

A Process for Reviewing the Purpose and Scope of Continuing Household Surveys
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Background

Since the first implementation of the Current Population Survey in the 1940's, the continuing household surveys conducted on an annual or more frequent basis by the Bureau of the Census have become a primary resource for obtaining data needed for economic and social policy decision-making. Together, these surveys which are also known as the major current demographic surveys now provide a significant portion of the statistical base for monitoring changes in the areas of unemployment, health, personal safety and housing. More recently, the quarterly consumer expenditure survey has been undertaken to monitor household expenditures and, according to current plans, in 1982 a new survey will be added to improve current estimates of income and income change, and to provide data for the analysis of Federal and State tax and social welfare programs.

The formal designations of these surveys are as follows: the Current Population Survey (CPS), the Health Interview Survey (HIS), the National Crime Survey (NCS), the Annual Housing Survey (AHS), the Survey of Residential Alterations and Repairs (SRAR), the Current Expenditure Survey (CES), and the Survey of Income and Program Participation (SIPP). The sponsoring agencies include for the CPS, the Bureau of Labor Statistics and the Bureau of the Census; for the HIS, the National Center for Health Statistics; for the NCS, the Bureau of Criminal Justice Statistics; for the AHS, the Department of Housing and Urban Development; and for the SRAR, the Bureau of the Census. Of the two newer surveys, the CES is sponsored by the Bureau of Labor Statistics and the SIPP is sponsored by the Social Security Administration and the Assistant Secretary for Planning and Development in the Department of Health and Human Services, and the Bureau of the Census.

The surveys share a number of important advantages deriving from their conduct by a common collection agency. The more important advantages include the opportunity to use the decennial census as a sampling frame, access to a large corps of methodological specialists, and an experienced field force, high response rates, the ability to avoid including a respondent in more than one of the major surveys and certain economies of scale.

Redesign of the continuing household surveys is a major effort of the Bureau of the Census and the sponsoring agencies. Samples for the continuing household surveys are ordinarily selected once during the decade after the completion of the decennial census. This procedure enables the use of an improved sampling frame, and allows the Census to avoid having an address included in more than one of the household survey samples. For the current redesign effort samples will be selected during the period 1981-83.

Coordinated planning within the Census for the current redesign began in mid-1978 with the listing of all aspects of survey operations which might be worth studying for use during the redesign. Individual studies covering such aspects as the definition of sampling strata and primary sampling units have been scheduled for completion during 1980 to feed into the overall redesign choices. Completion of major design specifications is anticipated by the end of 1980, while the entire redesign period including production of data from the redesigned surveys is expected to extend into 1984 or 1985 depending on the survey program.

The sponsoring agencies also anticipated the redesign in ongoing efforts to improve the survey programs. For example, in response to a congressional mandate to study unemployment, the President appointed the Levitan Commission in 1978. In September 1979, a report was published making a number of recommendations for modifying statistical programs, particularly the Current Population Survey. 1/ In the health area, a two-year health statistics plan is prepared annually reflecting data requirements of many of the major health agencies. 2/ In addition, a specific review was initiated to determine the extent to which the Health Interview Survey and the surveys of health economics might be related.

The National Crime Survey was studied by the National Research Council (NRC) of the National Academy of Sciences (NAS) which, in 1976, published an evaluation of the National Crime Surveys. 3/ As recommended by the NAS study, an extensive three-year review is underway relating to the study of possible methodological improvements in victimization data. Within the housing area, HUD has commissioned a number of special studies dealing with the measurement of housing and neighborhood quality. 4/ HUD also prepared a summary of uses of the Annual Housing Survey. 5/

The schedule for redesign of each survey varies somewhat, depending on the stage of agency planning activities and the newness of the survey program. In order to take advantage of joint sample selection, the redesign schedule calls for sponsors to provide the Bureau of the Census with the major design specifications by the end of calendar year 1980. Increasing levels of detail will be required in 1981 and actual sample selection is expected to begin late in 1981 and extend into 1982.

The redesign of the Current Population Survey is the most advanced of the seven major survey programs. The review of requirements is well advanced for the Annual Housing Survey and the Health Interview Survey. Preliminary work has been undertaken for the National Crime Survey with major decisions dependent on the availability of relevant recommendations from the longer term assessment of victimization data.

The Consumer Expenditure Survey and the Survey of Income and Program Participation are new survey programs for which considerable time will be required to determine the dimensions of the continuing program. For these programs, the redesign will attempt to anticipate the future sample needs by providing reserve panels.

From this brief discussion, it is evident that the household survey redesign effort is well underway, and that the sponsoring agencies have been actively working not only internally, but also with external advisors to improve their survey programs. The Office of Federal Statistical Policy and Standards (OFSPS) has participated in these developments as part of its ongoing coordination activities. 6/ Broad planning discussions, in which issues relating to data access, confidentiality, user input and program resources have played an important part, have been held periodically with sponsoring agencies. OFSPS has also been actively involved in the coordination of agency input through the reports clearance process.

The OFSPS Review

Agencies face a considerable number of difficulties in undertaking a planning effort extending over a number of years and involving one or more other agencies. Obstacles to multi-agency coordination include the pressure of current activities, insufficient appreciation of required lead times faced by other agencies, and concerns about the defense of an agency's own project, access to micro-records, and timely and reliable completion of basic tabulations and edited tapes. The basic difficulty in planning for the redesign of the household surveys is the insistent nature of current operations compared to a somewhat elastic timetable for the redesign program extending several years beyond the current budgeting horizon. On an ongoing basis, analyses must be produced, operational difficulties must be solved, and budgeting and staffing needs must be met on a timetable set by someone else. The normal consequence is that long term planning considerations are put aside in the hope that tomorrow's short term demands will ease.

In order to raise the visibility and urgency of the household redesign effort, OFSPS initiated early in 1980, a review to determine the current status of redesign planning for various surveys and to develop in consultation with the sponsoring agencies, a review strategy appropriate to each survey program. In so far as possible, the review was designed to complement agency efforts to provide requirements for sample redesign to the Bureau of the Census in the detail needed to place the redesigned surveys in operation during the period 1983-1985.

From the vantage point of OFSPS, the greatest threat to realization of the full redesign potential would be a failure to examine the current survey data content, frequency, and geography in terms of the sponsor's current and anticipated data requirements. Almost as serious would be a failure to actively examine the possibility of meeting data requirements of other agencies which might be appropriately

satisfied through the survey. In the absence of a thorough review of data requirements, redesign efforts would consist mainly of improving the efficiency of current program operations. Redesign tasks would center around technical questions such as determining optimal stratification, greater use of telephone interviewing, possibilities for reducing redesign costs by use of the same design for several surveys, and optimal interviewing loads.

Although methodological questions such as these clearly are not trivial and must be faced in any redesign effort, allowing the redesign to proceed without a critical review of data requirements could preclude consideration of opportunities to meet additional information needs both within and outside the sponsoring agency. A redesign of this type could also fail to consider growing demands for relating data collected in separate surveys, and for thorough assessment of the benefits derivable from relating survey data to administrative data sets.

Consequently, the first task of the redesign review by OFSPS was to learn whether the sponsor was making an attempt to rethink the relationship of the survey program to the basic analytical questions likely to be of concern to policy analysts during the probable ten-year life of the redesigned survey program. An opportunity to involve high level statistical policymakers was provided through planning meetings scheduled as part of the statistical budgeting process of the Statistical Policy Coordination Committee. Important support was also obtained through discussions of the household survey review in budget hearings called by the Office of Management and Budget with relevant agencies. These meetings emphasized the importance of the redesign effort and paved the way for meetings with OFSPS at the working level.

In preparation for the working meetings, an extensive set of questions was made available to each of the sponsors. The OFSPS reviewer was expected to exercise selectivity in choosing areas to be intensively covered in individual reviews. The questions related to current status of plans for the redesigned survey, content of the survey and uses of the data, the planning process employed to determine agency, government-wide and nongovernmental data priorities, alternative sources for data now collected in the survey, methodology, charges for users outside the agency, resources required, plans for making data accessible to users, analysis and publication of data, and the use of the survey for the preparation of estimates for smaller areas. A copy of the questions is given in Table 1.

It soon became apparent that the questions provided by OFSPS tended to focus discussion on the survey vehicle as the starting point. In other words, agencies tended to respond by indicating that the current vehicle embodied their current data needs and that only fairly modest modifications were needed. However, it was critical to the OFSPS objective of maximizing the usefulness of the surveys to encourage as much

freedom as possible from practical constraints during the initial stages of the redesign planning. Thus, OFSPS attempted to determine whether the sponsoring agencies had reviewed their broad data needs in a way in which key analytical questions were stated without reference to the anticipated data source. Where broad analytical questions had been stated, as for example, by the Levitan Commission, they would then need to be made more precise through the specification of suitable quantitative measures including the dimensions of geography, frequency, precision and longitudinality. Where such a recent review was lacking, as for example in the Department of Housing and Urban Development, the sponsor was encouraged to survey agency users in order to develop a current statement of priority analytical concerns.

Similarly, potential sponsors, i.e., those not currently supporting the particular household surveys, were asked to indicate broad analytical questions of concern to them and to specify the dimensions of the data required. The possibility that the OFSPS planning effort might evolve into a binding arrangement for continued reliance on another agency's survey program to meet significant data requirements tended to dampen enthusiasm for participation of potential sponsors. As a consequence, progress in involving them in serious discussions has been considerably more difficult and less advance than is the case for sponsors. Modest success in improving multiple use of the household surveys has been achieved with respect to the AHS. HUD, as the sponsor, the Energy Information Administration (EIA), as an agency interested in continuing use of AHS data, and the Bureau of the Census are discussing ways in which the AHS and an EIA survey can be mutually re-enforcing. Preliminary explorations have been initiated with the Department of Transportation with respect to the AHS.

Once significant needs for data about households had been identified, the next step proposed by OFSPS involved the identification of existing and potential sources of administrative and household data. One or more of the major continuing household survey programs would ordinarily be among the alternatives considered. At this point, joint meetings with the sponsors and potential sponsors, the Bureau of the Census and OFSPS have already been useful in shaping a "design envelope" or the general "givens", for example, the geography for which estimates are required or data needs for special population groups, which will meet a significant proportion of the priority requirements of each agency. For most of the surveys, discussions are still going on at this stage.

Periodically, as the attempt to specify the design envelope has proceeded, the Bureau of the Census has roughed out possible designs which might meet the defined data needs. The process has been an iterative one in which each design formulation has been reshaped in response to agency concerns. Eventually, when the number of promising designs has been reduced to a manageable number, the Bureau of the Census will provide rough cost estimates which may stimulate

further consideration of design alternatives. The set of alternatives will provide the basis for a determination by each sponsor or potential sponsor of whether to include a request for funds in the formulation of budget proposals. Further refinements to the design and survey content will continue over the next several years until the redesigned survey becomes operational. During this period, sponsors and the Bureau of the Census will consider the need for additional research projects which can be accomplished within the overall budget and timetable for the redesign.

Crosscutting Issues Under Consideration

A number of broad concerns have implications for all of the household survey programs and are therefore most conveniently treated as cross-cutting issues. Crosscutting issues identified as of this time as a part of the OFSPS redesign review include requirements for statistical and exact matching, timeliness, flexibility and confidentiality.

Matching - The overall usefulness of the continuing household surveys can be greatly enhanced through the inclusion of exact and statistical matching as common major design requirements in all of the surveys. Matching techniques have already made it possible to study the interrelationships of data appearing in different surveys and in administrative records.^{7/} Designs which anticipate matching applications should significantly improve the efficiency and accuracy of matching. Through this means many more relationships can be studied than would be possible using only the limited number of continuing survey programs which can be funded at any one time. The quality of survey data can also frequently be improved through matching survey data with administrative data.

Provision in the household survey review was made for separate exploration of matching requirements through the formation of a separate working group involving government and nongovernment analysts who have either used the results of matching or have conducted statistical or exact matches. The working group was specifically tasked to formulate recommendations in three areas: "1) to identify a core of information which should be common to all surveys, 2) to identify information which should be included on particular surveys which are prime candidates for matching, and 3) to identify data items which need to be standardized."^{8/} In addition, it was suggested that the working group might wish to explore other topics including the development of a research agenda.

Recommendations have been completed with respect to the first three tasks. These are currently under joint review by the sponsors and the Bureau of the Census with respect to their feasibility within the context of each survey program.

Timeliness - Early in the review, discussion repeatedly turned to agency concern with obtaining useable data in as short a time as possible after the reference period. With a few exceptions, the delivery time requested was always significantly shorter than presently provided by the Census and, depending on the program covered, generally from 1 to 6 months after the reference period. Sponsors and potential sponsors sought assurances that their data would be available on a specified schedule. Although there was agreement that timeliness was important and that there had been problems in this area, the cause of the difficulties was in dispute. Sponsors tended to believe that their work was not given adequate priority and the Bureau of the Census staff believed that a good deal of the problem was caused by late delivery of specifications. To avoid a stalemate on the issue of timeliness, OFSPS suggested that timeliness concerns be treated like any other design requirement. It was also suggested that a separate study of the extent and precise points of delay be made as a prelude to recommending alternatives for improvement. It was agreed that the 3-5 year lead time to the actual production of data from the redesigned surveys should provide sufficient time to develop and obtain consideration of proposals for adjustments needed to resolve the issue.

Flexibility - A third concern of sponsors which particularly threatened serious discussion of the addition of new sponsors was the degree of flexibility required for the addition of emerging analytical concerns. Potential sponsors generally wanted to be able to add new sets of questions on short notice and to obtain tabulations without an extended waiting period. Again, in the absence of specific design configurations it would not be possible to explore the degree to which flexibility could be incorporated. It was generally agreed that the continuing household survey programs should not be expected to meet all or even a major share of sponsor requirements for data relevant to short-term policy analysis needs. It was further agreed that flexibility should be treated like other design issues and included in the study of timeliness considerations.

Confidentiality - The unsettled state of confidentiality protection has added a dimension of uncertainty to the redesign options. As described elsewhere, the proposed establishment of protected enclaves through which sponsoring agencies could have access to individually identifiable records under clearly specified and enforced rules would greatly improve the quality and usefulness of the household survey programs by the application of

various matching techniques. 9/ However, for purposes of planning the redesign of household surveys, a cautious approach seems indicated which does not presume data access much beyond current practices. It is assumed that a number of existing arrangements for data access such as those between the Social Security Administration and the Internal Revenue Service for tax records, and between the Bureau of the Census and the Social Security Administration for developmental work for the Survey of Income and Program Participation can be extended on a regular basis.

The full impact on the redesign effort of the current severe constraints on the sharing of identifiable records will not be known until the end of 1980, but substantial problems have already appeared. For example, the lack of confidentiality protection within the Energy Information Administration has forced the deferral and probable abandonment of consideration of the possible use of the Annual Housing Survey as the main source for monitoring household behavior with respect to residential energy use. As a consequence, alternatives for strengthening independent housing and energy surveys through matching techniques are under consideration. Confidentiality options will undoubtedly be restudied at each major decision point in the redesign process, but even if favorable legislation is obtained, it is likely that full advantage of data sharing possibilities could be taken only at the risk of incurring substantial additional costs and delays.

Conclusion

The redesign of the continuing household surveys is a complex multiyear undertaking currently involving seven agencies as sponsors or producers and dealing with subjects of importance to all the statistical and evaluation units in the Federal Government. Likewise, the subjects covered are of vital importance to the general community of social scientists. In the redesign effort, the sponsors and the Bureau of the Census play the primary roles of articulating data requirements, translating requirements into viable operational programs and obtaining necessary funding and staffing.

In the process of the redesign, all program sponsors will have undertaken a reasonably complete review of priorities for data concerning households and will have considered alternatives for improving the performance of the data programs. With the exception of the Current Population Survey, during the remainder of 1980, many of the basic design features will remain open for discussion. Decisions on detailed design features will extend over the next three years, depending on the survey. Of special interest will be attempts to improve performance with respect to timeliness, flexibility, matching and efficiency.

Development of the major continuing programs has benefited greatly from agency sponsored discussions and contacts with the non-Federal community of data users and producers. It is hoped that this community will take advantage of the unusual opportunities for helping to reshape for the next 10 years the major sources of social intelligence represented by the continuing household survey programs.

TABLE 1

Review Questions

Current status of plans. What are the current plans for the survey: 1) during the period prior to redesign of the sample, and 2) after redesign? Explain. To what extent have discussions taken place concerning the redesign of the survey? Who has been involved? Have studies been prepared, or user meetings held? Explain. To what extent have alternative designs been considered. What are the standard errors (C.V.'s) for the most significant statistics? Content and Uses. What are the priorities for survey topics? What are the principal uses of the data? Explain the exact nature of the use as, for example, necessary to the preparation of a Congressionally mandated report (cite the legislation). What changes would be regarded as significant for key statistics. Planning process. What process is followed in the determination of survey priorities? Explain separately for agency, government-wide and non-governmental uses. When was the most recent review of survey content and what recommendations were made? Alternative data sources. What alternative data sources are there for the data obtained from the survey? What would be the effect of less frequent and/or less extensive data collection? Methodology. What is the universe of concern, e.g., the noninstitutional population? Have important subgroups been left out due to technical or cost limitations? Are any groups oversampled? Explain. What methodological work has been conducted on the survey? What results are available? How do survey results compare with other data sources? Explain. What plans are there for additional methodological work? Is a written plan available? How have sampling and nonsampling errors been addressed? Has an error profile been prepared? User charges. Are questions added for users outside the agency? Separately, identify one time and multiple requests. How are charges determined? Resources. Are major changes in the program level anticipated from the present through initiation of the redesigned survey? Explain. What additional resources are planned for FY 1982 and FY 1983 to support the redesign of the new survey? Explain. What plans are there for sharing the cost of the survey with other agencies? (Ref. Standards for Discussion and Presentation of Errors in Survey and Census Data.)

Access, analysis and publication. What plans for publication exist? Are clean tapes provided to the sponsor? Who is responsible for the tabulation and analysis of the data? Estimation for smaller areas. Are the survey data being used to obtain small area estimates through regression or matching techniques? What is the demand for small area data? Explain.

FOOTNOTES

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John Berry - CPS and CES
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 Katherine Wallman and Myra Triplett - NCS

- 1/ Counting the Labor Force, National Commission on Employment and Unemployment Statistics, Washington, D.C. September 1979.
- 2/ Health Statistics Plan, Fiscal Years 1978-1980. Department of Health and Human Services, Washington, D. C. December 1979.
- 3/ Surveying Crime, National Academy of Sciences, Washington, D.C. 1976.
- 4/ Goering, John M., Housing in America: The Characteristics and Uses of the Annual Housing Survey. Department of Housing and Urban Development, Office of Policy Development and Research. Annual Housing Survey Study No. 6. 1980. HUD-PDR-470-2.
- 5/ Weicher, John C., Lorene Yap, and Mary S. Jones. National Housing Needs and Quality Changes during the 1980's. Urban Institute. Washington, D. C. 1980.
- 6/ For a compilation of broad statistical planning issues, the reader is referred to A Framework for Planning U.S. Federal Statistics for the 1980's, Office of Federal Statistical Policy and Standards, U.S. Department of Commerce, July 1978.
- 7/ Statistical Policy Working Paper 5. "Report on Exact and Statistical Matching Techniques." Office of Federal Statistical Policy and Standards, U.S. Department of Commerce, 1980.
- 8/ Memorandum on "Initiation of Working Group on Statistical Matching." Jeanne E. Griffith, OFSPS, January 10, 1980.
- 9/ U.S. Congressional House. H.R. Report No. 96-835 on H.R. 6410. "Paperwork Reduction Act of 1980." Also, A Framework for Planning U.S. Federal Statistics for the 1980's, pp. 255-283.