the presence of a housing standards requirement affects participation;
- How allowance payment levels affect participation;
- How participation varies by demographic characteristics of households;
- What the participation rates are among eligible renter and homeowner households;
- How participation varies by housing market, and
- Why some households do not choose to participate.

Participation in EHAP 1/, however, involves two separate stages: enrollment and then becoming a recipient of allowance payments. Although these stages are similar in the Supply and Demand Experiments, each experiment took a different approach to fulfill its separate goals.

In the Supply Experiment, an open-enrollment program, any income-eligible household -- renter or homeowner -- could come to the local housing allowance program office and take the initiative of enrolling. 2/ In order to become recipients of allowance payments, enrolled households then had to meet housing standards requirements, which specified that a household must live in or obtain a dwelling unit that met a set of minimum standards of quality and occupancy (essentially no more than two persons per adequate bedroom).

Enrollment in the Demand Experiment consisted of accepting an offer to join the program. The offer was made to a representative sample of income-eligible renter households, and enrollment rates were calculated for those households that received enough information to make an informed choice. 2/ (Only households given an estimate of the monthly allowance they would receive if their living units met the required housing standards are included in the analysis.) The Demand

1/ Unless noted otherwise, the term "participation" refers to households who receive payments.

2/ For a discussion of income limits for eligibility, see Appendix A.

Experiment also included a group of households, similar to the others, that were offered cash assistance without any housing requirements.

Expectations vs. Reality

Prior to the knowledge gained through EHAP, the general expectation was that a housing allowance program would cause a high proportion of the eligible population to enroll and become recipients of allowances. Quite the opposite is true. After three years of the open-enrollment in the Supply Experiment, only about 50 percent of the eligible population was enrolled, and fewer than that received a housing allowance because their dwelling units never met the housing requirements.

Differences observed in Table II-1 will be discussed at greater length throughout the chapter, but for the moment what is most important to note in this table is the lower-than expected participation rates. The table shows that less than 50 percent of eligible renter households in the Supply Experiment were recipients of allowances after four years of open-enrollment in Brown County and less than 40 percent after three years in St. Joseph County. For owners, less than 30 percent of the eligible households were recipients. Although the time periods differ, participation rates had already stabilized at about the levels indicated at both sites.

Table II-1 also shows related results from the Demand Experiment. Although 75 percent or more of eligible households enrolled, only 30 percent of those contacted became recipients within two years in Pittsburgh and 45 percent in Phoenix.

Housing Standards Requirements: Findings

In order to become recipients of housing allowances households enrolled in EHAP had to meet housing standards requirements. Earmarking of this kind sets a housing allowance program apart from an unconstrained cash assistance program such as income maintenance. The effect of housing standards on participation is dramatic and unmistakable.

Table II-2 compares Demand Experiment participation rates for households offered allowances tied to housing standards with those offered unconstrained cash assistance. These households were alike in all respects except that those offered housing allowances had to meet the housing standards.

Table II-I

Percent of Eligible Households
Becoming Enrolled and Becoming
Allowance Recipients

	Renters		Owners	
	Enrolled	Recipients	Enrolled	Recipients
<u>SUPPLY EXPERIMENT a/</u>				
Brown County	57	48	28	26
St. Joseph County	54	38	32	28
<u>DEMAND EXPERIMENT b/</u>				
Pittsburgh	75	30	NA	NA
Phoenix	84	45	NA	NA

a/ Source: Data provided by The Rand Corporation, January 4, 1980.

NOTE: The numbers of enrolled and recipient households are calculated as of four years in Brown County and three years in St. Joseph County. Participation rates are the percent of estimated eligible households that are enrolled or that became recipients. The number of eligible households are estimated as of two years of open enrollment.

b/ Source: Kennedy and MacMillan, Available April 1980: Chapter 6.

NOTE: The enrollment rate is the percent of eligible households in a representative sample accepting an offer to enroll after being given an estimate of the amount of allowance payment. The recipient rate is the percent of eligible households that, offered an allowance, became recipients within two years.

Table II - 2

Participation by Type of Assistance

<u>DEMAND EXPERIMENT</u>	<u>Percentage Accepting Offer to Enroll</u>	<u>Percentage of Enrolled Households That Met Program Requirements Within Two Years</u>	<u>Percentage of Those Offered Allowances That Met Program Requirements</u>
<u>Pittsburgh</u>			
Housing Allowance	75	40	30
Unconstrained Cash	78	100	78
<u>Phoenix</u>			
Housing Allowance	84	54	45
Unconstrained Cash	90	100	90

Source: Kennedy and MacMillan, Available April 1980: Chapter 6.

NOTE: Those offered housing allowances had to meet the program housing standards requirements. Those offered unconstrained cash assistance became recipients upon enrollment.

The great majority of both groups accepted the offer to enroll, but those offered allowances tied to housing standards accepted a little less often. After enrollment, however, all of those offered unconstrained cash became recipients immediately, whereas only about half of those offered allowances tied to housing standards became recipients at some time during the two years of data collection. Thus, the effect of housing standards was to reduce participation considerably. Those offered unconstrained cash assistance participated at rates of 100 and 160 percent higher than those offered housing allowances.

Although housing standards in the two experiments were similar, those in the Demand Experiment were more stringent. This was demonstrated by applying both sets of standards to almost 400 dwellings. About 75 percent failed the Demand Experiment standards; 60 percent failed the Supply Experiment standards. (Valenza, 1977:ix) This difference is reflected in the higher percentage of enrolled households that became recipients in the Supply Experiment. Of those enrolled during five years of data collection in the Supply Experiment, about 83 percent of the renters in Brown County and 72 percent in St. Joseph County became recipients. (Data provided by The Rand Corporation, January 18, 1980)

These figures are considerably larger than the 40 and 54 percent shown in Table II-2 for the two Demand Experiment sites. But they are not due to standards alone. Differences in outreach, eligible populations, definitions, and housing market characteristics must also be considered. Stringency of standards explains at least part of the difference, however, and the use of the Supply housing standards in the Demand Experiment would have increased participation.

The Supply Experiment reenforces the more direct evidence from the Demand Experiment that housing standards greatly affect participation. Although the effect of housing standards on enrollment in the Supply Experiment is unknown, it is reasonable to assume that more would have enrolled in an unconstrained cash assistance program. This assumption would be consistent with the results from the Demand Experiment. Combining this assumption with the fact that 17 percent of enrolled renters in Brown County and 28 percent in St. Joseph County did not become recipients, implies that at least 20 percent more of the eligible renters in Brown County and at least 40 percent more in St. Joseph County would have become recipients of assistance in the absence of housing standards.

Housing Standards Requirements: Implications

Of all the factors influencing participation in EHAP, the housing standards requirements probably had the greatest effect. The poorer families, large families, and minority households -- all of whom are less likely than other households to meet the housing standards in their original units -- would be less likely to participate as housing standards grow more stringent. Among those in substandard units, the elderly and homeowners -- because they are less mobile -- would also be less likely to participate. Thus, it is clear that more stringent housing requirements reduce participation and alter the composition of the recipient population.

Payment Levels: Findings

The amount of assistance offered also made a difference in whether a household accepted the offer to enroll and whether an enrolled household became a recipient.

Various payment levels were tested in the Demand Experiment. ^{3/} From a comparison of the response of similar groups to these payment plans, the impact of the amount of assistance can be clearly seen. Table II-3 shows that as allowances are increased, an increasing number of households accept the offer to enroll and then proceed to meet requirements and become recipients. For the high allowance level, the overall participation rate was double that for the low allowance level (49 versus 24 percent); the average allowance payment was also about double. Thus, assuming the eligible population is not changed, overall payment costs would be four times as great in a program using the highest allowance payment compared with using the lowest allowance payment.

The medium level of the three payment levels in Table II-3 was calculated on the same basis as the payments in the other EHAP experiments. (The high and low levels were about \$22 higher and lower, respectively, than the average allowance for the medium payment.) Overall, the participation rate for the high allowance level was about 25 percent higher than that for the medium level, and total payment costs would be almost 70 percent higher using this payment level. The low allowance level decreased overall participation by about 40 percent compared with the medium level, and total payment costs would be about 60 percent less.

Actually, the changes in participation and total payment costs could be even greater than stated above because a change in payment level could also change the number of households eligible for the program. In EHAP, as in many

^{3/} For a discussion of payment levels, see Appendix A.

Table II-3

Participation in the Demand Experiment by Payment Level

<u>Payment Level</u>	<u>Average Allowance</u>	<u>Percentage Accepting Offer to Enroll a/</u>	<u>Percentage of Enrolled Households That Met Requirements Within Two Years</u>	<u>Percentage of Those Offered Allowances That Met Requirements a/ Within Two Years</u>
High	\$86	88%	55%	49%
Medium	64	76	52	39
Low	42	73	32	24

Source: Kennedy and MacMillan, Available April 1980: Appendix XVII.

a/ Those offered allowances approximate the eligible population. Therefore, the final column represents the percent of eligibles who became recipients in the Demand Experiment.

other programs, households were eligible if they could receive an allowance of at least \$10 per month. Thus, higher payment levels could increase the income limits for eligibility and open the program to more households. As an example of this type of change, when the estimated cost of standard housing was changed in the Brown County site of the Supply Experiment in April 1976 to reflect housing cost increases, payments increased by an average of about \$20. In turn, the eligible population increased by 20 percent.

Another way of looking at the effect of payment level is to consider how much allowance money is left after housing expenditures are paid. Because households not already living in acceptable units must move or upgrade their current units, and because most acceptable units are more expensive than their current unacceptable units, at least part of the allowance must go into increased housing costs -- part, but not all. Eighty percent of the households not meeting requirements at enrollment in the Demand Experiment could get standard housing without expending their total allowance. The difference between the allowance payment and the amount estimated to be necessary for increased housing costs is called the "net cash value." Table II-4 shows that as the net cash value increased, the probability of meeting housing standards requirements after enrollment increased.

Table II-4 also strongly indicates that even presumed high levels of payments will not necessarily induce households to meet the requirements if they do not already meet them at enrollment. Consider the households that would have received over \$480 of extra cash per year after paying for the rent increase in an acceptable unit. Only about half of these households became recipients within two years.

Payment Level: Implications

The fact that changes in payment level cause substantial differences in participation and program costs raises questions concerning tradeoffs that might be made. Although it appears that a large proportion of the eligible population would not participate for even relatively high allowance payments, higher payments certainly increase participation. An increase in participation as a result of higher payments causes a much larger percentage increase in program costs, however. (Conversely, of course, lowering payment levels causes a larger percentage decrease in program costs than it causes a decrease in participation.) Thus, participation can be increased by altering the payment level, but only at a relatively high cost.

Table II-4

Percentage of Enrolled Households
Not Meeting Housing Requirements at Enrollment
That Met Them Within Two Years
By Net Cash Value of the Offer in the Demand Experiment

<u>Net Cash Value</u> <u>(\$ Per Month)</u>	<u>PITTSBURGH</u>	<u>PHOENIX</u>
41 or more	45	54
21 to 40	25	45
1 to 20	6	42
-19 to 0	6	38
-20 or less	0	22

Source: Kennedy and MacMillan, Available April 1980:
Appendix XVII.

NOTE: Negative net cash values occur when households would receive an allowance payment smaller than the extra cost they would bear in an acceptable unit.

As pointed out earlier, a lowering of the stringency of housing standards also increases participation. In order to meet higher participation goals while simultaneously keeping costs in line, it might be appropriate to use housing standards that are not as stringent and payments that are not as high.

EHAP indicates that the selection of both standards and payment level are important decisions in meeting program goals. Participation and cost goals, however, would have to be weighed against many other goals, such as the quality of housing that is determined to be minimally acceptable.

Outreach

Different outreach procedures resulted in considerable differences in participation. This is illustrated by comparing the Demand and Supply Experiments. The direct contact made with eligible households in the Demand Experiment represents a more extensive outreach than attempted in the Supply Experiment. As a result, a higher proportion of eligible households were enrolled in the Demand Experiment than were enrolled in the Supply Experiment. On the other hand, many more of the households enrolled in the Supply Experiment were able to meet housing requirements. The implications may be that the extensive (and costly) efforts necessary to bring into the program as many eligible households as possible can increase enrollment but will not necessarily lead to the same proportional increases in the number of recipients of assistance payments.

Household Characteristics

In the Supply Experiment, participation varied by site, tenure and demographic characteristics. Table II-5 illustrates the variation for renters in Brown and St. Joseph Counties.

Tables II-5 and II-6 show participation outcomes for various life-cycle stages. Four of these stages -- elderly singles (at least 62 years of age), elderly couples (husband or wife at least 62), single parents (under 62 with at least one child under 18), and young couples with young children (husband under 46 with at least one child under 6) -- comprise more than 85 percent of the eligible population at both sites for both renters and owners.

Table II-5

Renters: Number of Eligible Households
and Participation Rates in the Supply Experiment

<u>Life-Cycle Stage</u>	<u>BROWN COUNTY</u>				<u>ST. JOSEPH COUNTY</u>			
	<u>Eligible</u>	<u>Enrolled</u>	<u>Recipients</u>	<u>Eligible</u>	<u>Enrolled</u>	<u>Recipients</u>	<u>Eligible</u>	<u>Recipients</u>
Elderly Singles	840	72%	69%	1,210	46%	42%		
Elderly Couples	260	37	34	330	21	20		
Single Parents	1,330	76	61	1,910	77	50		
Young Couples, Young Children	810	31	21	700	36	19		
Other Couples	<u>450</u>	<u>34</u>	<u>28</u>	<u>560</u>	<u>33</u>	<u>22</u>		
Total	3,700	57	48	4,720	54	38		

Source: Data provided by the Rand Corporation, January 4, 1980.

NOTE: The numbers of eligible households are estimated as of two years of open enrollment. The numbers of enrolled and recipient households are calculated as of four years for Brown County and three years for St. Joseph County. Participation rates are the percent of estimated eligible households that are enrolled or that become recipients.

Table II-6

Homeowners: Number of Eligible Households
and Participation Rates in the Supply Experiment

<u>Life-Cycle Stage</u>	<u>BROWN COUNTY</u>			<u>ST. JOSEPH COUNTY</u>		
	<u>Eligible</u>	<u>Enrolled</u>	<u>Recipients</u>	<u>Eligible</u>	<u>Enrolled</u>	<u>Recipients</u>
Elderly Single	1,220	40%	39%	3,550	45%	43%
Elderly Couple	910	23	23	2,150	29	27
Single Parents	720	31	26	1,890	36	28
Young Couples, Young Children	720	16	13	1,400	10	7
Other Couples	<u>470</u>	<u>25</u>	<u>21</u>	<u>1,380</u>	<u>19</u>	<u>16</u>
Total	4,030	28	26	10,360	32	28

Source: Data provided by the Rand Corporation, January 4, 1980.

NOTE: The numbers of eligible households are estimated as of two years of open enrollment. The numbers of enrolled and recipient households are calculated as of four years for Brown County and three years for St. Joseph County. Participation rates are the percent of estimated eligible households that are enrolled or that become recipients.

At both sites in the Supply Experiment, renter households headed by elderly singles or single parents enrolled and received allowances at higher rates than households headed by couples. In general, households headed by couples had enrollment and recipient rates that were about half the rates for single-headed households. (For example, about 20 to 35 percent of the eligible renter couples became recipients compared with 40 to 70 percent of the eligible renter singles.) One of the principal reasons for this difference may be the fact that households headed by single parents are already participating in welfare or similar government programs more frequently than households headed by couples.

Such households enroll in the program as referrals from welfare programs, which increases their rate of participation; as welfare recipients they have more experience in meeting various program requirements, and they are less reluctant to participate in government programs. The fact that elderly singles had higher housing costs relative to their income than did households headed by couples may explain their higher participation; they had greater need. But no consistent pattern emerged when we compared the participation rates of the elderly and non-elderly. The elderly participated at higher rates in Brown County and at lower rates in St. Joseph County.

The rate of success enrollees had in making the transition to becoming recipients of allowance payments varies by demographic group. Analyses indicate that over 80 percent of enrolled elderly households eventually became recipients. Enrolled single-parent households became recipients at somewhat lower rates than the elderly. Young couples with young children were least likely to become recipients once enrolled; only 60 to 75 percent of them were successful in meeting the housing requirements. (Data provided by The Rand Corporation, January 18, 1980.)

In the Demand Experiment, however, demographic differences did not seem to account in a consistent manner for variations in the rates at which offers to enroll were accepted. In Pittsburgh, the non-elderly and large households accepted more often than the elderly and smaller households, with differences of 10 to 20 percentage points in each case. (Kennedy and MacMillan, Available April 1980: Chapter 2.) In Phoenix, the difference was slight. With respect to race, however, both sites show a difference, but in opposite directions, with blacks more likely to enroll in Pittsburgh and whites more likely to enroll in Phoenix.

The one consistent and substantial pattern was that at both sites households with a history of mobility over the past three years accepted the offer to enroll more often than those that had not moved. As the amount of mobility increased, acceptance also increased. (Kennedy and MacMillan, Available April 1980: Chapter 2.) Prior mobility seems to increase a household's willingness to accept because they would be more willing to move if the current unit does not meet standards.

The second stage of participation -- meeting housing standards and becoming a recipient - shows more consistency than the first stage, and in the Demand Experiment as in the Supply Experiment, demographic characteristics are closely related to participation. At both Demand sites, large households, minorities, households headed by couples, households with income below \$4,000, and those receiving welfare lived in poorer quality units and had more difficulty meeting the housing standards than households consisting of 2 to 4 members, non-minorities, single parents, households with income over \$4,000, and those not receiving welfare. (Kennedy and MacMillan, Available April 1980: Chapter 2.) Typically, participation rates were about 40 percent higher for the more successful group. And here too, households with a history of some mobility in the past three years met housing standards and became allowance recipients more often than those who had not moved recently.

In general then, it appears that participation was most closely linked to two factors: the quality of the dwelling unit at enrollment and prior mobility. Because they often had to take action -- moving or making repairs -- which was difficult, costly, or not desirable from their point of view, the very poor, minorities, and very large households had lower participation rates than others in the program.

Comparisons Between Homeowners and Renters

As mentioned earlier, both renters and owners could participate in the Supply Experiment. Participation rates differed for these two groups: renters enrolled in higher proportions than owners, but enrolled owners were more likely to become recipients. A comparison of Tables II-5 and II-6 illustrates that renters enrolled at up to twice the rate of owners. Enrolled owners, on the other hand, became recipients at rates that were about 5 to 15 percentage points greater than the renters.

That enrolled owners became recipients more often than enrolled renters reflects that either enrolled owners lived in higher quality units or were more likely to repair their units than renters. (Lamar and Lowry, 1979: 20 and 29.)

Renters, on the other hand, were more willing to move than owners. Thus, even though fewer enrolled renters could meet the housing requirements after enrollment than owners could, enough renters moved that, combined with higher enrollment rates, their overall participation was much greater.

Differences Between Experimental Sites

A number of differences in participation rates are observable in Table II-1. The enrollment rates for renters are considerably higher in the Demand Experiment than in the Supply Experiment. This difference may be attributed, in part, to the different outreach approaches.

Even within the experiments some differences are observable. In the Supply Experiment, the overall participation rate for renters in Brown County was about 25 percent higher than for renters in St. Joseph County. Although enrollment rates are similar, households in St. Joseph County had more difficulty meeting the standards than those in Brown County. And that can be explained not because the standards differed -- they did not -- but because housing is generally of poorer quality in St. Joseph County and, despite higher vacancy rates, standard housing is not as available owing to a large surplus of deteriorating housing in South Bend, its central city.

There are also substantial differences between participation rates in Pittsburgh and Phoenix. Phoenix's higher rates may be attributed to a slightly better housing stock, its higher vacancy rates, and a mobile population more willing to move to better housing. And because higher payment levels cause greater participation, the higher average allowance payments in Phoenix may also have contributed to the difference in participation.

Reasons for Not Participating

A sample of over 300 households not accepting the offer to enroll in the Demand Experiment were asked why they chose not to participate. (Kennedy and MacMillan, Available April 1980: Chapter 3.) They were allowed to specify more than one reason, and about half said that there were too many requirements, including paperwork and the general

bother of participating. The second most frequent response (over 40 percent) was that they did not wish to accept charity or participate in a government program of this sort. Some of the other reasons given were that they thought they were ineligible, the payment was too small, personal reasons, didn't want to move, or didn't understand the offer. Each of these was cited by about 10 to 25 percent of those rejecting the offer.

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III. USE OF ALLOWANCE PAYMENTS

This chapter reports on how the households that participated in EHAP used their housing allowance payments. The following questions are addressed:

- Do allowances induce families to live in standard housing?
- Does the allowance induce families to increase their expenditures for housing?
- Are increased expenditures matched by similar increases in the amount of housing which families obtain?
- What proportion of the allowance is used for increased housing expenditures?
- What is the impact of the allowance payment on rent burdens?

Because low-income families make many changes in their housing conditions in the absence of any government-sponsored program, to answer these questions, it is not sufficient to measure the total changes made by housing allowance families. If the analyses were limited to such data, the results would include background effects -- such as inflation and other changes families normally make over time -- that are not attributable to the experiments. The findings presented in this chapter are those changes made by households because of the housing allowance program.

To do this we will use results from the Demand Experiment because that experiment includes control households. ^{1/} We will compare allowance households with controls in order to determine the changes that are attributable solely to the housing allowance program. Throughout this chapter we will refer to these changes as "above normal." In addition, this chapter also presents comparisons between housing allowance households and those that were offered payments not linked to a housing quality standard (unconstrained households).

1/ This does not imply, however, that the other two experiments of EHAP are not useful in answering these questions; they are, because the changes allowance households make in one experiment can be tested against the others. It just means that the other experiments lack a control group of households necessary for analysis in this chapter.

Minimum Standards. Table III-1 shows the percentage of housing allowance, unconstrained, and control households that meet a minimum set of health, safety, and structural standards. 2/ Households enrolled in the housing allowance program live in standard housing more often than control households. For example, after two years, the percentage point increase for allowance households is over two times greater than that for control households (23 percentage points increase versus 7 in Pittsburgh, and 36 versus 17 in Phoenix).

Households offered housing allowances in Pittsburgh and Phoenix also do better at meeting the housing standards than those that received unconstrained payments. In each site the improvement amounts to 13 percentage points (23 minus 10 in Pittsburgh; 36 minus 23 in Phoenix).

It is important to remember that housing allowance households had to live in units which passed the housing requirements in order to receive a payment. That is, 100 percent of the housing allowance families that received payments lived in acceptable housing. This was not the case for households that received unconstrained payments. Of these families, 77 percent in Pittsburgh (100 minus 23) and 54 percent in Phoenix (100 minus 46) received a subsidy and lived in less than standard housing.

Table III - 1

Percentage of Households Meeting Minimum Standards
After Two Years

	PITTSBURGH		PHOENIX	
	<u>Two Years</u>	<u>Change a/</u>	<u>Two Years</u>	<u>Change a/</u>
Enrolled Allowance	45%	+ 23%	56%	+ 36%
Unconstrained	23	+ 10	46	+ 23
Controls	28	+ 7	36	+ 17

Source: Friedman and Weinberg, Available March 1980:
Chapter 2.

a/ Change in percentage points from enrollment.

2/ See Appendix D.

Increased Expenditures for Housing

As a result of a housing allowance, what changes do families make in their expenditures for housing? There are a number of ways in which this question can be answered.

Table III-2, for example, shows the median percentage increase in expenditures for housing above normal -- that is, beyond what controls spend for housing. The median increase among all those that received allowances was 4.3 percent in Pittsburgh and 16.2 percent in Phoenix.

Among those allowance families that met the minimum standards at enrollment, both Pittsburgh and Phoenix have similar results --there was practically no change above normal in housing expenditures. In both sites virtually all of the above normal changes in expenditures are associated with those families that did not meet the standards until after enrollment.

Further, when housing allowance families are compared with similar unconstrained families that also meet housing quality standards, their increases in housing expenditures are not significantly different. Even among those families that had the largest increases in housing expenditures (those who upgraded or moved) the differences are not significant.

Table III-2

Median Housing Expenditure Changes Above Normal

<u>Housing Allowance Households</u>	<u>PITTSBURGH</u>	<u>PHOENIX</u>
All that Received Payments	4.3%	16.2%
Those that Met the Housing Standards at Enrollment	1.1	- 0.7
Those that Did Not Meet Housing Standards at Enrollment	7.5	23.6

Source: Friedman and Weinberg, Available March 1980:

Moving is generally the easiest way to make a substantial change in one's housing conditions. As is discussed in the next chapter, most renter households move within a five year period. Therefore, families that move reflect changes that are an approximation of those induced by a housing allowance program in the long run. Table III-3 presents the above normal changes in expenditures for housing for movers and non-movers.

Table III-3

Median Housing Expenditure Change
Above Normal by Moving Status

<u>PITTSBURGH</u>	<u>Movers</u>	<u>Non-Movers</u>
Housing Allowance Households	8.1 %	1.4%
Unconstrained Households	3.7	0.5
<u>PHOENIX</u>		
Housing Allowance Households	19.2	3.1
Unconstrained households	17.9	4.6

Source: Friedman and Weinberg, Available March 1980: Chapter 7.

As might be expected, non-movers made small above normal changes in their housing expenditures. The results are similar in both sites. No significant differences appear between housing allowance and unconstrained households. In all cases the changes are less than 5 percent.

The changes made by movers are greater. In Pittsburgh, housing allowance families increased their above normal expenditures by 8.1 percent; in Phoenix the increase was 19.2 percent. Again, similar patterns show up in both sites when housing allowance and unconstrained households are compared. The differences in above normal expenditures between these two groups are usually less than 4 percentage points and are not statistically significant.

In comparison to a similar unconstrained income transfer, the minimum standards requirements do not either increase housing expenditures overall or even among households that did not already meet requirements at enrollment. However, as shown by Table III-1, the housing quality standards did induce a substantial increase in the proportion of households that met the standards while the unconstrained offer did not.

Changes in the Amount of Housing that Families Obtain

Increased expenditures for housing may not always lead to corresponding changes in the amount and quality of housing that families obtain. If early in their search for a unit that passes the housing standards, a family finds one that is overpriced, it might choose to rent it rather than continue to search for a better deal. Since housing allowance families know that they will not receive a payment until they find an acceptable unit, they may be especially anxious to do so. Therefore, it is possible that some of the expenditure changes discussed earlier are overpayments.

To establish whether or not this is the case, actual rents were compared with an estimate of market rents. ^{3/} Analyses show that no significant overpayment seems to have occurred in Phoenix. While some overpayment may have occurred in Pittsburgh, there is no significant difference between the overpayment figures for housing allowance and control households. Similar results were reported for unconstrained households. (Friedman and Weinberg, Available March 1980: Chapter 6.)

Based on the above analysis, we are encouraged to interpret the increases in housing expenditures reported earlier as being a reflection of real changes in the quantity and quality of housing which families obtained.

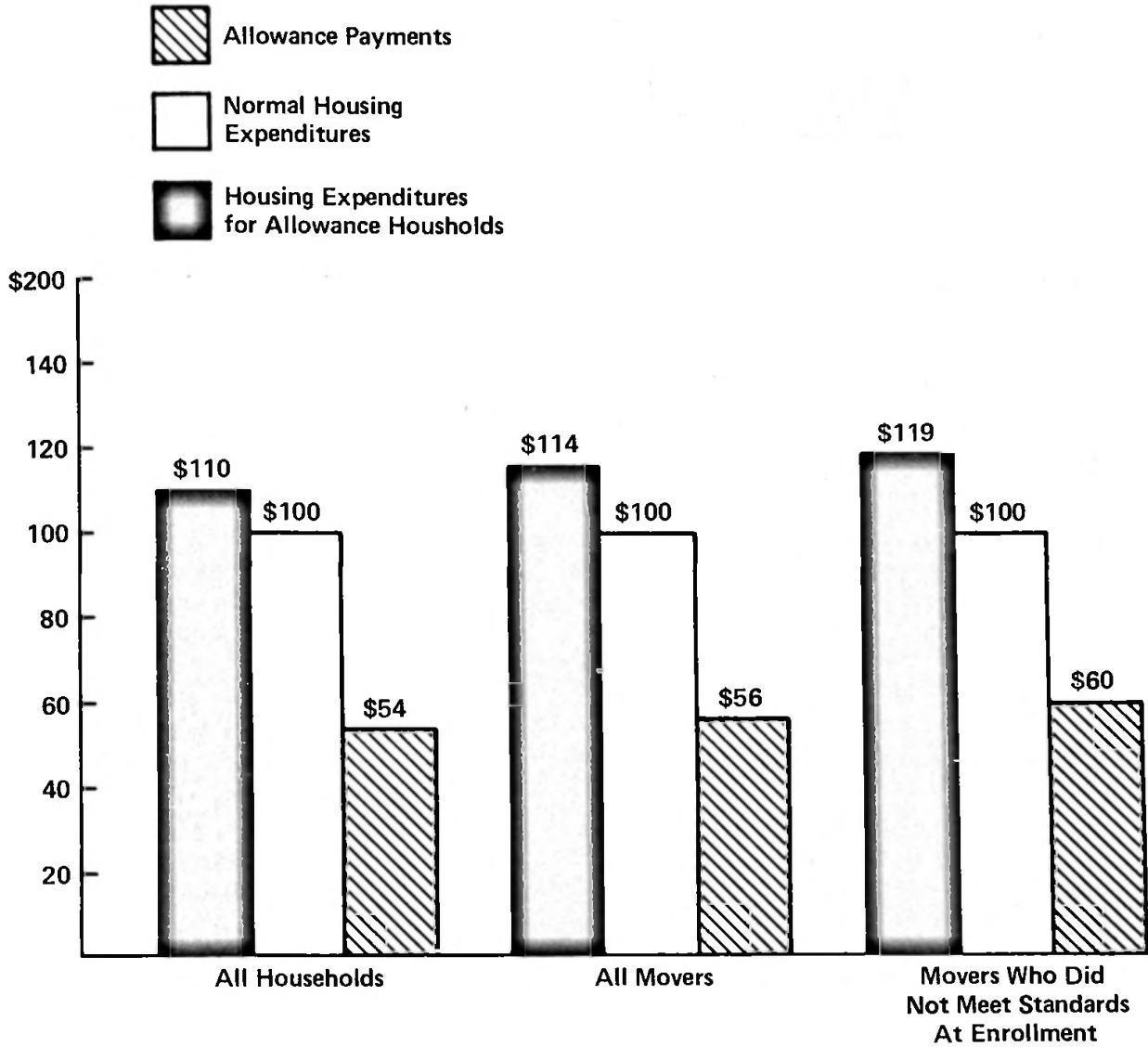
Portion of Payments Used for Housing

For households that received payments, what portion did they spend on increased housing? From a recipient's point of view, and perhaps from other views as well, it may seem that all the payments go to housing. We are concerned here with only that portion of the payment which is spent on increased housing above normal.

^{3/} Market value was determined by using a statistical index which relates the rents of a large number of units to their physical, locational, and tenure characteristics. The index was able to explain about 80 percent of the variation in rents. (Merrill, Available March 1980: Chapter 3.)

Figure III-1

**Changes in Housing Expenditures
and Allowance Payments
(Relative Dollars per Month)**



Source: Friedman and Weinberg, Available March 1980: Chapters 5 and 7.

Note: All figures have been adjusted so that normal housing expenditures equal \$ 100.

Table III-4 summarizes the EHAP data on that issue. In Pittsburgh, allowance households used 9 percent of their payment for increased housing expenditure above normal; unconstrained households used 6 percent of theirs. For Pittsburgh households that moved, 16 percent of the allowance and 8 percent of the unconstrained payments were used for increased housing expenditures above normal. (Recall, 5 percentage points is equivalent to \$7 monthly in rent.)

Table III-4

Median Housing Expenditure Increases
Above Normal as a Percent of Payment

	<u>Housing Allowance Households</u>	<u>Unconstrained Households</u>
<u>PITTSBURGH</u>		
All Households	9	6
Movers Only	16	8
<u>PHOENIX</u>		
All Households	27	19
Movers Only	32	24

Source: Friedman and Weinberg, Available March 1980: Chapters 5 and 7.

While the portion used in Phoenix is higher in each case shown, the differences between allowance and unconstrained payments used for increased housing expenditures above normal are similar for the two sites -- from 3 to 8 percentage points. Allowance recipients used more of their payments for increased housing than did unconstrained households.

Figure III-1 shows these findings in another way. It compares average values for housing allowance payments, expenditures households would have made in the absence of the program, and expenditures by allowance households on the same scale. The difference between the two expenditure levels is the extra expenditure induced by the program. For all households this is equivalent to an average of 10 percent of what would have been spent without the program. This increases to 14 percent when we look only at movers and to 19 percent when we look only at movers whose homes did not meet standards at enrollment.

In other words, the \$54 average allowance payment yielded a \$10 extra housing expenditure. Every dollar of payment yielded almost 19 cents of increased housing. The comparable figure for all movers is 25 cents; for movers whose units did not meet standards at enrollment, the comparable figure is 32 cents.

Changes in Rent Burden

We have examined the ways in which the housing allowance program helps low-income families obtain adequate housing. Now we will see if it makes their housing more affordable.

We will measure affordability by examining rent burden. Rent burden is the proportion of a household's income which is used for housing expenditures. The determination of rent burden for households not receiving an allowance payment is straightforward. The problem is more complex for allowance recipients. We can either view the allowance payment as "special" funds used solely to reduce rent, or we can view it as additional income which can be used for other purposes in addition to housing. It is likely that some recipients view the allowance in the second way.

The first row of Table III-5 shows that the rent burdens of those households who received payments were alike in both sites at enrollment. Families were using almost 40 cents out of every income dollar for rent and utilities.

The bottom two rows of Table III-5 shows that rent burdens, calculated according to the first approach, showed marked reductions. When rent burdens are calculated according to the second approach, however, the changes are more modest. Even with the additional income provided by the allowance (the average annual payment was \$780 in Pittsburgh and \$972 in Phoenix), families were still paying about a third of their incomes for housing.

Table III-5

Mean Rent Burden of Housing Allowance Households

	<u>PITTSBURGH</u>	<u>PHOENIX</u>
<u>Before Receiving the Allowance</u>	39%	41%
<u>After Receiving the Allowance</u>		
Considering Payments as a Reduction in Rent and Not Counting it as Income	19	20
Considering Payments as Additional Income and Not as a Reduction in Rent	32	36

Source: Friedman and Weinberg, Available March 1980: Appendix VI.

Summary

Analysis from the Demand Experiment has shown that the housing allowance program has had a modest effect on households' expenditures for housing. The long-term effect, as estimated by the increases shown for households that moved, is somewhat stronger than the short-term effect. The increases are similar to those shown for households in HEW's Income Maintenance Experiment. (Ohls and Thomas, December 31, 1979: Chapter II.)

Housing allowance households devote about a fourth of their allowance payments to these increased expenditures. The remainder of the payment can be viewed as reducing their rent burden.

Housing expenditures and housing quality changes for households that were offered housing allowances and met the housing standards are almost identical to the changes made by unconstrained households. On the other hand, the housing allowance offer with its housing quality requirements was substantially more successful in inducing households to meet the housing quality standards than an unconstrained assistance offer.

The earmarking provision of the housing allowance seems to focus the housing improvement efforts of households toward the particular health and safety items called for in the standards. ^{4/} Unconstrained households that improved their housing did so in a more general way.

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^{4/} The improvements required to meet the standards (by families that choose to repair their housing rather than move) are usually correctable at a low cost. This will be discussed in detail in Chapter V.

IV. MOBILITY

Both the freedom and the opportunity to move are primary characteristics of EHAP's housing allowance concept. If the offer of a housing allowance linked to a housing standard stimulates families to move more often than they would normally, then the potential for improvement in their housing and neighborhood conditions is increased by the program. But while a household can improve its neighborhood conditions by moving, an improvement in its housing may arise either by upgrading or by moving to another unit within or outside the neighborhood.

EHAP provides data on many mobility issues. The principal questions addressed in this section are:

- Does a housing allowance program stimulate families to move?
- As housing allowance recipients attempt to change their consumption of housing by moving, what neighborhoods will they seek and succeed in entering?
- Are these neighborhoods more racially and economically integrated?
- Will families flee from the central city to the suburbs?

Some insights and answers to each of these questions are provided by each of the three experiments of EHAP. But the Demand Experiment, because it includes control households, allows the effects induced by the allowance program to be separated from what occurs normally. In addition, the Demand Experiment allows comparison with households receiving payments not linked to housing.

Mobility of Low-Income Households

Before we get to the changes in mobility stimulated by the offer of housing allowances, let's review some of what is generally known about the subject.

The Bureau of the Census has been publishing annual mobility data from the Current Population Survey since 1948. Annual "ever moved" rates are calculated by asking if the members of the survey household have been living in the same dwelling unit since the previous year. As can be seen in Table IV-1, these rates have been very stable for the general population

Table IV-1

Proportions Ever Moved 1947-1976 by Move Type:
(U.S. Civilian, Non-Institutionalized Population
One or More Years Old)

<u>Period</u>	<u>Total</u>	<u>Inter-County</u>	<u>Intra-County</u>
1947-48	20.0	6.4	13.6
1948-49	18.8	5.8	13.0
1949-50	18.7	5.6	13.1
1950-51	21.0	7.1	13.9
1951-52	19.8	6.6	13.2
1952-53	20.1	6.6	13.5
1953-54	18.6	6.4	12.2
1954-55	19.9	6.6	13.3
1955-56	20.5	6.8	13.7
1956-57	19.4	6.3	13.1
1957-58	19.8	6.7	13.1
1958-59	19.2	6.1	13.1
1959-60	19.4	6.5	12.9
1960-61	20.0	6.3	13.7
1961-62	19.1	6.1	13.0
1962-63	19.4	6.8	12.6
1963-64	19.6	6.6	13.0
1965-66	20.1	6.7	13.4
1966-67	19.3	6.6	12.7
1967-68	18.3	6.7	11.6
1968-69	18.8	7.0	11.8
1969-70	18.4	6.7	11.7
1970-71	18.0	6.5	11.4
----- a/			
1975-76	17.1	6.4	10.8
Mean:(1947-76)	18.9	6.5	12.8

Source: U.S. Bureau of the Census, Current Population Reports, Population Characteristics, Series P-20.

a/ Data for April 1971 through March 1975 are not available on an annual basis.

over the past three decades, ranging only from 17.1 percent to 21 percent. Annual within-county moves for both homeowners and renters have also been stable, ranging from 10.8 to 13.7 over the same time period.

Another source of mobility information is the Michigan Panel Survey of Income Dynamics (SID), a study over time of the socio-economic characteristics of a representative sample of the American population. Some of its data on mobility rates of the low-income population are shown in Table IV-2.

Table IV-2

Mobility According to Age of the Low-Income Population a/

Households (By Age Groups)	Percentage Moving in One Year (1968-69)	Percentage Moving in Five Years (1968-1973)
Less than 25	56	93
25-34	28	83
35-44	25	66
45-54	20	57
55-64	15	56
65	11	14
All Low-Income Renters	27	71
All Low-Income Homeowners	5	23

Source: Michigan Panel Survey of Income Dynamics.

a/ The low-income population was defined by the ratio of total family income to an annual family need standard which varies by household size and by age and sex of family members, with additional adjustments for small families and for farmers.

Table IV-2 indicates that on average, mobility rates for low-income renters are substantially higher than for low-income homeowners. When this difference is taken into consideration, the mobility rates in Table IV-1 and IV-2 become quite compatible.

Data from the Michigan Panel Survey also shows very little variation by income among low-income households.

Table IV-3 shows that mobility rates are different in various census regions of the country. The propensity of western renters to move (41 percent in one year) is much higher than in the northeast or south (23 and 22 percent in one year, respectively). The data from this table suggest that renters generally have a high propensity to move.

Table IV-3
Regional Mobility Rates of the Low-Income Population
(Renters Only) a/

<u>Census Region</u>	<u>Percentage Moving In One Year (1968-69)</u>	<u>Percentage Moving In Five Years 1968-73)</u>
Northeast	23	62
North Central	31	77
South	22	68
West	41	81

Source: Michigan Panel Survey of Income Dynamics.

a/ See the footnote to Table IV-2 for the definition of the low-income population.

We hypothesize that the higher its propensity to move, the more likely a low-income household is to participate in a housing allowance program, particularly if the household must move to meet the housing requirements. The chapter on EHAP participation results supports this hypothesis after controlling for various determinants of participation such as initial housing quality and the size of the allowance offer. Renters participate at much higher rates than homeowners; the elderly participate less than younger groups; and the participation rate in Phoenix, in the west, was higher than in Pittsburgh.

Mobility of Households in EHAP

Figure IV-1 shows the pre-program mobility history of households enrolled in the two Demand Experiment sites, Pittsburgh and Phoenix. A comparison of these data with the national and regional data from the Panel Survey of Income Dynamics shows a striking similarity. Pittsburgh households closely resemble those households in the northeast and southern regions. Phoenix households are like those in the western regions. The moving rate in the north central region falls about midway between the Pittsburgh and Phoenix rates.

EHAP's Effect on Mobility

Table IV-4 indicates that the effect of the allowance on mobility is small or non-existent. In Pittsburgh over a two year period, 37 percent of the enrolled allowance households and 36 percent of the control households moved. In Phoenix, 59 percent of the allowance households and 52 percent of the controls moved.

Table IV-4

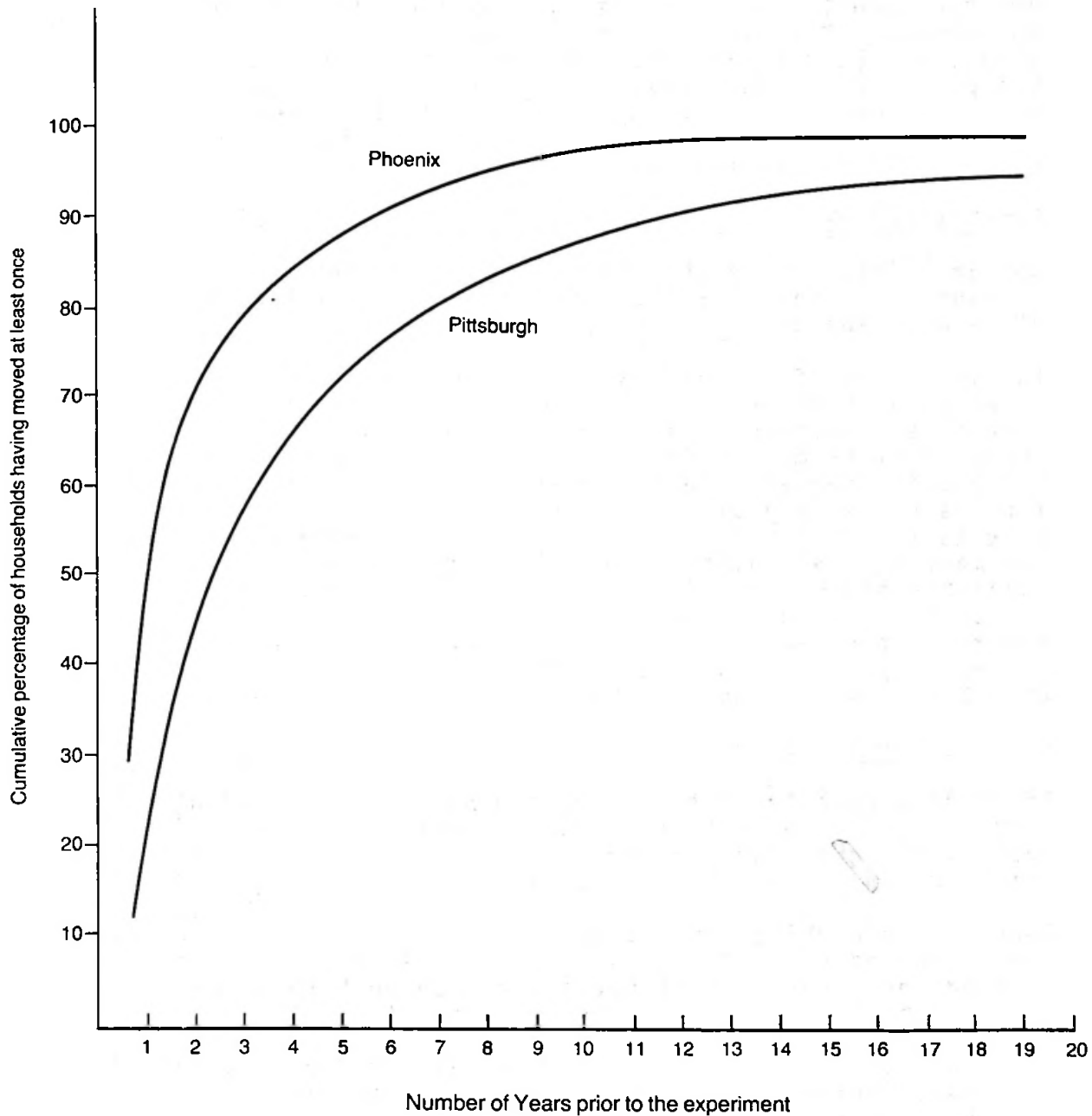
Two-Year Searching and Moving Rate for Housing Allowance and Control Households

	<u>Percentage Searching</u>	<u>Percentage of Searchers Moving</u>	<u>Percentage of All Enrolled Households Moving</u>
<u>PITTSBURGH</u>			
Housing Allowance Households	60	61	37
Control Households	58	61	36
<u>PHOENIX</u>			
Housing Allowance Households	68	87	59
Control Households	67	77	52

Source: Data provided by Abt Associates Inc.,
January 18, 1979.

Figure IV-1

**Cumulative Percentage of Enrolled Households Having Moved
At Least Once During the Twenty Years Prior to the Demand Experiment**



Source: MacMillan, Available March 1980: Chapter 3.

Note: Sample is Experimental and Control households enrolled, excluding those with enrollment incomes over the eligibility limits and those living in their own homes or in subsidized housing, and excluding households formed after the year shown.

At both sites, more sophisticated analyses controlling for demographic and other differences indicate that the allowance offer increased the probability of moving for all households by seven percentage points over the control households. However, the allowance effect on moving is concentrated among households whose units did not meet requirements at enrollment. But even for these households, the estimated effect was only to increase the probability of moving by ten percentage points over the control households. (MacMillan, Available March 1980: Chapter 4.) Thus, it appears that normal mobility will largely determine the rate at which households move to meet housing requirements.

Constrained vs. Unconstrained Payments

So far we have shown that the constrained housing allowance payment leads to small increases in mobility. How do allowances and unconstrained payments compare?

In Pittsburgh, families that received unconstrained payments moved more often relative to controls than did housing allowance households. Analyses indicate that their probability of moving is increased by 10 percentage points. ^{2/} While this program effect of moving is higher than the effect for the Pittsburgh allowance households, it is about the same as the effect for the Pittsburgh allowance households not meeting the housing standard at enrollment. (MacMillan, Available March 1980: Chapter 4.) In Phoenix, the program effect for housing allowance and unconstrained households was about the same. The unconstrained offer increased the probability of moving by about 0.10 over the normal probability of moving observed for control households.

Reasons for Not Searching

Of those households not meeting the housing requirements at enrollment, 64 percent in Pittsburgh and 68 percent in Phoenix searched for another housing unit. Nearly a third did not even bother to search. Why not?

Those non-searching households were interviewed three times over a period of 18 months. In both sites over 72 percent of them were consistently satisfied with both their unit and neighborhood. The reasons they gave for not having

^{2/} HEW's Income Maintenance Experiment found similarly small increases in the probability of moving. (Ohls and Thomas, December 31, 1979: Chapter 3.)

searched fall into three major categories: (1) they were satisfied with their present dwelling units; (2) they had strong attachments to their present neighborhoods because work, family, friends, schools were close by; and (3) with the additional money from the allowance, they did not believe they could find another unit they would like as well. (MacMillan, Available March 1980: Chapter 5.) Analyses of the data show a strong relationship between a household's level of satisfaction with its present housing and neighborhood and its propensity to move. When households are satisfied, the offer of some additional money is often not a sufficient incentive to move.

Data from the Supply Experiment, reported in Table IV-5, offer additional evidence that households are reluctant to move merely to qualify for allowance payments. About three-fourths of the households in each site whose dwellings initially failed chose either to repair them or move to acceptable housing. Moving was the preferred choice only for those whose dwellings had four or more defects. Moreover, among those who did not repair, termination was more common than moving.

Reported Discrimination

Among households that searched for another dwelling unit, over a third said they experienced some discrimination. Their reports are categorized in Table IV-6. The most frequent reason given was the presence of children in the household. Source of income, age, and marital status were next in frequency, followed by sex and race. ^{1/}

Analysis have been conducted that consider the relationship between several demographic characteristics and the incidence of reported discrimination. As might be expected, black and hispanic households were more likely than white households to report racial/ethnic discrimination. Black households were also more likely than white households to say they avoided certain neighborhoods because of the expectation of discrimination. There is little evidence, however, to suggest that any particular type of discrimination was consistently used to mask discrimination against race/ethnicity. (Vidal, Available April 1980: Chapter 2.)

^{1/} Similar results were obtained in the Supply Experiment. See McCarthy, September 1979:18.

Table IV-5

Renter Responses to the Initial Dwelling Evaluation
by the Severity of Failure in Green Bay and South Bend

Number of Items Failed	Percent of Failed Units	Household Response %		
		Upgraded	Moved	Terminated
<u>GREEN BAY</u>				
1	49	67	16	17
2	25	60	17	23
3	13	52	18	30
4+	13	31	36	33
Total	100	59	19	22
<u>SOUTH BEND</u>				
1	43	73	11	16
2	23	55	17	28
3	13	52	16	32
4+	21	32	30	38
Total	100	57	17	26

Source: McDowell, 1979: Table 2.3

Sample: Households who enrolled during the first two program years, failed their initial housing evaluations, and acted in one of the indicated ways by close of file. Those who did nothing are excluded.

Table IV-6

Type of Discrimination Reported by All Searchers

<u>Type of Discrimination</u>	<u>PITTSBURGH</u>	<u>PHOENIX</u>
	Percentage of Households That Reported Discrimination of This Type (N = 697)	Percentage of Households That Reported Discrimination of This Type (N = 651)
Any type of Discrimination	54%	33%
Age	15	12
Sex	8	2
Marital Status	20	6
Race/ethnicity	7 <u>a/</u>	4 <u>b/</u>
Source of Income	30	8
Children	45	24
Receipt of a Housing Allowance	1	1

Source: Vidal, Available April 1980: Appendix IV.

a/ Stratifying by race we find that 21% of black households and 3% of white households reported this type of discrimination.

b/ Stratifying by race we find that only 1% of white households reported experiencing this type of discrimination while 15% of black households and eight percent of hispanic households reported such discrimination.

Locational Changes

So far, we have found that housing allowance and control households move at only slightly different rates. But how do allowance and control households compare with respect to the types of neighborhoods they move to?

Analyses of program data from the Demand Experiment show that the neighborhoods moved to by blacks and hispanics had lower levels of minority concentration and higher average incomes than the ones they started from. These new neighborhoods were also more favorably ranked by subjective assessments -- less litter, less crime, more public services, etc. (Atkinson, et. al, 1977:106.) The controls showed similar changes. Thus, to the extent that allowance and control households move at only slightly different rates and generally move to similar neighborhoods, housing allowances do not significantly effect racial and economic integration. Results from the Supply and Administrative Agency Experiments show similar trends. (Rand Corporation, 1978:133, and Holshouser, 1977:E34.)

Movers from Cities to Suburbs

Generally the distances recipients moved were modest, averaging about 1.6 miles. (Atkinson et al, Available April 1980: Chapter 5). Table IV-7 provides some information about these moves in terms of shifts from cities to suburbs. In each instance, however, analyses indicate that the percentage of allowance households choosing a particular location is not significantly different from that of the control households. Data from the Administrative Agency Experiment confirm the lack of any noticeable effect on central city/suburban locations: 71 percent of the recipients lived in central cities at enrollment and 70 percent lived there after receiving their first payment. (Holshouser, 1977:E29.)

Table IV-7

City/Suburban Locational Choices

<u>Household Type</u>	<u>Percentage of Those Initially in the Central City Moving to the Suburbs</u>	<u>Percentage of Those Initially in the Suburbs Moving to the Central City</u>
<u>PITTSBURGH</u>		
Experimental Households	18%	12%
Control Households	19	12
<u>PHOENIX</u>		
Experimental Households	33	6
Control Households	29	6

Source: Atkinson et al., Available April 1980: Chapter 5.

Sample: Full payment experimental movers and control movers active two years after enrollment, excluding those with enrollment incomes over the eligibility limits, those living in their own homes or in subsidized housing.

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V. HOUSING MARKET EFFECTS

Critics of housing allowances argue that giving low-income families cash earmarked for housing would cause housing prices to rise substantially. Some view low-income renters as captives of their landlords and believe that landlords would raise the rents of program recipients by the amounts of their allowances. Others argue that the program's housing standards would create an inflationary competition for acceptable dwellings as those living in substandard housing sought to qualify for assistance.

Because housing allowance payments would not usually be large enough to induce recipients to purchase or rent newly constructed units, some critics conclude that the program would not increase the supply of acceptable dwellings. They judge that homeowners and landlords would be unwilling or unable to improve substandard dwellings, or that recipients would avoid such improved dwellings because of the neighborhoods in which they were located.

Those who favor housing allowances stress the flexibility of the existing housing stock, arguing that deteriorated housing could be profitably repaired if its occupants were willing to spend more on housing. They also envision more competition among the suppliers of housing than do the critics. Since allowance recipients could move, carrying their allowances with them, landlords who were unwilling to maintain their dwellings to program standards would lose their tenants and thus be forced either to change their policies or go out of business.

These different views reflect different beliefs about both the technical and behavioral features of housing markets. The Supply Experiment was designed to provide evidence to evaluate these two views. The evidence is provided directly by examination of market outcomes in its two sites and indirectly by generalizable analysis of the market processes that led to those outcomes.

With these objectives in mind, experimental sites were chosen that differed in three important respects: initial market conditions, market structure (division into racial submarkets), and the quality of the housing stock. Tables V-1 and V-2 present selected indicators of market condition and market structure in each site; Figure V-1 shows the age distribution of each county's housing stock, an indicator of its quality.

Table V-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 Spanish-speaking
<u>BROWN COUNTY</u>					
Green Bay	88,500	3.3	0.2	28,100	1.9
Rest of County	81,900	1.2	3.0	19,800	0.6
Total	170,400	2.4	1.5	47,900	1.4
<u>ST. JOSEPH COUNTY</u>					
South Bend	112,500	- 0.5	- 2.2	39,300	18.6
Rest of County	123,000	1.2	0.6	36,300	1.3
Total	235,500	0.3	- 0.8	75,600	10.4

Source: The Rand Corporation, 1978:98.

Table V-2

HOUSING VACANCIES AND TURNOVER AT BASELINE:
BROWN COUNTY (1973) and St. Joseph County (1974)

<u>Area</u>	<u>Number of Habitable Units</u>	<u>Average Vacancy Rate (%)</u>	<u>Average Turnover per 100 Units</u>	<u>Average Vacancy Duration (Weeks)</u>
Regular Rental Housing <u>a/</u>				
BROWN COUNTY	14,700	5.1	65.6	4.0
St. Joseph County	16,400	10.6	57.4	9.6
Central South Bend	8,000	12.3	59.5	10.7
Rest of County	8,400	8.9	55.3	8.4
Homeowner Housing <u>b/</u>				
BROWN COUNTY	31,700	0.8	7.4	5.6
St. Joseph County	57,000	2.4	9.9	12.6
Central South Bend	13,600	4.2	8.5	25.7
Rest of County	43,400	1.9	10.2	9.7

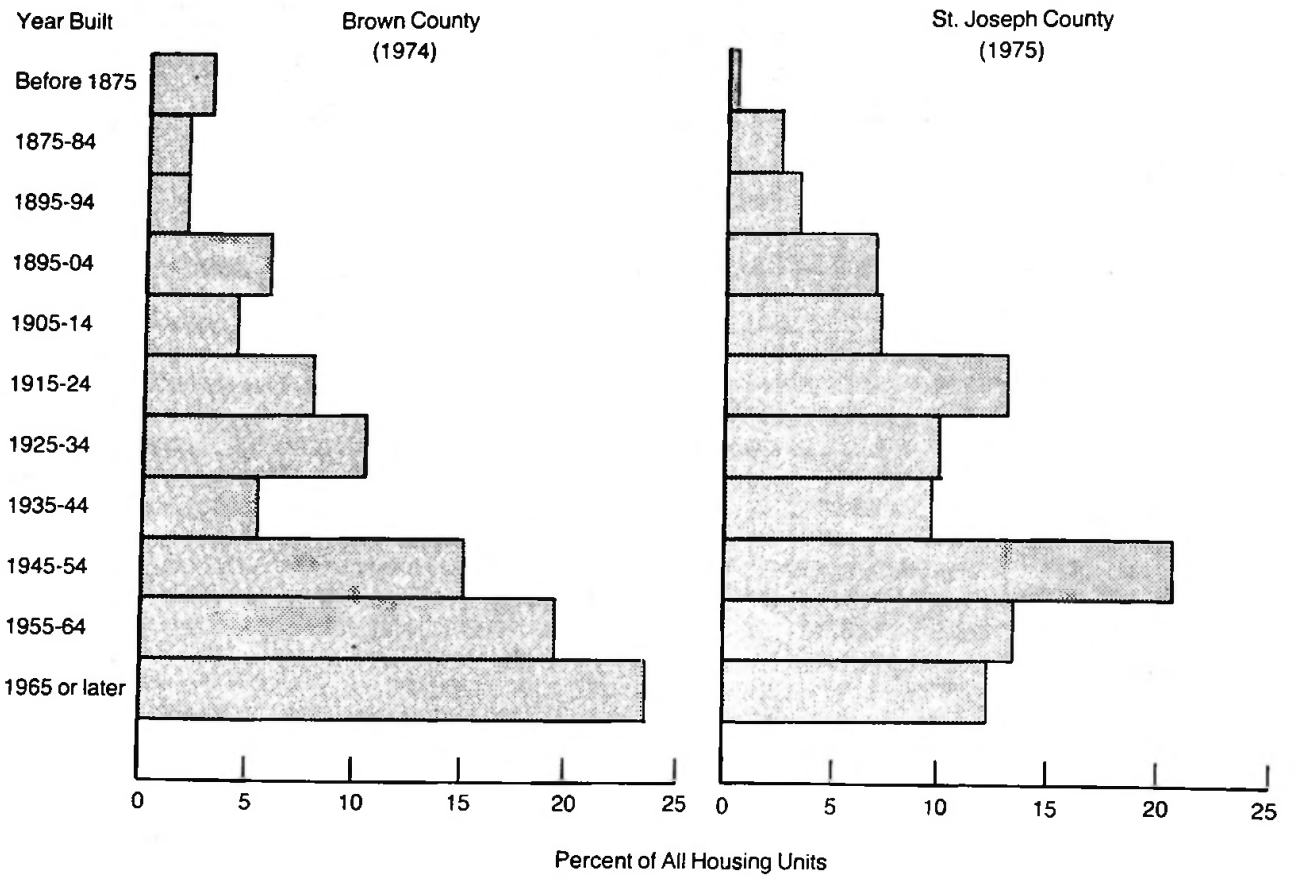
a/ Excludes mobile home parks, rooming houses, farmhouses, and federally subsidized dwelling units.

b/ Excludes mobile homes.

Source: The Rand Corporation, 1978:98.

Fig. V-1

Distribution of Dwelling Units by Year Built: Brown and St. Joseph Counties



SOURCE: The Rand Corporation, 1978:99

Prior to the experiment, Brown County, Wisconsin, had a tight housing market (low vacancy rates and short vacancy durations) because of its growing urban population. Lacking segregated racial minorities, the county was divided into specialized submarkets only by tenure and type of dwelling. Its housing stock was relatively new and there were no large clusters of deteriorated or dilapidated dwellings.

St. Joseph County, Indiana, on the other hand, was losing population and had a loose housing market, reflected in high vacancy rates and long vacancy durations. Central South Bend, with its segregated black population and older, deteriorated housing stock, comprised a geographical submarket distinct from the remainder of the county.

At the end of December 1979, the program had been operating for about 66 months in Brown County and 60 months in St. Joseph County. About 3,800 households were receiving payments in Brown County, and 5,800 in St. Joseph County (8 percent of all households in each site). Payments averaged about \$1,100 per year.

The argument that landlords of allowance recipients would raise rents without upgrading their units is easily dismissed. As Table V-3 shows, recipients who remained in pre-program housing that already satisfied program standards experienced virtually no change in their rents. Even non-movers whose units had to be improved in order to participate experienced relatively small rent increases.

Few experts on the workings of housing markets believed that the effects of an allowance program on housing prices would be limited to recipients. Instead, most believed that the prices of similar units would be affected similarly. The rents of the least desirable units would fall; rents of modest units meeting the standards would rise. Disagreements among experts about the extent to which housing allowances would inflate housing prices do not represent fundamental differences about how housing markets work but rather differences about the degree of responsiveness of consumers and producers to changes in their circumstances.

We do not yet have a complete understanding or an accurate estimate of the effect of housing allowances on housing prices. Nevertheless we can be confident that it is small. The effect of the housing allowance program on the rate of inflation in housing prices is simply the difference between the rate experienced in the presence of the program and that which would have prevailed in its absence. The average

Table V-3

POST-ENROLLMENT CHANGES IN CONTRACT RENT FOR RECIPIENTS:
HOUSING ALLOWANCE PROGRAMS IN BROWN AND ST. JOSEPH COUNTIES THROUGH YEAR THREE

Site and Post-Enrollment	Average Change in Contract Rent (%) by Initial Evaluation Result		
	Pass	Fail	Total
<u>Total Annualized Change a/</u>			
<u>BROWN COUNTY:</u>			
Nonmovers	4.9	4.0	4.6
Movers	15.4	22.6	19.4
<u>ST. JOSEPH COUNTY:</u>			
Nonmovers	2.8	4.0	3.3
Movers	7.3	22.6	18.1

Annualized Change Net of Background Inflation b/

<u>BROWN COUNTY:</u>			
Nonmovers	0.5	-0.4	0.2
Movers	11.0	18.2	15.0
<u>ST. JOSEPH COUNTY:</u>			
Nonmovers	- 1.0	0.2	-0.5
Movers	3.5	18.8	14.3

a/ Change from enrollment to end of Year 3 divided by duration of enrollment. Entries for movers are annualized even though they usually represent a single change at the time of the move. The total changes for movers during their entire periods of enrollment are between 1.4 and 2.0 times the entries shown.

b/ Total annualized change minus average annual rate of increase for all rents in the county. The background inflation rate was 4.4 for Brown County and 3.8 for St. Joseph County during the years in question.

SOURCE: Data provided by the Rand Corporation, February 20, 1980.

NOTE: Entries are based on records for 1,584 renter enrollees in Brown County and 1,592 in St. Joseph County who were receiving payments at the end of the third year of program operations. Those living rent-free at enrollment or who moved before their enrollment dwelling was evaluated are excluded.

annual rate of inflation in contract rents has never exceeded 5 percent in either site and has always been less than the national average (data provided by the Rand Corporation, December 21, 1979). Since none of the 23 cities for which the Bureau of Labor Statistics publishes price indices experienced a decline in contract rent between 1974 and 1978, it seems safe to conclude that neither experimental site would have experienced a decline in housing prices in the absence of the program. Thus, the effect of housing allowances on housing prices in the two sites is certainly less than the observed rates of inflation in contract rents, which are small.

Reasons for the program's small effect on housing prices are easy to find. First, housing allowances have had a small effect on the demand for housing services. 1/ Only 8 percent of all households become recipients. Since recipients spent less than the average on housing prior to the program, they accounted for less than 8 percent of aggregate demand. Even if all were to move, the program would increase their demand for housing services by far less than 19 percent, the largest increase in rent for movers shown in Table V-3. 2/ Therefore, the ultimate effect of housing allowances on the aggregate demand for housing services will be less than 2 percent.

1/ The phrase "housing services" refers to an index of all of the attributes of housing. If one dwelling unit is better than another, it is said to provide more housing services. If a dwelling is allowed to deteriorate, it provides less housing services. Therefore, the demand and supply of housing services refers to the demand and supply of a composite of all of the attributes of housing rather than the demand and supply of separate dwellings.

2/ Not all of this increase represents a program-induced increase in the demand for housing services. A part of the increase is due to the loss of the discount associated with long-term tenancy, and some of the rest would have occurred in the absence of the program. Furthermore, the percentage increase for homeowners is likely to be smaller than for renters because their pre-program housing meets the standards somewhat more often and they move much less frequently. (Lamar and Lowry, 1979:20.)

Second, it is clear that even in the short run the supply of housing services from existing structures does respond to changes in rents. That is, increases in rents will induce suppliers to provide some improvements in housing. These improvements are discussed in the following paragraphs.

The Supply Experiment has laid to rest the fear that a full-scale housing allowance program would drive up housing prices substantially. It has also dispelled the belief that such a program would do almost nothing to increase the supply of decent, safe, and sanitary housing.

In both sites, but especially in St. Joseph County, those who enrolled in the program often lived in substandard housing. ^{3/} During the first four program years, 48 percent of enrollees' dwellings in Brown County and 56 percent in St. Joseph County failed initial inspections. In the two sites combined, 24 percent of the failed dwellings lacked adequate space or interior privacy, 34 percent lacked adequate kitchen or bathroom facilities, and 80 percent had one or more hazardous conditions.

Among recipients whose pre-program housing did not meet the program standards, 86 percent repaired them, usually within three months. After five program years, about 3,500 current recipients and 7,600 former recipients are in this category. Since some of the units occupied by past recipients no longer meet the standards and others would have been repaired to meet the standards even if their occupants had never received assistance, we can conclude that EHAP has increased the supply of decent, safe, and sanitary housing at the two sites by at least 3,500, but less than 11,100 units. ^{4/} In the absence of the program, there would have been about 25,000 substandard and 99,000 standard units at the two sites. ^{5/} Therefore, EHAP has decreased the number of substandard units between 14 and 44 percent and increased the supply of decent, safe, and sanitary units between 4 and 11 percent. (Data provided by the Rand Corporation, January 28, 1980)

^{3/} See Appendix D for a description of the housing standards used in the experiments.

^{4/} This ignores two possibilities: (1) some of the units into which recipients moved were upgraded from substandard to standard units in response to the program, and (2) some of the previously substandard units occupied by current recipients would have been upgraded in the absence of the program.

^{5/} These numbers are based on estimates that prior to the experiment about 20 percent of the units would have failed the program standards. (Lowry, Woodfill, Repnau, 1974: 17-22; Lowry, Woodfill, Dade, 1975:9-16.)

The types of initial repairs are detailed in Table V-4. Approximately half of the units that were evaluated had only one defect; fewer than 10 percent had four or more defects. Table V-5 shows that these repairs were made at low out-of-pocket costs. These costs were low because many of the defects -- especially the health and safety hazards -- were easily repaired and because recipients, their friends and their landlords did most of the work. Most of the cash outlays were used only for purchased materials. Paid labor was used only for 10 percent of the repairs to rented dwellings and for about 15 percent of the repairs to owner-occupied homes (McDowell, 1975:24). 6/

A housing allowance program affects repair activities not only immediately before but also after a unit enters the program. The most comprehensive and reliable data on annual repairs come from homeowners. In the Supply Experiment sites, both the median and the mean cash outlays per dwelling are higher for allowance recipients than for other homeowners whose incomes were under \$7,000, as the following shows:

	<u>BROWN COUNTY</u>		<u>ST. JOSEPH COUNTY</u>	
	<u>Median</u>	<u>Mean</u>	<u>Median</u>	<u>Mean</u>
Recipient homeowners	83	256	109	303
All low-income homeowners	56	182	50	268

Source: Data supplied by the Rand Corporation, February 15, 1980.

Some observers have been disappointed by the small cash cost of repairing substandard dwellings, believing that such inexpensive improvements must have little social value. But housing improvements need not be expensive to contribute significantly to the welfare of occupants.

The major market effects on which proponents and opponents of housing allowances have differed are the effects of allowances on housing prices and the supply of standard housing. As a result of EHAP, facts now replace assumptions on these matters. Many other market effects have been studied; only some will be mentioned here. EHAP appears

6/ For renters there is reason to believe that even out-of-pocket costs are understated because tenants were asked to estimate costs incurred by their landlords.

Table V-4

Required Repairs to Enrollees' Dwellings
by Item Repaired: Housing Allowance Programs
in Brown and St. Joseph Counties, 1976-79

<u>Item Repaired</u>	<u>Percent of All Repairs</u>			
	<u>BROWN COUNTY</u>		<u>ST. JOSEPH COUNTY</u>	
	<u>Owners</u>	<u>Renters</u>	<u>Owners</u>	<u>Renters</u>
Handrail or steps	24	14	21	12
Window, door, or partition	24	27	30	28
Structural components <u>a/</u>	7	6	7	5
Plumbing system	12	11	13	12
Heating system or vent	2	2	2	4
Electrical system	4	3	3	4
Refrigerator or range	<u>b/</u>	2	1	3
Grounds or fence	<u>2</u>	2	1	1
Paint	21	27	18	26
Other	4	6	4	5
All repairs	100	100	100	100
Number of itemized repairs	1,940	5,691	6,800	10,591
Number of dwellings evaluated <u>c/</u>	1,088	2,988	4,028	5,330

a/ Includes repairs to the wall, floor, ceiling, roof, foundation, and porch.

b/ Less than 0.5 percent.

c/ Excludes households unable to describe repairs.

Source: Data provided by Rand Corporation, January 21, 1980.
 Tabulated from records collected between January 1976
 and June 1979.

NOTE: Repair actions were reported during deficiency reevaluations following failure of a regular evaluation. Nearly all corrected the defects that had been noted earlier by Housing Allowance Office evaluators, and most occurred at the outset of a household's enrollment. However, the data includes repairs reported during deficiency reevaluations following failed annual or movers' evaluations.

Table V-5

Cash Expenses for Initial Repairs to
Recipients' Dwellings: 1976-79

Percentage Distribution of
Dwellings Evaluated

<u>Cash Expense (\$)</u> per Dwelling	<u>BROWN COUNTY</u>		<u>ST. JOSEPH COUNTY</u>	
	<u>Owners</u>	<u>Renters</u>	<u>Owners</u>	<u>Renters</u>
No repairs reported	3.3	3.8	4.8	6.5
Repaired at no expense	17.3	22.7	22.8	24.3
Repaired, by expense amount:				
1 - 20	52.7	48.2	41.9	40.0
21 - 40	9.0	10.4	12.4	12.7
41 - 70	6.6	5.4	6.8	7.9
71 - 100	3.0	2.8	3.2	3.5
101 - 150	2.1	1.8	2.4	2.1
151 - 200	1.1	1.1	1.5	.9
201 - 300	1.5	1.5	1.4	.7
301 - 400	.5	.5	.6	.4
401 - 500	.4	.5	.4	.3
501 - 600	.2	.3	.3	.1
601 - 700	.4	.2	.2	.1
701 - 1,000	.7	.4	.4	.1
1,001 or more	1.2	.4	.9	.4
Total	100.0	100.0	100.0	100.0
Median Cost (\$) <u>a/</u>	12	8	10	10
Average Cost (\$) <u>a/</u>	74	42	65	34
Number of Records	1,088	2,988	4,028	5,330

a/ Median and average repair costs for all dwellings evaluated.

Source: Data provided by The Rand Corporation, January 21, 1980.
Tabulated from records collected between January 1976
and June 1979.

NOTE: Costs were estimated by the recipient and do not include
unpaid labor. Renter recipients may lack information
on costs paid by their landlords.

to have had no measurable effect on new construction and tenure choice. Few enrollees need or seek home improvement loans to bring their dwellings up to program standards. Home improvement and repair contractors have had no difficulty meeting program-generated demands for their services. Finally, a substantial majority of non-participants surveyed expressed approval of the program.

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VI. HOUSING ALLOWANCE PROGRAM COSTS

* Admin. Costs
in EHAP - Results

Administrative Costs in EHAP

Not until the implementation of EHAP in 1972 were questions associated with operating housing allowance programs systematically addressed. Using data collected from EHAP, we can now attempt the answers.

Administrative costs of a housing allowance program include all the initial and ongoing costs of operating an allowance program and providing payments to eligible families. Such costs range from the initial advertising of the program to the public and providing program information to participants, to the costs of overhead and issuing allowance payment checks.

Most of our information on administrative costs comes from the Administrative Agency Experiment (AAE) of EHAP. In the AAE, HUD selected eight public agencies in different housing markets across the country. 1/ Their task was to provide housing allowances to as many as 900 families in six sites, 500 families in one site and 400 in another.

Participating agencies were given a framework of a housing allowance program within which they had to administer their particular programs. That is, they were given certain guidelines covering the types of functions which they must perform (such as housing inspections and income certifications) and the minimum criteria with which they must comply. The procedures used to implement these requirements and to allocate staff time to each of the functions were left to the discretion of the administering agencies. Detailed records of costs (both in staff time and supplies) were maintained so that they could later be analyzed in relation to their outcomes. In this way, comparable information was collected across sites to help measure the effects of various administrative procedures. 2/

1/ Salem, Oregon; Springfield, Massachusetts; Peoria, Illinois; San Bernardino, California; Bismarck, North Dakota; Jacksonville, Florida; Durham, North Carolina; and Tulsa, Oklahoma.

2/ For a complete concise summary of the AAE and its findings, see Hamilton, William L., A Social Experiment in Program Administration, Abt Associates Inc., 1979.

The Supply Experiment presents another opportunity for cost observations, although this was not its original intent. The program's scale of operation is quite large, providing some insight into administrative economies of scale; its data collection spans several years compared to the AAE's two-year duration; and its administrative procedures, which are almost identical in the two sites, are carefully defined and controlled. Hence costs do not vary considerably. 3/

Although integration of much of the EHAP data is difficult because of the variations in administrative functions and accounting practices, we have the advantage of cross-experimental information, including differences in scale of program operation, administrative procedures, duration, start-up approaches, geographical location, and characteristics of the eligible populations.

Total administrative costs can be divided into two components -- direct costs and indirect costs. Direct costs can then be further divided into intake costs -- the costs of bringing households into the program (as well as dealing with unsuccessful applicants) -- and maintenance or ongoing costs -- the costs of the payment system and other continuing program functions.

Intake costs result from the following functions:

- Outreach -- publicizing the program to potential applicants through newspaper, radio, or television advertisements, referrals, etc.;
- Enrollment -- screening and selecting eligible households and certifying their eligibility;
- Inspection -- certifying that the housing unit selected by the participant meets the program requirements;
- Services -- providing program and market information to enrollees.

3/ Administrative cost data from the Demand Experiment are less useful. The varied treatment groups of the experiment simulate the effects of several different types of housing programs but make the associated administrative procedures and costs difficult to separate. Therefore, the nature of the Demand Experiment -- observing a microcosm of several different allowance programs testing various design parameters -- severely limits the usefulness of any actual cost data obtained from it.

Procedures used to perform these functions varied widely across the AAE sites, resulting in an equally wide variation in costs. Differences also appear between the AAE and the Supply Experiment in components of intake costs. However, these differences, which will be explained later, are not very large when we account for differences in the procedures used across experiments.

Maintenance costs result from four ongoing administrative functions:

- Payment Operations -- the procedure (automated or otherwise) used to process the allowance payments to program participants;
- Recertification -- periodic verification of household eligibility to ensure that recipients are still eligible for the program;
- Reinspection -- periodic re-evaluation of housing units to ensure that they too remain program-eligible;
- Services -- ongoing participant services, such as consumer and housing information seminars, home maintenance information, etc.

These also produced considerable variation in administrative costs. Again, comparing component cost differences between the Supply Experiment and the AAE, there is some variation -- but some of the same procedural differences (to be discussed later) help explain the variation here as well.

Indirect (or overhead) costs include such items as office supplies and equipment, management support, audit and control, etc. These costs tended to be slightly lower at the Supply Experiment sites (about 82 percent of direct costs), primarily because of the greater economies of scale associated with larger programs.

For example, Table VI-1 presents the annual per household

administrative costs for both the AAE and the Supply Experiment. Although there is a small difference in median intake costs, the main difference between the AAE and Supply Experiment estimates is in maintenance costs. These costs are much lower in the Supply Experiment, primarily due to the increased efficiency of running a large program. Each site participating in the AAE had at most 900 recipient households, while each of the Supply Experiment sites served over 3,500 households. Clearly, there are benefits in the form of reduced per household administrative costs when a substantially greater number of households are being served under some of the same fixed costs incurred in a much smaller program.

TABLE VI-1

Annual Per Recipient Administrative Costs a/

	<u>Median Intake Cost</u>	<u>Median Maintenance Cost</u>	<u>Projected Total Cost</u>	b/
Administrative Agency Experiment	\$253	\$205	\$256	
Supply Experiment	215	115	158	

Source: Maloy, et al., 1977:23.
The Rand Corporation, 1978:149.
(data adjusted by HUD staff)

a/ Unless otherwise noted, all dollar estimates presented in this chapter are in 1974 dollars.

b/ This estimate is based on the assumption that the average recipient household will remain in the program for a period of five years. Hence, intake costs are amortized over the duration of the household's recipiency and total per household costs are computed as one-fifth of median intake costs plus median annual maintenance costs.

Table VI-1 presents only the median cost estimates from EHAP. As can be seen in Table VI-2, the range of intake, maintenance, and their individual component costs across sites is considerable. As was noted earlier, this sizable variation results from a combination of many factors, including the various administrative procedures employed, the population being served, the quality of the existing housing stock in the program area, the capability of the program's management and staff, geographical location, and program scale.

The range of total administrative costs (\$165 in Salem to \$429 in Jacksonville) illustrates the effects of various combinations of factors. The reasons for many of these variations in cost will be explained in discussing the variations in their components.

Intake Costs

Intake costs varied from \$178 per recipient household in Peoria to \$534 per recipient household in Jacksonville, ^{4/} indicating the effects that varying program environments and procedures can have on program costs. Although the components of intake costs differed between the Supply Experiment and the AAE, their median total intake costs were fairly similar. These component differences were mainly the result of the administrative procedures used at the individual agencies.

^{4/} The Jacksonville agency had the highest cost of all ten sites for many of the components of administrative costs. The administrators of the Jacksonville agency expected a large turnout of applicants in response to their housing allowance program. Hence, they also assumed a large number of participants in the program and staffed their allowance program office accordingly. Unfortunately, although they did receive a large number of applicants, they experienced a very high attrition rate. That is, only 19 of every 100 applicants became recipients in Jacksonville, compared to an average of 40 per 100 at the rest of the AAE agencies. (Maloy, et al, 1977:139). Consequently, due to their gearing up for a large program, their overhead costs were very high compared to their number of participating households, ultimately resulting in higher total administrative costs. For a more complete discussion of the Jacksonville situation, see Holshouser, 1976, and Wolfe and Hamilton, 1977.

TABLE VI-2
Administrative Costs in Ten EHP Sites

Site	INTAKE COSTS*			TOTAL INTAKE COSTS per new recipient a/	MAINTENANCE COSTS†			TOTAL MAINTENANCE COSTS per recipient year a/	TOTAL ADMINISTRATIVE COSTS amortized recipient year b/		
	Outreach	Enrollment	Services		Inspection	Payment Operations	Recertification			Reinspection	
<u>AAE</u>											
Salem	\$15 (20%)	\$42 (55%)	\$17 (22%)	\$ 2 (3%)	\$186	\$18 (41%)	\$13 (30%)	\$ 0 c/ 10%	\$13 (30%)	\$129	\$165
Springfield	28 (22%)	27 (21%)	64 (50%)	8 (6%)	248	21 (16%)	17 (13%)	10 (8%)	85 (64%)	267	317
Peoria	15 (22%)	29 (42%)	10 (14%)	15 (22%)	178	12 (24%)	9 (18%)	15 (30%)	15 (30%)	171	207
San Bernardino	9 (8%)	54 (50%)	31 (28%)	15 (14%)	271	12 (29%)	15 (37%)	3 (7%)	11 (27%)	178	232
Bismarck	8 (13%)	26 (43%)	24 (39%)	3 (5%)	179	12 (12%)	39 (39%)	5 (5%)	45 (45%)	235	271
Jacksonville	15 (7%)	119 (53%)	59 (26%)	30 (13%)	534	30 (25%)	18 (15%)	7 (6%)	63 (53%)	322	429
Durham	3 (3%)	48 (44%)	40 (36%)	19 (17%)	258	14 (16%)	17 (19%)	7 (8%)	51 (57%)	231	283
Tulsa	66 (35%)	49 (26%)	45 (24%)	30 (16%)	300	10 (19%)	10 (19%)	10 (19%)	24 (44%)	144	204
<u>AAE Median</u>	15 (14%)	45 (41%)	36 (33%)	15 (14%)	253	13 (18%)	16 (22%)	7 (10%)	34 (49%)	205	252
<u>SE</u> Brown Co.	22 (21%)	58 (55%)	1 (1%)	25 (24%)	192	9 (14%)	39 (62%)	14 (22%)	1 (2%)	116	154
St. Joseph Co.	38 (28%)	56 (42%)	8 (6%)	31 (24%)	239	11 (17%)	35 (56%)	14 (22%)	3 (5%)	115	163
<u>SE Median</u>	30 (25%)	57 (47%)	4 (4%)	28 (24%)	215	10 (16%)	37 (59%)	14 (22%)	2 (3%)	115	158

* \$ = Direct costs per recipient
 () = % of total direct intake costs
 † \$ = Direct costs per recipient year
 () = % of total direct maintenance costs

Source: Maloy, et al., 1977.
 The Rand Corporation, 1978: 48

a/ Includes Indirect costs.
 b/ Based on five years of participation per recipient household.
 c/ Less than 50¢.

Outreach to eligible households, accounting for 14 percent of AAE intake costs, varied widely across the AAE agencies. Costs ranged from about \$3 per recipient household in Durham, where informal presentations, referrals from other agencies, and word-of-mouth were the only procedures used, to about \$66 per recipient household in Tulsa where a professionally developed mass-media campaign was employed. Other agencies' methods fell somewhere between these two.

Outreach accounted for a higher percentage of intake costs in the Supply Experiment, although the median dollar amount (\$30 per recipient household) was still less than the amount spent in Tulsa. Since outreach procedures were slightly different between the two Supply Experiment sites (mainly because of the St. Joseph County site's more extensive use of television advertising), their costs were correspondingly different. The Supply Experiment was an open-enrollment program -- that is, anyone who was eligible for the program could apply and receive an allowance if they met the program requirements. Therefore, outreach was crucial in this experiment, since ensuring that the majority of the eligible population was aware of the program was of utmost importance in determining its effects. The higher expenditures for outreach are therefore reasonable when compared to the AAE median (\$15 per recipient household).

Enrollment consumed the largest share of intake costs in both experiments -- 41 percent in the AAE and 47 percent in the Supply Experiment. Expenditures varied considerably across sites: from \$26 in Bismarck to \$119 in Jacksonville. The variation was in part due to the fact that extensive outreach efforts by some agencies generated large numbers of applicants (many of them ineligible), which resulted in greater per recipient expenditures for enrollment. This was particularly evident at the Supply Experiment sites. In Jacksonville, where a large number of enrollees dropped out of the program before becoming recipients, the agency's per recipient enrollment costs were especially high.

Another factor that caused variation in enrollment costs was the degree of stringency used to implement the income certification procedures. Income certification is the process used to validate the applicant's declaration of income. It is usually performed at enrollment and repeated periodically during the household's participation in the program. Three methods are used: (1) self-declaration - accepting a signed statement from the applicant declaring his/her income; (2) documentation -- checking proofs of income such as paycheck stubs; and

(3) third-party verification -- checking directly with the source of the income such as employers or welfare agencies. The estimated total costs per verification (including indirect costs) of each method -- self-declaration, documentation, and third-party verification -- are \$6, \$10, and \$12, respectively. (Hamilton, et al., 1977:29.)

Numerous combinations of these three methods were used in EHAP, and although there was no one "best" method for all types of applicants, results from all three experiments concluded that the two "active" forms of income certification (documentation and third-party verification) always yielded more accurate results than self-declaration. In general, the income certification procedures used at the Supply Experiment sites were more stringent than those used at the AAE sites. In addition, participant incomes were recertified annually in the AAE, but semi-annually in the Supply Experiment, increasing the annual per recipient cost of income certification.

Other factors which affect enrollment costs are computer vs. manual processing of records, and group vs. individual enrollment sessions. When differences in stringency, method, and frequency of income certification, and factors such as type of record processing and enrollment sessions are taken into account, the difference between the median enrollment cost in the AAE (\$45) and the median enrollment cost in the Supply Experiment (\$57) is understandable.

Services, which accounted for 33 percent of AAE intake costs, resulted in some of the widest cost variations across sites and between experiments of any of the four intake functions. In the Supply Experiment, services accounted for only 4 percent of intake costs.

This difference in the cost of service provision can be explained by the manner in which the services were provided. Only two services were offered at the Supply Experiment sites: group counseling sessions to deal with several housing information topics, and legal services to handle possible discrimination cases. Considerable effort went into designing the housing information sessions to make them both interesting and informative, but although both the counseling sessions and the legal aid were well publicized, both were voluntary and very few of the enrollees participated. 5/ Hence, very few administrative dollars were spent on providing services to enrollees in the Supply Experiment.

5/ This was also the outcome in the Demand Experiment when voluntary information sessions were offered.

In the AAE, however, services were more extensive. All eight AAE agencies routinely provided program information services to all enrollees. And, by making these services mandatory, costs were correspondingly higher than if they had been optional. In addition, "responsive" services were provided on a case-by-case basis when the agency staff thought they were necessary. However, the majority of staff resources devoted to responsive services were used by only a small number of enrollees, primarily in segregated or tight housing markets. Thus, the various agency approaches resulted in substantial differences across agencies in the provision of services and the corresponding costs. (Bernsten, Available March 1980: Chapter 7.)

Housing inspections were performed to ensure that the housing allowances were not subsidizing substandard housing. As with income certification, inspections were done before issuing subsidy payments to the participating households, and annually thereafter.

Inspection of housing units consumed 14 percent of intake costs (\$15 per recipient household) in the AAE and 24 percent (\$28 per recipient household) in the Supply Experiment. Most of the difference can be explained by the AAE's less costly methods of inspection.

Traditionally, housing inspections have been performed by trained professional inspectors. However, because pre-experimental estimates of the costs of such inspections ranged from \$30 to several hundred dollars per unit, AAE agencies were encouraged to devise less expensive inspection procedures while traditional methods were implemented in the Supply and Demand Experiments. Two new procedures were introduced: inspections done by regular agency staff members who had received specialized training in inspecting units and inspections done by the enrollees themselves. In Salem, Bismarck, and Springfield, AAE agencies chose to allow enrollees to inspect their own units. Consequently, these three agencies had the lowest costs for unit inspections. Several other agencies used a mixture of inspection methods, which also resulted in lower costs. Thus, overall inspection costs in AAE agencies were lower than inspection costs in the Supply Experiment.

As expected, professional inspectors proved to be the most effective at identifying substandard units and enrollees were the least effective. Trained staff members were almost as effective, but they tended to be more subjective, approving units they felt would satisfy the enrollees'

needs, and the cost differential between the two disappeared when a staff person became as proficient as a professional inspector.

Because the actual cost per inspection using professional inspectors turned out to be about \$34, approximating the lowest of the original estimates, and because the average AAE enrollee requested only slightly more than one inspection (1.07) before becoming eligible for the program, the total cost of using the most effective inspection procedure (professional inspectors) was not prohibitive, and it minimized the number of substandard units in the program. (Hamilton, et al., 1977: 35-36.)

Another variable in the housing inspection process is the minimum quality standards chosen by the administering agency and the degree of stringency with which they are followed. In the AAE, both standards and stringency varied substantially across agencies. Most agencies based their standards on local codes, giving little attention to the quality of the existing housing in the area. As a result, large numbers of units were initially rejected and many agencies had to adjust their standards over time to avoid excluding most of the enrollees and meet their enrollment quotas. In addition, only one of the agencies had a formal procedure for handling exceptions to the requirements. The remaining agencies treated exceptions on an ad hoc basis. This too resulted in wide variation in the implementation of the standards.

Maintenance Costs

Maintenance costs ranged from \$129 per recipient year in Salem to \$322 per recipient year in Jacksonville, again reflecting the repercussions of different program procedures and environments. Unlike intake costs, median total maintenance costs in the AAE (\$205 per recipient year) were substantially different from those of the Supply Experiment (\$115 per recipient year). As was mentioned earlier, this resulted primarily from the difference in indirect costs, which were lower per recipient in the Supply Experiment than they were in the AAE.

Payment Operations. Under the category of payment operations fall all the functions necessary to provide allowance payments to recipients. Costs ranged from \$10 per recipient year in Tulsa to \$30 per recipient year in Jacksonville.

The unusually high cost in Jacksonville is primarily due to that agency's small number of recipient households and its lack of an automated payment system. Among the other AAE sites there were relatively similar costs, and the AAE median, \$13 per recipient year, was not substantially different from the Supply Experiment median, \$10 per recipient year.

Recertification. Annual recertifications of household size and income to re-establish recipients' eligibility accounted for 23 percent of total AAE maintenance costs, which ranged from \$9 per recipient year in Peoria, to \$39 per recipient year in Bismarck. Again, the high cost resulted from a unique situation. During its second year of operation, the Bismarck agency conducted a detailed certification of a substantial sample of its recipients. It also conducted an additional recertification of recipients who received welfare when welfare levels were increased in the state. The range of recertification costs among the remaining AAE agencies, when Bismarck is excluded, is not as great -- from \$9 to \$18 per recipient year.

In the Supply Experiment, recertifications consumed 59 percent of maintenance costs, or \$37 per recipient household. In the AAE, the median per recipient year cost was \$16. Again, these differences reflect the differences in frequency and stringency of the certification procedures used.

Reinspection. Costs for reinspection of housing units accounted for 10 percent of maintenance costs in the AAE and ranged from less than 50 cents per recipient year in Salem to \$15 per recipient year in Peoria. The extremely low cost in Salem does not imply that inspections could be done for this amount; it means that the Salem agency performed very few housing reinspections during the second year of program operation. The remaining variation in costs is attributed to the different methods, stringency, and frequency of inspection used at the different agencies.

In the Supply Experiment, reinspection consumed 22 percent of maintenance costs, and its median per recipient year cost, \$14, is about double the corresponding cost in the AAE, \$7. This too can be attributed to the differences between the inspection methods used and the stringency with which they were implemented.

Ongoing Services. Services to recipients consumed 49 percent of the AAE maintenance costs and showed the largest cost variation across sites and between experiments of any of the other four functions. Among the AAE agencies, costs for services ranged from \$11 per recipient year in San Bernardino, where minimal services were provided, to \$85 per recipient year in Springfield, where the agency provided a comprehensive consumer education and advocacy service. Other AAE agencies provided intermediate levels of recipient services.

In the Supply Experiment, services consumed a very small portion of maintenance costs -- 3 percent. Because services were made available to recipients on a voluntary basis, and very few chose to participate, the per recipient expenditure for services was an extremely low \$2.

Indirect Costs

Indirect costs -- overhead -- cover such items as office space, supplies, and management support. They are a primary determinant of total costs and accounted for more than half of total costs in all but one of the AAE agencies. Many of the differences in component costs across sites and between experiments can be attributed to differences in overhead. Table VI-3 illustrates this point by comparing direct and total components of administrative costs of the AAE and the Supply Experiment. As Table VI-3 indicates, direct costs across the two experiments are similar. The substantial differences between the two occur when indirect costs are added.

In the AAE, the median indirect costs for the two-year period of operation were approximately \$1.63 for every \$1.00 of direct costs; the Supply Experiment median was \$0.82. Table VI-4 shows the two-year indirect cost rates of the AAE agencies, and the April to December 1976 indirect cost rates in the Supply Experiment.

The exceptionally low indirect cost rate in Tulsa occurred because many of the program functions were subcontracted to another agency. This exaggerated their direct costs, since direct and indirect costs of the contractor were included in the direct costs of the Tulsa agency, but understated their indirect costs, since they required very little in "overhead" services.

Table VI-3

Annual Per Recipient Administrative Costs
With and Without Indirect Costs

	<u>Administrative Agency Experiment</u>	<u>Supply Experiment</u>
Median Intake Cost Without Indirect Cost	110	119
Median Intake Cost With Indirect Cost	253	215
Median Maintenance Cost Without Indirect Cost	70	63
Median Maintenance Cost With Indirect Cost	205	115
Projected Total Cost Without Indirect Cost	92	87
Projected Total Cost With Indirect Cost	256	158

Source: Maloy, et al., 1977:23,39.
The Rand Corporation, 1978:149

Table VI-4

Indirect Cost Rates in the EHAP Sites

<u>Site</u>	<u>Indirect Cost Rate</u>
Salem	1.67
Springfield	1.06
Peoria	2.01
San Bernardino	1.91
Bismarck	2.00
Jacksonville	1.53
Durham	1.59
Tulsa	0.82
<u>Administrative Agency Experiment Median</u>	1.63
Brown County	0.83
St. Joseph County	0.81
<u>Supply Experiment Median</u>	0.82

Source: Maloy, et al., 1977:39.
Data provided by the Rand Corporation, February 1979.

The indirect cost rates of the Supply Experiment sites were less than half the indirect cost rates of many of the AAE sites. As noted earlier, there are certain economies of scale associated with operating a large program. Hence, the low indirect cost rate of the Supply Experiment agencies is a primary factor in explaining the difference in costs between the Supply Experiment and the AAE.

Conclusions

At first glance it appears from Table VI-2 that administrative costs varied erratically across the EHAP sites. When we take a closer look, however, we discover that the variations in EHAP's administrative costs were not simply random events.

Long before the arrival of the first applicant, costs were being influenced by each agency's philosophies and goals, and the application of these ideas to the program's designs. The resulting administrative procedures further amplified the differences in eventual administrative costs. Add to these variations differences in characteristics of the eligible populations, the quality of the existing housing stock, staff and management capability, and especially the scale of program operation, and differences in administrative costs become quite reasonable.

Estimated Costs of a National Housing Allowance Program

There are two basic components to the total cost of conducting a housing allowance program: transfer costs -- the costs of allowances paid to participating households, and administrative costs -- the costs of administering the program. To estimate these costs, actual cost data from EHAP were used with a simulation model to develop the costs of a nationwide housing allowance program. The model is based on the following seven assumptions:

- homeowners as well as renters are eligible;
- households headed by students or consisting of non-elderly single persons are excluded;
- a national average cost of adequate housing of about \$185 per month (1976 dollars) for a two-bedroom unit;
- a payment formula that provides recipient families with an amount equal to the local cost of adequate, modest housing minus 25 percent of their household incomes;
- an income definition that excludes taxes and work-related expenses but that includes cash assistance from other federal programs;
- an imputed return on home equity; and
- no test of assets.

The administrative cost estimates used in the model were extrapolated from the AAE. As we have seen, total administrative costs differed substantially across the eight AAE sites. To avoid the biasing influence of extreme values, the median estimate of total per applicant administrative costs was used in the simulation model.

Estimates of transfer costs were developed using information from all three experimental components of EHAP. Variations in actual allowance payments to households across the EHAP sites were primarily the result of (1) differences in the program-defined income of recipients, (2) variations in the levels set in each locality for the costs of adequate housing, and (3) whether or not homeowners were eligible for the program.

These differences were taken into account after estimates of the various types of participants were projected. Participation rates from the Supply Experiment were used in the model (30 percent for homeowners and 50 percent for renters) since only in that experiment was an open-enrollment program conducted.

These estimates and assumptions led to the conclusion that about 17.5 million households would be income eligible, and about 7.2 million households would receive allowances in a national program with open enrollment. The average monthly allowance would be about \$65. As Table VI-5 shows, the total program cost, including administrative costs, would be \$7.4 billion per year. Of this amount, \$1.7 billion are administrative costs.

Table VI-5

Cost of a National Housing Allowance Program
(1976 dollars)

<u>Tenure</u>	<u>Eligible Households (millions)</u>	<u>Participant Households (millions)</u>	<u>Annual Subsidy Cost (\$ billion.)</u>	<u>Administrative Cost (\$ billion.)</u>	<u>Total Cost (\$ billion.)</u>
Homeowners	8.0	2.4	1.7	0.6	2.3
Renters	<u>9.5</u>	<u>4.8</u>	<u>4.0</u>	<u>1.1</u>	<u>5.1</u>
Total	17.5	7.2	5.7	1.7	7.4

Source: Carlson and Heinberg, 1978:44-47.

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APPENDIX B

Housing Conditions of Low-Income Households

Housing conditions have typically been measured by general population surveys which ask respondents to indicate the presence or absence of specific items within a housing unit. The decennial census, for example, reports the proportion of units without some or all plumbing facilities. ^{1/} By 1976 only three percent of the units in the United States failed to meet this minimal criterion.

A single measure, like the presence or absence of plumbing, is no longer an adequate indicator of whether a unit is suitable for occupancy. An appropriate measure should include an indication whether the plumbing, electrical, and heating systems work; the structural soundness of the building; and the presence of other health and safety hazards.

The Annual Housing Survey (AHS) was developed, in part, as a response to this need. The AHS surveys a sample of housing units throughout the United States and interviews a member of the household regarding the presence of services and appliances in the unit and the number of breakdowns of major systems during the past year. The respondent is also asked about the general condition of the unit, such as the presence of large holes or open cracks in the walls and ceilings, broken plaster, peeling paint, etc.

While the results of this survey can be combined into useful indices to measure housing conditions, there are some limitations. In some cases the respondent has not lived in the unit long enough to experience service breakdowns. In all cases the answers depend on the respondent's judgments regarding the definition of a "breakdown," a "crack," or a "hole." Finally, when dealing with renters, the answers to the questions are sometimes beyond the respondent's knowledge. For example,

^{1/} Since 1950, "complete plumbing facilities" has been defined as the presence of hot and cold piped water inside the structure as well as a flush toilet and a bathtub or shower inside the structure for the exclusive use of the occupants of the unit (Congressional Budget Office, 1978:4).

the presence of a leaking roof may not be known to a respondent living on the ground floor of a multi-story building.

EHAP used a more thorough method for assessing housing condition. Physical inspections were performed by people with backgrounds in housing code enforcement or related disciplines who were rigorously trained to inspect housing units against a consistent set of standards which focused primarily on health and safety items. The standards were based on guidelines developed by the American Public Health Association. ^{2/} A unit's failure on a particular item in the standard (for example, broken windows) would mean that the unit "failed" the inspection. The failure would disqualify the family from receiving an allowance payment until the deficiency was corrected. This type of failure does not necessarily mean that a unit is uninhabitable or that major repairs are required. Instead, it means that a significant health or safety standard was not met. As reported in Chapter V, the cost of remedying such deficiencies is often small and frequently can be accomplished by the residents without professional help.

Table B-1 shows the failure rates for units evaluated at enrollment in both the Demand and the Supply Experiments. Comparison of the figures for renters shows a substantially higher failure rate in the Demand Experiment than in the Supply Experiment (73 percent versus 50 percent). In the Supply Experiment, where rental and owner-occupied units can be compared, the failure rates are about the same.

In order to determine the source of the difference between rental units in the Supply and Demand Experiments, a representative sample of units in each of the sites was evaluated against each experiment's standards. The results ^{3/} show that most of the difference (17 percentage points) result from different items being included in

^{2/} The standards used in the Demand Experiment are listed in Appendix D. Those used in the Supply Experiment are similar. See McDowell, 1979, for a complete listing of the Supply Experiment standards. See Valenza, 1977, under the Integrated Analysis for a detailed comparative discussion of the standards used in the Demand and Supply Experiments.

^{3/} Valenza, 1977.

Table B-1

Percent of Pre-Program Units That Failed to Meet
Housing Standards in the Supply and Demand Experiments

	<u>Renters</u>	<u>Homeowners</u>
<u>Demand Experiment</u> a/		
Pittsburgh	75%	NA
Phoenix	71	NA
Combined Sites	73	NA
<u>Supply Experiment</u> b/		
Green Bay	44%	47%
South Bend	56	51
Combined Sites	50	49

a/ From inspections at enrollment of 2,914 units in which a representative sample of low-income households lived. Abt Associates Inc., 1975: 132-133.

b/ From inspections at enrollment of 18,187 units occupied by low-income households who applied for assistance from the housing allowance program in each site through the first four program years (through June 1978 in Green Bay and December 1978 in South Bend). Data provided by the Rand Corporation, February 21, 1980.

the housing standards. What were believed to be minor differences in the items included in the housing standards can have a substantial impact on the results of housing evaluations.

The housing inspections in EHAP were undertaken to ensure that households participating in the program lived in standard housing, to measure housing change, and to produce other ways to estimate housing conditions.

In the Demand Experiment, for example, in addition to using the "basic" standard, a measure of housing adequacy was developed that identified units which were severely substandard and required substantial repairs in order to be made adequate. Under the basic Demand Experiment standard, for example, a unit would fail if its interior walls had significant cracks even if they could be easily repaired. But under the severely substandard measure, a unit failed only if a wall was so structurally unsound that it required replacement. 4/ Similarly, rigorous requirements were applied by trained evaluators to the conditions of ceilings, floors, roofs, and exterior walls, as well as to heating, electrical and plumbing systems. Thus, in the Demand Experiment one could apply two standards of measure -- the basic standard and the one which provided an estimate of the incidence of substandard housing requiring substantial repairs.

Table B-2 presents four estimates of the incidence of substandard housing. The first two are based on data collected by survey methods and the next two are based on data derived from housing inspections. The first measure was designed by the Congressional Budget Office (CBO) and is based on an index that identifies substandard units in need of rehabilitation using 15 questions asked in the Annual Housing Survey. When this index is applied to Pittsburgh, Phoenix, and the nation as a whole, it shows that the housing in the two Demand Experiment sites are comparable to the national average. It also shows that the incidence of substandard housing is higher than data from the decennial census would suggest.

4/ The complete specification was: "Requires replacement; severe buckling or leaning, damaged or loose structural members, evidence of persistent moisture, serious dry-rot or termite damage." (Budding, Available March 1980; Chapter 2).

Table B-2

Estimates of the Incidence of Substandard
Housing of Low-Income Families

<u>Using Annual Housing Survey Data:</u>	<u>Pittsburgh</u>	<u>Phoenix</u>	<u>United States</u>
Congressional Budget Office Index <u>a/</u>	14%	11%	13%
Section 8 Existing Housing Standards Index <u>b/</u>	30	20	36
 <u>Using Demand Experiment Inspection Data:</u>			
Severely Substandard Units in Need of Substantial Repair <u>c/</u>	44%	43%	NA
Units Failing the Basic Demand Experiment Standard <u>d/</u>	75	71	NA

a/ The estimate for the United States was calculated by the Congressional Budget Office (Congressional Budget Office, 1978: 6). The estimates for Pittsburgh and Phoenix were provided by Abt Associates Inc., using Annual Housing Survey data and an index identical to that used by the Congressional Budget Office.

b/ Based on unpublished tabulations from the Annual Housing Survey using items which correspond as closely as possible to the Section 8 Existing Housing Standards. Limited to households with incomes less than \$8,000 per year.

c/ Budding, Available March 1980: Chapter 2.

d/ Abt Associates Inc., 1975: 132-133.

The second index, also using data from the Annual Housing Survey, describes the incidence of substandardness based on the housing requirements of HUD's Section 8 Existing Housing Program. ^{5/} This index identifies a substantially higher percentage of substandard units than the CBO index.

The first estimate of substandardness derived from inspections is based on the measure of severely substandard housing described earlier. It shows that over 40 percent of the low-income households are living in units which have serious physical deficiencies. This estimate is more than three times higher than the CBO measure and between one and one-half to two times higher than the estimate of units failing Section 8 standards.

The failure rates using the Demand Experiment standards are the highest. Yet, it is important to note that these standards were based on American Public Health Association guidelines from which many local and model codes are derived.

The results presented in Table B-2 indicate the complexity and difficulty involved in measuring housing conditions. They also show that physical inspections, whether judging on basic or severe standards, reveal a considerably higher incidence of substandardness than do survey-based data.

Rent Burden

The rent burden a family experiences is the proportion of total disposable income which it spends for housing. As rent burden increases, obviously the income left for other necessities declines.

Table B-3 presents rent burden statistics by income for the nation as a whole. Since median household income in 1976 was \$16,000, the columns represent households with incomes under 50 percent, between 50 and 80 percent, and over 80 percent of median income, respectively.

^{5/} The standards can be found in the Code of Federal Regulations, 24:882.109.

Table B-3

Rent Burden for Low-Income Households in the United States

	<u>ANNUAL HOUSEHOLD INCOME</u>		
	<u>Less than \$8,000</u>	<u>\$8,000 to \$12,800</u>	<u>Over \$12,800</u>
Low Rent Burden <u>a/</u>	29%	75%	86%
Moderate Rent Burden <u>b/</u>	34	22	12
Severe Rent Burden <u>c/</u>	37	3	2

a/ Low Rent Burden = less than 25% of income spent for housing.

b/ Moderate Rent Burden = 25% to 39% of income spent for housing.

c/ Severe Rent Burden = 40% and higher of income spent for housing.

NOTE: Rent burden is the proportion of household income spent for rent and utilities.

Source: Original tabulations from the 1976 Annual Housing Survey.

More than two thirds of the households in the lowest income category experience rent burdens higher than 25 percent, but only a quarter of the families in the next higher income category and only 14 percent in the highest income group do so.

In the representative sample of the low-income renter households in the Demand Experiment, 28 percent experienced severe rent burdens and an additional 40 percent experienced moderate rent burdens. (Budding, Available March 1980: Chapter 3.) The total (68 percent) spending more than 25 percent of their income on housing is similar to the total for low-income households in the U.S. shown in Table B-3.

The situation is more severe for the population whose income falls below the poverty level. Close to half the poverty level households in Pittsburgh and Phoenix spent more than 40 percent of their disposable income for housing.

The problems are magnified when housing condition and rent burden are considered jointly. About one-fifth of all households below the poverty level not only lived in very poor housing but also spent over 40 percent of their income for that housing.

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APPENDIX C

DESIGN AND REVIEW PROCESS

The design and review of the Experimental Housing Allowance Program involved many social scientists. Together with HUD, three research organizations were responsible for the experimental designs: The Rand Corporation of Santa Monica, California; Abt Associates Inc. of Cambridge, Massachusetts; and the Urban Institute of Washington, D. C.

All of the designs were reviewed in detail by panels of experts of national reputation in the fields of housing, housing research, economics, and social science research, from many of the nation's leading universities and institutes. In addition to review panels for each of the experimental designs, there has been an ongoing panel of experts to review various reports and analyses resulting from the total Experiment. The lists of approximately thirty prominent experts who assisted in the review are provided below.

As is the case in all such undertakings, not all of the reviewers agreed on every point, and the final decisions and responsibility remained with HUD. But not one of the experts recommended that the experiments be drastically redesigned or suggested that the experiments as designed would not produce useful information. To the contrary, the majority of the reviewers found the designs to be worthy of the existing state-of-the-art.

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APPENDIX D

HOUSING STANDARDS

The standards categorized below were used to qualify dwelling units as meeting program standards in the Demand Experiment. The Supply Experiment used fifteen similar categories but the items within each category varied somewhat. In the Administrative Agency Experiment, agencies developed their own standards which had to meet the requirements for the Section 23 leased housing program; for evaluation purposes, however, a sample of units were judged against the Demand Experiment standards.

1. Complete Plumbing:

Private toilet facilities, a shower or tub with hot and cold running water, and a washbasin with hot and cold running water will be present and in working condition.

2. Complete Kitchen Facilities:

A cooking stove or range, refrigerator, and kitchen sink with hot and cold running water will be present and in working condition.

3. Living Room, Bathroom, Kitchen Presence:

A living room, bathroom, and kitchen will be present. (This represents the dwelling unit "core", which corresponds to an efficiency unit.)

4. Light Fixtures:

A ceiling or wall-type fixture will be present and working in the bathroom and kitchen.

5. Electrical Outlet:

At least one electric outlet will be present and operable in the living room and kitchen. A working wall switch, pull-chain light switch or additional electrical outlet will be present in the living room.

6. Heating Equipment:

Units with no heating equipment; with unvented room heaters which burn gas, oil, or kerosene; or which are heated mainly with portable electric room heaters will be unacceptable.

7. Adequate Exits:

There will be at least two exits from the dwelling unit leading to safe and open space at ground level. Exceptions will be allowed on a case-by-case basis when it appears that fire safety is met, despite the lack of a second exit.

8. Room Structure:

Ceiling structure or wall structure for all rooms must not be in conditions requiring replacement (such as severe bulging or leaning).

9. Room Surface:

Ceiling surface or wall surface for all rooms must not be in condition requiring replacement (such as loose surface material, containing large holes, or severely damaged).

10. Ceiling Height:

For living room, bathroom, and kitchen the ceiling must be 7 feet (or higher) in at least one-half of the room area.

11. Floor Structure:

Floor structure for all rooms must not be in condition requiring replacement (such as severe buckling or noticeable movement under walking stress).

12. Floor Surface:

Floor surface for all rooms must not be in condition requiring replacement (such as large holes or missing parts).

13. Roof Structure:

The roof structure must be firm.

14. Exterior Walls:

The exterior wall structure or exterior wall surface must not need replacement. (For structure this would include such conditions as severe leaning, buckling or sagging and surface conditions such as excessive cracks or holes.)

15. Light-Ventilation:

The unit will have a 10 percent ratio of window area/floor area and at least one openable window in the living room, bathroom, and kitchen or the equivalent in the case of properly vented kitchens and/or bathrooms.

For a detailed comparative discussion of standards used in the Demand and Supply Experiments, the reader should consult (118) in the bibliography.

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