REDESIGNING THE ANNUAL HOUSING SURVEY: POLICY CONSIDERATIONS

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I. Introduction

HUD's Annual Housing Survey (AHS) has been conducted nationally by the Census Bureau since 1973, with 60 Standard Metropolitan Statistical Areas (SMSAs) included on a rotating basis since 1974. It provides information on the size and composition of the housing inventory, characteristics of occupants, changes in the inventory resulting from new construction and from losses, and indicators of housing and neighborhood quality. The AHS is longitudinal, returning to the same housing units each year in order to track changes in housing and neighborhood characteristics and quality.

Certain changes have been made to the AHS since 1973, including doubling the sample of rural housing units, and altering the geography of the public use tapes to permit identification of as many SMSAs as possible. Modifications have also been made in questionnaire form and content, but such revisions have been kept to a minimum to facilitate the study of housing inventory and neighborhood changes over time. The necessity of redesigning the AHS to use the 1980 Census data base thus provides an opportunity to respond optimally to the anticipated housing and neighborhood policy needs of the 1980s and 1990s.

This paper summarizes HUD's current thinking about the issues and uses that must be considered in redesigning the Annual Housing Survey, and the apparent implication of these issues for the redesign. We welcome comments and suggestions from interested users.

II. Continuing Issues in Housing and Community Development

The primary issues facing HUD in the 1980s are likely to be those identified repeatedly in the past (cf. National Commission on Urban Problems, President's Committee on Urban Housing, and National Housing Policy Review). Encouraging and facilitating an adequate supply of decent housing at affordable levels in a basic continuing concern. Because housing has not been equally available, affordable, and adequate for all groups in the population and throughout all regions and locations of the country, discrimination and spatial inequities are also continuing issues. The concern for decent homes, furthermore, goes beyond the particular housing units to their location within neighborhoods and access to public services, and to the fiscal capabilities of the jurisdictions within which they are located.

The spatial distribution of housing and population is a major issue. Past concerns about the distribution of population within the country and within metropolitan areas are assuming new urgency in the face of the energy crisis. The density of housing development, its relationship to transportation services and the amount of energy it consumes, are issues facing HUD as public policy seeks to encourage energy-efficient and environmentally-sound community development patterns.

Programs of the past, moreover, demonstrate only too clearly that merely providing adequate affordable housing can be insufficient. Change, often rapid and cumulative, continually affects houses, households, and neighborhoods. Houses deteriorate or are abandoned, or become too expensive for their occupants; neighborhoods also change as households move in and out, as housing is or is not maintained, and as neighborhood access to amenities, public services and employment opportunities varies in relation to other neighborhoods in the same housing market. Thus change itself is a major continuing issue, and it is necessary to understand the interrelated processes of change in designing programs that seek to ensure adequate affordable housing in a suitable environment.

III. HUD Use of Annual Housing Survey Data

The Annual Housing Survey was originally designed to provide annual information on housing condition and costs, neighborhood conditions and services, and key household characteristics. It also would measure the components of change in both housing and households, not only maintenance, new construction, and losses from the stock, but also household mobility and household formation. A key decision in its design was its longitudinality, tracking the same housing units over time to gain better information about gross rather than net changes and the processes such as filtering, depreciation, and upgrading that underlie them.

AHS data have already been used for many of the intended purposes. Past uses range from determining relative and absolute needs for housing assistance to administering present programs and evaluating proposed new ones. Research and program design uses are heavily intertwined with uses that support program administration.

A major purpose of the national AHS is to provide baseline estimates of housing need, to determine both the absolute number of persons with different kinds and degrees of housing problems, and the relative distribution

of such housing need among demographic and geographic groups. Comparing the characteristics of households served with the characteristics of those in need serves to evaluate the targeting of present HUD programs and to measure the extent of unmet need.

A second major use of current data about housing cost and condition is to administer existing programs more efficiently.

Thirdly, AHS data are used not only to evaluate existing programs both ongoing and experimental -- and anticipate needed program changes but also to evaluate the implications, costs, and feasibility of proposed new programs. One of the prime justifications for a broad-based sample is the continuing need to be able to evaluate the variety of possible policy instruments available to HUD and other Federal agencies.

In addition to supporting such past uses we wish to permit two important additional uses. Because targeting funds to current local needs is a high priority of urban policy, HUD wishes to use current AHS data to allocate funds in intercensal years among regional offices.

The second desired use is to exploit the longitudinal data to study the processes and interrelations of housing and neighborhood change. Both of these uses would be facilitated by changes in geographical stratification and neighborhood clustering in the redesigned sample.

IV. Lessons and Priorities for the Redesign

This review of the range of basic issues likely to confront HUD in the 1980s, and the variety of uses of AHS data that will help HUD intelligently design and administer programs that respond to these basic issues as they interact in many different contexts, makes the first priority for the redesign very clear. It is of prime importance to continue to collect basic housing data concurrently both at the national level and for selected SMSAs. The broad design of the present survey, and the variety of data collected on both condition and change, already have helped HUD respond to many issues such as condo conversions and displacement that were not even anticipated when it was designed. Concurrent collection of data on a variety of subjects -- from basic condition and cost information to mobility history and plans and commuting patterns -- is necessary because of the number of factors that jointly influence housing demand and value and thus urban dynamics. National data are needed for baseline assessments of need, better targeting of HUD programs and allocations of funds, and monitoring national trends; but data on a variety of local local housing markets are necessary to indicate the range of situations to which urban policy and programs must be responsive and to improve understanding of housing market processes. It is equally clear, however, that the Annual Housing Survey could be made more useful in many ways:

1. More timely, current data on the composition and cost of the housing inventory is the highest priority for change. Prior to instituting an unchanging questionnaire core, the timing of delivery of AHS data has become worse and worse, although processing of the 1979 national sample is proceeding more quickly. Such lags undermine all desired uses, particularly the recurrent requests to assess the extent and implications of newly publicized trends.
2. The desirability of using more current, post-censal AHS data for allocating funds for the major housing programs among HUD regional offices implies that the sample should be selected to provide more reliable statistical tabulations of data for OMB regions than are presently available.
3. Recurring concern about the availability and the cost of housing -- tight rental markets, displacement, etc. -- implies that more specific information on the components of inventory change is needed, while the goal of conserving the existing stock requires more detailed information on maintenance levels and decisions.
4. More information is needed on "neighborhoods" and their characteristics, in recognition of the importance of neighborhood conditions, services and overall quality to housing value, to resident satisfaction and social well-being, and to the future condition of each neighborhood.

To restrict this wish list, our basic constraint is that the total available budget must be no higher in constant dollars than the Fiscal Year 1980 AHS budget. If possible, efficiencies or sample cuts may be made to reduce the cost. Within this constraint, our basic priorities are:

1. Much more timely data on housing cost and availability. To facilitate speedy processing of such data, an unchanging core of the most important questions about housing tenure, structure type and characteristics, costs, vacancies,

basic physical condition, and essential household characteristics will be defined to be available without longitudinal linkages as quickly as possible.

2. Second only to the need for more timely data on this subset of items, having longitudinal microdata on many household and housing characteristics of particular housing units remains a basic priority. To improve the longitudinal links and the amount of data available at minimal cost, housing units selected in the redesign for the AHS should, wherever possible, be drawn from the long-form sample for the 1980 Census, and the 1980 Census responses should be retained so that they can be included upon the AHS longitudinal public use tapes.
3. Reducing the response burden on households, rather than potentially interviewing them for 10 years in a row, is highly desirable. This consideration suggests the desirability of rotating the sample, so that few or no households interviewed every year.
4. Surveys of a range of particular housing markets or SMSAs are needed in addition to the national survey. Supplemental surveys providing larger samples for selected metropolitan area housing markets than those available from the national AHS are necessary for almost every issue and use judged important. Analysts concerned with issues of cost, availability, displacement, equal opportunity and fair housing, and rehab of existing units were all agreed that data on a wide variety of types of housing markets are highly desirable for evaluating both current and proposed programs. Basic to each use is the fact that reliable data on a variety of housing markets are needed to show the range of actual conditions, rather than national or regional aggregates. Being able to monitor differences among metropolitan areas in trends, moreover, can be even more important than evidence of differences at one point in time.

V. Considerations and Preliminary Decisions -- National Survey

To translate these priorities into final decisions about sample size, geography, frequency, and longitudinality, committees of the HUD Task Force on Redesign are specifying the sample designs desirable for addressing each of the main issues. Final decisions will depend on Census Bureau studies of the cost and reliability tradeoffs implied by different alternatives, and the needs of users beyond HUD. At this point, the important considerations about the design of the national sample to date are as follows:

Sample Size: Issues of cost, including affordability and supply, especially for low-and moderate-income households, are of the highest priority for timely data because of the rapid pace of change in these areas. Although the present sample size is adequate for showing national change in condos and coops, and approaches adequacy for crucial regional rent and income data, the results of census calculations suggest that enlarging the present effective sample size of 60,000 units would be desirable for tracking many of the key statistics, especially for change within regions. More reliable data on vacancy rates by housing unit characteristics are particularly important for assessing supply/demand imbalances. Because using data from the redesigned AHS for allocating program funds among regions is a high priority for change, the key consideration in final decisions about sample size will be the levels of reliability necessary to distinguish differences among OMB regions.

Because of HUD's particular concern with the housing problems of low-income, minority, and female-headed households, the possibilities of oversampling low-income households, low-cost housing, or poverty areas are being explored. In past uses, the sample size often has been thin for numerically small groups. Such oversampling might prove a good way to provide more reliable estimates of groups with multiple housing problems, such as inner-city residents, the elderly, and others of special interest to housing policymakers. Oversampling new construction for at least one year has also been suggested as a means of obtaining both more reliable information on the characteristics of new homebuyers and renters and a reserve of new units for the sample.

Geography. To support fund allocations, the primary sampling units should be chosen and geographi-

cally located to ensure minimum levels of reliability for OMB regions, but OMB regions will not need to be identified on the public use tapes. But in reviewing the alternate geographies desired on the public use tapes, several conflicting requirements emerged.

At present, in order to identify as many SMSAs as possible on the national tape, all 125 SMSAs with 1970 population greater than 250,000 are identified separately. Such identification of as many SMSAs as possible has proved useful in many circumstances. Yet, when as many SMSAs as possible are identified, national or regional totals of central city vs. suburban housing are precluded, because one-fifth of metropolitan households live in "medium sized" SMSAs in which either the central city or the metropolitan balance has less than 250,000 population. This geography then restricts comparisons between AHS and other national data series.

Identifying as many SMSAs as possible also restricts the possibilities of identifying smaller jurisdictions by size of place. Within SMSAs, it is impossible to distinguish the population that should be served by the Farmer's Home Administration, for which "rural" is by statute defined as including places less than 10,000 within metropolitan areas. The housing and community needs of small jurisdictions, whose capabilities and special problems have been of particular concern to HUD, also cannot be isolated.

Frequency. Careful consideration is being given to the need for annual rather than biennial data. Because of the rapidity of change in the availability and cost of housing of different types, the crucial importance of these issues to most of HUD's programs, and the need to understand better the relation of changes in the supply of housing to business cycles (particularly turning points) and to macroeconomic policies, it is clear that cost, availability, and information on non-new construction additions to the stock and on inventory losses are needed annually with quick turnaround. Less frequent information would miss important turning points and hide relationships. Because of the importance of mobility to issues ranging from housing costs, tenure choice and discrimination to neighborhood and urban change, supplemental information on recent movers is also necessary annually to measure how well housing markets are working.

Longitudinality. Being able to determine the causes and concomitants of gross, rather than net, changes in tenure, condition, cost, vacancy status, and household characteristics such as income, race, and household type is basic not only for monitoring trends but for any attempts to understand housing market dynamics. Longitudinal linking of records for the same housing unit is necessary to address issues as varied as abandonment, conversion, revitalization, filtering, displacement, racial succession, discrimination, maintaining the existing stock, and changes in neighborhood conditions and perceptions. It is needed to determine the impacts of mobility by being able to compare current and former occupants, to trace the flow of households through the housing unit.

Preliminary Choices. Weighing these various considerations, we are currently thinking of selecting two national samples of approximately 60,000 housing units each and rotating them to survey one sample in odd years, the other in even years. We wish to have their core data processed as quickly as possible without longitudinal links to give current annual data on housing need, costs and availability. Complete data from both the core and the supplements for households in each sample would subsequently be made available on public use tapes, with biennial longitudinal links. Although reliable data on OMB regions will be necessary for special tabulations, Census region will be sufficient for the public use tapes. We would like to have the geography on the public use longitudinal tapes similar for both samples, so that they may be merged for analyses requiring larger sample size than is currently available, such as the characteristics of those displaced or involved in condominium conversions. However, within Census region, geography may differ for the two samples to meet the different needs. In an approach similar to the current geography, one sample could identify individually as many as possible of the old as well as the new metropolitan areas that will be defined following the 1980 Census. The other sample could identify all central cities over 250,000 individually, remaining central cities as a group or by several size categories, and suburban and nonmetropolitan housing units by urban/rural, farm/non-farm status and by size of place. Thus the data from the two samples could be merged on a metropolitan/nonmetropolitan basis within Census regions, and for about 50 to 60 of the individual central cities that have over 250,000 populations, while the remainder of the geographic identifiers would be used separately within each sample.

With respect to oversampling, the costs and advantages of selecting additional units from poverty areas, low-income households, or low-value housing units are being considered. We are examining whether the present double rural sample (which adds 16,000 units to the basic national

sample of 60,000 units) should be retained in the redesign, or whether a redefinition of "rural" to include places up to 10,000 population inside metro areas and 20,000 outside, together with geography that identifies all such places, would provide reliable data with the basic sample.

VI. Considerations and Preliminary Choices -- SMSA Samples

Samples for a range of different housing markets are needed to indicate the variability of conditions both among and within housing markets at any point in time and to dissect processes of change for particular housing markets over time. At present, the Annual Housing Survey SMSA surveys cover 60 SMSAs over a 4-year period, 15 per year. Individual records are longitudinally linked. The sample size is approximately 15,000 units each for 12 of the largest SMSAs, with 3 in each Census region, and 5,000 units for each of the remaining 48 SMSAs. The SMSAs were selected to be diverse in both location and growth experience, and include most of the 50 largest SMSAs, but also some smaller, fast-growing areas.

Most of the major decisions to be made in redesigning the SMSA samples -- the number of metropolitan areas, the sample size for each, and the frequency of sampling -- are interdependent. The variety of issues and uses which require SMSA data lead at various times to arguments for increasing or decreasing each. For this decision as well, we have adopted the procedure of identifying several key statistics and calculating the sample sizes necessary to measure differences among SMSAs and over time. Because of the complexity of the final decision, we encourage interested potential users to identify which key statistic(s) and which comparisons for which demographic group are most essential for the issues they consider important.

The Number of SMSAs to Sample and the Frequency of Sampling.

For analyzing housing markets in depth, as well as for Departmental purposes of evaluating and designing new programs, fewer SMSAs might be sufficient. Between 30 and 45 metropolitan areas, chosen to represent both regional balance and a variety of housing market conditions, appear adequate for examining ranges of possible impacts. Most evaluations to date have used only the 20 or 40 most recently surveyed SMSAs because of the desirability of using more current data. Because many evaluations deal with programs that are restricted to or targeted at particular groups, areas within the SMSA, or types of housing, and because of the complexity of housing markets and the number of factors to include in their analysis, fewer SMSAs would also be preferable if this implied more reliable data on subgroups from a larger sample size for each SMSA. Finally, focusing on fewer SMSAs could be associated with reducing the present interviewing frequency from 4 years to 2 or 3 years. Greater frequency of interviewing within SMSA samples is deemed desirable in order to be able to monitor and study changes within housing markets.

However, other considerations point to retaining or increasing the number of SMSAs studied. Indeed, even for research or evaluating proposed programs, it could be very difficult to agree on one group of SMSAs that analysts interested in a variety of issues would consider properly representative of the desirable range of experience. Furthermore, as metropolitan areas change thoughout the decade, the probability of representing the full range of different experience is obviously less with a smaller sample. Sampling more, rather than fewer, SMSAs would be desirable in terms of managing programs, targeting and allocating program funds, evaluating existing programs, and monitoring trends. The program people who must analyze local markets, set fair market rents, and make on-line decisions about subsidizing new construction or existing units, etc., are the most vehement in arguing for more SMSAs, as long as the data are minimally reliable. The need is particularly apparent right now, when far too many decisions must of necessity be based on 1970 Census data that can only be crudely updated. The same groups would prefer more SMSAs less frequently, considering even a 5-year rotation cycle adequate if this would mean that additional SMSAs could be added.

Having at least 60 SMSAs is also preferable to be more flexible about evaluations of ongoing programs. Major recent evaluations such as those of the Experimental Housing Allowance program and the Community Development Block Grants have tried to use SMSAs covered by AHS data, in order to obtain base line data without costly special surveys. Many potential evaluation needs, however, would require or prefer relatively detailed and reliable data on subareas or subgroups within metropolitan areas, a factor which would point toward larger sample sizes per SMSA than the advocates of "as many as possible" propose. Finally, more data points on experience in various SMSAs provide more reliable estimates of possible diversity for both monitoring trends and projecting future conditions.

Preliminary Choices. Faced with these tradeoffs between sample size, number of SMSAs, and frequency of interviewing, proponents of more SMSAs argue that the "extra" 10,000 units now interviewed in each of the 12 largest samples could be reallocated to provide sufficiently reliable data for 20 or 30 more SMSAs over a 4-year cycle. Yet advocates of better data on subareas of 250,000 population within SMSAs, or of the importance of sampling neighborhood clusters to study neighborhood change, feel that even larger samples within some SMSAs are desirable.

At present, assuming it possible to gain "extra" sampling units by merging the national and SMSA samples and by reducing sample size for the 12 largest SMSA samples, we are thinking of surveying as many SMSAs as possible over a 4-year cycle. Thus it may be possible to include more than 60 SMSAs with population above 250,000 in the redesigned sample, selected to provide balance among HUD regions and diversity of housing market types. Some extra sampling units, however, may be more useful for oversampling subareas or neighborhood clusters, leading to a two-tier system where a few SMSAs are intensively sampled, and minimal basic data are provided for as many other SMSAs as possible.

VII. Procedures Being Followed in Completing the Redesign.

The work to accomplish the redesign of the AHS will be carried out by the Bureau of the Census. The Bureau needs to know which key statistics are most crucial to policymakers for important housing and community development issues. In comparing housing and living environments among different demographic groups, geographic regions, metropolitan area locations, or socioeconomic levels, the amount of difference which is important must be specified. The relative priorities among the key statistics, the minimum level of periodic change that should be detectable, the frequency desired for each statistic and the acceptable level of reliability for each are also needed.

Now that the initial identification of alternatives and decisions has been made, discussions are being expanded to incorporate other needs and thinking in the final survey design. As was done when the Annual Housing Survey was first designed in 1970 to 1973, users from other Federal agencies, from public interest groups, housing industry trade associations, and professional groups, as well as independent researchers will be involved in the design. Comments from all interested groups are welcome and needed.

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