

## ORGANIZATION OF THE FEDERAL COMMITTEE ON STATISTICAL METHODOLOGY

Maria Elena Gonzalez, Office of Management and Budget

The Federal Committee on Statistical Methodology (FCSM) which has a coordinating role within the statistical system, held its first meeting in July of 1975. The FCSM was initially organized by the Statistical Policy Division of the Office of Management and Budget (OMB). The U.S. Federal statistical system is decentralized. The major statistical agencies are located in various departments such as the Bureau of the Census and the Bureau of Economic Analysis in Commerce, the Bureau of Labor Statistics in Labor and the Statistical Reporting Service in Agriculture. <sup>1/</sup> The location of the FCSM, has moved twice because of reorganizations of the Federal statistical system. In October 1977, the FCSM moved to the Office of Federal Statistical Policy and Standards (OFSPS) in the Department of Commerce. In August 1981, the FCSM returned to OMB to the Office of Information and Regulatory Affairs (OIRA).

The main purpose of the FCSM is to identify and investigate technical and methodological problems which affect the quality of Federal statistical data and to suggest ways for improving the statistical methods used by Federal agencies for designing, gathering, processing, analyzing and disseminating statistical data. Another purpose is to study the cost effectiveness of various statistical methods.

Members of the FCSM are selected by the Office of Information and Regulatory Affairs of OMB. These members cover a broad spectrum of Federal agencies; however, they do not represent the agencies, but rather are individuals with recognized expertise in statistical methodology who are concerned with the quality of Federal statistical data.

The FCSM selects topics of methodological concern to be studied by subcommittees. The topics are proposed by individual members and then selected based on the amount of interest expressed by all members. When topics are selected for subcommittee work, the FCSM usually prepares a very general description of the area to be investigated by the subcommittee. This description serves as a starting point for the work of the subcommittees.

### Organization of the Subcommittees of the FCSM

After a topic has been selected for a subcommittee a chair is identified; the chair may be a member of the FCSM.

The membership of the subcommittees comes from various Federal agencies and is open to any Federal employee interested in the selected area. Members of the FCSM are asked to suggest possible participants for the subcommittee work. After an initial group has been invited, a first meeting is convened. During this first meeting the objectives of the subcommittee are reviewed and initial tasks are defined. The subcommittees provide an opportunity for collaboration by persons from different agencies with expertise and interest in a common subject. This collaboration provides an opportunity for fruitful exchange of experiences. The kind and extent of work of the subcommittee members varies depending on the expertise and interest of the individuals.

An element common to the work of nearly all subcommittees is the process of gathering information from Federal agencies (and in one case from contractors) on relevant procedures and methods. Frequently, this is done through a fairly structured survey process. In addition to providing the data needed to address the topic, this process is in itself useful to those who participate because it often encourages them to reexamine what they are doing.

There is no fixed time period for the work of the subcommittee, nor is there a set periodicity for the meetings. In general, however, the subcommittees have prepared their reports within 18 to 30 months and meetings are scheduled every 4 to 6 weeks. In one case, a follow-up subcommittee has been set up to consider the technical aspects of the implementation of the recommendations made by the original subcommittee; this committee was on statistical uses of administrative records.

After studying the area of concern, the subcommittee prepares a report which is published by the office in which the FCSM is located. These reports have formed a series called Statistical Policy Working Papers. After publication of the reports, FCSM-sponsored sessions are organized to discuss the findings and recommendations with other Federal employees. Reports on the work of the FCSM and its subcommittees have also been organized at meetings of the Washington Statistical Society and at the annual meetings of the American Statistical Association. Participants in these sessions include both Federal and non-Federal statisticians.

The Statistical Policy Working Papers published to date are:

1. Report on Statistics for Allocation of Funds (1978).
2. Report on Statistical Disclosure and Disclosure-Avoidance Techniques (1978).
3. An Error Profile: Employment as Measured by the Current Population Survey (1978).
4. Glossary of Nonsampling Error Terms: An Illustration of a Semantic Problem in Statistics (1978).
5. Report on Exact and Statistical Matching Techniques (1980).
6. Report on Statistical Uses of Administrative Records (1980).

The book review section of JASA (Journal of the American Statistical Association) has published quite favorable reviews of the Report on Statistics for Allocation of Funds and on the Report on Statistical Disclosure and Disclosure-Avoidance Techniques. The next sections of this paper discuss the history and the work of four subcommittees:

1. Contracting for Statistical Surveys--Approaching the Problem.
2. Statistical Interagency Agreements.
3. An Interagency Review of Time-Series Revision Policies.
4. Data Collection Methodology in Federal Government.

In other sessions at this meeting, papers related to work of the subcommittee on Implementation of Statistical Uses of Administrative Records will also be presented. Another topic being addressed by a subcommittee is the design and evaluation of questionnaires.

#### Contracting for Statistical Surveys

The Subcommittee on Contracting for Statistical Surveys was first organized in the Fall of 1977. An outline of the initial task was defined by the FCSM as follows. 2/

1. The task of the subcommittee should be developed sequentially comprising the following major steps (in chronological order):

- A. Prepare a comprehensive list of topics in the realm of contracts for Federal statistical surveys. The life-cycle of the contract should be covered.
  - B. Determine priorities with respect to topics to investigate.
  - C. Investigation of topics selected.
2. Various topics were discussed as possibly within the scope of the task:
    - A. In terms of types of contractual arrangements:
      - i. Competitive Federal contracts for statistical surveys.
      - ii. Sole source Federal contracts for statistical surveys.
      - iii. Statistical interagency agreements.
      - iv. Cooperative agreements with universities, etc.
      - v. International contracts under PL-480.
      - vi. Contracts in Federal-State cooperative agreements.
    - B. In terms of types of statistical services:
      - i. Developmental work on concepts and methods.
      - ii. Studies of statistical methodology.
      - iii. Data collection in statistical surveys.
      - iv. Program evaluation.
      - v. Analysis of data.
    - C. Expertise of persons to include (or consult) in the subcommittee:
      - i. Survey statisticians.
      - ii. Sponsors of surveys with specific subject-matter knowledge.
        - a. Policy/evaluation groups.

- b. Statistics and research groups.
  - iii. Contracting officers.
  - iv. Procurement experts.
  - v. GAO auditors of statistical surveys.
  - vi. Agency counsel with responsibility for reviewing contracts.
- D. How was agreement for contract carried out?
  - i. Study of "Requests for Proposals" (RFPs) issued for competitive contracts.
    - a. Select and study a sample of RFPs to determine characteristics.
    - b. What firms get invited to bid?
  - ii. How are statistical interagency (reimbursable) agreements achieved?
  - iii. Investigation of methods used for sole source Federal contracts.
- E. Study of procedures used for selection of contractor; review of proposals:
  - i. Membership of review committee.
  - ii. How are points assigned?
  - iii. Is there an acceptable range for evaluating proposals?
- F. Post-award activities:
  - i. Modification of contracts.
  - ii. Monitoring of progress of contract.
  - iii. Need for termination of contract.
- G. Evaluation of final product:
  - i. Have the needs of the sponsor been met adequately?
  - ii. Performance evaluation of contractor for future reference (need for legal advice).

The subcommittee's initial discussions considered the use of contracts vs. in-house work, as well as the use of contracts vs. statistical interagency agreements. After many hours of deliberation a working group was set up to investigate statistical interagency agreements (that is, contracts between Federal agencies). This working group later became a separate subcommittee and a paper will also be presented at this session on the summary and conclusions of that group.

Over the years, there has been much turnover in the membership of this subcommittee as well as refocusing of its objectives. However, in the past year the membership has been stable, the outline for the final report has changed little and significant progress has been made in drafting the report. The main topics covered are:

1. Introduction (focus and scope of report)
2. Technical skills needed in contracting for statistical surveys
3. Considerations in the preparation of requests for proposal (RFPs)
4. Contractor selection process
5. Contract management and evaluation: post-award activities

Appendix A. Informal survey of agencies and contractors concerning contracting for statistical surveys

Appendix B. Office of Management and Budget Requirements: Clearance and Information Collection Budget

One of the early activities of the subcommittee was to interview nine agencies and nine contractors to identify practices and pitfalls of the contracting process. Appendix A of the report will summarize these interviews.

The report being prepared should be useful to Federal employees involved in specifying statistical contracts, selecting contractors or monitoring statistical surveys. Based on the OMB clearances (August 1981) about 25 percent of the approved dockets (excluding application and regulatory requests) involve private contractors; for clearances involving telephone data collection 67 percent involve private contractors; for data collected by personal interviews 47 percent involve

private contractors; and for those involving both telephone and personal interviews 61 percent involve private contractors. Therefore, the contracting process is an important factor in Federal data collection.

Even though focusing the work of this subcommittee and keeping a stable membership were difficult tasks, the initial draft report is now almost complete. We will hear a first report of this material in the paper entitled "Contracting for Statistical Surveys -- Approaching the Problem."

#### Statistical Interagency Agreements

A working group of the subcommittee on Contracting for Statistical Surveys was formed to study the issue of statistical interagency agreements. Statistical interagency agreements are contractual agreements between Federal agencies where the sponsor agency agrees to pay for the services done by the contractor agency. A work plan written in 1978 states that a description of how interagency agreements are arranged, as well as identification of the various circumstances under which interagency agreements are suitable would be the foci of this group's work.

To illustrate the process of changing the focus of groups an example will be cited. A memorandum from Monroe Sirken (chair of the subcommittee) on "Plans for the Working Group on Interagency Agreements," June 30, 1978 states:

The goal of the Working Group (WG) has been modified. Originally, the WG planned to compare the cost, error, and administrative effects of three alternative arrangements available to a Federal agency for compiling and analyzing statistics: (1) in-house, (2) interagency agreements, and (3) contracts with non-Federal agencies. The WG soon recognized that the original objective was too ambitious. The WG is planning to limit its scope to a study of interagency agreements for statistical services.

This group carried out a small scale study of contractor and sponsor agencies of statistical interagency agreements to investigate (1) interagency agreement procedures and policies and how they vary from one Federal agency to another, and (2) the extent to which Federal agencies are involved in interagency agreements. 3/ Based on the results of these interviews a final report has been prepared.

The draft report was circulated to the agencies that participated in the feasibility study and their extensive

comments have been incorporated into the final report. The topic of statistical interagency agreements is of interest basically to the Federal agencies involved in these studies. Their importance is, however, much broader since important statistical data are collected through interagency agreements. The Current Population Survey, providing monthly estimates of employment and unemployment, and the Health Interview Survey, which is the source for health prevalence data, are examples of major surveys conducted through statistical interagency agreements.

#### An Interagency Review of Time-Series Revisions Policies

In the Fall of 1980, a subcommittee was formed to address the issue of making and publishing revisions and corrections to time series data. The initial specification of the problem pointed out some issues which might be addressed:

1. Frequency of revisions.
2. Labeling of preliminary estimates and revisions in publications and in public use tapes.
3. File maintenance procedures. Establishment of audit trails at the micro and macro levels showing amount and reasons for change.
4. How large a change is needed to justify a revision?

After a few meetings, it was decided to prepare a questionnaire to collect information about revision of time series. The topics covered in the questionnaire were: identification of time series, description of series, timing of release of statistics, reasons for revisions, magnitude of revisions, methods of dissemination and methodologies used in preparing original and revised data, and policies for revisions. 4/ The agencies represented in the subcommittee were asked to select a few series published by their agencies and to complete the questionnaire with respect to these series. The results were summarized and a report including eight recommendations was prepared.

These recommendations used input from the survey, as well as existing Federal practices in this area. The paper entitled "An Interagency Review of Time-Series Policies" represents the report of this subcommittee.

## Telephone Data Collection in Federal Statistics

In the Fall of 1980 a subcommittee was started to study the role of telephone, mail and personal interview surveys in Federal statistics. One of the first decisions of this subcommittee was to concentrate only on telephone surveys. This decision was based on the fact that the methodology of telephone surveys has changed dramatically in recent years and that several Federal agencies are beginning to take advantage of these new developments.

To determine the prevalence of the use of the telephone for Federal data collection, a request was made for a listing of the projects approved in the clearance process of the Office of Management and Budget. The various characteristics given on the request form (SF-83, 3-81 version) were included in this listing. Based on the listing, tabulations were prepared of the clearances for surveys which report collecting data by telephone.

The next planned step of this subcommittee is to gather further information on the characteristics of projects which report using the telephone for data collection and to identify issues which will improve the use of telephone data collection in Federal Government. This subcommittee is still active and a progress report of their findings will be presented here in the paper on "Data Collection Methods in Federal Statistics."

## Organization of the FCSM

The FCSM (often referred to as the parent committee) has provided the leadership in the selection of topics to be studied and has also served to review the reports of the subcommittees. Further the FCSM has encouraged the work of Federal interagency groups in investigating crosscutting methodological issues of importance to the Federal statistical system. The interagency group setting has provided a fruitful opportunity for persons with similar interests from different agencies to meet and obtain a good exchange of ideas. This type of forum serves to strengthen the Federal statistical system.

As chair of the FCSM, one of the author's duties is to work with the subcommittees to ensure results which are both useful and timely. Work with the subcommittees has many different aspects. For example, one needs to consider how to maintain sufficient interest of the members in the task in order to achieve the defined objectives. The task of focusing the work of the subcommittee takes ingenuity and much effort. Most of the subcommittees have

modified their objectives several times before settling on the task of preparing a final report. The necessary process of focusing and refocusing a report can be both time consuming and frustrating to the members of the group. However, the final product is likely to be improved by sharpening the objectives of the task to be accomplished.

Another important function is the selection of members for the subcommittees. Since subcommittees are open to any Federal person interested in working on the selected topic, the selection is done by assigning tasks and determining whether the person handles the assigned task effectively.

Experts from outside Federal agencies have sometimes been used to provide technical support to subcommittees. For example, Tore Dalenius worked very effectively in support of the Subcommittee on Statistical Disclosure and Disclosure-Avoidance Techniques; Tom Jabine is now working with the Subcommittee on Implementation of Statistical Uses of Administrative Records.

Once a final report is prepared, its publication and dissemination are also important aspects of the work. In 1982 we will issue reports on "Time-Series Revision Policies" and on "Statistical Interagency Agreements." An additional step which may sometimes be necessary is to determine the implications of the report for existing statistical standards or those to be developed. It is essential to develop operational recommendations to implement within the Federal statistical system the work of the subcommittees.

## FOOTNOTES

- 1/ A comprehensive description of the agencies within the U.S. Federal Statistical System is given in Principal Federal Statistical Programs, Statistical Policy Branch, Office of Information and Regulatory Affairs, Office of Management and Budget, March 1982.
- 2/ Memorandum from Maria E. Gonzalez to FCSM on "Work Plan for a Possible Subcommittee on Standards for Contracting Statistical Surveys", September 9, 1977.
- 3/ Copies of the sponsor and contractor questionnaire are available upon request from M. Gonzalez, OMB, NEOB, Rm. 3019, Washington, DC 20503.
- 4/ A copy of the questionnaire is available upon request from M. Gonzalez, OMB, NEOB, Rm. 3019, Washington, DC 20503.