

SMALL-AREA DATA ACTIVITIES

DEPARTMENT OF HOUSING
AND URBAN DEVELOPMENT

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Purpose

Members of the Census Bureau's Advisory Committee on Small-Area Data believe that the committee should act as an information exchange. This publication is, therefore, being launched as a step toward keeping both the users and the producers of small-area data informed as to needs, new programs, publication and other relevant items which may be of interest to readers. Articles will be directed toward state and local officials, planning personnel, and leaders in the civic, educational, and business sectors and will hopefully cover a wide range of topics. This issue contains accounts of the formation of the Census Advisory Committee on Small-Area Data, the forthcoming National Conference on Governmental Statistics, the Connecticut Interregional Planning Program, and an article on local data banks. Articles giving voluminous details will be limited in number since the purpose generally is to bring to the attention of persons those things which they can investigate more fully if they desire.

This publication will be issued and distributed by the Bureau of the Census on an irregular schedule. Individuals and organizations interested in the development and use of small-area statistics may receive subsequent issues by completing the coupon on page 3 and returning it to the Bureau. Recipients of this first issue must use the coupon or their names will be removed from the mailing list.

Comments and suggestions, both pro and con, on the utility and content would be appreciated.

Statements appearing in the publication do not necessarily reflect the policy or opinions of the Census Bureau.

Small-Area Data Defined

Small areas are generally construed as spatial aggregations below the State level ranging from groups of counties down to city blocks or block-sides considered individually for some purposes or aggregated in a variety of ways to meet administrative and analytical considerations. Some of the most common examples of small areas are: (a) standard metropolitan statistical areas; (b) single counties, cities, or towns; (c) regional economic areas or regional planning areas; (d) school districts, sanitation districts or precincts, and (e) central business

districts, census tracts, or sides of blocks. Small-area data refers to locally generated data as well as that from federal agencies.

Background Leading to Formation of Census Advisory Committee on Small-Area Data

The initial step in establishing the Census Advisory Committee on Small-Area Data was taken when a group of users asked to meet with the Bureau staff to discuss their interest in strengthening the Bureau's program of small area statistics and in integrating the development of this program with data from local and other sources. A meeting organized by Dr. Wilbur Steger, President, CONRAD Research Corporation, was held in August 1964 at which time many new areas of interest were expressed. Four such areas were selected as being of greatest urgency for further cooperative investigation:

1. Areal units
2. Intergovernmental data collection standardization
3. Evaluation of variables to determine those of greatest value to users
4. Special service activities of the Bureau of the Census

As a result of this meeting the Bureau decided to organize a more widely representative group to serve as an advisory committee on small area statistics. Pending the formal establishment of such a committee, the Bureau had convened in January 1965, an informal group of people interested in the geographic aspects of data generation in view of the urgency of scheduling advance preparatory work for the 1970 Decennial Censuses. Represented were urban transportation researchers, city and regional planners, systems development personnel, State and local government, university research interests, and Federal agencies.

The first meeting of the Small-Area Data Advisory Committee was held on July 19 and 20, 1965 and the second meeting on October 7 and 8, 1965. A third meeting will be held in the Spring of 1966. Dr. William L. Garrison, Professor of Geography at Northwestern University, serves as Chairman.



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National Conference on Governmental Statistics

A national conference on governmental statistics called for by the Governors' Conference is now in planning stages. The conference will be held on February 24 - 25 in Washington, D.C., principally for State officials but with important participation from other levels. The conference is to be planned and conducted by a broadly based steering committee and coordinated by the Council of State Governments. Its evolution can be traced from a proposal of Governor Henry Bellmon of Oklahoma, adopted by the 1964 Annual Meeting of the Governors' Conference: "That the Governors' Conference through its executive committee make appropriate investigation and recommendations for the standardization of statistical data in reporting, analyzing and evaluating governmental services." Improvements in State capacity to record, define and evaluate the many services of government, Governor Bellmon then observed, is needed for both current operating and long-range planning purposes. He noted difficulties, for lack of comparable data, in measuring progress among States and against national norms in many service fields as well as in analyzing economic conditions in adjacent areas.

Later in 1964, following action of the National Association of State Budget Officers to lend their support, the Governors' Conference Executive Committee scheduled "standardization of statistical data" for extended discussion at the 1965 Annual Meeting. Also, in the belief that the goals required agreement among State and Federal entities, a meeting of representatives of Governor Bellmon, and NASBO (National Association of State Budget Officers) and the Council of State Governments with interested Federal officials was held in February 1965 to develop additional materials for the consideration of the Executive Committee.

The 1965 Governors' Conference agenda featured contributions on the subject by NASA Administrator, James E. Webb, Dr. Raymond Bowman, of the U.S. Bureau of the Budget, and Dr. T.N. Hurd, Budget Director of New York State. A report of the Executive Committee adopted unanimously by the Governors featured recommendations for a statistical standardization unit in each State and an initial national conference on comparative statistics.

A steering committee consisting of State and Federal officials held a meeting on September 2, 1965, in Washington, D.C., for the purpose of organizing and holding initial discussions. Two other meetings have been held since then. Eugene L. Swearingen, Vice President of Oklahoma State University, is chairman of this group.

Local Government Data Banks as a Source of Small-Area Statistics

By
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As the size of local governments increases and the size and cost of electronic computers decrease, local government data banks have begun to appear rapidly.

The electrical accounting machines which made such great improvements in such things as billing and payroll accounting in the 1940's are being replaced with computers having greatly increased capabilities. Some of the larger local governments are now on the verge of replacing their first computers with larger, more centralized ones which can relate the data from one file with the data from others and allow access to all of them by a large number of users.

The significance of this technological revolution is that data for research, management and planning purposes is now becoming available as a by-product of routine governmental programs. Much of this data relates to individual parcels of land, and can be feasibly tabulated according to any desired geographic area, such as a city block, census tract, planning area, watershed or traffic zone. The only limitation is in making sure that special attention is given to establishing small area retrieval codes in each data record when it is created in the computerized file.

Although street address is the most common of such codes, it is too cumbersome to be very useful. Special codes for each small area for which data are to be tabulated can be put into each record, but they may get quite numerous, and there will always be requests for small area tabulations which were not anticipated and, therefore, cannot be met. Fortunately, mathematical coordinates can be used to uniquely identify a parcel of land, to make each parcel susceptible to any kind of desired small area tabulation, and to allow graphic display of data through automatic computer output procedures. Furthermore, devices are now commercially available at reasonable cost to enable the automatic assignment of coordinates to existing records about individual parcels of land, thus making it feasible to use coordinates instead of the traditional small area codes.

In a number of ways, the Federal government has been speeding up the establishment of local government data banks. The planning requirements in transportation, urban renewal and other Federal-aid programs have called attention to the great need for small area statistics. To help show how this need could be met, an urban renewal demonstration grant was given to five southwestern metropolitan areas, and has shown the feasibility of using computers to meet this need.* A second demonstration grant, given to the Washington, D.C., area through the Metropolitan Washington Council of Governments, is seeking to show that individual local government data banks within a metropolitan area can be established with enough compatibility among data classifications and location coding methods so that data can be assembled for metropolitan planning purposes as well as for other areawide analyses of small area statistics. Funds now available through the Federal highway program (BPR) and the urban planning assistance program (URA-701) may be used to help establish local government data banks which will supply the data needed to meet planning requirements. The Economic Development Administration of the Department of Commerce (formerly ARA) may also be able to supply funds for this purpose in some cases.

*Project No. Oklahoma D-1, coordinated by the Tulsa Metropolitan Area Planning Commission, carried out demonstrations of the feasibility of five different planning applications in Tulsa, Oklahoma; Wichita, Kansas; Denver, Colorado; Fort Worth, Texas; and Little Rock, Arkansas.

With Federal funds, computer technology, and improved management in local government coinciding in the data, bank movement, it is up to the users of small-area data to make their needs abundantly clear to each local government, so that opportunities for establishing workable codes for small-area retrieval of data will not be over-looked.

Connecticut Interregional Planning Program

By

Horace H. Brown

Connecticut Interregional Planning Program,
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State-wide land use, resources, and transportation planning in Connecticut is now being carried out by the Connecticut Interregional Planning Program, a joint venture of the State Department of Agriculture and Natural Resources, the Development Commission, and the Highway Department.

The Connecticut Interregional Planning Program is a mechanism for the preparation and sponsorship of a long-range state-wide comprehensive plan to cope with the problems and exploit the opportunities of Connecticut's indicated growth and development. Basic to the operation of the program is the coordination of the planning activities of the State's planning regions, the individual departments of State government and related federal agencies.

Implementing this mechanism is a staff of experts in various fields assembled within the State Highway Department, the Connecticut Development Commission and the Department of Agriculture and Natural Resources along with consultants and personnel engaged specifically for the program. The staff brings together talents and training in such diverse fields as economics, geography, conservation, statistics, engineering, planning, transportation and recreation, with others to be added as the needs of the program may indicate.

The program is cooperatively financed by the State of Connecticut through the contributions of the participating departments and by the federal government through the planning assistance program of the Department of Housing and Urban Development (formerly HHFA) and the Bureau of Public Roads.

The two-year Inventory Phase of the CIPP program was completed in 1964. During that phase, five different facets of the State's structure were explored and analyzed in detail: Physical, cultural, demographic, economic, and public service. Although little use was made of Census data in the inventory of physical geography, published and unpublished reports of the census of housing as well as data on industrial water use from the census of manufactures and measurements of town areas contained in the 1940 Census of Population were employed in two studies of the State's cultural structure. The inventory studies of population and labor force relied heavily on state-wide and town data contained in the published and unpublished reports of the census of population. The CIPP economic studies employed extensive data from the censuses of population, agriculture, manufactures, and business, while the public service reports contained much information from the census of governments.

In its current thirty-months Planning Phase, scheduled for completion in 1966, the Connecticut Interregional Planning Program is concerned with the analysis of the extensive data that has been assembled and of the projection of current trends. This will serve as a basis for the preparation of long-range proposals as alternatives to the indicated projections in the four broad areas of economics, development patterns, open space, and transportation. The separate proposals will be adjusted and coordinated into a workable comprehensive plan.

Detailed studies are being undertaken of the State's economic potential—the dimensions of the employment needs of the increasing population, the nature of changing employment patterns, the State's competitive position in attracting new industry, and development patterns in labor, capital and management. On the basis of such studies, the staff will devise plans and proposals for taking the maximum advantage of the unfolding situation. Data from the censuses of population, manufactures, and business are being used extensively in these analyses. Both published and unpublished data including tapes are involved.

Other studies are progressing relative to future concentrations of population. These involve an attempt to determine the nature and location of the progressive urbanization of the State and to prepare proposals for influencing general patterns of land use. Figures on

(continued on page 4)

NOTICE TO RECIPIENTS DESIRING SUBSEQUENT ISSUES

Small-Area Data Activities is published by the Bureau of the Census as required to keep users and producers of small-area data informed on developments on this subject. Individuals receiving this first issue may obtain subsequent issues by completing the coupon furnished below. Persons not specifically requesting copies will be removed from the mailing list.

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town population trends from the census of population are employed in these studies.

Recognizing that the acquisition of "open space" land is an obligation that cannot be indefinitely postponed, the staff is preparing recommendations in this area based on surveys and studies of the outdoor recreation preferences of Connecticut residents, types of facilities needed, regions of the State in which the need is most urgent, and the location and availability of the several types of resources, such as shoreline, lake and woodland. These studies rely in part on information from the censuses of population and manufactures (industrial water use), as well as special Bureau of Census surveys for the Outdoor Recreation Resources Review Commission.

With the inescapable awareness of the extent to which the pattern of modern life has become dependent upon rapid communication, extensive studies of developing highway and other transportation needs are under way. Vast amounts of data have been gathered through surveys and from statistical sources. On the basis of this data, scientifically analyzed both by experienced judgment and electronic computers, plans are being formulated for the efficient movement of goods and people. Census of transportation data will be utilized in these studies.

When the planning phase of the Interregional Program has identified goals and outlined concrete objectives in their attainment, the Program will make a concerted effort to chart the means, formulate the plans, and recommend the procedures necessary to implement specific planning proposals. Amending and adjusting planning proposals when changing conditions and unforeseen circumstances may indicate, the Program will continue to anticipate with enlightened preparation the inevitable problems of population growth and intensifying urbanization . . . to minimize the adverse effects of growth where they can be influenced . . . and to insure maximum enjoyment of unfolding opportunities and safeguarded resources.

Finally making the program truly interregional, the seven regional planning agencies in Connecticut which had already worked effectively with and contributed significantly to the work of each of the three departments involved, now cooperate with a united entity both contributing to and benefiting from a program for which they had long recognized a need. These agencies also make

extensive use of published and unpublished Bureau of Census data, part of which they obtain from CIPP.

On October 22, 1964, CIPP sponsored a Census Users Conference which was attended by about 50 State and local officials, consultants and representatives of private industry, as well as seven officials of the Census Bureau. Conferees described their employment of census data and recommended numerous improvements and additions to future reports of the Bureau.

In summary, census data for a variety of geographical areas, from enumeration district and tract level up, have been a vital information source throughout the inventory and planning phases of this Statewide program. Small-area data have proven particularly important in the transportation planning work which involves vast numbers of traffic zones and mathematical model work.

New Federal Statistical Directory

The twentieth edition of the Federal Statistical Directory has recently been compiled by the Office of Statistical Standards, U.S. Bureau of the Budget. Its principal purpose is to be a guide to easier direct communication among various federal offices working on statistical programs. It may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Price is \$0.70 (paper).

The directory is a companion volume to Statistical Services of the United States Government, last issued in 1963. This publication is also available from the Superintendent of Documents for \$1.00 per copy.

Schedule of Censuses Through 1970

<u>Year</u>	<u>Census</u>	<u>Year</u>	<u>Census</u>
1967	Business	1969	Agriculture
1967	Governments	1969	Drainage
1967	Manufactures	1969	Irrigation
1967	Mineral Industries	1970	Housing
1967	Transportation	1970	Population

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