

RAND/N-1215-HUD

A TOPICAL GUIDE TO HASE RESEARCH

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PREFACE

This document is a topically organized guide to the research methods and findings of the Housing Assistance Supply Experiment (HASE). It was prepared specifically to assist the Brookings Institution in its evaluation of the Experimental Housing Allowance Program (EHAP), of which HASE is a part. Both EHAP and the Brookings evaluation are sponsored by the Office of Policy Development and Research, U.S. Department of Housing and Urban Development (HUD).

The author gratefully acknowledges the assistance of the HASE research staff, who reviewed each section for emphasis, accuracy, and documentation. The complete document was reviewed by C. Lance Barnett and C. Peter Rydell. The draft was typed by Gwen Shepherdson and Jan Newman. Charlotte Cox supervised production of final copy.

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SUMMARY

To evaluate HUD's Experimental Housing Allowance Program (EHAP), the Brookings Institution has commissioned a paper on each of the following topics:

- o Critique of EHAP design
- o Policy implications of EHAP
- o Participation of eligible households
- o Mobility and search behavior
- o Other household behavior
- o Housing market effects of EHAP
- o Administrative lessons from EHAP
- o A universal housing allowance program

Each paper will draw on reports and papers prepared by EHAP's several research contractors, each of whom has been responsible for a specific part of the overall EHAP research agenda. The Housing Assistance Supply Experiment, conducted by The Rand Corporation, is one element of EHAP.

Although the Supply Experiment will not be finished until 1981, it has published over 150 reports, working notes, and papers. This note assists the prospective author of each evaluative paper by summarizing the relevant features or findings of our research and citing selected documents that should be consulted for details. It also contains a topical index of HASE publications that is current through March 1979.

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## INTRODUCTION

The Experimental Housing Allowance Program (EHAP) is a large, complex social experiment with housing allowances for low-income families. Allowance programs were begun in twelve housing markets distributed across the nation for periods ranging from two to ten years, in order to learn whether or not housing allowances are a feasible and desirable instrument of federal policy; and, if so, how a permanent program should be designed.\*

EHAP has four components: the Demand Experiment, conducted by Abt Associates; the Supply Experiment, conducted by The Rand Corporation; the Administrative Agency Experiment, conducted jointly by Abt Associates and local agencies; and the Integrated Analysis, conducted by the Urban Institute. Planning for EHAP began in 1971; the field operations at the various sites began on different schedules, 1972-1974.

Fieldwork is now complete for all except the Supply Experiment, whose allowance program has the longest lifespan (10 years, of which five are to be monitored). The final report on the Administrative Agency Experiment has been submitted. Final reports on the Demand Experiment and Integrated Analysis are due in 1979. The final report of the Supply Experiment is scheduled for submission in September 1981.

HUD's Office of Policy Development and Research, the sponsor of EHAP, has asked the Brookings Institution to evaluate EHAP research methods, the findings to date, and their implications for federal policy. Pursuant to that charter, Brookings has commissioned eight evaluative papers to be presented and discussed at a conference scheduled for 15-16 November 1979. The prospective authors and their topics are listed below.

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\* For a detailed account of EHAP's origins, purposes, organization, and current status, see *Experimental Housing Allowance Program: A 1979 Report of Findings*, U.S. Department of Housing and Urban Development, Office of Policy Development and Research, Division of Housing Research, April 1979.

Harold Watts	Critique of EHAP design
Henry Aaron	Policy implications of EHAP
Mahlon Straszheim	Participation of eligible households
Peter Rossi	Mobility and search behavior
Eric Hanushek and John Quigley	Other household behavior
Edwin Mills	Market effects of EHAP
David Kershaw	Administrative lessons from EHAP
John Kain	A universal housing allowance program

The Supply Experiment will not be completed until two years after this conference is held, so its assessment now will undoubtedly pose some problems for the authors. For Rand, the mid-experimental evaluation could be especially useful. Although data collection is virtually complete, we may still be able to readjust our analysis plans in the light of the conference's critique.

Because the interim reports of the Supply Experiment are voluminous, cumulatively redundant, and organized on different principles than the topical division specified for the conference papers, we have prepared this guide to help the authors find the materials relevant to their assignments. For each topic listed above, we reprint the prospectus prepared for the author by Brookings, summarize the relevant features or findings of our research, and cite the documents that should be consulted for details.

In each case, our response is governed by the prospectus, but is organized around its major themes rather than the specific questions posed for the author's consideration. Certainly, our responses reflect some judgment on our part as to the best way to approach each assessment, and refer to various inferences and conclusions drawn by HASE staff that we suppose will stand up under the author's scrutiny. But we have done our best not to preempt the evaluation itself under the guise of assisting the evaluator.

The documents cited as sources for each topic were selected for relevance and currency from among approximately 150 reports, working notes, and papers published by HASE staff. They also include a few

that have not yet been published but that we expect to issue in May or June, so that conference authors will have adequate time to review them. Our text also mentions some studies now under way from which we anticipate publishable findings by September. The published documents can of course be supplied immediately to conference authors; the others will be delivered as soon as they are available.

The appendix is a topical index of all HASE documents published before 31 March 1979.

SESSION I, PAPER A  
CRITIQUE OF EHAP DESIGN

PROSPECTUS

Specific critique of the overall experiment design as well as component parts. What were the treatments (what was varied)? Does the variation provide important additional information? With benefit of hindsight, should there have been other variations? What were the important differences between supply, demand, and administrative experiments? Were these differences useful in adding to our understanding?

What research questions were the experiments designed to answer? What were the most important design choices? Did we succeed in obtaining answers to the questions? Were we surprised by any results or was it only magnitudes that we obtained better estimates of? Are the findings important?

Can we make reasonable extrapolations from the EHAP results to other geographic areas? To the degree that we cannot, is it because of experimental problems of which we were aware before the experiment (but couldn't correct because of program constraints such as costs) or because of unforeseen difficulties or limitations? Or are we no better off in our ability to generalize than we would be without the EHAP results?

What lessons can be learned from EHAP about the effectiveness of large-scale social experiments, society's ability to learn from them, and how (or whether) they should be conducted in the future? How much of what we learned could have been discovered through other (perhaps less costly) methods such as empirical work with existing data or simulations with new or existing models? What did we learn that we could not have learned without the experiments? Were lessons from previous social experiments useful (used) in designing this one? Overall, has the investment in EHAP been worthwhile?



## GUIDE TO HASE RESEARCH

The design of the Supply Experiment is abundantly documented at both the conceptual and technical levels. The account below summarizes the evolution of that design, discusses three general design issues that bear powerfully on the fruitfulness of the experiment, and reviews some of the salient findings. References are provided at the end of each topic.

### EVOLUTION OF THE EXPERIMENTAL DESIGN

The Supply Experiment was conceived in 1972 when it became apparent to HUD that a single experiment could not both test participant responses to program variations and market responses to a fullscale program. The former task was assigned to the Demand Experiment, the latter to the Supply Experiment.

The Supply Experiment was explicitly designed to answer four clusters of questions concerning the effects of a fullscale housing allowance program for low-income renters and homeowners:

1. How do suppliers respond to program-induced housing demand?  
Do housing prices increase? Are substandard dwellings improved?
2. How do market intermediaries respond to participants' attempts to improve their homes, rent or buy better homes, or move to better neighborhoods?
3. Do participants often use their allowances to move rather than to repair their current dwellings? How do the moves affect the neighborhoods of origin and destination?
4. How do nonparticipants perceive and evaluate the program's consequences for them personally and for their communities?\*

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\*The items above are paraphrased. The exact wording of the initial experimental charter is given on pp. 8-9 of the *General Design Report*.

An experimental design that addresses these questions was proposed in the *General Design Report* of May 1973, reviewed by a panel of experts in June, and approved by HUD with minor changes in October 1973. After the sites were selected and certain legal problems with program funding were settled, Rand revised the first four sections of the *General Design Report*. As revised early in 1975, that report governed the experiment until September 1978.

As the experiment proceeded, it became apparent that the program's market and community effects were less pronounced than had been expected. On the other hand, the program itself--its administrative features, its effects on participants, the dynamics of eligibility and participation--was proving a fruitful topic for analysis. Moreover, the data on local housing markets had stimulated new hypotheses about market structure and processes that were essentially independent on the housing allowance program. Consequently, in September 1978, Rand and HUD agreed to revise the experimental charter to reflect a broader agenda. Program administration, eligibility and participation, and effects on participants would be given equal emphasis with market effects. Housing market analysis would continue under a separate grant whose terms are now under negotiation.

Because the market effects were manifestly slight, the plan for market surveys was curtailed from a possible six annual surveys to four. Otherwise, the new charter did not affect the experimental design, only the uses to which the data were to be put.

#### References

Ira S. Lowry (ed.), *General Design Report: First Draft*, WN-8198-HUD, May 1973. Updated by WN-9098-HUD (Secs. I and II), May 1975; WN-9070-HUD (Sec. III), April 1975; and WN-9051-HUD (Sec. IV), April 1975.

HASE Staff (ed.), *Proceedings of the General Design Review of the Housing Assistance Supply Experiment*, WN-8396-HUD, October 1973.

Ira S. Lowry (ed.), *General Design Report: Supplement*, WN-8364-HUD, August 1973.

HASE Staff, *Completing the Supply Experiment*, WN-10223-HUD, June 1978.

#### SITE SELECTION AND GENERALIZATION

In most social experiments, the focus of interest has been on the behavior of individuals or households in response to programmatic incentives; consequently, the experimental design compares the behavior of the members of various treatment groups to that of the members of a control group. Program effects are inferred from differences in treatment- and control-group responses, assuming a shared market or community context.

In the Supply Experiment, the treatment was an open-enrollment housing allowance program; the purpose was not except incidentally to learn how eligible or participating individuals responded to the program; rather it was to learn how the market responded to the cumulative actions of program participants. Consequently, the unit of analysis was a housing market rather than a household. This fact rules out conventional experimental design and poses serious difficulties for statistical inference.

The high costs of a fullscale allowance program limited HASE to two sites, each with under 250,000 inhabitants occupying a self-contained housing market. Those sites were carefully chosen to offer contrasts in market structure and initial conditions. Although we considered various options for economically expanding the sample of housing markets to be treated and for choosing and monitoring "control" cities, neither scheme was technically feasible. We concluded that the problems of measuring program-induced effects and generalizing from those measurements would have to be solved within the context of two "treated" sites.

Our design solution was to mount a marketwide data collection plan (see below) that was comprehensive enough to allow detailed analysis of market dynamics subsequent to the program's introduction. By modelling market processes in two contrasting markets, we hoped to arrive at response parameters that were reasonably portable.

Although observers generally agree on the relevance of the market contrasts we sought (segregated vs. unsegregated; tight vs. loose), the sites chosen have been criticized both as "unrepresentative" and too

few for statistical inference; furthermore, the absence of classical experimental "controls" has been alleged to be a fatal design defect. We have yet to see a critical discussion of the techniques we proposed to surmount those difficulties.

#### References

HASE Staff, *Site Selection for the Housing Assistance Supply Experiment: Stage I*, WN-7833-HUD, May 1972.

R. Dubinsky, *Collected Site Selection Documents: Housing Assistance Supply Experiment*, WN-8034-HUD, January 1973.

HASE Staff, *First Annual Report of the Housing Assistance Supply Experiment*, R-1659-HUD, October 1974, pp. 31-51 (comparison of experimental sites).

Ira S. Lowry (ed.), *General Design Report: First Draft*, WN-8198-HUD, May 1973, pp. 10-18 (experimental strategy) and pp. 289-307 (analytical generalization).

Ira S. Lowry (ed.), *General Design Report: Supplement*, WN-8364-HUD, August 1973, Sec. III (site selection, program variations, experimental controls).

#### THE EXPERIMENTAL TREATMENT

When the Supply Experiment was being planned, there was a persistent tension between two views of the desirable experimental treatment. One view was that it should as nearly as feasible simulate a permanent housing allowance program suitable for national implementation; the main motivation for the experiment was, after all, to forecast the market consequences of such a program. The opposing view was that the treatment should be designed to produce a specific demand shock, a shock that was large enough to permit the reliable measurement of market response. The two views were consistent only if one assumed that the preferred national program would produce the desired shock.

Because of uncertainties about eligibility, participation, benefit entitlement, the income elasticity of housing demand and the effectiveness of the contemplated earmarking device, there was room for

disagreement about the size and nature of program-induced demand changes, as well as about the market's capacity to absorb them. In fact, the demand changes have been smaller than most observers anticipated, and the market has absorbed the extra demand without visible disturbance. Retrospectively, critics of the experiment have charged that the treatment was faulty *because* it failed to disturb the market.

Although participation has been lower than most observers expected, and our estimates of the unconstrained income elasticity of housing demand are far below those prevailing when the experiment was designed, the criticism has focused on the program's housing standards. These standards serve indirectly to earmark allowances for housing expenditure, inasmuch as only occupants of acceptable dwellings qualify for payments.

Although about half of all dwellings fail their initial inspections, their occupants are nearly always able to repair those dwellings at nominal cash expense. Consequently, the demand shock is essentially limited to that produced by the few who choose to move to more expensive dwellings. One critic in particular argues that much more stringent housing standards should have been imposed in order to force participants to spend more for housing.

#### References

HASE Staff, *Proceedings of the General Design Review of the Housing Assistance Supply Experiment*, WN-8396-HUD, October 1973, pp. 33-34 (demand shock), 93-98 (earmarking), 108-122 (treatment strategy).

I. S. Lowry (ed.), *General Design Report: Supplement*, WN-8364-HUD, August 1973, Sec. II (treatment design) and Sec. IV (measuring market impacts).

HASE Staff, *Fourth Annual Report of the Housing Assistance Supply Experiment*, R-2302-HUD, May 1978, Sec. V (market effects).

Ira S. Lowry and C. Lance Barnett, *How Housing Allowances Affect Housing Prices*, R-2452-HUD, forthcoming (predicted vs. actual effects).

## DATA COLLECTION

The experimental design specified two major sources of data. Administrative records of the allowance program have provided full information on all enrollees, including their family compositions, incomes, housing expenditures, allowance entitlements, housing quality, and changes of residence. A marketwide probability sample of residential properties was surveyed annually to learn about market events subsequent to the beginning of the program.

The marketwide survey of residential properties was the most ambitious undertaking. Beginning with an exhaustive sampling frame, a stratified sample of properties was chosen for baseline surveys. Those with complete interview records were eligible to be included in a longitudinal panel of about 2,000 properties in each site. We estimated that up to six annual survey cycles in each site might be necessary to follow program effects to a new market equilibrium.

The annual survey cycle included interviews with homeowners, landlords and their tenants; and less frequent field observations of each property and all neighborhoods. The data thus gathered are the most comprehensive ever assembled for an entire housing market.

An important feature of the surveys is that they followed residential properties, not their owners or occupants. The panel was updated annually with a sample of newly constructed or converted residential properties, and, within the panel, vacancies and terminations of residential use were duly noted; so each year's surveys provided a full description of the current housing stock and the current populations of landlords, tenants, and homeowners.

Although the sample size and stratification were explicitly designed to achieve specified levels of reliability in estimating the price elasticity of supply, they have proven to be robust for nearly all analytical purposes within the experimental charter. Response rates have been good as judged by other contemporary survey experience.

The main issues pertinent to the data collection are (a) the possible record-selection biases and (b) the curtailment of the survey

schedule. Although nonresponse and other record defects that force deletion of records from our analytical files have not been troublesome in terms of remaining sample sizes, they have required us to correct potential biases by a complex record weighting scheme. Because the allowance program was having so little effect on the housing market, the market surveys were terminated after the fourth (rather than the sixth) annual cycle. Thus, the survey data capture only the first three years of market events following the beginning of the allowance program.

#### References

Ira S. Lowry, *Monitoring the Experiment: An Update of Sec. IV of the General Design Report*, WN-9051-HUD, April 1975.

T. Corcoran, E. C. Poggio, and T. Repnau, *Sample Design for the Housing Assistance Supply Experiment*, WN-8029-HUD, November 1972.

HASE Staff, *Fifth Annual Report of the Housing Assistance Supply Experiment*, R-2434-HUD, forthcoming, Sec. III (final field results for HASE surveys).

D. A. Relles, *Using Weights to Estimate Population Parameters from Survey Records*, WN-10095-HUD, April 1978 (record-selection bias).

Ira S. Lowry, *Are Further Survey Cycles Needed in Site I?*, WN-9541-HUD, July 1976.

#### UNEXPECTED FINDINGS

HASE's data analysis will not be completed until 1981, and we expect the data to be widely studied thereafter. But what we have learned so far from preliminary analyses and simply from conducting the experiment is often at variance with theories and opinions prevailing among housing market and program analysts in 1972. Below, we list a selection of findings that are new (in the sense of disagreeing with conventional wisdom) and important for federal housing or transfer policies.

- o Only about half of those eligible are likely to participate in a general entitlement transfer program at any given time.

Our data are unique in allowing close comparisons between the eligible and participating populations, and the patterns we have observed can now be perceived in other transfer programs.

- o The housing occupied by low-income families today is often defective in ways that present health or safety hazards, but most of the defects can be inexpensively corrected by amateur labor. Lack of means is not the primary obstacle to securing decent, safe, and sanitary housing; rather, those in substandard housing are either unaware of or unconcerned by the hazards identified by our inspections. When offered a bribe in the form of a housing allowance, they are willing to make the necessary repairs.
- o The unconstrained income elasticity of housing demand is much lower than was generally believed a decade ago. Based on our cross-section analysis and "permanent" income, the figure is about .19 for renters and .45 for owners. The evidence is consistent with constant or slightly increasing elasticity as income increases
- o Traditional theories and current models of housing market response to demand shifts greatly exaggerate price movements and misunderstand the relationship between rent levels and property values. The inconsistency of HASE data with conventional wisdom sparked development of a powerful theory of shortrun market adjustments that assigns a key role to vacancies rather than rents as market equilibrators.
- o In combination, the findings itemized above provide virtual assurance that a fullscale national housing allowance program similar to the experimental program would not cause rent inflation or otherwise much disturb housing markets. On the other hand, it would be equally unlikely to have large positive externalities. Housing allowances help those who receive them; others are unaffected except as contributors to program costs.
- o When full costs are counted, homeowners' housing expenses are generally greater than those of renters with comparable incomes,



and there are about as many poor homeowners in the nation as poor renters.

- o When confronted with a new social program, the concerns and expectations of civic leaders are more global and less realistic than those of ordinary citizens. The latter tend to appraise the program in terms of its most direct and reliable consequences.
- o Given a careful administrative design, a largescale transfer program can be operated efficiently by a staff hired locally at prevailing wages. Consideration for clients' dignity and convenience appears to yield efficiency gains despite substantial direct costs.

#### References

- C. P. Rydell, J. E. Mulford, and L. W. Kozimor, *Dynamics of Participation in a Housing Allowance Program*, WN-10200-HUD, June 1978.
- James L. McDowell, *Housing Allowances and Housing Improvements: Early Findings*, N-1198-HUD, forthcoming.
- John E. Mulford, *The Income Elasticity of Housing Demand*, R-2449-HUD, forthcoming.
- C. P. Rydell, *The Shortrun Response of Housing Markets to Demand Shifts*, R-2453-HUD, forthcoming.
- Ira S. Lowry and C. Lance Barnett, *How Housing Allowances Affect Housing Prices*, R-2452-HUD, forthcoming.
- Lawrence Helbers, *Measuring Homeowner Needs for Housing Assistance*, WN-9079-HUD, February 1978.
- Phyllis L. Ellickson and David E. Kanouse, *Public Perceptions of Housing Allowances: The First Two Years*, WN-9817-HUD, January 1978.
- HASE Staff, *Fourth Annual Report of the Housing Assistance Supply Experiment*, R-2302-HUD, May 1978, Sec. VI (program administration).

SESSION I, PAPER B  
POLICY IMPLICATIONS OF EHAP

PROSPECTUS

What are the "housing problems" of the United States and what do the results of EHAP imply about our ability to solve them? Do we have appropriate and useful national housing policies? What changes should be made in specific policies or the weighting of effort among policies in light of EHAP findings? What is the appropriate mix of construction-related or rehabilitation-related (supply side) subsidies and income-related (demand side) subsidies?

What have we learned about the relative effectiveness of different policies in improving the quality of housing consumed by low-income people? What does the evidence from these experiments as well as the income maintenance experiments tell us about the effectiveness of unconstrained cash allowances versus earmarked subsidies with quality standards imposed? Are these more effective ways to improve the quality of the housing inventory than earmarked housing allowances, for example, code enforcement or direct subsidies for housing improvements (or, as some argue, the elimination of rent control)?

Is geography an important aspect of housing policy? Have we learned anything about where subsidized housing should be located or in what locations housing subsidies should be available? In light of the experimental results on mobility, would a metropolitan housing authority produce results different from fragmented individual municipal housing authorities? Do the EHAP mobility results suggest that targeting of housing programs to specific areas would be effective in increasing racial and economic integration? What are the implications of the participation results from EHAP of the various types of housing subsidy programs for low-income families? What has been learned about the relative importance of so-called decent housing to low-income families? How are differences of importance explained? What do these mean for housing policy?

## GUIDE TO HASE RESEARCH

The Supply Experiment has published much that is relevant to national housing policy, but has rarely commented directly on policies other than housing allowances. The following guide specifies four fundamental issues of federal housing policy and indicates what HASE research is pertinent to each.

### HOUSING CONSUMPTION

Existing federal policy is premised on the assumption that there is a national shortage of "decent, safe, and sanitary" housing which should be remedied or at least ameliorated by federal action. For lack of explicit legislative guidelines, each housing assistance program develops its own consumption standards and enforcement methods, which vary greatly. Although organizations such as the American Public Health Association and the Building Officials and Code Administrators International have promulgated model housing codes, these are unsupported by scientific evidence as to the effects of specific housing defects on the occupants' health, safety, or social performance.

#### Policy Issue

What should be the goal of federal policy with respect to housing consumption standards? Is a national minimum appropriate? If so, what features of a dwelling's structure or performance should it encompass? Is subsidized new construction appropriate for housing low-income families?

#### Relevant HASE Findings

Forty years ago, occupied dwellings were often quite crowded, had severe structural defects, or lacked basic plumbing, food preparation, and space-heating equipment. Both the Annual Housing Survey and HASE data show that those conditions are now rare in *occupied* dwellings, even for low-income households. Instead, housing defects (as defined by national model codes) are essentially maintenance problems. Although undermaintenance may create genuine (if unmeasured) hazards to the

occupants' health or safety, the hazards can usually be remedied without major rehabilitation.

The housing defects encountered by the HAOs' inspectors are nearly always covered by local housing codes, but those codes are not systematically enforced. In the HASE sites, about half of all enrollees' dwellings (whether occupied by renters or homeowners) failed the HAOs' housing evaluations. Nearly all the defects were correctable with amateur labor and inexpensive materials.

Finally, we find only a loose inverse association between housing cost and the incidence of housing defects. The aspects of housing quality that have consumer appeal are not primarily those covered by housing codes. We judge that most enrollees are either unaware of or unconcerned by the defects discovered by the HAOs' inspectors. About two-thirds of those in defective dwellings are willing to repair or move in order to qualify for allowances, but only rarely is the allowance essential to pay for the repairs.

#### References

HASE Staff, *Fourth Annual Report of the Housing Assistance Supply Experiment*, R-2302-HUD, May 1978, Sec. IV.

Bruce W. Lamar and Ira S. Lowry, *Client Responses to Housing Requirements: The First Two Years*, WN-9814-HUD, February 1979.

James L. McDowell, *Housing Allowances and Housing Improvements: Early Findings*, N-1198-HUD, forthcoming.

#### HOUSING EXPENDITURES

Although federal policies to encourage housing consumption may lead to greater housing expenditures, expenditure increases are not themselves a policy objective. Federal policy has instead been concerned with housing expense burdens for low-income families. The most common rule of thumb embodied in federal legislation is that those who are poor enough to need help should not have to spend more than a fourth of income for housing. Each housing assistance program has its own rules as to who needs help (income, assets, family composition), the income eligibility limits generally rising with the quality of the

housing offered by the program (subsidy amounts do not necessarily fall). Income definitions, the role of assets, and income certification methods vary greatly between programs and in some programs are matters of local option.

#### Policy Issue

What should be the goal (if any) of federal policy with respect to housing expenditure as a component of total household spending? Does the earmarking of transfers for housing reflect public priorities about consumption or merely the legislative and executive fragmentation of policy making? Is there any basis in science for the fourth-of-income rule?

#### Relevant HASE Findings

HASE survey data merely confirm wellknown patterns of housing expenditure by renters but add hitherto unavailable data on housing expenditures by homeowners. When implicit as well as explicit expenses are counted, homeowners generally spend more for housing than renters of comparable income. Moreover, both in HASE sites and nationally, there are about as many low-income homeowners as low-income renters. We estimate that in 1976 about 8.2 million low-income renters and 7.8 million low-income owners spent more than a fourth of their incomes for housing.\*

Contrary to many earlier studies, HASE analysts find that housing expenditures do not vary much with either current or permanent income. For renters (not program participants, but all renters), the elasticity of gross rent with respect to current income is about .11; with respect to permanent income, the expenditure elasticity is about .19. For owners, the corresponding figures are .33 and .45. Renters' expenditures also increase with household size; family composition and race seem to have little effect, but our models characteristically explain

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\* For these calculations, low-income households include all those whose gross annual incomes are under \$7,000.

only a fourth to a third of the variance in housing expenditures.

Among the low-income households that enroll in the allowance program, housing expense burdens are high. For renters in 1976 the median ratio of housing expense to gross income was .48 in Brown County and .57 in St. Joseph County; when income is adjusted for family size and composition according to program rules, those median ratios rise to .56 and .75, respectively. Estimates for homeowners are less reliable because some of their expenses must be imputed, but they fall in the same range.

HASE does not gather data on the composition of nonhousing expenditures, so we cannot directly assess the specific effects of "excessive" housing costs in nonhousing consumption.

#### References

Kevin F. McCarthy, *Housing Choices and Residential Mobility in Site I at Baseline*, WN-9029-HUD, August 1976.

Kevin F. McCarthy, *Housing Choices and Residential Mobility in Site II at Baseline*, WN-9737-HUD, September 1977.

Lawrence Helbers, *Measuring Homeowner Needs for Housing Assistance*, WN-9079-HUD, February 1978.

HASE Staff, *Two Years of Housing Allowances: Income and Housing Expenditures*, N-1209-HUD, forthcoming.

John E. Mulford, *The Income Elasticity of Housing Demand*, R-2449-HUD, forthcoming.

#### RESIDENTIAL LOCATION

Federal policy on residential location within metropolitan areas has two aspects. It is concerned on the one hand with residential land use as an element of urban form and on the other with the social composition of residential neighborhoods.

With respect to urban form, there are many vigorous opinions, but no policy consensus except that comprehensive longrange planning by local agencies is desirable and should be fostered by federal subsidies. With respect to neighborhood social composition, the only generally accepted principle is that neighborhood exclusiveness is undesirable;

there exists no coherent policy as to the desirable social composition of neighborhoods or the desirable pace of neighborhood change.

#### Policy Issue

Should federal housing assistance promote explicit objectives as to urban form or neighborhood social composition? What public purposes would be served thereby?

#### Relevant HASE Findings

With respect to urban form, the two HASE sites offer an interesting contrast. In Brown County, the urban center is gaining and the outlying rural areas are losing population. In St. Joseph County, the urban center is losing and the suburban areas are gaining population. Although we have not measured trends, we judge that net residential density is increasing in the first case and decreasing in the second.

HASE data do show gross as well as net geographical flows of local moves, and the social composition of those flows. In general, the findings confirm those of other studies. Young adults without children move from low to high density areas, those with children move from high to low density areas, and the elderly converge from both extremes to areas of intermediate density.

The two HASE sites likewise contrast in social segregation. Brown County, lacking racial minorities except for a small group of American Indians, does not have a racially segregated housing market; economic segregation is visible but weak. St. Joseph County has a racially segregated market, the blacks nearly all living in central South Bend; and economic segregation is stronger than in Brown County, partially due to the large scales of recent suburban developments whose housing is uniform in cost.

The allowance program has had no perceptible effect on either urban form or on the social composition of neighborhoods. Many program participants have moved, but the pattern of their movements does not imply significant redistribution either by race, income, or life-cycle stage.

Although some local jurisdictions in St. Joseph County were reluctant to join the program for fear of invasion by poor or black residents of South Bend, such invasions have not in fact occurred.

References

Brian C. Ellickson, *Neighborhoods in Brown County*, WN-8468-HUD, November 1973.

John E. Bala, *Neighborhoods in St. Joseph County*, N-1205-HUD, forthcoming.

Kevin F. McCarthy, *Housing Choices and Residential Mobility in Site I at Baseline*, WN-9029-HUD, August 1976, Sec. VI.

Kevin F. McCarthy, *Housing Choices and Residential Mobility in Site II at Baseline*, WN-9737-HUD, September 1977, Sec. VI.

Mark David Menchik, *The Residential Mobility of Allowance Recipients*, N-1144-HUD, forthcoming.

HASE Staff, *Fourth Annual Report of the Housing Assistance Supply Experiment*, R-2302-HUD, pp. 118-133 (residential mobility and neighborhood change).

S. B. White, *Market Intermediaries and Indirect Suppliers: First Year Report for Site I*, WN-9400-HUD, September 1976.

S. B. White, *Intermediaries and Indirect Suppliers: First Year Report for Site II*, WN-9020-HUD, August 1977.

Kevin F. McCarthy, *Housing Search and Residential Mobility*, R-2451-HUD, forthcoming.

TARGETING HOUSING ASSISTANCE

The variety of forms for federal housing assistance is usually justified by reference to a corresponding variety in target populations. Specific programs are explicitly or implicitly designed to help renters or homeowners, poor or middle-income families, urban or rural residents, young parents with children, elderly persons, people living in substandard dwellings, and residents of particular neighborhoods.

However, federal housing assistance programs rarely serve more than a small fraction (either locally or nationally) of those eligible under program rules. Moreover, many households fall between the cracks of categorical eligibility even though they seem to be as needy as those



who are eligible for assistance. Finally, targeting in some programs is curiously myopic, oblivious to any effects except the shortrun benefits to those directly assisted; for example, moving a given family from substandard to standard housing is assumed to be a global and permanent improvement in housing conditions.

Overall, existing policy strongly favors low-income urban renters, certainly as measured by their share of federal subsidies and fairly consistently as measured by the per capita amount of subsidy. Low-income urban homeowners, on the other hand, get virtually nothing either as direct subsidy or as indirect tax benefits. High-income homeowners are not directly aided but get substantial tax benefits.

#### Policy Issue

What is the appropriate targeting philosophy for federal housing assistance if we assume that full horizontal and vertical equity would reduce per capita benefits to trivial amounts? Should limited resources be focused entirely on the neediest? Spread more widely among those close to some threshold of self-sufficiency? Bestowed in token amounts on a variety of identifiable constituencies, so that a few families in each get substantial aid? Used to support a few model communities within a matrix of needy ones?

#### Relevant HASE Findings

HASE surveys describe two different but characteristic metropolitan populations; the HASE housing allowance program has a much broader definition of eligibility than any existing program, and all eligible applicants may enroll. These features give us an unusual opportunity to test alternative targeting strategies against population characteristics and self-assessment of need for assistance. We have not systematically reviewed alternative targeting strategies in this context, but experimental findings are nonetheless revealing.

Briefly, we find that about a fifth of all households are eligible for assistance when the income limit is four times the standard local cost of adequate housing. The income-eligibles are about equally divided