

TOWARD AN AGENDA FOR THE FUTURE

TOWARD A FUTURE AGENDA FOR THE FEDERAL COMMITTEE ON STATISTICAL METHODOLOGY

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The main focus of my remarks is on a future agenda for the Federal Committee on Statistical Methodology (FCSM), a committee headed up so effectively for many years by Maria Gonzalez, to whom this conference is dedicated. Since the activities of the FCSM need to be responsive to the needs of the federal statistical system, I shall also comment on some likely future needs for that system, based in part on the presentations made in earlier sessions of the conference.

The current climate for federal statistics is one of increased demands and decreased resources. I believe that this climate calls for increased collaboration between the federal statistical agencies, and between these agencies and other bodies involved in statistical data collection and dissemination. This collaboration, which will be a recurring theme in my remarks, relates both to the production of statistics and to methodological research. In particular, in the current context, the climate enhances the need for contributions from the FCSM. In times of scarce resources, methodological research is often (mistakenly) a major victim. The FCSM can play the vital roles of sharing methodological advances across the whole of the federal statistical system and of promoting cross-agency contacts to facilitate the pooling of resources for methodological research.

The Personal Responsibility and Work Opportunity Act of 1996 will have a major impact on federal statistics. Welfare reform, with the devolution of responsibility for many welfare programs to states, calls for significant changes in many of the large federal surveys (e.g., the Current Population Survey, the Survey of Income and Program Participation, the

Medical Expenditure Panel Survey, and the National Health Interview Survey) and will affect the availability of welfare program data from administrative data systems. Information needs to be compiled on the programs offered by the individual states, and sometimes substate units, and survey questionnaires will need to be changed to reflect the new programs and their eligibility criteria. There will be greater need for state level estimates to monitor the effects of the different programs.

Welfare reform presents many methodological challenges for federal statistical programs. These include, for example, the difficulties of questionnaire design when respondents may not be familiar with the names of welfare programs, the need for small area data, and the development of linkages between state administrative program data and survey respondents. These challenges again call for collaboration between federal statistical agencies to pool their resources and develop unified methods of handling the problems that will be encountered. They also call for collaboration between federal and state statistical agencies so that data can be generated to satisfy both national and state needs. Such collaboration may, for example, establish compatible administrative data systems across the states. It may also involve partnerships between a federal statistical agency conducting a major national survey and some states to supplement the survey's sample in those states in order to produce state estimates of adequate precision.

Several of the sessions at this conference have indicated the benefits of close collaboration between the federal statistical agencies. An obvious example is the session on sharing data for statistical purposes. Another is the session on survey integration for health data, in which several health surveys are linked to the National Health Interview Survey. Other linkages may also be contemplated. In particular, linking large-scale surveys using inexpensive data collection methods - like the proposed American Community Survey to be conducted largely by mail and the National Immunization Survey conducted by telephone - to smaller scale

surveys collecting more extensive data in some form of two-phase sample design holds promise for the production of small area estimates.

Another session that points to the benefits of collaboration was the one on electronic dissemination of federal statistics. This field is experiencing rapid advances in technology, and there are clear benefits from collaboration between agencies. The benefits relate to keeping abreast of the technology, to the adoption of a common standard to aid users, and to the placement of data from several agencies in a single location, providing the user with one-stop shopping.

Panel surveys received little mention at this conference, but I believe they warrant further attention from federal statistical methodologists. There are nowadays many panel surveys and great strides have been made in addressing the additional complexities they present. Nevertheless, I think there remains much to be done, especially in the area of the longitudinal analysis of panel survey data. I see the methodology of panel surveys as a fruitful area for an FCSM activity, extending the work of the earlier subcommittee on this topic.

The issues of quality improvement, quality measurement, and quality reporting need to be kept on the agenda for the federal statistical agencies despite the tight financial situation. I interpret quality in broad terms, to include accuracy, relevance, timeliness, accessibility, and cost-efficiency. I am pleased to note the production of several quality profiles recently, and I hope this activity will continue, including both quality profiles for new surveys and updates of existing quality profiles. The FCSM Subcommittee on Quality Reporting might usefully develop guidelines for these quality profiles.

My last general suggestion for an area of attention for FCSM was stimulated by the comments of Victor Cohn in his keynote speech at this conference. The area is that of

communication skills, both oral and written. It is critically important that federal statisticians be able to communicate effectively, yet training of statisticians in communication is often limited. There is no quick remedy for this situation and it is not a problem that is methodological in a narrow sense. Nevertheless, it is a problem that FCSM might consider addressing.

I would now like to turn to the mission of the FCSM and its methods of operation. Margaret Martin (1991) provides a good review of the FCSM's mission, which includes exchanging information across agencies, promoting the advancement of best current methods, and obtaining consensus on definitions. As I argued at the previous seminar (Kalton, 1995), I think that special attention should be given to disseminating information to the smaller statistical agencies (whose needs are perhaps greatest), and to taking account of methodological advances developed in other countries and in organizations outside government.

The traditional way for the FCSM to carry out its work is by means of subcommittees appointed to study and produce working papers on specific topics. Recent working papers have, for instance, covered electronic dissemination, statistical disclosure limitation methodology, indirect estimates for small areas, and computer assisted survey information collection. Such working papers serve a very useful function. To attain full benefit from the work put into their production, they need to be distributed widely within the federal statistical service. They could also usefully be sent to government statistical agencies in other countries and to private survey research organizations.

While the working paper approach is effective in meeting some of the FCSM goals, it has its limitations. A working paper usually takes two or more years to complete, and once it is published the subcommittee disbands. Since working papers usually deal with topics of current research interest, they are likely to become rapidly outdated. A mechanism is needed to provide new information in a timely manner. One possibility is that FCSM could set up hot links

between the working papers (which are available on the internet) and other on-line information that provides news of recent developments. Another is that FCSM could establish list serves for continuing on-line discussion groups on working paper, and other, topics. Government statistical agencies in some countries produce journals or newsletters on statistical methodology. Running a full-fledged journal is a major undertaking, but newsletters, perhaps also on the internet, may be much more manageable and provide an effective way to communicate material rapidly among federal statisticians.

The FCSM might also convene workshops of federal statisticians and others to discuss topics of current concern, like the workshop held a couple of years ago on the use of incentives in surveys. Such workshops may be small-scale, informal, and convened at relatively short notice.

Finally, I believe that FCSM should continue to support these biennial symposia, well organized by Ed Spar and COPAFS. There are many conferences these days, and probably too many. However, this one, which brings together federal statisticians from many agencies, and which serves as a forum for the presentation of FCSM activities, is unique. I believe it serves a valuable function and I look forward to the next one.

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Toward an Agenda for the Future
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Over the past two days we have heard many innovative ideas and suggestions for the Federal statistical system -- many of which resulted from the efforts of the Federal Committee on Statistical Methodology (FCSM), and its able leader Maria Gonzalez. Maria initiated the FCSM 20 years ago and was instrumental in seeing that it was a success. This conference is a special tribute to Maria; we miss her.

I am honored to have been selected to try to fill Maria's shoes, and to continue the important efforts of the FCSM. The FCSM is a very important collaborative effort of the Federal statistical agencies. In light of budget constraints and public distrust of government, collaboration among the Federal statistical agencies is more important than it ever has been.

I am interested in continuing and building on the good work the FCSM has done in the past. But I am also interested in seeing how we can make the FCSM even more valuable in the future. Please send me your ideas.¹

With that introduction, let me point out some of the themes for the future I heard during the past two days. John Rolph and Graham Kalton also identified major themes, and my themes are on their lists as well: first, communication, and second, observations about the Federal statistical system.

Communication

The issue of communication came up in many of the talks in this conference: examples include Vic Cohn's keynote speech, "What We the Public Needs to Know;" the session "Training Federal Statisticians;" and the session "What the Public Needs to Know About Federal Statistics." In the latter session, the comments by Terri Ann Lowenthal were particularly relevant. Terri Ann suggested that Federal statisticians need to establish useful working relationships with legislators and staff, the media, and other professional societies (users of our data). She suggested that we need to get involved in and understand policy debates, the data needed, and how the data will be used. In short, we need to broaden our focus beyond statistics, so that we can better communicate with our customers.

Communication is the key to trust, as well as to understanding. As Vic Cohn so aptly offered "If we want to gain public confidence, we must confide in the public." We have fallen short in communication, and as a result we have lost trust. This is a problem that stretches beyond the Federal statistical community. It is also a problem in the academic community. We do not teach elementary statistics courses so that they are interesting. David Grier, a professor at George

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Washington University, used to talk about meeting people at Washington cocktail parties. When he told them he was a statistician, they typically put their hands in their pockets, looked down, shuffled their feet and said something like "You're in statistics? I took a statistics course once. It was awful." If these basic courses were more interesting, people might remember more about them than that they were very difficult and incredibly boring. Ideally these courses should instill an appreciation for and understanding of statistics and statisticians.

There has been some relatively recent work within the American Statistical Association on making elementary statistics courses more interesting and informative. Novel ideas and hands-on experiments enhance communication. The Federal statistical system needs to identify and use convincing new ways to demonstrate the value of statistical methods and concepts.

How do we go about improving communication? I am not sure. But I believe that it is critically important for our profession as well as for the Federal statistical system.

Federal Statistical System

Connie Citro had many important recommendations for the Federal statistical system. Her suggestions embody one of my earlier points: interagency coordination will be absolutely necessary in the future. Connie's suggestions, augmented with additional insights from other speakers follow. OMB's Statistical Policy Office working in concert with the statistical agencies should:

1. Commission an interagency group to address emerging policy issues and data needs, and to decide how best to satisfy them.
2. Charge interagency forums and working groups with specific charters --identifying problems to be solved, and working together to solve them.
3. Designate a lead agency for immigration (also recommended by Jeff Passel). One of the problems with the data on immigration is that no agency feels responsible for this area.
4. Establish a cross-cutting advisory group (in addition to the ongoing advisory groups for specific agencies.)
5. Consider implications of the Government Performance and Results Act, not only for our own agencies, but for the system as a whole. This supports Joe Wholey's comment in the session on "Performance Measurement in Statistical Agencies" that in 15 months, the government will be required to have a performance plan. We should strive to see that the statistical agencies are represented as a unit in that plan.
6. Use the INTERNET to advantage. There is a social statistics briefing room on the White House home page. It could be used to discuss cross-cutting issues such as kids, immigration, etc. We should consider ways to use the INTERNET to facilitate dialogue on cross-cutting issues.

7. Develop standards of good documentation for INTERNET products. For example, we need ways to describe data limitations in a form or format that people would be willing to read. In the session "Quality in Survey Data" Renee Miller talked about coming up with short, interesting descriptions of survey data and their limitations. I believe she said that the Energy Information Administration's descriptions were modeled after those prepared by the National Center for Education Statistics.

8. Be aware of the sociology of the Federal statistical system. As noted by Dan Melnick in the session "What the Public Needs to Know About Federal Statistics," each agency's approaches to problems -- its strengths and weaknesses -- result from its own history, staff, etc. A cross cutting approach can generate synergy, taking advantage of our diversity.

All of the sessions were interesting and valuable, and most pointed to a continuing need for interagency cooperation. For example, in the session "Sharing Data for Statistical Purposes," Tom Mesenbourg's paper made an implicit assumption that Congress will pass the data sharing legislation. We certainly hope that will be the case! As Tom observed, if the Statistical Confidentiality Act that would implement data sharing is passed, the statistical community will need a plan for implementing it in an orderly way. We will need to consider how to phase in this new approach and how to establish priorities. Kathy Wallman observed that we will need to work together to develop standards and guidelines for implementing the act.

An Update on the FCSM

About a year ago two new subcommittees of the FCSM were established to pursue training federal statisticians and to review and report on quality in survey data. Two of the sessions at this conference were organized by the new subcommittees.

The session on Training Federal Statisticians presented the efforts of a team lead by Cynthia Clark. They have done a lot of work, shared many ideas and made great progress toward their goal. In their session, the panel discussion that followed the formal subcommittee presentations focused on the need for training in new fields: large data bases, handling messy data, INTERNET, performance measures (timeliness, accuracy, relevance of products), political skills, ethical issues, and communication.

The second new FCSM subcommittee is not as far along, and needs to be revitalized. Nevertheless, there were two very interesting papers in the session on Reviewing and Reporting Quality in Survey Data. The papers by Claes Andersson from Statistics Sweden and by Renee Miller from the Energy Information Administration described approaches to measuring data quality and identified issues. The discussants pointed out that measures of total quality are most likely too expensive in times of shrinking budgets, and that it is not clear what users need or want in terms of the quality of documentation. Hopefully, the FCSM subcommittee will take on some of the challenges identified during the session. I would personally like to see this subcommittee identify common approaches for the Federal statistical system to use in measuring quality and timeliness. These are two fundamental attributes of information, and a more integrated statistical

system require will require common measures to support evaluation and comparison.

I also want to take special note of a particular recent success. In April, 1996, the FCSM along with many of the statistical agencies cosponsored a seminar on data editing, which was attended by about 500 people. The proceedings volume from that seminar appeared as Statistical Policy Working Paper 25 in December 1996.

Conclusions

This has been a very valuable conference with many excellent talks and discussions. Perhaps conferences like this are one of the best outcomes of interagency cooperation. I would like to thank Ed Spar, Helen Peck, and Susan Cohen from COPAFS for their part in organizing this conference. I did not realize until today that Helen came back from retirement to help out.

Thanks to all participants and attendees. What would a conference be without you? Please remember to send me your ideas for the future of the Federal statistical system in general and for the FCSM in particular.

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