WN-8974-HUD

PROGRAM STANDARDS FOR SITE II

Ira S. Lowry
Barbara M. Woodfill
Marsha A. Dade

February 1975

HOUSING ASSISTANCE SUPPLY EXPERIMENT

A WORKING NOTE

This Note was prepared for the DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT, under Contract No. H-1789. It is intended to facilitate communication of preliminary research results. Views or conclusions expressed herein may be tentative and do not represent the official opinion of the sponsoring agency.

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PREFACE

This working note was prepared for the Office of Policy Development and Research, U.S. Department of Housing and Urban Development (HUD). It recommends program standards for the HUD-sponsored allowance program in South Bend, Indiana, presents related estimates of program size and allowance costs, and evaluates the ability of the local market to provide housing suitable for program participants. Because the program may later expand to include other parts of St. Joseph County (in which South Bend is located), the program standards are based on countywide data, and program estimates are provided both for South Bend and for other parts of the county.

St. Joseph County is the second site of the Housing Assistance Supply Experiment. Our recommendations for Site II assume that program standards relating to eligibility rules, the assistance formula, housing quality requirements, and occupancy limits that were adopted for Site I will also apply to Site II. However, one major program element, the standard cost of adequate housing for each size of household, is based on local data. Our recommendations for such a schedule of standard costs (usually denoted as R^*) and related program estimates are based on data gathered in July and August 1974 by means of a field survey addressed to 10,000 households in St. Joseph County.

On 8 November 1974, we submitted a preliminary analysis and recommendations to HUD, based on the first usable data file prepared from survey records. Although corrections to the preliminary data file and further analysis of its contents led us to suggest minor changes in the R^* schedule on 22 November 1974, HUD approved the initial recommendations shortly thereafter. We agreed with HUD that the statistical basis for the suggested changes was relatively weak and that their effects on the allowance program would not be great.

The analysis reported here reflects changes in the data file made during October and November 1974, as field reports were reconciled with sample lists and sampling weights were reestimated. However, it should be noted that further changes both in record counts and in

sampling weights are likely consequences of the survey audit now in progress. We do not expect these to materially affect our analysis of program standards or our estimates of program size and cost.

This note was prepared pursuant to HUD Contract H-1789 as amended to date, and fulfills Tasks 2.4 and 2.5 of that contract as they apply to Site II.

Doris Dong prepared the graphics. Charlotte Cox edited the typescript and supervised production of final copy.

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I. INTRODUCTION

Developing a schedule of values for the standard cost of adequate housing (R^*) in Site II of the Housing Assistance Supply Experiment was substantially easier than it was earlier for Site I. Then, we had to work out empirical details of the basic method and design computer programs to analyze screening survey data. We also had to experiment with alternative program standards of housing quality and occupancy, since these standards had not been fixed. For Site II, we had only to adapt our computer programs to a differently formatted data file and could base our analysis on what we take to be firm program standards adopted by the Housing Allowance offices (HAOs) in both sites.

Although we continue to be dissatisfied with some of those program standards, our problems in developing a schedule of values of R^* for Site II have been of a different sort. First, the portion of the screening survey data base that is relevant to the R^* analysis is only half as large in Site II as it was in Site I. Second, these data are not as well behaved in the sense that they do not exhibit the expected regular relationship between housing quality and gross rent. The two problems may be connected.

For these reasons, the schedule of values of R^* proposed here for Site II reflects a larger element of professional judgment than was the case in Site I. We try, however, to provide the reader with the information he needs to apply his own judgment to the basic data.

Our definition of the standard cost of adequate housing and the logic of our method for estimating it are discussed in detail in two earlier reports.* Briefly, we define the standard cost of adequate housing for a given size of household as the price, including a standard set of utility services, at which housing that meets specified standards of quality and space can be supplied by the private market

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*David B. Lewis and Ira S. Lowry, *Estimating the Standard Cost of Adequate Housing*, The Rand Corporation, WN-8105-HUD, March 1973; and Ira S. Lowry, Barbara M. Woodfill, and Tiina Repnau, *Program Standards for Site I*, The Rand Corporation, WN-8574-HUD, January 1974.

on a continuing basis, in quantities that meet the housing allowance program's objective of enabling all eligible households to secure adequate housing.

Although we would prefer to estimate this cost from detailed local data on the costs incurred by actual suppliers of such housing, these data are not yet available; they will first be collected in our baseline surveys of landlords, tenants, and homeowners. Rand and HUD have agreed to base the initial schedule for Site II on the market price of such housing, as measured by gross rent for rental housing units. Gross rent is the amount a tenant pays his landlord plus any additional amounts he pays for heating or cooking fuel, electricity, water, and sewer service. These values based on rental housing will be applied by the HAO to renters and homeowners alike, on the assumption that the real costs (as distinguished from the out-of-pocket costs) of housing services to a homeowner are approximately the same as those incurred by a landlord supplying equivalent services to a tenant.

Data on rents and housing characteristics were collected as part of our screening survey of households in St. Joseph County in July and August 1974. We analyzed that information with particular attention to the relationship between gross rent and housing quality for units of each size (number of bedrooms). Our general decision rule for selecting a value of R^* for a unit of a specified size was to choose the lowest $10 interval of gross rent above which 50 to 75 percent of the rental housing units met HAO housing certification standards (as nearly as those standards could be applied on the basis of the survey data). In Site I, we used 75 percent as the critical figure. As the reader will see, that figure is inappropriate for South Bend.

Once a value of R^* is selected for a given size of housing unit, it can be related to a given size of household through the occupancy standards that have been adopted for the Supply Experiment. Then, comparing R^* with one-fourth of a household's adjusted gross income, we can determine whether the household is eligible for enrollment, and if so, its allowance entitlement. We have done this for both renters and homeowners for whom we have adequate data from the screening survey. Weighting this sample of respondents, we can finally estimate the

number of eligible households in Site II and their aggregate annual allowance entitlement.

Our data base covers all of St. Joseph County. The allowance program is now authorized to operate only within the city of South Bend but is expected to expand its jurisdiction later. We have based our proposed schedule of values for R^* on countywide data for this reason; in any event, about two-thirds of all rental units in the county are in South Bend, and our data do not indicate that those outside the city are very different from those in the city with respect to the relationship between housing quality and gross rent. Program estimates have been prepared both for South Bend and for the entire county.

Section II of this report describes the data base used in our analysis. Section III reviews HAO standards of housing quality and reports on the quality of unsubsidized rental housing in St. Joseph County as reflected in our screening survey data. Section IV presents corresponding material on space standards and occupancy patterns. Section V explains our measure of housing cost and examines the distribution of unsubsidized rental units by gross rent. In Sec. VI, considerations of quality, size of unit, and cost are integrated into a proposed schedule of the standard cost of adequate housing. In Sec. VII, we examine the implications of this schedule for program size and cost and report on some crude tests of the housing market's ability to provide certifiable units for program eligibles. Finally, we review the quality and occupancy characteristics of owner-occupied housing in Appendix A and provide additional tables on rental housing and eligible households for selected parts of St. Joseph County in Appendix B.

Throughout this report, we have compared our findings for Site II with those for Site I. Our purpose is to alert the reader to differences in the housing markets of the two sites and to the implications of these differences for the two allowance programs.

II. THE DATA BASE

The analysis reported in this note is based on data collected by a screening survey conducted in St. Joseph County during July and August 1974. The survey was addressed to heads of households occupying a stratified cluster sample of over 10,000 housing units throughout the county. The sampling elements were residential properties, some of which contained more than one housing unit; on multiple-unit properties, interviews were sought with heads of up to four randomly selected households.*

The screening survey had two purposes. One was to screen residential properties for possible inclusion in the baseline survey sample. The other, which concerns us here, was to collect current data on housing and household characteristics needed to set program standards for Site II and to estimate program size and costs.

To serve the second purpose, we designed the survey instrument to obtain data needed to estimate the gross rent for each rental unit in the sample; to test the quality of the housing unit against certification standards used by the allowance program; to compare the size of the unit with the size of the household occupying it; to determine whether the household would be eligible to participate in the allowance program; and if so, how much assistance it would be entitled to receive. To keep the interview brief, all these objectives had to be compromised, but our experience with similar problems in Site I enabled us to frame questions that avoided both needless loss of information and superfluous detail.**

Our analysis of housing quality and cost for Site II is based on an intermediate file of screening survey records. This file has been reconciled with the sample list and a preliminary sampling weight has

*See Sandra H. Berry, Daniel A. Relles, and Eugene Seals, *Sample Selection Procedure for St. Joseph County, Indiana*, The Rand Corporation WN-8588-HUD, January 1974.

**See the Site II *Screening Survey Instrument*, The Rand Corporation, HUD No. H-3-1A, OMB No. 63-573027, approved 6 June 1974.

been assigned to each record, but the weighting scheme has not yet been fully validated.

Assigning weights is a complex operation. Initially, in order to select the survey sample, all properties in St. Joseph County were listed from tax records and stratified by use (residential or nonresidential), tenure, number of units, and market value. The sampling rate varied by stratum, from 1.00 to less than 0.01. Interviews were then attempted for all residential units on a property, to a maximum of four units. Weights were subsequently assigned only to "field-complete" records, i.e., those for which an interview was actually conducted with the heads of the households occupying the sampled housing units, and for which usable answers were given to a subset of critical questions. This involved two steps: (a) expanding the number of field-complete records for a property to the total number of housing units on that property; and (b) expanding the number of properties in a stratum for which at least one field-complete screening interview was obtained to the population of properties in that stratum.

Until the survey audit is complete, we cannot confirm the validity of the weights. We are generally confident about them, but comparisons with the 1970 census have not yet been completed (see below). Also, we have found that some distributions of rental units are, in our view, distorted by the presence of a very few records that have exceptionally large sampling weights. By retaining these records we minimize sampling bias, but at the expense of high sampling variance in parts of the distribution. In some tabulations, therefore, we chose to distribute the housing units represented by each such record in the pattern of all other housing units of that class.

The intermediate screening survey file contains records for 10,008 housing units, for each of which interviews were sought. Field-complete interview records were returned for 6,067 units, or 61 percent of the total. The remaining units were vacant (10 percent), or the interviewer was unable to contact the occupants (about 14 percent), or the occupants declined to be interviewed (about 13 percent) or failed to answer certain critical questions (less than 2 percent).

Contact failures and refusals in this survey were both about twice as frequent as in Site I and are grounds for concern about biased inference from field-complete records. The seriousness of this problem has yet to be assessed; as we noted above, each field-complete record in each sampling stratum is weighted to compensate for both contact failures and refusals in that stratum, as though field completions were a representative sample of all occupied units.

Our analysis of the quality of rental housing, its occupancy patterns, and its cost, reported in Secs. III, IV, and V, is based on only part of the survey file. The steps in selecting that part are summarized in Fig. 1. There were 3,406 field-complete records for occupied rental housing units. We were able to estimate gross rent for all but 219 of these records, which lacked usable information on contract rent. In the analysis we used only the records for which gross rent could be estimated; sampling weights were adjusted accordingly.

A total of 587 renters in our sample reported either that their housing was subsidized by a federal program or that they were unsure whether it was. To check on the subsidy status of *all* units that were screened, we obtained address lists of subsidized units from local public housing authorities and from HUD's area office and matched them with our survey records. We identified 241 subsidized rental units, which we excluded from our program standards analysis, both because gross rents for such units do not reflect their full costs and because the units are not eligible for occupancy by participants in the allowance program.

All these exclusions left us with a reduced file of 2,946 field-complete records for rental units whose gross rents were both computable and definitely unsubsidized. This file is about half as large as the corresponding file for Site I, where more interviews were attempted in multiple dwellings, where interview completion rates were higher, and where subsidized housing units were rare. The smaller data base implies that our estimates of population sizes and distributions are less reliable for Site II than they were for Site I.

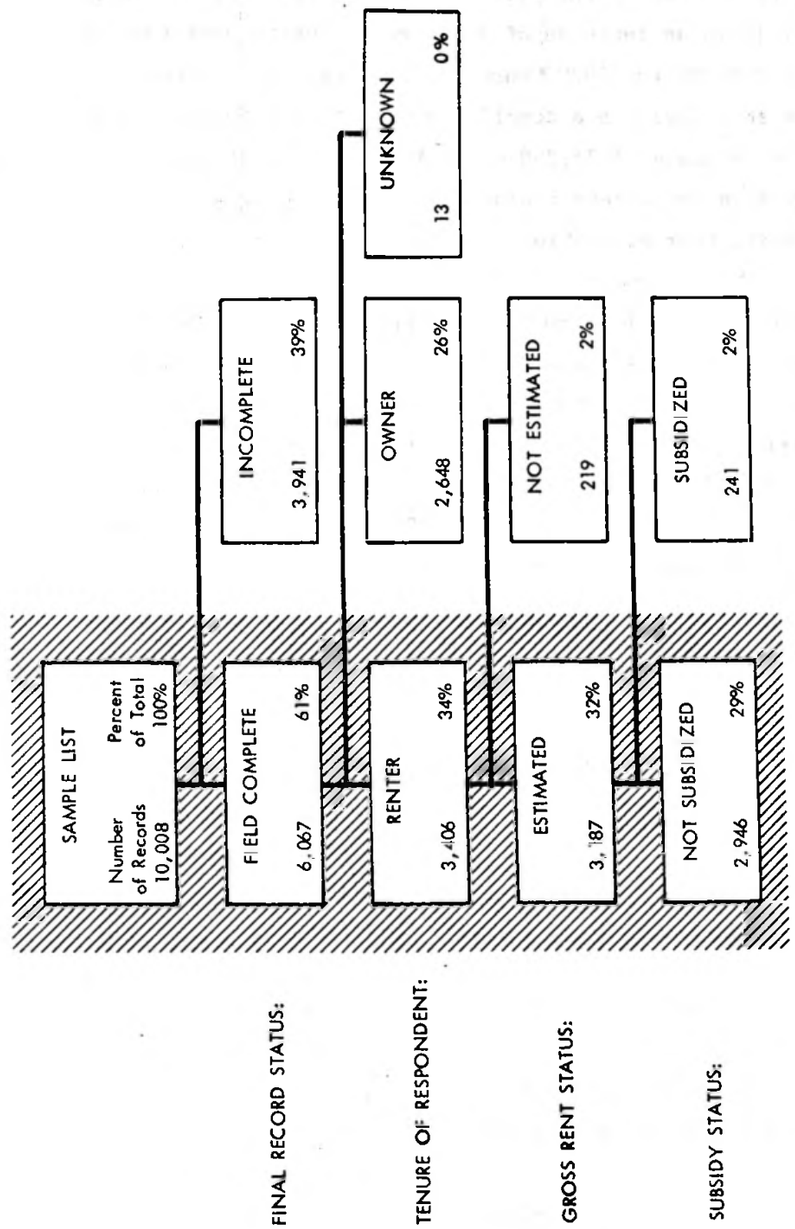


Fig. 1--Screening survey records used for program standards analysis: Site II, 1974

The preliminary sampling weights attached to the records in the field-complete file indicate that there were 22,456 rental housing units (occupied or vacant) in St. Joseph County at the time of the screening survey. This is an increase of 3,837 rental units over the total of 18,619 reported by the 1970 Census of Housing. The census figure, combined with building and demolition permits for 1970 through 1973, leads to an estimate of 21,230 units for July-August 1974, about 1,200 units less than the screener-based estimate. Changes in tenure of existing units from ownership to rental and undercounting by the census may explain the difference.

The subset of 2,946 unsubsidized rental records for which gross rent could be estimated represents a population of 19,037 housing units, about 85 percent of the total number of rental units. The implied average sampling rate for the records we use here is thus 15.5 percent.* Our estimates of 3,419 federally subsidized rental units is 239 higher than the count of 3,180 units we obtained from our search of public records.

*100 (2,946/19,037) = 15.5 percent.

III. HOUSING QUALITY IN ST. JOSEPH COUNTY

Our method for estimating the "standard cost of adequate housing" from screening survey data requires us to distinguish "adequate" from "inadequate" housing units in our sample. Clearly, the most appropriate test of housing adequacy would be the one applied by the HAO to determine whether a unit is certifiable for occupancy by a program participant. However, HAO housing certification is based on a 45-minute inspection of the premises by a trained evaluator, who rates seven items for each room and 22 general items. That much information could not be gathered in screening survey interviews.

Instead, we devised a smaller set of six indicators of housing quality, each reflecting a key element of the certification standard. These indicators capture information on the most serious of common defects affecting health, safety, or comfort, but are limited to items that were readily reportable by the occupant:

- Plumbing: Complete plumbing facilities inside the structure (hot and cold piped water, flush toilet, and bathtub or shower) not shared with another household.
- Kitchen facilities: Complete kitchen facilities (sink with piped water, range or cookstove, and refrigerator) not shared with another household.
- Light and ventilation: At least one openable window or skylight in each habitable room.
- Electrical service: One electrical outlet and one light switch in each habitable room and in at least one complete bathroom.
- Heating system: A permanent and properly vented heating system serving at least the living, dining, and kitchen areas and one bathroom.
- Fire exits: At least two exits from the floor on which the unit is located, leading to safe, open space at ground level.

A housing unit that failed these tests would clearly be uncertifiable under the standards promulgated in the *HAO Handbook* for Site I and recently approved without change in the handbook for Site II. The converse is not true: A unit could pass these tests, yet fail others embodied in those program standards. Consequently, our screening survey test of housing adequacy ought to fail fewer units than would be failed by HAO evaluations.

We should note that one of these indicators, the light and ventilation requirement, is designed to fail a room rather than a housing unit. We therefore exclude windowless rooms from our count of a unit's habitable rooms when we apply program occupancy standards (see Sec. IV). For our test of housing-unit quality, we use the other five indicators.

In the screening survey instrument, these five indicators are reflected in ten questions, each paraphrased as a "quality requirement" in Table 1. The right-hand columns of the table indicate the estimated frequency of deficiencies of each type in unsubsidized rental housing units. The frequencies are shown for both Site I and Site II and were estimated from comparable survey samples in each site.*

By far the most frequent deficiency among rental units in Site II was the lack of adequate fire exists (24.6 percent of all cases). Other frequent deficiencies were inadequate electrical service in habitable rooms (10.1 percent) or bathrooms (10.0 percent) and inadequate heating for the common rooms of the unit (4.7 percent) or the bathroom (6.1 percent).

With only one exception, item deficiencies of each type were more frequent in Site II than in Site I, a situation that we anticipated from comparisons of 1970 census data for the two places and from informal observation.** As shown in the last column of the table, shared plumbing and kitchen facilities are respectively 3.2 and 6.5

*For Site II, the distributions are based on a weighted tabulation of 2,946 housing-unit records representing 19,037 unsubsidized rental housing units. See Sec. II for details.

**Although differences between two small percentages estimated from sample data are subject to considerable sampling variability, the pattern in Table 1 is too consistent to be attributable only to sampling error.

Table 1

INCIDENCE OF SPECIFIC QUALITY DEFICIENCIES IN UNSUBSIDIZED RENTAL HOUSING UNITS: SITE I (1973) AND SITE II (1974)

Items Included in Standard[a]			Quality Requirement	Percent of Unsubsidized Rental Units Deficient		Ratio, Site II to Site I
B	C	A		Site I	Site II	
X	X	X	Complete plumbing facilities	1.9	1.2	0.63
X	X	X	If complete, plumbing facilities not shared	0.6	1.9	3.17
X	X	X	Complete kitchen facilities	0.9	1.9	2.11
X	X	X	If complete, kitchen facilities not shared	0.2	1.3	6.50
X	X	X	Heat in kitchen, living room, and dining room	2.2	4.7	2.14
X	X	X	Heat in one or more bathrooms	4.9	6.1	1.24
X	X	X	Vents for heating equipment	0.2	1.9	9.50
O	X	X	Electrical switch and outlet in all habitable rooms	6.9	10.1	1.46
O	X	X	Electrical switch and outlet in one or more bathrooms	8.6	10.0	1.16
O	O	X	Two or more fire exits	9.9	24.6	2.48

SOURCE: Tabulations by HASE staff of data from the screening surveys for Sites I and II.

[a]X = included, O = excluded.

times as frequent in Site II as in Site I; inadequate heating for common rooms is 2.1 times as frequent and unvented heating equipment is 9.5 times as frequent. Inadequate fire exits are the most common deficiency in both sites, but this deficiency occurs 2.5 times as often in Site II as in Site I.

The left-hand columns of Table 1 define three alternative quality standards that might be used to judge housing adequacy on the basis of screening survey data.* Standard B is the least rigorous, omitting the requirements for two fire exits and for full electrical service in habitable rooms and bathrooms. Standard C requires full electrical service, but not two fire exits. Standard A requires all items listed in the table as quality requirements; in this respect, it corresponds to HAO certification standards and is therefore the most appropriate test.

Table 2 shows how unsubsidized rental housing units in each site are evaluated under each of these standards. Naturally, as the rigor of the standard is increased, the percentage of all units failing the test increases. Comparing Sites I and II, however, it is clear that Site II housing comes off less well whichever standard is used.

Figure 2 pertains only to Site II. The left-hand panel of the figure graphically repeats data from Table 2. It shows that about 16 percent of all unsubsidized rental units in St. Joseph County would fail the least rigorous of our standards, 32 percent would fail the intermediate standard, and 45 percent would fail Standard A, which corresponds most closely to HAO certification requirements.

The right-hand panel of Fig. 2 shows the marginal effects on failure rates of each added requirement. Under the seven quality requirements of Standard B, about 16 percent of all units failed. Taking only those units that passed Standard B, we then applied the additional requirements for electrical service in common rooms and bathrooms (Standard C); these added requirements failed nearly

*The labeling of these alternatives as Standards A, B, and C follows a precedent established in Lowry, Woodfill, and Repnau, *Program Standards for Site I*. Unfortunately, the alphabetic sequence used there differs from the logical sequence in which the data are presented here.

Table 2

FAILURE RATES FOR UNSUBSIDIZED RENTAL UNITS UNDER ALTERNATIVE QUALITY STANDARDS: SITE I (1973) AND SITE II (1974)

Quality Standard[a]	Percent of Units Failing		Ratio Site II to Site I
	Site I	Site II	
B	8.7	15.7	1.80
C	20.1	31.9	1.59
A	26.6	44.8	1.68

SOURCE: Tabulations by HASE staff of data from the screening surveys for Sites I and II.

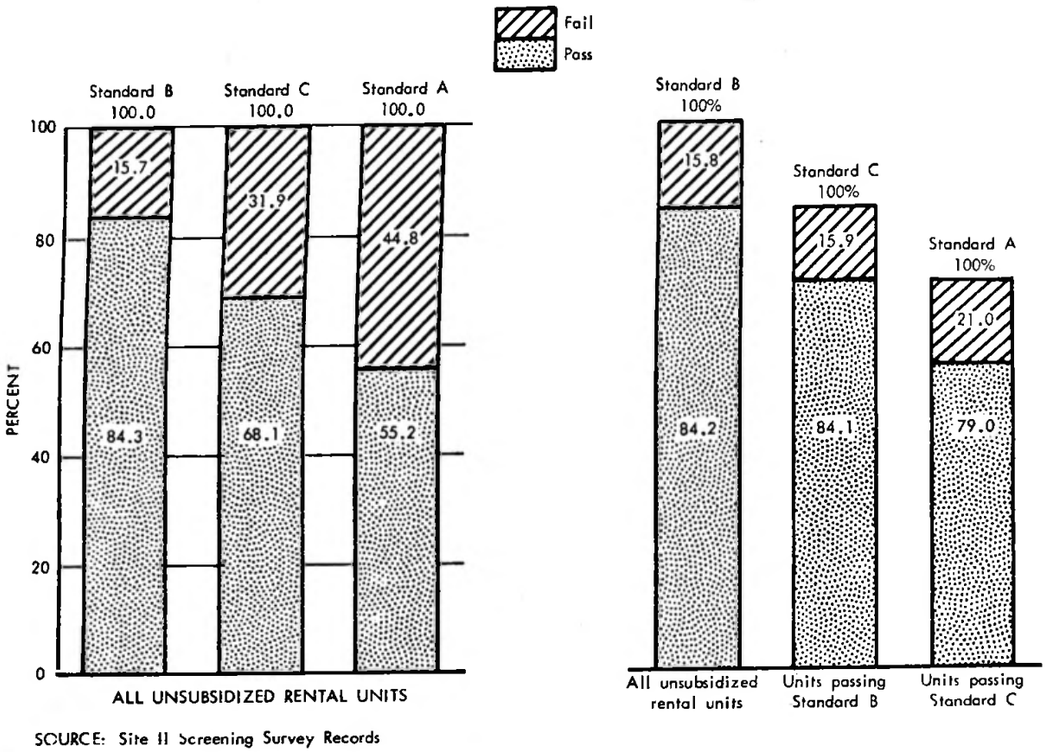
[a]See Table 1 for quality requirements included in each standard.

16 percent of the units that had passed Standard B. Finally, we applied the requirement for two fire exits to those units passing Standard C; 21 percent of the otherwise acceptable units failed this added requirement.

As we explained above, Standard A corresponds most closely to existing HAO certification standards. We examined less rigorous alternatives here because we have serious doubts about the wisdom of an HAO standard that fails a minimum of 45 percent of all unsubsidized rental units.

The issue is not new for Site II; we raised it also for Site I. There, we found that

> . . . even though a requirement for two or more exits may be desirable from the standpoint of fire safety, it is not a [code] requirement in Brown County for units in structures containing fewer than four housing units; nor is it included in national model codes or required by national fire insurance companies. Our consultants recommended against including this requirement in the HAO certification standard, except for rooming houses, nursing homes, and mobile homes. In their view, the problem of fire exits is insignificant for one-story units at ground level, and modification of otherwise adequate small multiple dwellings to meet this requirement would be prohibitively expensive.



SOURCE: Site II Screening Survey Records

Fig. 2--Evaluation of housing quality under alternative standards: unsubsidized rental units in Site II, 1974

The electrical service requirements, on the other hand, are included in the codes of local jurisdictions in Brown County, as well as the national model codes. Our consultants recommended that they also be included in the HAO certification standard.*

For Site I, our analysis of the standard cost of adequate housing was therefore based on Standard C, which includes the requirements for electrical service in habitable rooms and bathrooms but omits the fire-exit requirement. However, the HAO certification standards finally approved by HUD include both requirements. On the latter, the *HAO Handbook* for Site I requires, as a condition of housing unit certification, that

> means of egress from the unit and the building must create no hazardous condition.
> — Hazardous conditions include lack of at least two safe exits from the building leading to open space outside the building.**

The draft *Housing Evaluation Guide and Training Manual* for housing evaluators is somewhat more specific. To obtain a passing score on Item 1.31, "Exits," the housing unit must have

> a minimum of one exit from the housing unit and at least two safe exits from the building leading to open space outside of the building. Windows are not acceptable exits.***

These requirements seem reasonable and are certainly less rigorous than a requirement that there be two safe exits from each housing unit in a multiple dwelling. The question on the screening

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*Lowry, Woodfill, and Repnau, *Program Standards for Site I*, p.20.

**Sec. 12.03(7).

***P. 80.

survey that failed 21 percent of otherwise acceptable units and 25 percent of all units was as follows:

> In case of fire, are there <u>two</u> or more safe exits to the outside from (this house/the floor this apartment is on/the floor these living quarters are on/this mobile home) which you can use?*

For apartments in multiple dwellings, the exit requirement implied by this question is more stringent than that required for certification by the HAO, in that there must be two exits from the *floor* on which the unit is located, not just from the ground floor of the building. The survey training manual was liberal in its interpretation of that provision, advising interviewers to accept open porches or balconies on the second or third floor of a building as one "safe exit." However, we doubt that such an interpretation would occur to a respondent unless he were prompted by the interviewer.

In our judgment, the frequency of fire-exit deficiencies is somewhat overestimated from screening survey data. Therefore, we have based the quality/cost analysis in Sec. V of this note on Standard C, which excludes *any* fire-exit requirement. Even under Standard C, our screening survey data indicate that at least 32 percent of all unsubsidized rental housing units in St. Joseph County would fail an HAO housing evaluation. Twenty percent of such units in Brown County failed the same test in our screening survey there (see Table 2).

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*Site II *Screening Survey Instrument*, Q. 50.

IV. OCCUPANCY PATTERNS IN ST. JOSEPH COUNTY

The preceding section reported on the quality of unsubsidized rental housing units in St. Joseph County, "quality" being one of two elements underlying the concept of "adequate housing." The other element is space, or the size of the housing unit relative to the size of the household that occupies it. Here, we first review program occupancy standards, then report briefly on actual occupancy patterns in St. Joseph County, comparing them with program standards and also with actual patterns in Site I.

The occupancy standards that Rand proposed for the experimental housing allowance program measured the size of a housing unit by the numbers of habitable rooms of different types; they then related space requirements to household composition as well as to household size.* This recommendation was overridden by HUD in favor of a standard that was both simpler and less generous to small households. That standard reads in the *HAO Handbook* for Site II as follows:**

<u>04 - Living Space</u>

To be certifiable for occupancy by a program participant, a unit must meet the following minimum standards related to living space:

- <u>Habitable Rooms</u>. Each habitable room must have a sufficient floor area and ceiling height to permit normal activities by the occupants, and meet requirements set forth below for heating and electrical facilities, natural light and ventilation. (A bathroom--any room containing an unenclosed toilet or bathing facilities--is not a habitable room.)
  - Each habitable room must contain a minimum of seventy (70) square feet of floor area and have a clear height of seven (7) feet in at least one half of the room area.

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*Lowry, Woodfill, and Repnau, *Program Standards for Site I Appendix B.*

**Sec. 12.03(2).

- Bedrooms. Each bedroom must be a habitable room that can be closed off from all other rooms and that does not contain kitchen facilities (except where the space for kitchen facilities and their use does not occupy the dominant portion of the room).
- Living Room. A unit occupied by more than two persons must have one habitable room in addition to the kitchen and bedrooms to serve as a general living area.
- Occupancy. The minimum number of bedrooms a unit must have for occupancy by households of various sizes is as follows:

Number of Persons	Number of Bedrooms
1 or 2	1
3 or 4	2
5 or 6	3
7 or more	4

A notable feature of this standard that may not be clear from the above is that either one or two persons may occupy a one-room (zero-bedroom) housing unit--either an "efficiency apartment" or a rooming-house unit without private kitchen or bathing facilities. Only for households of more than two persons does the standard require a living room--i.e., at least "one habitable room in addition to the kitchen and bedrooms to serve as a general living area." For setting R^*, however, it was established in Site I that both one- and two-person households should be able to afford a unit with a private kitchen and bathroom and, further, that two-person households should be able to afford a unit with a separate living room.

Table 3 shows the actual pattern of occupancy for unsubsidized rental housing units in St. Joseph County, as reflected in our screening survey records. As would be expected, larger households tend to occupy larger housing units. However, small households rather consistently occupy more space and large households occupy less space than HAO standards require. Thus, 90 percent of all one-person households have at least one bedroom in their unit--that is, a minimum of two

Table 3

PERCENTAGE DISTRIBUTIONS OF HOUSEHOLDS IN UNSUBSIDIZED RENTAL UNITS BY NUMBER OF BEDROOMS AND SIZE OF HOUSEHOLD: SITE II, 1974

Number of Persons[a]	Percentage Distribution by Number of Bedrooms[b]						Total	Median Number of Bedrooms
	0	1	2	3	4	5+		
1	9.6	57.0	32.0	1.2	0.1	0.0	100.0	1.2
2	4.4	41.8	44.1	7.1	0.8	1.7	100.0	1.6
3	0.2	11.4	51.5	32.6	3.9	0.2	100.0	2.2
4	0.1	2.5	48.6	42.7	5.6	0.6	100.0	2.5
5	0.9	3.6	31.0	55.6	8.0	1.0	100.0	2.8
6	0.0	0.6	25.6	58.2	12.7	3.0	100.0	2.9
7+	0.0	1.4	50.9	21.5	18.6	7.6	100.0	2.5
All households	3.9	29.7	42.2	20.2	3.2	0.9	100.0	1.9
Median number of persons	1.3	1.5	2.5	3.8	4.1	2.7	2.2	--

SOURCE: Tabulations by HASE staff of data from the Site II screening survey.

NOTE: Percentages may not add exactly to 100.0 because of rounding.

[a] Roomers and boarders are counted here as members of the household with whom they reside.

[b] Excludes unventilated bedrooms.

rooms;* 54 percent of all two-person households have at least two bedrooms. Households of three to six persons usually have either two or three bedrooms, close to the HAO standard. Nearly three-fourths of the larger households (7+ persons) occupy units with three or fewer bedrooms--units that would not be certifiable for them under present HAO standards.

The actual pattern of occupancy is of course not necessarily the most desirable one, either from the perspective of the occupants or from a societal view. As in Site I, however, we are very much concerned by HUD's decision that assistance to single (elderly) persons should reflect no more than the standard cost of a one-room (zero-bedroom) housing unit.

Even for renters, such units are extremely rare; in all of St. Joseph County, we estimate that there are 600 zero-bedroom units with private kitchens and baths and about 1,900 rented rooms with shared kitchen or plumbing facilities. For homeowners, one-room (zero-bedroom) units are virtually nonexistent. While it is possible that the allowance program will stimulate the conversion of some larger units to accommodate single persons at rents of R^* or less, we do not believe that it can occur on a scale at all commensurate with the population to be served. In fact, unless single program participants can be persuaded to double up with nonrelatives, they will generally occupy larger units than their allowances are intended to support.**

Figure 3 compares occupancy patterns for unsubsidized renters in Site II with corresponding patterns in Site I. There is very little difference between the sites in these patterns. For each size of household, both the modal and the median number of bedrooms in the two sites are nearly identical. However, households in Site I are less dispersed among units of different sizes than are households in Site II--e.g., the modal size of unit accounts for a larger proportion of all households in Site I.

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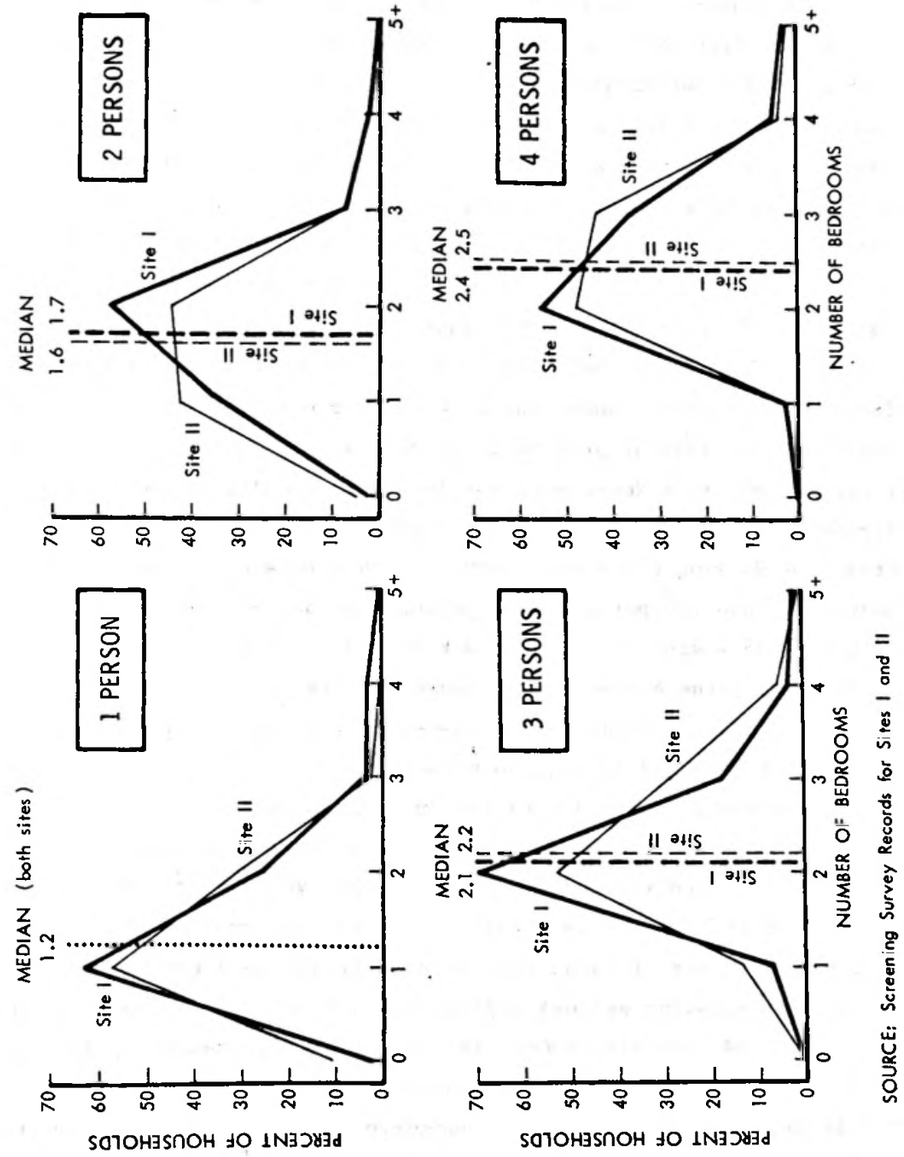
*The table, however, counts paying lodgers as members of the household with which they live. From our survey records, we estimate that there are about 300 lodgers in St. Joseph County who reside with renter households. Another 1,400 persons share expenses in a rental unit. There are about 1,600 lodgers in owned homes.

**See Sec. VI for relevant estimates.



SOURCE: Screening Survey Records for Sites I and II

Fig. 3--Comparison of occupancy patterns for unsubsidized rental housing: Site I (1973) and Site II (1974)

V. HOUSING COSTS IN ST. JOSEPH COUNTY

One reason St. Joseph County was selected as the second site for the Supply Experiment was the contrast it offered to the first site (Brown County, Wisconsin) in terms of economic and demographic growth. Total employment in St. Joseph County declined by about 6.5 percent between 1950 and 1970 and the county's population grew by only 2.7 percent between 1960 and 1970. During that decade, the central city, South Bend, actually lost 5.2 percent of its 1960 population.

This pattern of slow metropolitan growth and central-city decline is powerfully reflected in the county's housing market. Relatively few new housing units have been constructed in the last decade, and a large proportion of those that were built are rental units subsidized under various federal programs. As nearly as we can judge, there is a persistent price-depressing surplus of both multiple dwellings and single-family houses, especially in the city of South Bend. The 1970 Census of Housing reported a rental vacancy rate of 8.2 percent in South Bend and 7.0 percent countywide. The median value of owner-occupied homes was $11,700 in South Bend and $12,400 countywide. (In Brown County, the corresponding vacancy rates were 4.3 and 4.9 percent, and the median values of owner-occupied homes were $15,800 for the central city and $17,100 countywide.)

Our screening survey data for July-August 1974 do not suggest any recent reversal of the 1970 patterns of housing surplus and relatively low rents and prices. We are not yet prepared to be specific about the vacancy rates for rental and homeowner properties, because the tenure of vacant units is difficult to determine and our preliminary sampling weights are not reliable enough for vacancy rate estimation. We can only report that we received vacancy reports on 1,007 units out of a total sample of 10,008.

Below, we review the screening survey data on housing costs in the third quarter of 1974. We only discuss rental housing, since these are the data that will be used in selecting a schedule of values for R^*, and as noted before, we do not have comparable data on owned units from our survey.

For rental units, we have measured housing cost by gross rent--the sum of contract rent and any additional tenant payments for electricity, gas, fuel oil, other heating fuels, and water service. Our procedures were as follows.

In the screening survey, each sampled tenant was asked his current contract rent, and also whether he received any special rent reduction or discount. In the latter event, he was also asked to estimate the "full rent the landlord would usually charge" for the unit. In computing gross rent for households receiving special discounts, we used their estimates of "normal" contract rents for their housing units.

We did not ask respondents to report their actual utility payments because it is difficult to obtain usable data on these payments (which vary seasonally) in a brief interview. Instead, we asked each tenant whether he used electricity, gas, fuel oil, or other fuels; which of these energy sources were used for cooking, space heating, water heating, and air conditioning; and whether the cost of the fuel was included in the rent or the tenant paid extra for it. We also asked whether he used piped-in water (some rural homes are served by private wells) and whether he paid extra for this service.

From this information, we estimated average monthly payments by each respondent for utilities not included in contract rent. The other ingredients of these estimates were rate schedules obtained from local utility companies and consumption norms specific to the uses indicated and the number of rooms in the housing unit. When this procedure was tested in Site I, it yielded a distribution of estimates that were at least consistent with distributions published by the U.S. Bureau of the Census, which are based on responses to direct questions about utility payments.

Our estimate of gross rent was thus the sum of reported contract rent (or estimated "full" contract rent) and estimated extra utility charges. Item nonresponse or errors in the data prevented us from making gross rent estimates for 219 records, about 6.4 percent of all field-complete survey records for occupants of rental housing units (see Fig. 1, above). Records for which gross rents could not be estimated were excluded from the data base used here.

UNSUBSIDIZED RENTAL HOUSING

Table 4 shows the distribution of unsubsidized rental housing units by gross rent, separately for units of different sizes (number of bedrooms). The table is based on 2,946 field-complete screening survey records for which it was possible to estimate gross rent; the records are weighted to reflect both their own sampling rates and to account for incomplete records and vacant units. Altogether, they represent an estimated 19,037 unsubsidized rental units in the county.

The sample of unsubsidized rental units contains four records with very large sampling weights, each representing more than 220 housing units in the population. When they are included in detailed distributions by rent and unit size, these records dominate the particular rows and columns in which they appear; yet as estimators of housing characteristics, they have much larger sampling variance than the records with which they are grouped. We neutralized the effects of these records by allocating their weights over the rent distributions of all unsubsidized units that had the same number of bedrooms.

Median rent increases consistently with number of bedrooms. For units of any given size, there is a fairly wide range of rents, the range typically lacking a strong central tendency. The distribution for zero-bedroom units is distinctly multimodal, suggesting that it includes very different types of accommodations--apartments with complete, private kitchen and bathroom facilities, and rented rooms with shared or no such facilities. The distributions for larger units are not so strongly multimodal, but they do have clusters of units in certain rent intervals, with fewer units in the intervening intervals.

These distributions, however, are somewhat less dispersed than the corresponding ones for Site I. Figure 4 shows such a comparison for two-bedroom units, the most common size in both sites.

The distribution in Site I is bimodal, with a minor peak at $125 and a major peak at $165 to $175. The distribution for Site II also is bimodal, but its major peak is at the lower value, $125, and its minor peak is at the higher value, $215. The latter figure is well above the secondary peak for Site I, where few two-bedroom units

Table 4

DISTRIBUTION OF UNSUBSIDIZED RENTAL UNITS BY MONTHLY GROSS RENT AND NUMBER OF BEDROOMS: SITE II, 1974

Monthly Gross Rent ($)[a]	Percentage Distribution by Number of Bedrooms[b]					
	0	1	2	3	4	All Units[c]
Under 50	6.3	0.5	1.7	--	--	1.1
50-59	11.1	1.4	--	0.1	--	0.9
60-69	5.6	3.1	0.7	0.7	--	2.0
70-79	4.4	5.1	2.5	0.2	5.6	3.0
80-89	10.2	8.7	1.8	0.5	4.8	4.1
90-99	8.1	7.9	4.4	1.1	1.2	4.9
100-109	6.2	15.8	7.0	3.0	1.9	8.6
110-119	2.4	9.4	8.3	7.0	4.7	8.1
120-129	5.4	11.0	10.5	5.1	5.7	9.2
130-139	21.3	7.1	10.3	6.6	4.2	8.8
140-149	4.2	8.6	9.6	8.9	7.3	8.8
150-159	2.3	4.1	8.5	12.4	7.4	7.6
160-169	8.8	4.5	4.2	9.6	2.9	5.4
170-179	--	5.8	2.9	6.2	17.6	4.8
180-189	--	2.6	3.3	8.4	4.7	4.0
190-199	--	2.6	2.7	9.6	6.2	4.0
200-209	3.4	1.0	4.5	8.3	3.0	4.1
210-219	--	0.1	7.4	2.5	3.7	3.8
220-229	--	--	2.8	1.2	2.0	1.5
230-239	--	0.2	1.1	3.1	2.9	1.2
240-249	--	--	2.3	1.6	1.6	1.3
250-259	--	--	2.1	0.6	1.0	1.0
260 or more	--	0.2	1.5	3.2	11.5	1.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of units	753	5,705	8,117	3,614	617	19,037
Median rent ($)	106	117	142	164	172	139

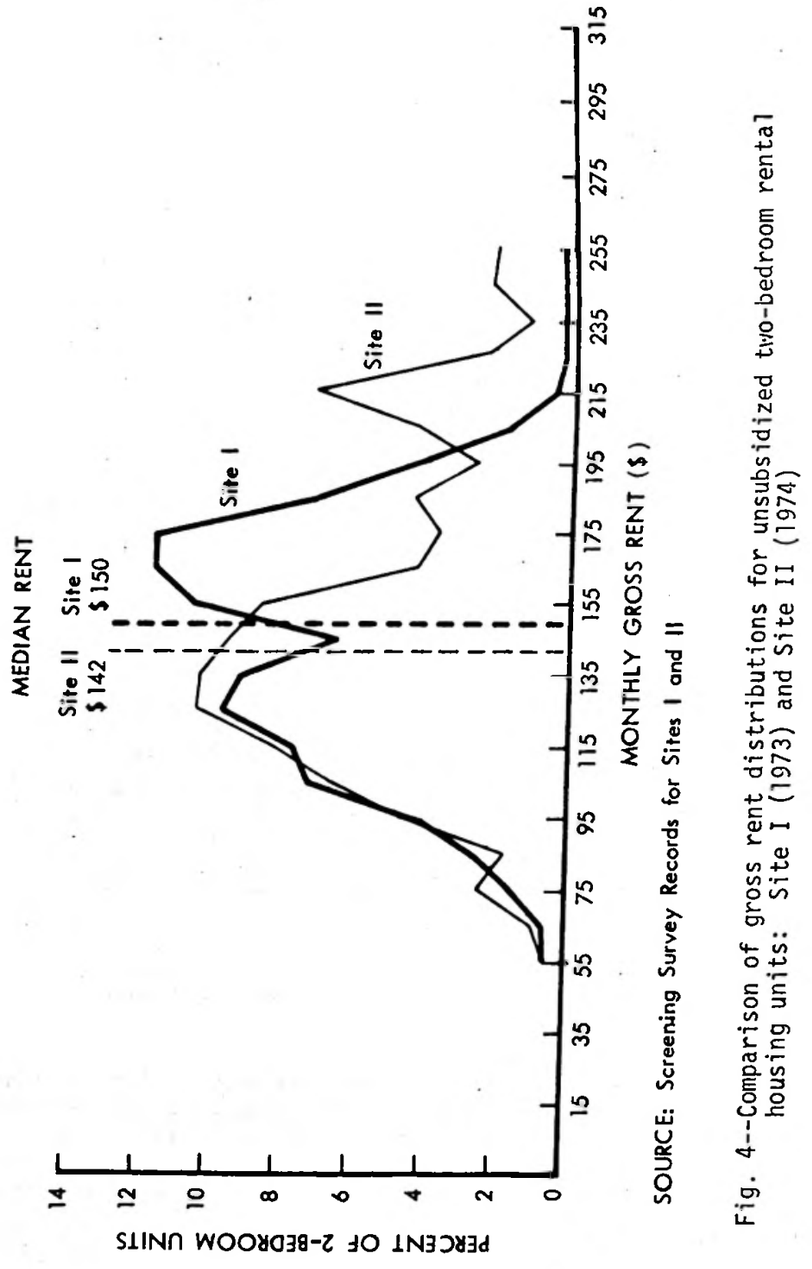
SOURCE: Tabulations by HASE staff of data from the Site II screening survey.

NOTE: Four records with especially large sampling weights, each representing more than 220 housing units, were accorded special treatment in this table. The housing units represented by each such record were distributed by gross rent in the pattern of all other unsubsidized housing units of the same unit size. Percentages may not add exactly to 100.0 because of rounding.

[a] Contract rent plus an estimate by HASE staff of the average monthly cost of any utilities not included in contract rent.

[b] Excludes unventilated bedrooms.

[c] Includes 183 units with five or more bedrooms and 47 units with unknown bedroom count.



SOURCE: Screening Survey Records for Sites I and II

Fig. 4--Comparison of gross rent distributions for unsubsidized two-bedroom rental housing units: Site I (1973) and Site II (1974)

had gross rents of more than $190. The median value in Site II is $8 less than that in Site I.

Although we show only one example, the Site I and Site II rent distributions for one-bedroom and three-bedroom units follow the same pattern. Small data bases for zero-bedroom and four-bedroom units make comparison less trustworthy, but the evidence indicates higher rather than lower rents in Site II for these sizes.

In 1970, median gross rent for *all* rental units in Site I was $106; in Site II, it was $107. From our point of view, the figures are not exactly comparable, since there were then several times as many subsidized housing units in Site II than in Site I.* If the object is to compare market rents rather than household expenditures, the inclusion of below-market rents in the distributions exerts a downward bias on the median, especially in Site II.

Screening survey data for *unsubsidized* rental units in the two sites are compared in Fig. 5. It is important to note that the data for Site I are for September 1973 and those for Site II are for July-August 1974, about 10 months later. Yet the overall medians are again nearly identical--$138 for Site I and $139 for Site II. Even without allowing for the downward bias in the 1970 data for Site II, it is clear that rents have not risen as rapidly in Site II as in Site I. The average annual rate of increase in Site I between the 1970 census and the screening survey was 8.6 percent. In Site II, it was at most 6.9 percent, and allowing for the bias mentioned previously, probably closer to 5 percent.

SUBSIDIZED RENTAL HOUSING

Table 5 lists the federally assisted rental housing projects that we have identified from public records. They include 1,289 units of low-rent public housing, 300 privately owned units whose tenants

*We do not know how much subsidized housing was in operation in either site in 1970; but we assume that the relative positions of the two sites in this respect were about the same as they are today.

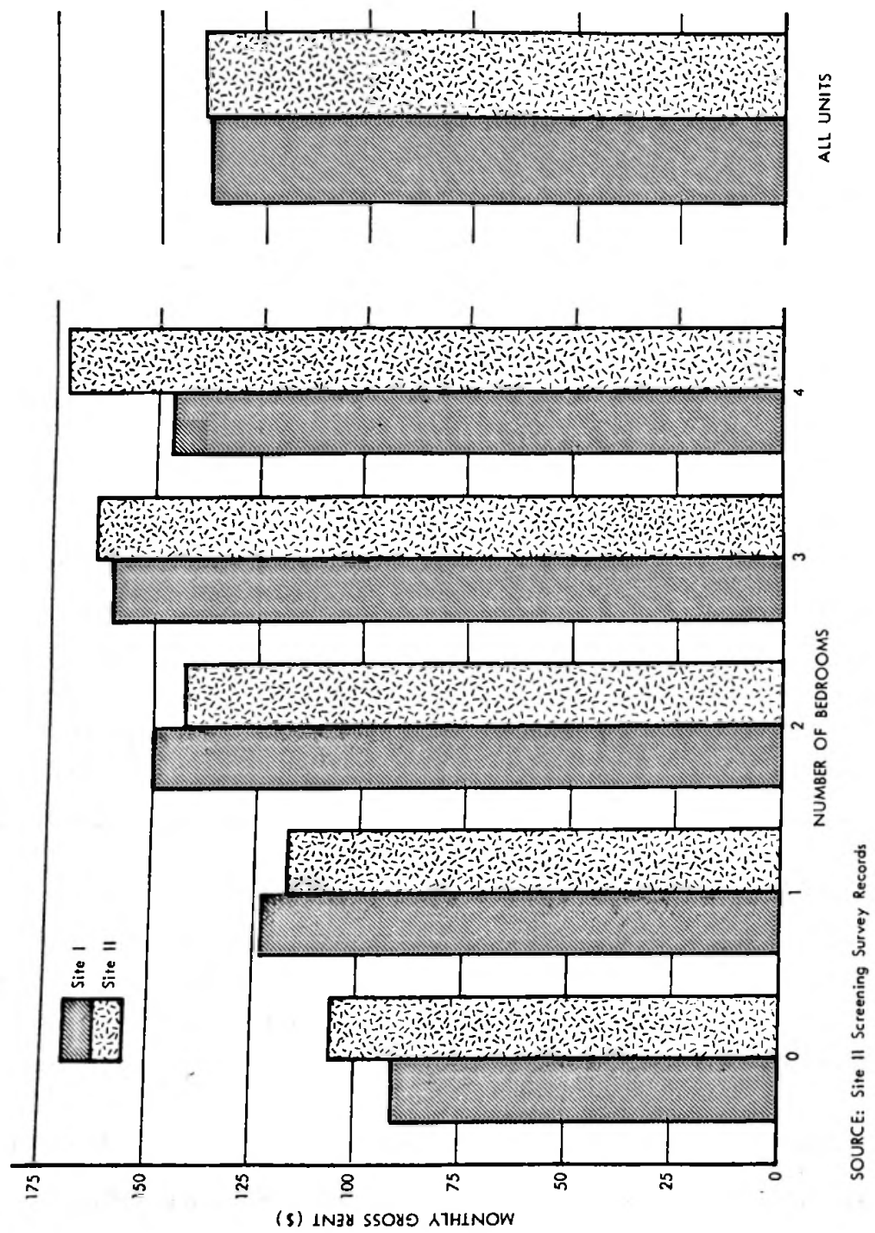


Fig. 5--Comparison of median gross rents for unsubsidized rental housing units, by size of unit: Site I (1973) and Site II (1974)

Table 5

FEDERALLY ASSISTED RENTAL HOUSING PROJECTS IN ST. JOSEPH COUNTY, AUGUST 1974

Project Name, by Type of Program	Number of Units	General Location: Address or Vicinity	General Location: City[a]	Address List Obtained	Federal Legislative Authority[b]
Low-Rent Public Housing[c]					
Indiana 15-2	235	S. Scott at W. Western	SB	Yes	USHA, Sec. 10
Indiana 15-3	108	1800 N. Meade	SB	Yes	USHA, Sec. 10
Indiana 15-4	186	400-500 S. Scott Street	SB	Yes	USHA, Sec. 10
Indiana 15-5	175	Scattered site	SB	Yes	USHA, Sec. 23
Indiana 15-6	50	Scattered site	SB	Yes	USHA, HOPLIF
Indiana 15-7	50	Scattered site	SB	Yes	USHA, HOPLIF
Indiana 15-8	55	Harbor Homes Addition	SB	Yes	USHA, HOPLIF
Indiana 15-9	50	Scattered site	SB	Yes	USHA, Sec. 10
Indiana 15-10	66	Scattered site	SB	Yes	USHA, Sec. 10
Indiana 15-11	48	1200-1300 Twyckenham	SB	Yes	USHA, Sec. 10
Indiana 15-12	(*d*)	Scattered site	SB	Yes	USHA, Sec. 10
Indiana 20-1	151	12th at Union	M	Yes	USHA, Sec. 10
Indiana 20-2	115	500 Lincoln Way E.	M	Yes	USHA, Sec. 10
Total	1,289				
Rent Supplement					
LaSalle Park	150	Washington at Falcon	SB	Yes	HUDA 1965, Title I
Corby Homes	150	3000 E. Corby	SB	Yes	HUDA 1965, Title I
Total	300				
FHA Interest Subsidy					
Western Manor	102	Western at Lombardy	SB	Yes	NHA, Sec. 221(d)(3) BMIR
Cambridge Square Coop	232	Grape Road	M	Yes	NHA, Sec. 221(d)(3) BMIR
Jamestown Homes	160	Hickory Road	M	Yes	NHA, Sec. 221(d)(3) BMIR
Parkview Terrace	108	500 12th Street	M	Yes	NHA, Sec. 221(d)(3) BMIR
Pin Oak Manor	154	2700 Hickory Road	M	Yes	NHA, Sec. 221(d)(3) BMIR
Townhouse East	204	N. McKinley Avenue	M	Yes	NHA, Sec. 221(d)(3) BMIR
Carriage House I	240	Main nr. Catalpa	M	Yes	NHA, Sec. 236
Carriage House II	240	Main nr. Catalpa	M	Yes	NHA, Sec. 236
Miami Hills I	151	Wolhaven at Ridgedale	SB	Yes	NHA, Sec. 236
Miami Hills II	(*e*)	Wolhaven at Ridgedale	SB	Yes	NHA, Sec. 236
Total	1,591				
Total Subsidized	3,180				
FHA Insurance					
Southwood Manor	387	12th nr. Capital	M	Yes	NHA, Sec. 207
Northshore Woods	120	1500 N. Shore Drive	M	Yes	NHA, Sec. 207
Creekside Terrace	144	12th nr. Capital	M	No	NHA, Sec. 221(d)(4)
Village Apartments	150	East of Main	M	No	NHA, Sec. 221(d)(4)
Pin Oak Manor East	82	N. Hickory Road	SB	Yes	NHA, Sec. 221(d)(4)
Crestwood Gardens	142	Edison Road	SB	Yes	NHA, Sec. 221(d)(4)
Village Terrace	56	Rosemary Lane	SB	Yes	NHA, Sec. 221(d)(4)
Total	1,081				
Total Subsidized or Insured	4,261				

SOURCE: Letters and lists from HUD Area Office, Indianapolis, South Bend Housing Authority, and Mishawaka Building Department.

[a] SB = South Bend; M = Mishawaka. All federally assisted rental units in St. Joseph County are located in one of these two jurisdictions.

[b] USHA = United States Housing Act of 1937, as amended; NHA = National Housing Act, as amended; HUDA 1965 = Housing and Urban Development Act of 1965, as amended. HOPLIF is a program that permits renters eventually to purchase their units from the local housing authority.

[c] Apparently projects are not named.

[d] Forty-five units under construction.

[e] Proposed addition of 150 units; no permit issued as of 1 September 1974.

receive rent supplements under Title I of the Housing and Urban Development Act of 1965, and 1,591 units in privately owned projects with mortgage interest subsidies arranged under Sec. 221(d)(3) or Sec. 236 of the National Housing Act. The table also lists seven private rental projects with FHA mortgage insurance but no direct subsidies; these contain another 1,081 units. All the projects listed in the table are in South Bend or Mishawaka.

By matching the address lists of these housing projects with our screening survey records, we identified 259 records for federally subsidized rental units. Weighted, they represent an estimated population of 3,419 units, 239 more than we identified in Table 5.

The distribution of contract rent for these units by size of unit is shown in Table 6. We report contract rather than gross rent because the "full rent the landlord would usually charge" is not a meaningful concept for subsidized units. In Table 6, we used only the records (241) for which contract rent was reported, and sampling weights were adjusted accordingly.

Eighty percent of the units have one or two bedrooms, a slightly higher proportion than in the unsubsidized stock; there are almost no zero-bedroom apartments. The rent paid by the tenant is a function of the household's income--generally, 25 percent of adjusted income (gross income less certain deductions). In most programs, households are allowed to remain in the subsidized unit even though their income increases beyond the maximums permitted for entrance; in these cases, they pay the full or market rent. Nearly 20 percent of the subsidized units rent for less than $50 a month, and half for less than $110. At the other end of the scale, 10 percent have contract rents in excess of $200. For most unit sizes, the median rents are, not surprisingly, substantially below the medians for unsubsidized units shown in Table 4 (even allowing for possible additional utility payments by subsidized tenants). But for two-bedroom apartments, the most common size, the median *contract* rent of the subsidized units is only $12 lower than the median *gross* rent for nonsubsidized units. The distribution for subsidized units, however, is far more compact.

Table 6

DISTRIBUTION OF FEDERALLY SUBSIDIZED RENTAL UNITS BY MONTHLY CONTRACT RENT AND NUMBER OF BEDROOMS: SITE II, 1974

Monthly Contract Rent ($)	Percentage Distribution by Number of Bedrooms[a]					All Units[b]
	0	1	2	3	4	
Under 50	--	29.6	8.6	13.0	37.9	18.2
50-59	--	9.4	5.9	1.0	12.8	6.6
60-69	--	7.5	2.0	1.0	14.1	4.2
70-79	--	4.1	2.0	12.1	13.4	4.7
80-89	100.0	2.0	0.8	3.9	2.5	1.8
90-99	--	2.2	4.6	4.9	--	3.6
100-109	--	18.4	6.1	7.9	10.5	10.6
110-119	--	12.2	12.3	5.0	--	10.5
120-129	--	1.0	5.6	2.8	6.2	3.6
130-139	--	4.4	24.2	4.8	--	13.4
140-149	--	--	--	16.1	--	2.5
150-159	--	3.4	0.2	1.0	--	1.4
160-169	--	--	3.2	7.0	--	2.6
170-179	--	2.9	4.7	--	--	3.2
180-189	--	1.5	0.9	--	--	0.9
190-199	--	1.5	1.1	--	--	1.0
200-209	--	--	2.8	--	--	1.5
210-219	--	--	5.0	1.7	--	4.1
220-229	--	--	--	11.5	--	--
230-239	--	--	--	--	--	--
240-249	--	--	--	--	--	--
250-259	--	--	--	--	--	--
260 or more	--	--	9.9	6.3	2.5	5.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of units	3	1,146	1,575	529	139	3,419
Median rent ($)	85	78	130	130	124	110

SOURCE: Tabulations by HASE staff of data from the Site II screening survey.

NOTE: Percentages may not add exactly to 100.0 because of rounding.

[a] Excludes unventilated bedrooms.

[b] Includes 27 units with five or more bedrooms.

VI. ESTIMATING THE STANDARD COST OF ADEQUATE HOUSING

In preceding sections, we reviewed HASE definitions of housing quality, size of unit, and housing cost and our methods for measuring these variables. We also used these methods to describe the inventory of unsubsidized rental housing in St. Joseph County as it is represented in our screening survey records. Here, we relate quality, size, and cost to each other in order to estimate R^*, the standard cost of adequate housing under market conditions that prevailed in St. Joseph County during the third quarter of 1974.

For a given size of household, the standard cost of adequate housing is defined as the price at which units that meet HAO certification standards can be supplied by the private market *on a continuing basis and in quantities sufficient to serve the allowance program's housing objectives*. This definition implies that standard cost need not reflect the effects on market price of temporary shortages or surpluses of housing when the economics of housing supply will not sustain these short-run prices. On the other hand, the definition does not imply that an adequate supply of certifiable housing must be available at or below standard cost when the allowance program begins operations; rather, it implies that when low-income households are enabled by the program to afford the standard cost of adequate housing, there is a reasonable prospect that the market will respond by providing enough certifiable units to meet the augmented demand.

Before looking at any of the data for either site, we devised a method for estimating the standard cost of adequate housing. That method assumes that, holding size of unit constant, the quality of housing improves as gross rent increases. Our general decision rule for selecting a value of R^* for a unit of specified size was to choose the lowest $10 interval of gross rent above which 50 to 75 percent of the rental housing units met HAO certification standards (as nearly as those standards could be applied on the basis of screening survey

data). We judged that it would be wiser to examine the data before settling on an exact pass rate in the 50- to 75-percent range.*

In Site I, the assumptions of our method were met by the data: The proportion of rental units passing Quality Standard C increased fairly regularly within successively higher gross rent intervals. Our recommended values for R^* were based on a 75-percent pass rate, though they were then smoothed to form a more regular progression with increasing unit size.**

An example for two-bedroom units is given in Fig. 6. The vertical axis of the figure measures the percentage of units in each $10 interval of gross rent that passed Quality Standard C, and the horizontal axis measures gross rent. The shaded band in the figure marks the 50- to 75-percent pass rate on the vertical axis.

The heavy plotted curve in the figure is for Site I. After some initial fluctuations in the lower left-hand corner, the curve rises fairly steadily as gross rent increases, reaching a pass rate of 100 percent at rents of $230 or more. The curve permanently rises above the 50-percent pass rate at a gross rent of $90 and above the 75-percent pass rate at a gross rent of $130. We recommended that R^* be set between $145 and $155 rather than at $130 because the corresponding curve for one-bedroom units also crossed the 75-percent boundary at a rent of $130, and we thought that larger households should have more housing options. (HUD chose $155 for two bedrooms and $125 for one bedroom.)

Figure 6 also plots the curve of housing quality vs cost for two-bedroom units in Site II. That curve shows a much less regular relationship between the two variables than our method assumed or than Site I experience indicated. The highest quality ratings are for units with very low and very high rents. While the curve permanently rises above the 50-percent pass rate at a rent of $80, it behaves quite erratically in relation to the 75-percent pass rate.

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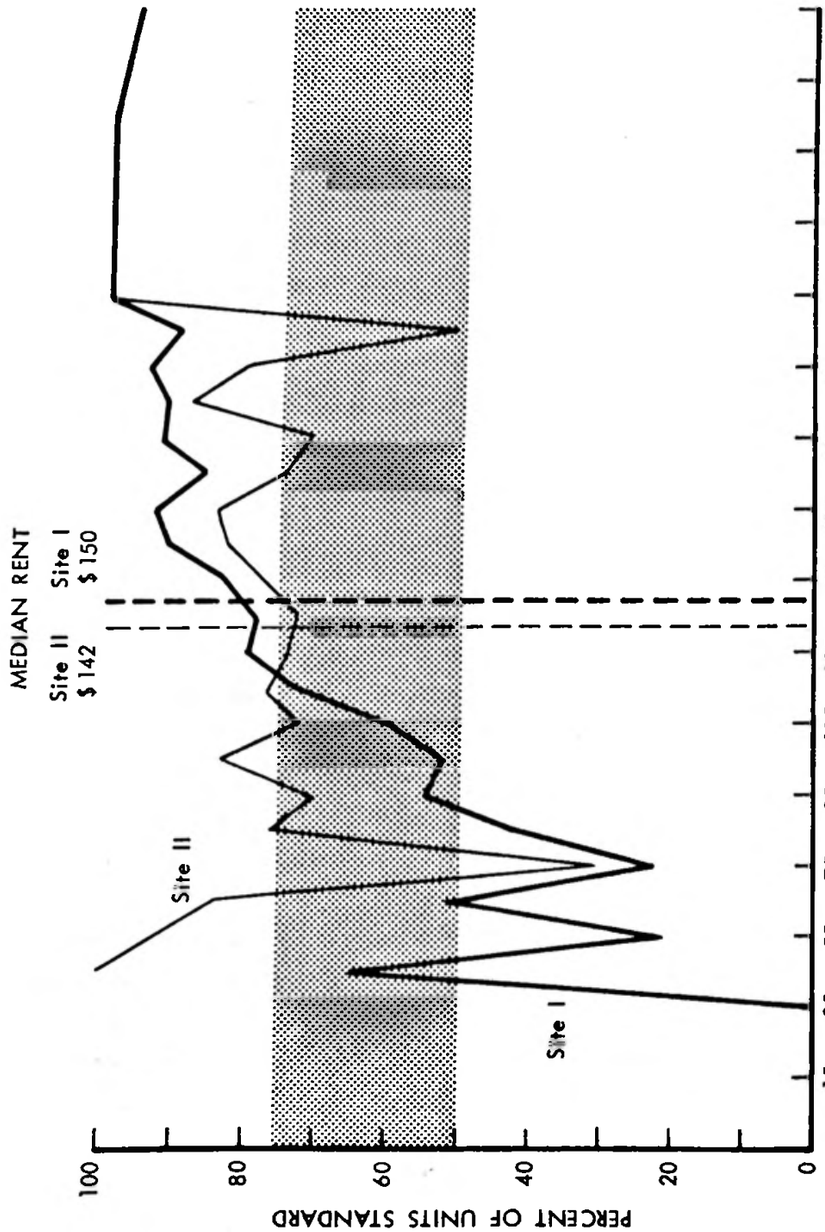
*Lewis and Lowry, *Estimating the Standard Cost of Adequate Housing*, Sec. III.

**Lowry, Woodfill, and Repnau, *Program Standards for Site I*, Sec. IV.



SOURCE: Screening Survey Records for Sites I and II

Fig. 6--Percentage of unsubsidized two-bedroom rental units in each $10 rent interval that meet Quality Standard C: comparison of Site I (1973) and Site II (1974)

As Fig. 7 shows, the problem is not unique to two-bedroom units. There is a general absence of association in Site II between housing quality (as measured by Standard C) and gross rent. We believe that this finding reflects two factors, which were not present in Site I, operating on the rental market in Site II. One is the generally depressed state of the housing market there, which may have altered the "normal" relationship between housing quality and rent levels in ways that we cannot presently explain. The second factor, and possibly the more important one, is the effect of neighborhood characteristics on housing prices.

Elsewhere, we have noted that residents of Site I appear to attach very little importance to neighborhood differences: One place is about as good as another in terms of public services, amenities, congenial neighbors, and quality of schools. In Site II, this is clearly not the case. There is a strong sense of neighborhood differences, reflecting in part residential segregation of blacks and whites and in part differences between political jurisdictions (e.g., South Bend vs. Mishawaka). Anecdotal evidence confirms that these perceived differences are reflected in the rents and prices of outwardly comparable homes. We are nonetheless reluctant to believe that the differences are pervasive enough to obscure any systematic relationship between housing quality and housing cost.

Given the evidence of Fig. 7, however, it is clear that our former decision rule for estimating the standard cost of adequate housing is inappropriate for Site II. There is no rent level that (a) encompasses a reasonably large proportion of the housing stock, while (b) distinguishing better from worse housing.

We believe that baseline survey data, when they are available, will greatly improve our understanding of the relative prices of different housing units in Site II. But in the meantime, it is necessary to begin program operations with a preliminary schedule of values for R^*, and these not only are important in determining benefit levels for program participants but also directly influence the income limits for participation.

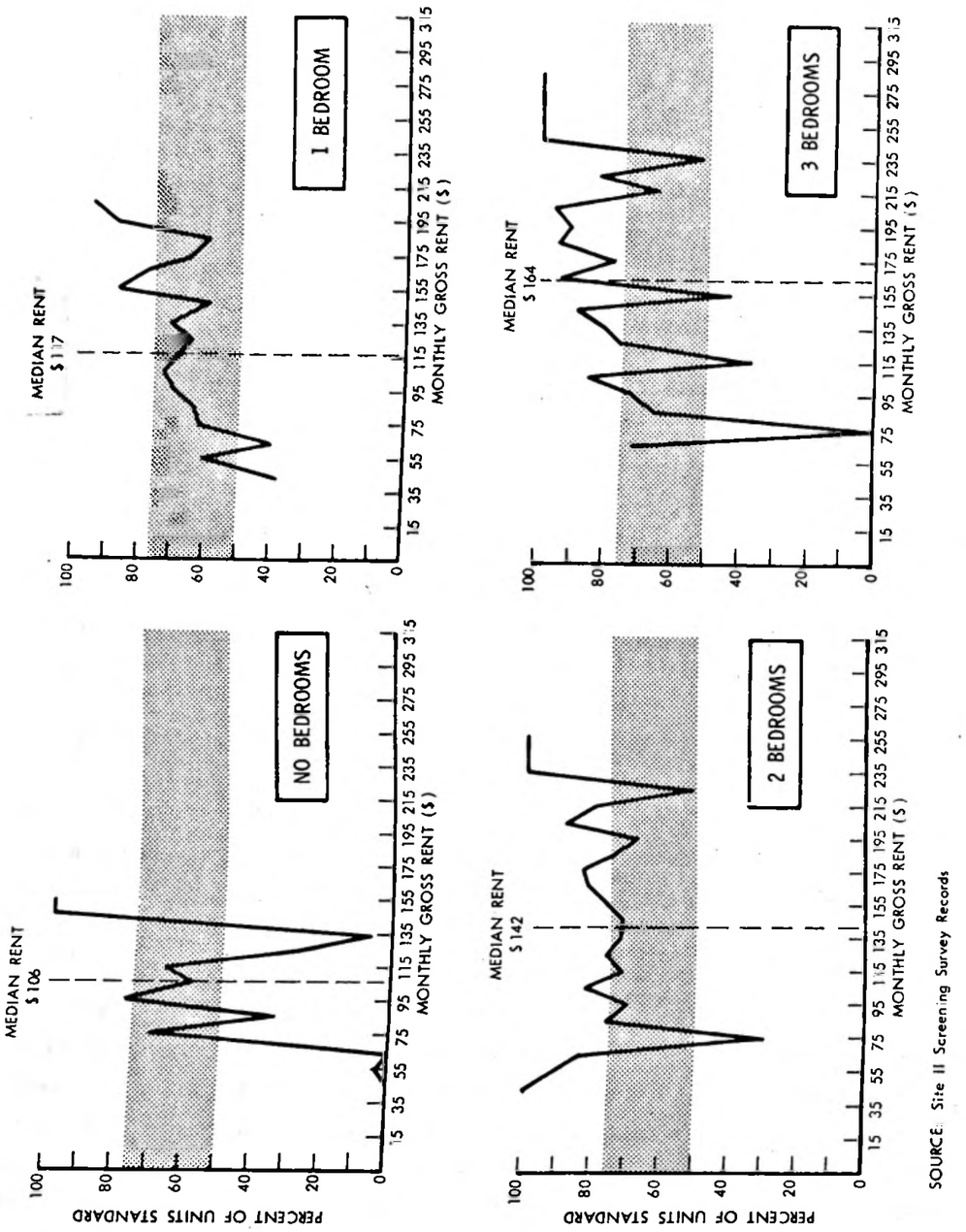


Fig. 7--Percentage of unsubsidized rental units in each $10 rent interval that meet Quality Standard C, by number of bedrooms: Site II, 1974

SOURCE: Site II Screening Survey Records

We have therefore experimented with several alternative perspectives on the relationship between housing quality and housing cost as it bears on program purposes. One that has considerable logic is to set R^* at a level of gross rent that encompasses a substantial fraction of all existing certifiable units. This would at least assure us that when the allowance program begins operation, enrollees will have a reasonable chance of finding certifiable housing at rents within their (augmented) budgets.

Table 7 shows the percentages of unsubsidized rental housing units of each size that passed and failed Quality Standard C. Except for zero-bedroom units, the pass rates range from 66 to 77 percent; the highest rate is for three-bedroom units, closely followed by two-bedroom units; these two unit sizes account for three-fifths of all rental units.

Zero-bedroom units are a special case. Their high failure rate under Standard C reflects a high incidence of incomplete bathroom or kitchen facilities, or shared kitchens. As noted in Sec. IV, although HAO standards permit single persons to occupy rooming-house units with shared bathroom facilities located elsewhere in the building and with "reasonable access" either to a kitchen or to a facility regularly serving hot meals, it was agreed in Site I that R^* should at least allow a single person to afford an efficiency apartment with private kitchen and bath. Thus, for present purposes, Quality Standard C is an appropriate test, under which units lacking these features fail.

Table 8 compares the rent distributions of units that passed Standard C and units that failed. The distributions are summarized by three parameters: the lower quartile, the median, and the upper quartile values of gross rent. Unlike Fig. 8, this comparison suggests that units of better quality are more expensive--even though the distributions of rents for passing and failing units overlap considerably. For example, the lower quartile rent for two-bedroom "standard" units is 104 percent of the corresponding value for substandard units; the median and upper quartile values for standard units are respectively 105 and 117 percent of the corresponding values for substandard units.

Table 7

QUALITY DISTRIBUTION OF UNSUBSIDIZED RENTAL HOUSING UNITS, BY SIZE OF UNIT: SITE II, 1974

Number of Bedrooms[a]	Number of Units	Percentage Distribution by Quality (Standard C)		
		Pass	Fail	Total
0	753	45.1	54.9	100.0
1	5,705	66.4	33.6	100.0
2	8,117	76.1	23.9	100.0
3	3,614	77.1	22.9	100.0
4	617	66.3	33.7	100.0
All units[b]	19,037	71.4	28.6	100.0

SOURCE: Tabulations by HASE staff of data from the Site II screening survey.

[a]Excludes unventilated bedrooms.

[b]Includes 183 units with five or more bedrooms and 47 units with unknown bedroom counts.

Table 8

RENT DISTRIBUTIONS FOR UNSUBSIDIZED RENTAL UNITS PASSING AND FAILING QUALITY STANDARD C: SITE II, 1974

Number of Bedrooms[a]	Monthly Gross Rent ($)					
	Lower Quartile		Median		Upper Quartile	
	Pass	Fail	Pass	Fail	Pass	Fail
0	87	56	116	94	149	134
1	100	91	118	115	148	142
2	119	114	144	137	194	166
3	144	119	171	152	198	168
4	140	115	181	159	230	175
All units[b]	111	100	141	128	180	155

SOURCE: Tabulations by HASE staff of data from the Site II screening survey.

[a]Excludes unventilated bedrooms.

[b]Includes 183 units with five or more bedrooms and 47 units with unknown bedroom counts.

The series of approximations in Table 9 lead in the last column to our recommended schedule of values for R^*, beginning with the specification of lower and upper bounds for R^* for each size of unit ("first approximation"). These bounds, taken from Table 8, are the lower quartile and median gross rents for units that pass Quality Standard C. In other words, we judge that housing allowances should at least enable an assisted family to choose from the lowest-priced fourth of all existing certifiable units and that the program need not extend that choice above the lowest-priced half of all such units.

Naturally, setting the limits exactly at the quartile and median values is an arbitrary decision; however, these limits seem to us reasonably consistent with program purposes. We doubt that very many readers would argue for extending the limits either up or down.

We first considered using the average of these two values as the second approximation; the averages range from $102 for zero-bedroom units to $160 for four-bedroom units. However, an inspection of the neighborhoods and housing in Site II by one of the authors convinced us that rents there reflect great uncertainties about the future of neighborhoods comprising about half of South Bend. It does not appear that current market rents in these neighborhoods will sustain capital values over time; yet the housing there is generally serviceable or could be made so by modest investments in repairs or modernization. An R^* schedule that is generous relative to current rents and values might encourage housing improvement and stability of tenure.

Accordingly, we took as a second approximation the median value for *all* units, believing this to be a politically significant boundary for a program of this type. For units with one and two bedrooms (the most common sizes), the median rents for all units and for all standard units are nearly identical. For all other sizes, the median for all units is significantly lower than the median for all standard units.

Nearly all other data that we have reviewed indicate that the marginal cost of extra rooms should decline steadily. We therefore think that the second approximation should be smoothed and the values rounded. The recommended schedule of values for R^* shown in the last

column of the table reflects both these operations.* This schedule was approved by HUD in December 1974.

In Table 10, our proposed schedule of values for R^* in Site II is compared with other measures of housing cost. For each size of unit, our schedule is close to the median gross rent in St. Joseph County for unsubsidized rental units, differing at most by $8 per month. It is equally close to the current schedule of Sec. 23 rents for South Bend. For units with zero or one bedroom, our proposed values for Site II are identical to those approved for Site I a year earlier; for larger units, the proposed Site II values are distinctly lower than those for Site I, with a maximum difference of $20 for four-bedroom units.

There is, of course, no programmatic reason why schedules of values for R^* should be the same in our two sites; each schedule is intended to reflect housing costs on the local market. Although it is true that the Site I method for determining these values was not strictly followed in Site II, this was because of market differences between the two sites that rendered the Site I method inadequate. We should also note that the Site I schedule is no longer well attuned to market conditions there; we judge that market rents in Brown County have increased by 8 to 10 percent since we collected the data on which Site I values are based.

Given the lack of rigor in the process by which we derived our proposed values for R^* in Site II, it is particularly important that the schedule be judged by its programmatic consequences. In the

*Clearly, the data do not lead rigorously to this schedule, which emphasizes regularity in the relationships between values for different sizes of unit at the expense of regularity in the relationship to characteristic market rents for different sizes of unit. As noted in the Preface, the schedule shown here was devised from preliminary data which posed less conflict between these two desirable kinds of regularity. The data as presented here led us to suggest an alternative schedule to HUD, with slightly higher values for units with zero, three, and four bedrooms, and a slightly lower value for units with one bedroom. However, given that the differences were small and the element of judgment was in any case large, we concurred in HUD's decision to stay with the preliminary recommendations.

Table 9

PROPOSED VALUES FOR R^*, BY SIZE OF UNIT: SITE II, 1974

Number of Bedrooms	Monthly Amount ($)			
	First Approximation		Second Approximation	R^* (Proposed Values)
	Lower Bound	Upper Bound		
0	87	116	106	100
1	100	118	117	125
2	119	144	142	145
3	144	171	164	160
4	140	181	172	170

SOURCE: Tables 4 and 8, and calculations by HASE staff.

Table 10

COMPARISON OF APPROVED VALUES FOR R^* WITH OTHER MEASURES OF HOUSING COST: SITE II, 1974

Number of Bedrooms	Monthly Amount ($)			
	Site II			Site I R^* (Approved)[d]
	R^* (Approved)[a]	Median Rent, All Units[b]	Sec. 23 Schedule[c]	
0	100	106	107	100
1	125	117	121	125
2	145	142	142	155
3	160	164	163	170
4	170	172	178	190

SOURCE: Table 4, Table 9, Chicago Regional Office of HUD, and *HAO Handbook* for Site I.

[a]Approved by HUD for South Bend, Indiana, in November 1974.

[b]All unsubsidized rental units in St. Joseph County, third quarter, 1974.

[c]Schedule currently in effect for South Bend, adopted in 1973.

[d]Schedule approved by HUD for Brown County, Wisconsin, based on market data for September 1973.

following section, we examine the implications of the schedule for the size of the allowance program, its cost, and the ability of the housing market to supply certifiable units of appropriate sizes to allowance recipients.

VII. FEASIBILITY TESTS

The values of R^* that are adopted for the allowance program in Site II will affect the program in a number of ways. They directly determine income limits for enrollment in the program and, for those enrolled, the level of benefits to which they are entitled. These factors in turn will affect the size and cost of the program, the first by delimiting the eligible population and the second by providing a greater or lesser incentive to participate. The values of R^*, together with HAO standards of housing quality and space requirements, also determine the ease with which program participants can find certifiable housing, since the amount they can afford to pay increases, dollar for dollar, with R^*. Finally, the size of the program and its benefit levels jointly determine how much incentive there is for housing suppliers to improve existing dwellings to certification standards.

In this section, we explore the consequences of our proposed schedule of values for R^*, to help the reader judge whether these values are appropriate in the light of program purposes, available program resources, and current market conditions in Site II.

INCOME LIMITS FOR PROGRAM PARTICIPATION

Under program rules, a household will be eligible for assistance if its annual income (as defined for program purposes) is no more than four times the annualized value of R^* for households of that size. This is also the level of income (Y) at which allowance entitlement (A) falls to zero under the formula

$$A = R^* - .25Y. \tag{1}$$

However, a household will not be enrolled if its annual allowance entitlement under this formula is less than $120, so the income ceiling for enrollment is

$$Y_{max} = 4(R^* - \$120). \tag{2}$$

Table 11 shows the maximum incomes for enrollment by size of household, based on Eq. (2) and the schedule of values for R^* approved by HUD. Incomes are shown in two forms: the adjusted gross income, i.e., the amount remaining after various exclusions and deductions, which depend on the specific characteristics of the household (such as age of head, number of employed persons, number of dependents, value of assets that yield no cash return, and unusual medical or child-care expenses); and the unadjusted gross income that typically corresponds to the adjusted value.

Although the unadjusted figures are exact only for households that conform to the specifications given in Note *b* of the table, they do provide a link to general information about incomes as usually reported in the census and elsewhere. The unadjusted income limits range from $4,800 for one person to nearly $10,000 for eight persons. Even the latter figure is well below the median income for all households in St. Joseph County (now about $12,000).

PROGRAM SIZE AND COST

The experimental housing allowance program is presently authorized to operate only in the city of South Bend. However, its funding under an Annual Contributions Contract (ACC) reflects the expectation that the remainder of the county will participate at a later date. Consequently, we have prepared estimates of program size and cost both for St. Joseph County and for the city of South Bend.

To make these estimates, we applied program standards to each household that reported the necessary information on the screening survey, thus determining whether that household was eligible to enroll; if so, we computed its allowance entitlement. We were able to determine eligibility for each of 5,234 household records; of these, 1,638 met program requirements for enrollment and 3,596 did not. Each record for an eligible household was multiplied by the inverse of its sampling rate (adjusted for nonresponse) to obtain an estimate of the number of such households in the population. The estimates were then tabulated.

Table 11

INCOME LIMITS FOR ENROLLMENT IN THE HOUSING ALLOWANCE PROGRAM, BY SIZE OF HOUSEHOLD: SITE II, 1974

Number of Persons	Proposed Values for R^* ($)		Annual Gross Income Limit for Enrollment ($)	
	Monthly	Annual	Adjusted[a]	Unadjusted[b]
1	100	1,200	4,320	4,800
2	125	1,500	5,520	5,810
3	145	1,740	6,480	7,137
4	145	1,740	6,480	7,453
5	160	1,920	7,200	8,526
6	160	1,920	7,200	8,842
7	170	2,040	7,680	9,663
8	170	2,040	7,680	9,979

SOURCE: Table 9 and computations by HASE staff.

[a]All cash income and imputed income from assets, after exclusions and deductions provided for by program rules.

[b]Estimated gross income corresponding to adjusted gross for a typical household of that size. Among single persons, only those over 61 years of age are eligible. Households of two or more persons are assumed to be headed by a married couple, both under 62 years of age; it is assumed that there is no more than one employed household member; the other household members are dependents.

Table 12 shows the results for St. Joseph County. Under the adjusted gross income limits specified in Table 11, we estimate that 17,624 households would be eligible to enroll in the program if it operated countywide. Three-fifths of these are homeowners.

Experience in other federal transfer programs indicates that a substantial fraction of those eligible for benefits do not apply. As yet, we have no solid basis for estimating participation rates for the experimental allowance program; the best we can do is to apply income-specific participation rates based on experience in other open-enrollment programs--federal Old Age Assistance for elderly single persons and Aid for Dependent Children for households of two or more persons. These rates decline as income rates.*

On this basis, we estimate that about 66 percent of the eligible homeowners and 75 percent of the eligible renters are likely to participate, for a total of nearly 12,200 households. If we further assume that no one now living in a federally subsidized housing unit would move into unsubsidized housing in order to participate in the allowance program, the number of participating renters would drop to about 4,000 and the total would drop to about 10,900.**

For those assumed in Table 12 to participate in a countywide program, the average annual allowance entitlement would be $685 for homeowners and $851 for renters.*** Annual allowance payments to the 12,200 participating households would total about $9.2 million; excluding those now in subsidized housing would reduce this figure to about $8.1 million.

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*See Barbara M. Woodfill, Tiina Repnau, and Ira S. Lowry, *Estimates of Eligibility, Enrollment, and Allowance Payments in Green Bay and Saginaw: 1974 and 1979*, The Rand Corporation, WN-8439-HUD, September 1973, Table 9 and associated text.

**We estimate that about 40 percent of the renter households in federally subsidized units would be income-eligible for the housing allowance program.

***Experience with the first 957 households receiving allowance payments in Site I, whose R^* schedule is similar to the one proposed for Site II, indicates an average allowance entitlement of $640 for homeowners and $760 for renters. Our prior estimates from screening survey data for Site I were higher, $672 and $860--about the same as those reported above for Site II.

Table 12

ESTIMATES OF PROGRAM SIZE AND ALLOWANCE COSTS IF ENROLLMENT WERE OPEN TO ALL RESIDENTS OF ST. JOSEPH COUNTY IN 1974

Item	Household Size							Total
	1[a]	2	3	4	5	6	7+	
Eligible households:								
Homeowners	1,850	5,148	1,174	747	405	612	711	10,647
Renters	1,706	1,772	1,071	1,299	488	218	423	6,977
Total	3,556	6,920	2,245	2,046	893	830	1,134	17,624
Participating households:								
Homeowners	1,923	3,265	704	453	149	236	244	6,974
Renters	1,343	1,400	766	817	362	170	362	5,220
Total	3,266	4,665	1,470	1,270	511	406	606	12,194
Average allowance ($):								
Homeowners	543	608	962	1,071	783	1,041	747	685
Renters	700	789	890	795	1,250	1,212	1,214	851
Total	606	668	925	892	1,093	1,101	1,038	758
Total payments ($000):								
Homeowners	1,044	1,985	677	485	117	246	182	4,736
Renters	940	1,105	682	650	453	206	440	4,476
Total	1,984	3,090	1,359	1,135	570	452	622	9,212

SOURCE: Tabulations by HASE staff of data from the Site II screening survey.

NOTE: Estimates of the numbers of eligible and participating households are based on data that include occupants of about 3,400 federally subsidized housing units. Even if income-eligible, such households could not receive housing allowances unless they moved to unsubsidized units.

[a]Excludes single persons under 62 years of age, who are ineligible unless displaced or handicapped. Also excludes lodgers in private homes, some of whom may be eligible but whose ages and incomes were not reported.

These estimates may be compared with the limits on program size and cost that are established by the ACC for Site II. That contract permits assistance to a maximum of 9,638 households and limits annual program costs (allowance payments plus administrative expenses) to $17.5 million. Thus, the ACC would come close to supporting a county-wide program with open enrollment, unless participation rates exceeded our current estimates.

Table 13 reports on the situation for South Bend, the allowance program's present jurisdiction. We estimate that the present population of South Bend includes about 9,400 eligible households, excluding those now living in subsidized housing. About 62 percent of those eligible are homeowners; about 24 percent are single elderly persons and another 37 percent are two-person households (most of which are headed by an elderly person). Eligible households account for about 23 percent of all households in the city.

Applying the same participation rates as before, we estimate that about 6,300 households in South Bend would actually enroll in the program. Among these, the proportions of homeowners and renters, small and large households, etc., would be about the same among all eligible households. The estimated number of enrollees amounts to about 15 percent of all households in the city.

With an average allowance entitlement of $681 for homeowners and $831 for renters, total payments to the 6,300 households would amount to nearly $4.8 million annually. About 59 percent of the total would go to households consisting of either one or two persons; such households account for two-thirds of all those participating. Sixty-nine percent of these small households are homeowners.

If we have correctly estimated the pattern of participation, it seems clear that a housing allowance program in South Bend (as in Site I) will mostly serve small households headed by elderly persons, usually homeowners. Their benefits will be modest, averaging about $60 per month under our proposed schedule of values for R^*. But the program will also serve over 2,000 larger households, 60 percent of which are renters. Benefits for households in this group would average about $90 per month under our proposal.

Table 13

ESTIMATES OF PROGRAM SIZE AND ALLOWANCE COSTS IF ENROLLMENT WERE LIMITED TO RESIDENTS OF UNSUBSIDIZED HOUSING IN SOUTH BEND IN 1974

Item	Household Size							Total
	1[a]	2	3	4	5	6	7+	
Eligible households:								
Homeowners	1,547	2,587	500	193	341	508	168	5,844
Renters	675	932	577	955	158	105	141	3,543
Total	2,222	3,519	1,077	1,148	499	613	309	9,387
Participating households:								
Homeowners	1,206	1,661	347	125	135	167	84	3,725
Renters	528	751	418	566	133	64	110	2,570
Total	1,734	2,412	765	691	268	231	194	6,295
Average allowance ($):								
Homeowners	568	614	1,010	981	829	953	986	681
Renters	723	799	962	757	972	1,055	1,276	831
Total	614	676	985	796	893	973	1,162	743
Total payments ($000):								
Homeowners	685	1,020	351	123	112	159	83	2,533
Renters	382	760	402	429	129	68	141	2,311
Total	1,067	1,780	753	552	241	227	224	4,844

SOURCE: Tabulations by HASE staff of data from the Site II screening survey.

[a]Excludes single persons under 62 years of age, who are ineligible unless displaced or handicapped. Also excludes lodgers in private homes, some of whom may be eligible but whose ages and incomes were not reported.

CERTIFIABILITY OF HOUSING OCCUPIED BY ELIGIBLES

An enrollee in the housing allowance program may wish to stay in the housing unit in which he lives at the time of enrollment, or he may wish to move immediately to a different unit. In either case, the housing unit must be certified by the HAO before allowance payments can commence. This certification entails judgments about the general quality of the unit and its appropriateness for that particular household.

One test of the problems likely to be encountered by enrollees is the frequency with which their preenrollment housing is judged unsuitable by the HAO. In such cases, the (renter) enrollee either must persuade his landlord to make the necessary repairs or improvements, or he must locate a unit that meets HAO standards.

If all the allowance-eligible population already lived in certifiable housing, this might imply that certification standards were lax, or that housing allowances were not needed to achieve the program's housing objectives, or that the program had somehow managed to exclude those actually in need of help. On the other hand, if all the allowance-eligible population lived in uncertifiable housing, the program might exert extreme pressure on the housing market's ability to provide necessary housing improvements.

The probable (and preferable) situation lies between these extremes. In terms of experimental purposes, it is important that the allowance program exert considerable pressure for housing improvement, but not so much as to discourage program participation or to cause rapid price inflation.

Table 14 summarizes screening survey evidence bearing on this issue. The top half of the table deals with renter households eligible for allowances; for purposes of comparison, corresponding data for ineligible households are presented in the bottom half of the table. Two aspects of housing condition bearing on certifiability are considered: general housing quality, as measured by Standard C; and overcrowding, as measured by HAO occupancy standards.

The housing of just over 35 percent of all the eligible renter households living in unsubsidized units in St. Joseph County was

Table 14

DISTRIBUTION OF ELIGIBLE AND INELIGIBLE RENTER HOUSEHOLDS IN UNSUBSIDIZED UNITS BY HOUSING CONDITION AND SIZE OF HOUSEHOLD: SITE II, 1974

Housing Condition, by Program Status	Percentage Distribution by Number of Persons							All Household Sizes
	1[a]	2	3	4	5	6	7+	
Eligible Households								
In substandard units:	57.6	28.5	25.8	33.1	32.8	22.8	27.7	35.5
Overcrowded	*0.0*	*0.4*	*5.8*	*3.8*	*21.4*	*12.1*	*18.3*	*4.4*
Not overcrowded	*57.6*	*28.1*	*20.0*	*29.3*	*11.4*	*10.7*	*9.4*	*31.1*
In standard units:	42.4	71.5	74.2	66.9	67.2	77.2	72.3	64.5
Overcrowded	*0.0*	*0.0*	*14.8*	*2.3*	*13.9*	*39.7*	*28.2*	*6.4*
Not overcrowded	*42.4*	*71.5*	*59.3*	*64.6*	*53.2*	*37.4*	*44.1*	*58.1*
Totals	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Ineligible Households								
In substandard units:	32.7	26.1	29.4	20.6	14.2	24.7	39.9	28.4
Overcrowded	*0.0*	*0.0*	*1.3*	*0.9*	*4.5*	*7.9*	*30.9*	*0.8*
Not overcrowded	*32.7*	*26.1*	*28.1*	*19.7*	*9.7*	*16.8*	*9.0*	*27.6*
In standard units:	67.3	73.9	70.5	79.4	85.8	75.3	60.1	71.6
Overcrowded	*0.0*	*0.0*	*5.6*	*2.1*	*24.5*	*4.9*	*31.1*	*2.3*
Not overcrowded	*67.3*	*73.9*	*64.9*	*77.3*	*61.2*	*70.4*	*29.0*	*69.3*
Totals	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

SOURCE: Tabulations by HASE staff of data from the Site II screening survey.
NOTE: Percentages may not add exactly to 100.0 because of rounding.
[a]Single persons under 62 years of age are categorically excluded from program participation.

substandard at the time of our screening survey, with considerable variation by size of household. Eligible one-person households were by far the worst housed, 58 percent living in units that failed Quality Standard C; however, some of these units may be rooming-house units that actually would be certifiable by the HAO. Among eligible households of other sizes, the proportions in substandard units varied from 23 to 33 percent.

Because HAO occupancy standards for households of one or two persons are minimal, overcrowding was not officially a problem for them. For larger households, it frequently was a problem, even for those living in standard units. About 11 percent of all eligible households were overcrowded by HAO standards.

Altogether, about 42 percent of all eligible renter households in St. Joseph County lived in units that were substandard, overcrowded, or both. This figure is our best a priori estimate of the proportion of renter enrollees who would have to take some action (either arrange for housing improvements or move) before their allowance payments could begin.

Although the proportion of ineligible households living in substandard housing (28 percent) is well below the corresponding figure for eligible households, it is by no means insignificant. Overcrowding among ineligibles is also generally less of a problem than among eligibles. Presumably, these households could all afford units of adequate quality but do not choose to spend enough for this purpose; or else they are restricted in their housing choices by residential segregation of blacks and whites.

While the significant frequency with which ineligible households occupy substandard units raises reasonable questions about the reliability of the screening survey's tests of housing quality, it must also be recognized that a consumer's housing priorities are likely to differ from those underlying public policy. (If this were not so, the argument for housing allowances as opposed to income supplements would be very weak.)

In our judgment, the conclusion that over two-fifths of all eligible renter households would have to improve their housing before

they could receive allowance payments is evidence that the allowance program, if it works at all, will exert considerable pressure on the rental housing market for improvement and rehabilitation.

RENT EXPENDITURES BY ELIGIBLE HOUSEHOLDS

A fundamental issue is whether program participants are likely to be able to obtain certifiable housing units for rents in the vicinity of R^*. Their ability to do so is a crucial premise of the experimental design. Over time, the answer will of course depend on how the market responds to the increased rent-paying ability of program participants. But some notion of the scale of the required market adjustments can be obtained from an examination of preprogram rent expenditures by eligible households.

Table 15 presents evidence on this point from the screener survey. The column headings indicate the R^* values proposed for each size of household. The entries in the body of the table indicate the proportions of renter households that pay gross rents well below the relevant value of R^*, in the vicinity of R^*, and well above R^*. These distributions are shown separately for eligible and ineligible households; and within these categories, separately for those occupying standard and substandard housing.

As the table indicates, nearly 60 percent of the eligible households living in substandard units pay rents that are well below our proposed values of R^*, and only 22 percent pay rents that are well above these values. For eligible households living in standard units, the rent distribution is more nearly centered on R^*. For both substandard and standard housing, the relation of current rent expenditures to the proposed values of R^* differs erratically by size of household, the exceptional cases being two persons in substandard units and three persons in standard units.

Whether they live in substandard or standard units, ineligible households tend to spend more for rent than eligible households. This finding is expectable, since ineligible households are almost by definition more prosperous than eligible households.

Table 15

DISTRIBUTION OF ELIGIBLE AND INELIGIBLE RENTER HOUSEHOLDS IN UNSUBSIDIZED UNITS BY HOUSING QUALITY AND GROSS RENT EXPENDITURES AND SIZE OF HOUSEHOLD: SITE II, 1974

Gross Rent Expenditures, by Program Status and Housing Quality[a]	Percentage Distribution by Number of Persons and R^*							All Household Sizes
	1[b] $100	2 $125	3 $155	4 $145	5 $160	6 $160	7+ $170	
Eligible Households								
In substandard units:								
Less than R^*	62.8	42.5	60.3	69.0	61.4	60.9	56.2	59.4
Approximately R^*	21.7	32.7	21.6	5.8	34.2	8.6	3.4	19.0
More than R^*	15.4	24.8	18.1	25.2	4.4	30.6	40.4	21.6
Totals	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
In standard units:								
Less than R^*	38.5	32.9	64.4	24.5	24.3	25.5	53.7	39.8
Approximately R^*	26.4	39.0	23.0	43.0	51.7	69.4	8.5	34.9
More than R^*	35.1	28.1	12.5	32.6	24.1	5.1	37.8	25.3
Totals	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Ineligible Households								
In substandard units:								
Less than R^*	14.9	22.2	44.8	29.7	33.7	76.7	65.8	25.6
Approximately R^*	26.8	53.7	38.1	48.4	43.2	0.0	20.6	38.2
More than R^*	58.3	24.1	17.2	21.9	23.1	23.3	13.6	36.2
Totals	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
In standard units:								
Less than R^*	6.5	21.1	24.6	13.6	45.0	23.6	14.5	16.4
Approximately R^*	31.4	22.0	29.2	12.8	32.9	27.6	31.2	25.3
More than R^*	62.1	56.9	46.2	73.7	22.1	48.8	54.3	58.3
Totals	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

SOURCE: Tabulations by HASE staff of data from the Site II screening survey.
NOTE: Percentages may not add exactly to 100.0 because of rounding.

[a]Quality of the housing unit does not reflect its current occupancy--i.e., a standard unit may be overcrowded. See Table 14 for detail on crowding and quality.

[b]Single persons under 62 years of age are categorically excluded from program participation.

When the data in Table 15 are compared with corresponding data for Site I, there is a striking resemblance between the situations of eligible households in the two cases and a striking difference in the situations of ineligible households.* In Site I, 66 percent of the eligible renter households in substandard units and 35 percent of those in standard units spent substantially less than R^*, very close to the proportions shown in Table 15 for Site II. While ineligible households in Site I generally spent more than eligible households, for both substandard and standard housing, the differences are much greater in Site II. For example, in Site I, 55 percent of the ineligible renters in substandard housing spent less than R^*, as compared with 66 percent of the eligible renters. In Site II, the corresponding figures are 26 and 59 percent.

We judge that the ineligible households in Site II are paying extra for neighborhood characteristics rather than for housing characteristics; but we cannot confirm that judgment from presently available data. Neighborhood characteristics aside, however, the data for eligible households in Table 15 confirm that standard housing is readily available at or below R^* for each size of household.

The possible exception is housing for single renters.** Among those eligible for assistance and living in standard units, 35 percent spend substantially more than R^*. Among ineligible single renters living in standard units, fewer than 7 percent pay substantially less than R^*. Probably most of these people, eligible and ineligible, occupy apartments with at least one bedroom--in other words, pay for more space than R^* is designed to support.

It remains our judgment that the standard cost of adequate housing for eligible (i.e., elderly) single persons ought to enable them to afford a one-bedroom apartment or house. The data in Table 15 suggest that they will seek such a unit in any case, and that an allowance

*See Lowry, Woodfill, and Repnau, *Program Standards for Site I*, Table 17, for full details of the differences summarized below.

**Another possible exception is housing for households of seven or more persons; however, our estimates for these large households are based on very few cases and are thus unreliable.

based on an R^* of $100 will be generally inadequate to support their housing choices without requiring them to spend more than a fourth of their nonallowance income for housing.

AVAILABILITY OF RENTAL HOUSING UNITS

How easily could eligible households find certifiable units at rents of R^* or less? If a housing unit is uncertifiable because of quality deficiencies, a landlord can participate in the allowance-stimulated market only by making the necessary repairs or improvements or by providing the required services. If a housing unit is too small, he can wait for a smaller family of program participants or rent the unit to nonparticipants. However, the HAO certification standards will affect the distribution of housing demand by size of unit. Suppose there is excess demand for units of n rooms and excess supply of units with $2n$ rooms. One option to the owner of a building containing units with $2n$ rooms is to subdivide and remodel his units. With opposite demand-supply relationships, he may have the option of merging existing units to create larger ones.

Altering the sizes of housing units in these ways is quite common; but if the subdivided or merged units must also meet HAO quality standards, the alterations may be fairly expensive. As part of the experiment, we are interested to discover how much flexibility there is in the housing stock when effective demand is available to stimulate the changes.

On the other hand, the allowance program is so structured that participants unable to find units of minimum certifiable size may instead choose larger units because they are available, even though they rent for more than R^*. As Table 14 shows, most eligible households now live in standard units of adequate or more-than-adequate size; and as Table 15 shows, more than a fifth of all eligible households pay rents that are substantially above R^*. With housing assistance, we assume that more households would follow this course.

Table 16 indicates the implied rearrangements of households and housing units. There we estimate the current surplus or deficit of unsubsidized rental housing of each size, relative to the

Table 16

INDICATORS OF HOUSING SURPLUS OR DEFICIT IN UNSUBSIDIZED RENTAL UNITS UNDER THE HOUSING ALLOWANCE PROGRAM: SITE II, 1974

Type of Households or Housing Units	Number of Households or Housing Units, by Occupancy Configuration					Total
	1 Person 0 Bdrms	2 Persons 1 Bdrm	3-4 Persons 2 Bdrms	5-6 Persons 3 Bdrms	7+ Persons 4+ Bdrms	
Eligible renter households	1,148	1,298	2,028	520	380	5,374
Units renting for R^* or less:						
Available units	509	3,427	3,129	1,961	360	9,386
Standard units	145	2,213	2,180	764	174	5,476
Housing surplus (deficit):						
Available units below R^*	(639)	2,129	1,101	1,441	(20)	4,012
Standard units below R^*	(1,003)	915	152	244	(206)	102
Ineligible renter households	3,438	3,046	3,217	384	79	10,164
Units renting for more than R^*:						
Available units	149	1,623	3,941	1,518	365	7,596
Standard units	23	1,060	3,176	1,349	260	5,868
Housing surplus (deficit):						
Available units above R^*	(3,289)	(1,423)	724	1,134	286	(2,568)
Standard units above R^*	(3,415)	(1,986)	(41)	965	181	(4,296)
All renter households	4,586	4,344	5,245	904	459	15,538
All rental housing units:						
Available units	658	5,050	7,070	3,479	725	16,982
Standard units	169	3,272	5,356	2,113	434	11,344
Housing surplus (deficit):						
Available units	(3,928)	(706)	1,825	2,575	266	1,444
Standard units	(4,417)	(1,072)	111	1,209	(25)	(4,194)

SOURCE: Tabulations by HASE staff of data from the Site II screening survey.

requirements of all eligible renter households presently living in unsubsidized units. Because the estimates rest on a number of crude assumptions, fine detail should not be taken too seriously. The conclusions, however, transcend such details.

The upper section of the table indicates that St. Joseph County's unsubsidized housing stock does not now contain enough zero-bedroom units renting for R^* or less to meet the needs of all one-person renter households who are eligible to participate in the program.* They exceed by 1,003 the number of standard zero-bedroom units available to them. If all substandard units of this size were upgraded to acceptable quality, the deficit would be 639. It could be partially filled by placing some small households in larger units, but in doing so at least some assisted households would have to pay more than the scheduled R^*.

There also is a deficit of standard units with four or more bedrooms, which are required under HAO certification standards for households with seven or more persons, although correction of quality deficiencies would almost eliminate the deficit. For households of all other sizes, there is a surplus of certifiable housing at rents below the scheduled values of R^*.

In the middle section of Table 16, we compare the stock of unsubsidized units renting for more than R^* with the number of ineligible renter households. Except for our judgment that ineligible households could afford to spend more than R^*, there is no compelling reason for us to confine their choices to this sector of the housing stock; about 30 percent of such households now spend less. It is necessary to note, however, that there are nearly 1,300 single persons who are income-eligible but who cannot receive allowances because they are under 62 years of age; they are included in this portion of the table.

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*Note that this estimate does not include single persons who are presently lodgers in private homes or rooming houses, nor are their quarters counted as housing units.

The shortage of small units is even greater here than in the lower-rent sector. As compared with 6,484 ineligible one- and two-person households, there are only 1,772 housing units of one or no bedrooms renting for more than R^*; of these units, only 60 percent are standard. For small households who want and can afford more space, the scarcity of small units is not serious; however, as we stated above, nearly 1,300 low-income single persons have been categorically excluded from the allowance program, and they may find it difficult to pay for small units of standard quality, let alone larger units.

The figures in the lower section of Table 16 confirm the scarcity of small units in St. Joseph County at all rent levels. Altogether there are about 8,900 one- or two-person renter households not residing in subsidized units, and only 5,700 unsubsidized, small units to accommodate them. Of these units, 40 percent or 2,270 are substandard. The same conclusions hold if we perform these feasibility tests for the city of South Bend alone.

This pattern of surplus and deficit was found also in Site I and our conclusion there also applies here: Events in the market for small rental housing units will critically test the effectiveness of the experimental allowance program. If the market is able to supply small standard units in the vicinity of R^*, the program will succeed, almost regardless of events in other parts of the market.

Appendix A

PROGRAM STANDARDS FOR OWNER-OCCUPANTS

Although the experimental allowance program is designed to include assistance for homeowners as well as for renters, we have based our housing cost standards entirely on data for rental housing. Our exclusive reliance on such data reflects their ready availability and, we judge, the equivalence of the real costs of housing services for renters and owners. Especially because we do not think that the experimental program should favor one form of tenure over another, we propose to apply these standards to renters and owners alike. Thus, eligibility and allowance entitlement for homeowners would reflect the schedule of values for R^* presented in Table 9.

In Sec. VII, we reported various tests of the probable effects our program standards will have on the rental housing market and on program participants who are renters. Data from the screening survey permit us to perform only some of these tests for homeowners. We cannot classify the inventory of owner-occupied homes, as we can rental housing, according to monthly costs (e.g., above or below R^*); our screener records contain only estimates by owner-occupants of the market values of their homes. Nor can we classify owners, as we can renters, according to monthly housing expenditures. So a critical factor in most of the comparisons made in Sec. VII is missing.

Even if monthly homeowner costs were available, our a priori tests of potential market effects would be inconclusive. The proposed homeowner program is much smaller than the rental program--smaller, that is, in relation to the size of the homeownership market. We estimate that about 17 percent of all homeowners in St. Joseph County would be eligible for assistance under our proposed program standards, vs. 36 percent of all renters; and that 11 percent of all homeowners would participate, vs. 27 percent of all renters.

Moreover, the homeowner assistance program is unlikely to stimulate as much market activity as the rental program. For eligible renters, housing improvements can be sought as readily by moving as by negotiating with the landlord for repairs and other services. This fact is likely to influence both the choices of tenants and the responses of landlords. For eligible homeowners, moving is a much less accessible alternative, at least in the short run. Those whose homes are below standard will usually have to improve them if they want to participate. Such home improvement activities may increase the values of these homes but will have no direct impact on other homeowner properties.

It is useful, however, to estimate how many eligible homeowners would be able to obtain certification of their homes without having to undertake major repairs or remodeling. First, we look at the characteristics of all owned units.

Just under 10 percent of all unsubsidized homeowners in St. Joseph County have units that fail Quality Standard C. The principal causes of failure are the absence of an electrical switch and outlet in all habitable rooms or in at least one bathroom (each failing about 3 percent of the units) and the lack of heat in one or more bathrooms (less than 2 percent failing). None of the other quality criteria, which are listed in Table 1, have failure rates of over one percent.

Overcrowding is not a problem. We found that less than 3 percent of owners lived in units that were too small by HAO standards, and almost all the households that failed our occupancy test had five or more persons.

Among program-eligible homeowners, 13.4 percent fail Quality Standard C. The causes of failure are the same as for all owners, but with increased frequency. The requirement of an electrical switch and outlet in at least one bathroom is failed more than twice as often (7.6 versus 2.8 percent); absence of these in all habitable rooms is about as frequent in units of program-eligible households as in all owned units. The cost of installing a switch and/or outlet could be held down if local codes permit a conduit

and wiring to be run outside the wall; if the installation must be entirely within the wall, the costs mount. More expensive to install would be permanent heating facilities in at least one bathroom (which 2 percent of the units lack) and in the living and dining rooms and kitchen (one percent without).

Virtually none of those households whose units fail the quality standards also fail the occupancy standards. About 3 percent of eligible owners who live in otherwise standard units might be required to add extra rooms. It is possible, however, that rooms not counted in our survey as bedrooms (e.g., a separate dining room) might qualify as bedrooms in the HAO inspection, thereby removing the need for expensive remodeling. The HAO only determines whether or not a room is suitable as a sleeping room and does not consider its actual use in making its occupancy assessment.

Appendix B
SUPPLEMENTARY STATISTICAL TABLES

Table B-1 presents a comparison of median gross rents for unsubsidized rental units in South Bend, Mishawaka, and the remainder of St. Joseph County. The underlying gross rent distributions are given in Tables B-2, B-3 and B-4.

Estimates of program size and allowance costs for Mishawaka and for St. Joseph County excluding South Bend and Mishawaka are shown in Tables B-5 and B-6.

Table B-1

MEDIAN GROSS RENTS OF UNSUBSIDIZED RENTAL UNITS, BY NUMBER OF BEDROOMS: COMPONENT AREAS OF SITE II, 1974

Number of Bedrooms	Monthly Amount ($)			
	South Bend	Mishawaka	Remainder of St. Joseph County	Total, St. Joseph County
0	106	112	93	106
1	119	109	122	117
2	148	150	126	142
3	173	152	159	164
4	169	151	173	172
All units	140	129	140	139

SOURCE: Tabulations by HASE staff of data from the Site II screening survey.

Table B-2

DISTRIBUTION OF UNSUBSIDIZED RENTAL UNITS BY MONTHLY GROSS RENT AND NUMBER OF BEDROOMS: SOUTH BEND, 1974

Monthly Gross Rent ($)[a]	Percentage Distribution by Number of Bedrooms[b]					All Units[c]
	0	1	2	3	4	
Under 50	5.9	0.4	2.5	--	--	1.4
50-59	13.6	1.5	--	--	--	1.1
60-69	6.5	3.3	0.8	1.0	--	2.6
70-79	3.3	5.7	1.6	0.1	8.9	2.9
80-89	10.3	8.2	1.9	0.5	7.6	4.2
90-99	6.5	7.7	3.1	1.3	1.4	4.4
100-109	5.8	14.9	7.3	1.9	1.4	8.5
110-119	1.6	8.5	7.2	4.8	6.8	7.0
120-129	1.7	9.8	8.2	5.7	7.4	7.9
130-139	23.8	6.6	10.6	7.6	2.0	9.1
140-149	5.2	9.6	8.5	11.6	6.0	9.0
150-159	0.9	4.2	6.3	6.5	5.7	5.3
160-169	10.7	3.7	3.9	7.4	3.2	4.7
170-179	--	7.1	2.8	4.9	1.4	4.3
180-189	--	3.3	2.8	7.0	2.4	3.5
190-199	--	3.2	2.5	12.3	6.9	4.4
200-209	4.2	1.4	6.1	12.6	4.8	5.6
210-219	--	0.1	10.3	3.2	4.6	5.0
220-229	--	--	3.9	1.1	2.6	1.9
230-239	--	0.3	1.2	4.9	4.6	1.6
240-249	--	--	3.3	2.0	2.6	1.8
250-259	--	--	3.0	--	1.2	1.3
260 or more	--	0.3	2.1	3.6	18.4	2.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of units	619	4,150	5,438	2,255	388	13,040
Median rent ($)	106	119	148	173	169	140

SOURCE: Tabulations by HASE staff of data from the Site II screening survey.

NOTE: Percentages may not add exactly to 100.0 because of rounding.

[a]Contract rent plus an estimate by HASE staff of the average monthly cost of any utilities not included in contract rent.

[b]Excludes unventilated bedrooms.

[c]Includes 147 units with five or more bedrooms and 43 units with unknown bedroom count.

Table B-3

DISTRIBUTION OF UNSUBSIDIZED RENTAL UNITS BY MONTHLY GROSS RENT AND NUMBER OF BEDROOMS: MISHAWAKA, 1974

Monthly Gross Rent ($)[a]	Percentage Distribution by Number of Bedrooms[b]					All Units[c]
	0	1	2	3	4	
Under 50	9.5	1.3	--	--	--	0.9
50-59	--	0.8	--	--	--	0.3
60-69	--	2.2	0.9	--	--	1.2
70-79	11.0	4.0	0.4	--	--	2.3
80-89	11.1	10.9	1.7	0.8	--	5.7
90-99	11.6	9.6	2.4	0.8	--	5.5
100-109	4.7	21.3	4.3	2.7	--	11.0
110-119	7.4	10.0	7.5	25.2	4.5	11.2
120-129	25.7	14.3	12.6	5.8	--	12.5
130-139	11.0	8.0	11.1	2.8	13.5	8.5
140-149	--	4.3	8.6	9.8	17.6	6.8
150-159	9.0	3.7	22.0	8.3	20.1	11.7
160-169	--	6.7	7.3	9.2	5.8	7.0
170-179	--	1.4	5.5	9.2	14.7	4.3
180-189	--	0.4	8.5	4.2	19.2	4.4
190-199	--	0.8	4.1	10.1	4.5	3.6
200-209	--	--	0.2	2.5	--	0.5
210-219	--	0.4	2.3	3.6	--	1.6
220-229	--	--	0.3	1.1	--	0.3
230-239	--	--	--	--	--	--
240-249	--	--	--	--	--	--
250-259	--	--	--	0.6	--	0.1
260 or more	--	--	0.2	3.3	--	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of units	118	1,180	1,051	441	60	2,859
Median rent ($)	112	109	150	152	151	129

SOURCE: Tabulations by HASE staff of data from the Site II screening survey.

NOTE: Percentages may not add exactly to 100.0 because of rounding.

[a]Contract rent plus an estimate by HASE staff of the average monthly cost of any utilities not included in contract rent.

[b]Excludes unventilated bedrooms.

[c]Includes 5 units with five or more bedrooms and 4 units with unknown bedroom count.

Table B-4

DISTRIBUTION OF UNSUBSIDIZED RENTAL UNITS BY MONTHLY GROSS RENT AND NUMBER OF BEDROOMS: ST. JOSEPH COUNTY EXCLUDING SOUTH BEND AND MISHAWAKA, 1974

Monthly Gross Rent ($)[a]	Percentage Distribution by Number of Bedrooms[b]					
	0	1	2	3	4	All Units[c]
Under 50	--	0.5	--	--	--	0.1
50-59	--	1.4	0.1	0.3	--	0.3
60-69	11.2	3.8	0.2	--	--	0.6
70-79	--	2.1	7.0	0.3	--	4.0
80-89	--	7.2	1.6	0.3	--	1.8
90-99	41.5	5.7	9.9	0.7	1.3	6.6
100-109	30.9	8.2	7.7	5.9	3.8	7.0
110-119	--	17.6	12.7	3.6	--	9.8
120-129	--	13.6	17.2	3.1	3.8	11.6
130-139	--	9.9	8.8	6.0	5.9	7.9
140-149	--	10.8	14.3	2.1	6.5	9.6
150-159	16.4	3.9	7.1	29.1	6.5	13.2
160-169	--	6.3	2.8	15.4	1.3	6.8
170-179	--	5.4	1.7	8.0	55.6	7.2
180-189	--	2.6	1.5	14.0	4.9	5.5
190-199	--	1.2	2.6	2.7	5.1	2.5
200-209	--	--	1.7	0.6	--	1.1
210-219	--	--	0.8	0.3	2.9	0.6
220-229	--	--	0.5	1.4	1.3	0.9
230-239	--	--	1.4	0.3	--	0.8
240-249	--	--	0.4	1.3	--	0.6
250-259	--	--	0.2	1.9	1.1	0.7
260 or more	--	--	--	2.6	--	0.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of units	17	375	1,628	918	169	3,138
Median rent ($)	93	122	126	159	173	140

SOURCE: Tabulations by HASE staff of data from Site II screening survey.

NOTE: Percentages may not add exactly to 100.0 because of rounding.

[a]Contract rent plus an estimate by HASE staff of the average monthly cost of any utilities not included in contract rent.

[b]Excludes unventilated bedrooms.

[c]Includes 31 units with five or more bedrooms.

Table B-5

ESTIMATES OF PROGRAM SIZE AND ALLOWANCE COSTS IF ENROLLMENT WERE OPEN TO ALL RESIDENTS OF MISHAWAKA IN 1974

Item	Household Size							Total
	1[a]	2	3	4	5	6	7+	
Eligible households:								
Homeowners	439	901	255	317	10	42	0	1,964
Renters	531	298	204	113	34	11	226	1,417
Total	970	1,199	459	430	44	53	226	3,381
Participating households:								
Homeowners	303	511	150	228	4	6	0	1,202
Renters	420	220	245	83	19	5	213	1,105
Total	723	731	295	311	23	11	213	2,307
Average allowance ($):								
Homeowners	448	721	1,011	1,270	786	1,162	0	801
Renters	678	701	840	907	859	899	1,208	833
Total	583	715	927	1,172	847	1,039	1,208	816
Total Payments ($000):								
Homeowners	136	368	152	290	3	7	0	956
Renters	285	154	122	75	16	5	257	914
Total	421	522	274	365	19	12	257	1,870

SOURCE: Tabulations by HASE staff of data from the Site II screening survey.

NOTE: Estimates of the numbers of eligible and participating households are based on data that include occupants of about 1,600 federally subsidized housing units. Even if income-eligible, such households could not receive housing allowances unless they moved to unsubsidized units.

[a]Excludes single persons under 62 years of age, who are ineligible unless displaced or handicapped. Also excludes lodgers in private homes, some of whom may be eligible but whose ages and incomes were not reported.

Table B-6

ESTIMATES OF PROGRAM SIZE AND ALLOWANCE COSTS IF ENROLLMENT WERE OPEN TO ALL RESIDENTS OF ST. JOSEPH COUNTY OUTSIDE MISHAWAKA AND SOUTH BEND IN 1974

Item	Household Size							Total
	1[a]	2	3	4	5	6	7+	
Eligible households:								
Homeowners	539	1,627	403	204	84	79	498	3,434
Renters	166	218	215	167	130	39	23	958
Total	705	1,845	618	371	214	118	521	4,392
Participating households:								
Homeowners	421	950	202	82	22	53	149	1,879
Renters	127	153	151	119	109	29	11	699
Total	548	1,103	353	201	131	82	160	2,578
Average allowance ($):								
Homeowners	545	507	843	628	558	1,267	638	601
Renters	614	622	758	888	1,629	1,241	778	864
Total	559	526	805	785	1,409	1,259	647	674
Total Payments ($000):								
Homeowners	229	482	170	52	12	67	95	1,107
Renters	78	95	115	106	178	36	9	617
Total	307	577	285	158	190	103	104	1,724

SOURCE: Tabulations by HASE staff of data from the Site II screening survey.

[a]Excludes single persons under 62 years of age, who are ineligible unless displaced or handicapped. Also excludes lodgers in private homes, some of whom may be eligible but whose ages and incomes were not reported.