

committee). During the interim the proposal and the problem set to which it was addressed has been intensively reviewed. I have had the benefit in this effort of the Council and effort of numerous others as indicated in the covering letter.

In order to identify the program options that might satisfy the intent of the Ruggles committee proposal, it was necessary to try to specify more precisely the problem set at issue. This has led to a characterization of the problem and attendant proposals in a somewhat broader context than the committee report but in a way that seems consistent with the intent and the leadership council of that group.

It is important to note that the report of the Ruggles committee is only one of the more manifest expressions of concern, dissatisfaction and frustration that have been surfacing among the groups that use numerical records for research, planning, or decisionmaking at all levels. The committee report is a good representation of the interests and the concern of the academic social science research community. There are other loci of discontent. The newly emerging welfare agencies of the Federal Government (OEO, EDA, the Department of Urban Affairs, the new programs in education and health in HEW, etc.) are experiencing great difficulty in assembling the statistical data that will guide them in analyzing their missions, establishing standards for performance and formulary for guidance, and support of administrative decisions and evaluating results. Their problems in this regard, when added to the usual difficulties of new program development, threaten to delay programs and render decisions more vulnerable to attack. A wide assortment of groups associated with making policy and planning for public facilities at all levels are becoming increasingly vocal about this concern. These are the groups that plan for roads, schools, hospitals, urban and regional development, etc. As business management turns increasingly to supplement its internal sources of information with the intelligence afforded by public agencies, they, too, are becoming aware of some of the inadequacies and anomalies of the information base.

Public needs for general purpose statistical information have never been satisfied and, indeed, never will. There are serious and legitimate issues of policy about how far down the scale one goes before general purpose becomes special purpose and about the levels of support for public information services that are appropriate. However, the problems that are at issue at the present moment go beyond the forms of discontent generated by marginal interests not served by current public policy. They are the product of fundamental changes on both the demand and supply side of the information process that have come to a head since World War II.

The most dramatic and obvious change on the supply side results from the advent of the large-scale computer. The economic feasibility and technical capability of producing, managing, and utilizing large numerical files has been multiplied by factors of a thousand in some technical applications and often by factors of 10 and a hundred in the economic and engineering dimensions of program planning. These are order of magnitude changes in capability that have come with revolutionary speed. They not only represent important and discontinuous changes in scale but also changes in kind because program options become technically feasible that were unthinkable as recently as 10 years ago.

Less commonly noted has been an increasingly dramatic change in information requirements on the demand side. In part, this is a consequence of the technical capabilities offered by the computer as well. The user can now handle data matrixes of a size and complexity formerly unmanageable and can use analytical techniques of a computational dimension formerly impossible. In part, however, the changes in information requirements stem from radical changes in demand factors distinct from these responses to expanded technical capability. Public policy in recent years has turned increasingly to a concern about the problems of social structure as they relate to public welfare and public policy. The issues of poverty, education, health, area depression, urban organization, etc., all require an increase in relevant detail for sub-system components of the total economy or total culture. At the same time the analytical disciplines in the social sciences and management analysis and control have been turning increasingly to quantitative methods and procedures.

As a result of these processes the users are increasingly finding that their needs for data are not satisfied by traditional documentary formats and the producers of data are finding the need to make data available more commonly in machine readable form—often in an organization and a format unique to the