

SMALL-AREA DATA ACTIVITIES

DEPARTMENT OF HOUSING
AND URBAN DEVELOPMENT

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Proposed Small-Area Data Research and Development Study

The opportunity is now available to make important advances following the 1970 Census to serve the evolving modern needs of numerous Federal, State, local, and private programs in urban areas that depend on Census statistics for analysis and for planning. Steps by the Bureau of the Census to meet the data needs of urban areas in the 1970's can also, as a byproduct, be expected to make a significant contribution toward standardizing the definition and format for local data, a much desired objective recognized by most students of the urban scene. Comparative analyses of activities and changes in one urban area as against others depends on local statistics more compatible in definition and form than are now generally available. Because the Census program is national in scope and because Census data occupy a central position in the information needs of many urban planning programs, it is reasonable to expect that a general framework developed to allow integration of Census data with other locally generated data will act to encourage greater uniformity in the coding and definition of local data in all urban areas.

To work toward the accomplishment of these goals, it is proposed to undertake a development project with the financial cooperation of interested Federal, State and local agencies in a standard metropolitan statistical area.

In April 1967, the Bureau of the Census is conducting a pretest of the procedures developed for a mail-out/mail-back population and housing census in 1970. This pretest is to be taken in the New Haven, Connecticut SMSA.

New Haven and Connecticut officials have expressed their willingness to cooperate in a small-area data research and development study based on the results of the Census pretest and subsequent surveys in the area. This project will have as its function the following:

1. Explore both the current uses and likely future needs for Census data in existing local, State and Federal programs.
 2. Develop a system that will allow efficient merging of Census data with other local and State data to meet the needs of specifically defined programs.
- Since an important step toward advancing the capacity for merging data from different sources is the creation of a common and relatively fine-grained system for relating data to small areas, special emphasis will be given to defining a workable block grid location system, consistent with the anticipated needs for the 1970 Censuses of Population and Housing. In addition, an investigation of data compatibility will be made with a view to resolving as many potential problems as possible within the limited resources of the study (e.g., problems of inconsistent definitions, timing, and coding).
3. Investigate the benefits of cooperative data collection between Census and other local, State, and Federal programs. For example, a study will be made as to the feasibility of coordinating the regular population and housing censuses with the origin-destination home-interview studies made by or for State highway departments, and of using Census data to meet part of the needs of such O-D surveys.
 4. Investigate the level of detail and the form in which Census data should be made available to local users. Included also will be a study of the form in which Census data can best be made available on magnetic tape.
 5. Develop a package of programs for use by local communities to allow rapid conversion of Decennial Census tabulations into information (e.g., summary reports, charts, and possibly map type displays) useful for local analysis.
 6. Analyze the results of the demonstration for potential strategies to be incorporated in the 1970 Census plans and in local community programs to take advantage of Census and other information.



U.S. DEPARTMENT OF COMMERCE

John T. Connor, Secretary

BUREAU OF THE CENSUS

A. Ross Eckler, Director

Improving Land Use Information

Several programs for improvement of land use information are under way which, in the course of the next decade, could materially change the content, scope, comparability, and usability of land use information. Scholars and research workers interested in better data about land should be aware of these programs and prepare to participate in efforts at data improvement.

In early 1965, the federal agencies, Urban Renewal Administration and Bureau of Public Roads jointly published a *Standard Land Use Coding Manual*. (Available only by purchase from the United States Government Printing Office, Washington, D.C., fifty cents.)

In early 1966, Resources for the Future, Inc., with the collaboration of governmental and private agencies and individuals, published *Land Use Information: A Critical Survey of U.S. Statistics Including Possibilities for Greater Uniformity*. (Available by purchase from The Johns Hopkins Press, Baltimore, Maryland or through commercial bookstores, for six dollars.) One major conclusion of this book is that a permanent committee on land use statistics to help public agencies and private organizations move toward more nearly uniform and more usable land use data should be established.

Meanwhile, the National Governors' Conference has instituted a program for improvement of all manner of socioeconomic data needed as an aid to policy decisions. The assistance of the National League of Cities, the National Association of Counties, and other organizations has been secured; cooperation with major Federal statistical agencies has been enlisted.

According to the Director of the Land Use and Management Program of Resources for the Future, Inc., the studies made so far indicate agreement on three fundamentals:

- (1) Land use information at the field or primary collection level should be recorded in detail as observed and with only a minimum of classification at this stage;
- (2) data should be obtained and recorded for the smallest recognizable parcel or unit which in turn must be described with sufficient accuracy that other data relating to the same area can be interrelated with confidence; and
- (3) the full potentials of modern data processing equipment should be employed to make summaries, cross-classifications, and interrelations of data about land.

New York State's Statistical Coordination Program

by
Harold Rubin, Director, Statistical Coordination
New York State Division of the Budget

New York State's statistical coordination program was inaugurated in 1964 with establishment of the Office of Statistical Coordination in the Division of the Budget. In broad terms its four principal functions are:

1. To improve statistical output so that the data necessary for budgeting, forecasting and planning are available.
2. To promote the exchange of information within State service, and between the State service and outside organizations.

3. To act as a clearing house.

4. To provide technical assistance.

So far the main emphasis has been on information flow. To eliminate inter-agency knowledge gaps of statistical and research studies a bimonthly periodical, the New York State Statistical Reporter, was initiated to report on completed, current and prospective studies.

All State agencies have been surveyed as to their statistical series. An inventory of these series will be published in booklet form in late Spring 1966.

State agencies have been encouraged to publish needed data. For example, the State Office for Local Government, as a byproduct of assisting localities in contracting for special censuses, obtained the latest figures for all New York localities. The 1960 Population Census figures plus all subsequent special censuses were then published in a booklet form and made available to State and local agencies.

In 1965 the Interdepartmental Committee on Research—an informal organization of research directors and related personnel in State service—was reactivated, with the Office of Statistical Coordination acting as its secretariat. The Committee meets three times a year to exchange information and to hear speakers on topics of mutual interest. It is also a forum for exchanging ideas among top research personnel on matters affecting statistical coordination.

A major function of the Office of Statistical Coordination is to improve the data base available to State agencies. For planning purposes, New York is divided into 12 regions. Each agency, however, uses its own regions for administrative reasons. To permit each agency to maintain its own regions, and still make full use of data for planning, the county is used as the basic building block. Where possible, State-produced statistical series will be made available on a county basis. In this connection, the Office will participate in the comprehensive surveys of all State agencies which are being undertaken in order to obtain information on their data, collection systems and techniques for updating their master files. Among the objectives of these surveys are to provide for the coordination of data processing systems and to establish a central data system for the State.

Where possible, State agencies will be urged to obtain figures from their Federal counterparts on the New York State portion of national surveys. Meaningful State data can often be provided by the Federal government at a minimum of additional cost.

The Office of Statistical Coordination acts as a focal point for bringing together people in different agencies who are operating in the same field. A recent example was the conference of representatives of the various State agencies concerned with the administration of criminal justice, called to help establish a reporting system for local expenditures in the field. Since there is national interest in the subject, a representative of the Census' Governments Division was invited to participate.

In acting as a clearing house, the Office of Statistical Coordination responds to requests originating both within and without the State. It also assists some of the smaller agencies having no professional statistical personnel to obtain data.

In addition, the Office assists in establishing training courses in research and statistics. As a by-product of one course, OSC published Guidelines for Chartmaking, a pamphlet designed to help researchers, statisticians and others do a better job in the graphic presentation of statistical data.

New York's statistical coordination program is still in the beginning stage. Much more remains to be done so that the data needed for decision-making are available. Future plans include publication of a Statistical Abstract of New York and retaining highly qualified statisticians as consultants to be made available for specific agency problems.

Assistance to Communities That Wish to Conduct Housing Surveys

A program to provide on-the-spot technical assistance to communities that wish to conduct their own housing surveys is now being developed by the Bureau of the Census.

The rapid and dynamic changes occurring in the housing inventory in many of the Nation's cities and localities have generated the need for such a program. Up-to-date housing information is needed by planning and other community officials concerned with local housing markets, including lenders, builders, real estate firms, etc. Many localities do not have the financial resources to contract with the Bureau of the Census or private survey organizations to conduct such housing studies for them, but do have competent personnel who, if provided with technical guidance, would be able to carry out their own surveys. In recognition of these needs, the Bureau of the Census has instituted a Technical Assistance program under which a survey could be designed to provide vacancy rates, characteristics of the vacant units, as well as housing and household data for the occupied inventory. Upon request by communities, the Bureau will provide necessary technical guidance, from the time of initial planning to the completion of the survey. The assistance will cover such phases of survey activity as the selection of concepts and definitions, question wording and questionnaire design, sample design and selection, preparation of instructional manuals for interviewers, and for the supervisory staff, and procedures for the processing, tabulation and publication of the data.

By taking advantage of this program, localities will be able to conduct census-type studies at minimum cost. These studies will not only provide current information about a local housing market but comparisons with other localities will be possible by use of standardized concepts, definitions and procedures. The Technical Assistance Program is designed to be as flexible as possible so that each locality can "tailor" its own survey to meet its individual needs.

To help implement the program, the Bureau has available a staff of technicians experienced in the field of housing surveys. Communities asking for technical assistance will be required to pay the travel and per diem (living allowance) costs of the Bureau technician(s) for each day his services are required. The amount of the per diem and travel expenses is determined in accordance with Federal regulations regarding travel allowances for government employees. The salaries of the technicians, however, will be paid by the Bureau. Although

Bureau personnel will be available to the community in an advisory capacity, the actual conduct and supervision of the survey (securing office space and facilities, obtaining staff, conducting the field enumeration, and processing, tabulating, and publishing the results) is the responsibility of the community.

For further information community officials should write to Mr. Arthur F. Young, Chief, Housing Division, Bureau of the Census, Washington, D.C. 20233.

Small-Area-Data Activities is sponsored by the Census Bureau's Advisory Committee on Small-Area Data. Its purpose is to serve as an information exchange to keep both the users and producers of small-area data informed as to needs, new programs, new publications, and other relevant items which may be of interest to readers. Suggestions on articles or notes for future issues are welcomed. Articles contributed by outside authors are subject to review prior to publication.

National Conference on Comparative Statistics

The National Conference on Comparative Statistics was held February 23-25 in Washington, D.C. The Conference was called to discuss information needs for decision making by State and local governments and standardization of statistical data at each level and on an intergovernmental basis.

The Conference was addressed by Governor Bellmon of Oklahoma, Governor Volpe of Massachusetts, Congressman Arnold Olsen of Montana, Charles Schultze, Director of the U.S. Bureau of the Budget, A. Ross Eckler, Director of the Bureau of the Census and a number of other speakers. About two hundred delegates attended from 39 States, local government administrations, Federal Government agencies, and organizations interested in the purposes of the Conference.

At the concluding session, the Conference recommendations were summarized by the Chairman as follows:

1. The Conference supported the recommendation that a unit for statistical coordination be established in each State and delegates were urged to carry this recommendation to their Governors.
2. The Conference expressed a need for a continuing national forum to discuss problems of statistical coordination and for a secretariat to provide such a forum. Although there was no final agreement on the location of such a secretariat, the Advisory Commission on Intergovernmental Relations was suggested as a leading possibility.
3. A second Conference was recommended for the Spring of 1967, with more emphasis on specialized fields.
4. Continuation of the steering committee with the Council of State Governments as a participant was recommended to plan the 1967 conference and work on related problems.

1964 County Business Patterns

The Census Bureau has placed on an annual basis its series of reports called "County Business Patterns" which, based upon Social Security Records, presents employment and payroll data by industry and kind of business for each county. The new reports are published on a faster time schedule and give more detailed geographic information than previously. The 1964 series has now been published and is available from the Government Printing Office.

Census Tract Conference Papers and Census Tract Manual

"Papers Presented at the Census Tract Conference on September 10, 1965, at Philadelphia, Pennsylvania" has recently been published. Major topics covered in the papers deal with local area information systems and data banks and the 1970 Censuses of Population and Housing. The publication is for sale by the Bureau of the Census, Washington, D.C. 20233 or at any of the Field Offices of the Department of Commerce (Price: 50 cents).

The fifth edition of *Census Tract Manual* has also recently been published and is available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 (Price: 35 cents). This manual tells what tracts are, describes their origin and development, their value and uses, what areas are eligible for Census Tracts, how to get them established, and also covers a number of other related subjects.

New York Regional Statistical Center

The New York Regional Statistical Center was established by the New York Chapter, American Statistical Association, in January 1966. The Center was created as an operating organization in order to accelerate the development of more adequate statistics for the New York Community and to function as a service center in the area of regional statistical work. The term "regional" refers to the 22 New York, New Jersey and Connecticut counties within about a 50-mile radius of Times Square.

Three initial projects of the center deal with the development of an inventory of statistical generating sources and data sources within the Region, the publication of a Regional Statistical Bulletin, and a program to pinpoint statistical gaps and areas of appropriate new development of data which the cooperative effort may suggest.

The Center has begun operations with a staff of four under the supervision of Dr. John I. Griffin, Director and Mr. Richard Carstens, Administrator. It is located at 17 Lexington Avenue, New York, N.Y. 10010.

This publication is issued and distributed by the U.S. 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 writing to Small-Area Data Advisory Committee, Bureau of the Census, Washington, D.C. 20233.

Geography Division of Census Now Busy With Preparatory Work for 1970

Plans are now underway to conduct the 1970 Census in most urban areas by mailing questionnaires to all residential addresses with a request that they be completed and mailed back to local census offices.

Under this plan, enumerators will still be needed in some of the difficult areas of our cities and in all non-urban areas. They will also be used to follow up on non-responses and to complete partially-filled questionnaires.

This new concept has changed somewhat the role of the Geography Division of the Bureau of the Census. In addition to the major effort now taking place in the compilation of uniform metropolitan maps, there is a need to prepare address coding guides to facilitate the assignment of individual addresses to specific geographic areas. This latter project involves the preparation of a master coding file on computer tape to be used in assigning 40 to 50 million addresses to States, counties, cities, congressional districts, zip codes, tracts, wards, blocks and block faces.

The mapping program requires compilation of maps at a scale of 1":800', starting with U.S. Geological Survey 7 1/2 minute quadrangle maps, eliminating the topographic features and filling in streets and natural boundaries and their names in as much detail as possible by using all available sources.

This will eliminate the forced use of a conglomerate array of maps in widely varying sizes and scales which, in many cases in the past, failed to show some existing streets while showing some which never really existed except in developers' plans.

The Census Bureau, being essentially a map-using agency rather than a maker of maps, must necessarily secure extensive cooperation at the local level. We believe we will get it from areas which have alert planning groups because the maps are only a portion of a broader program which will provide a vehicle for tying-in locally developed data (such as assessor's records, public health statistics, school information, transportation planning or crime statistics) with Census Bureau figures and in the same geographical units used by Census.

Those geographical units will, for the first time, range from an entire city to just one side of one block. The information to be derived from such flexibility is limited only by computer capacity, disclosure rules, limits imposed by local users, and the willingness of local groups to pay the modest cost of special tabulations.

As one example of possible local use, the following question might be asked as a base for determining crime rates by age groups: "How many males between the ages of 15 and 45 live in the second police precinct?"

Or another example: "How many people over the age of 60 live within 20 blocks of the proposed recreational center for aged?"

Such questions could be answered almost immediately because of the combination of census and local data coded to identical geographic units.

Map Compilation Program

The Census Bureau will make the newly compiled maps available to the communities covered. While those maps will not have the extreme accuracy necessary for detailed engineering projects, they will be better than anything heretofore available for Census purposes and they will have many uses in fields such as local planning.

The cooperative system of map compilation will work like this:

1. Metropolitan maps, scale 1":800', will be compiled at the Census Bureau. (This step is now about one-third complete.)
2. Copies of the maps will be sent to the local agency which has agreed to serve as coordinator between local cooperating units and the Geography Division.
3. The coordinating agency will distribute maps to the cooperating units for updating and correction.
4. The coordinating agency will review the changes and return the map to the Bureau.
5. Original tracings will then be updated to conform with the locally edited sheets.
6. Copies will be returned to the coordinating agency for local use.
7. The maps will be updated periodically by repeating steps 2 through 6.

Address Coding Guides

In the block face-block intersect program to establish the address coding guide, the following procedure is to be followed:

1. FOSDIC worksheets, showing street names, block face identification, intersecting streets, address numbers and side of street will be developed by Census, using information from commercial mailing list and directory firms. (The FOSDIC sheets are later to be microfilmed and put on computer tape.)
2. The FOSDIC sheets, along with maps depicting census area identifications, will be sent to the local coordinating agency, which will distribute them to cooperating groups.
3. Those groups will complete and update the FOSDIC sheets.
4. Corrected forms will be returned to the coordinating agency for review.
5. Interested agencies may now determine what use they will make of a 5-digit optional field reserved on the FOSDIC form for local use. They will then code the form to make the required information readily available. (Alternatively, this field can be completed during step 3.)
6. The FOSDIC forms will be returned to Census for review and recording on computer tape.
7. A tape copy of the coding guide will be sent to the coordinating agency for local use.

8. Actual addresses will be coded in 1969 after which a simulated mailing will be made to test the address list and to allow local letter carriers to make mailing list changes.

Cooperation Invited

The Department of Housing and Urban Development recognizes the benefits accruing from cooperation between metropolitan groups and the Bureau of the Census in the fields of mapping and address coding, and indicates that applications for "701 grants" on a two-thirds to one-third basis for costs incurred locally in these cooperative programs will be favorably received.

Space limitations prohibit covering the new project in its entirety. Although there are complications for which we do not now have solutions, we invite questions. While we may not have the answers at once, it is possible that inquiries will stimulate thinking on various parts of the program.

We invite suggestions, too. This is a pioneer effort and the sooner we identify and solve the problems involved, the better the 1970 Census will be.

The Address is: Chief, Geography Division, Bureau of the Census, Washington, D.C. 20233.

Census Users Regional Conferences

In order to learn more about the needs of users of population and housing census statistics, the Census Bureau has scheduled a number of regional meetings in major cities. Participants are invited to consider subjects which might be included in the 1970 Census and to submit comments and suggestions. Meetings, which are under local direction, were held in March and April in Atlanta, Boston, Cleveland, Detroit and New Orleans. The schedule of the May and June meetings and the names and addresses of the organizers are shown below:

Baltimore June 15	Dr. Mathew Tayback, Deputy Commissioner of Health, Baltimore Dept. of Health, Baltimore, Md.
Chicago May 25	Mr. De Ver Sholes, Director Research and Statistics Chicago Assn. of Commerce and Industry 30 West Monroe Street Chicago, Ill. 60603
Dallas May 24	Dr. Gordon Shaw, Research Manager Dallas Morning News Houston and Young Streets Dallas, Tex. 75222
Denver May 23	Mr. James D. Braman, Jr., Director Department of Planning 810 Fourteenth Street (Suite 800) Denver, Colo. 80202
Houston May 4	Mr. Howard N. Martin, Manager Research Department Houston Chamber of Commerce P.O. Box 53600 Houston, Tex. 77052

Kansas City, Mo.
May 31

Mr. G. M. Robbins, Associate
Director
Community Studies, Inc.
2300 Holmes Street
Kansas City, Mo. 64108

Los Angeles
May 10

Mr. James H. Lewis
Director, Marketing Research
Manager, Research Committee
Los Angeles Chamber of
Commerce
404 South Bixel Street
Los Angeles, Calif. 90054

Minn.-St. Paul
May 17

Mr. David L. Ferguson, Director
Marketing Research
Investors Diversified Services,
Inc.
Investors Building
8th and Marquette
Minn., Minn. 55402

New York City
June 3

Miss Ingrid C. Kildegaard,
Research Statistician
Advertising Research
Foundation
3 East 54th Street
New York, N.Y. 10022

Norfolk
June 24

Mr. Robert F. Foeller, Director
S.E. Virginia Regional Planning
Commission
111 West Main Street
Norfolk, Va. 23510

Orlando
May 5

Mr. Robert H. Doyle, Executive
Director
East Central Florida Regional
Planning Commission
2323 South Washington Avenue
Titusville, Fla. 32780

Philadelphia
May 19

Mr. Harlin G. Loomer,
Planning Research Consultant,
Philadelphia Area Census
Committee,
6103 Carpenter Street
Philadelphia, Pa. 19143

St. Louis
June 1

Mr. Steven R. Best
St. Louis County Juvenile Court
701 South Brentwood
St. Louis, Mo. 63105

San Francisco
May 11

Mr. Angelo J. Siracusa, Vice
President
San Francisco Bay Area Council
World Trade Center
San Francisco, Calif. 94111

Seattle
May 12

Dr. Calvin F. Schmid, Director
Office of Population Research
University of Washington
Seattle, Wash. 98005

Conference on Urban Planning Information Systems and Programs

The Fourth Annual Conference on Urban Planning
Information Systems and Programs will be held in
Berkeley, California, August 19-21, 1966.

This year's conference will bring together planning
professionals and computer specialists for a critical
appraisal of existing automated information systems and
an exploration of new techniques and emerging tech-
nological developments.

The conference sessions will be of practical interest
to urban planners, economists, sociologists, geographers,
librarians, public administrators, and others who are
concerned with environmental analysis. Major sessions
will include: data systems for state and local govern-
ments; information systems; intelligence systems;
real-time time sharing systems; theory and application
of geographical information retrieval; and gaming
simulation.

More information can be obtained from Andrei Rogers,
Conference Chairman, Department of City and Regional
Planning, University of California, Berkeley, California
94704.