

WHAT WILL THE 1960 CENSUSES DO?

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The results of the 1960 Censuses will provide a basis for action and analysis to a large number of persons and organizations. Many users will be able to apply new yardsticks to the measurement of their current problems. Others who are concerned with the study of national, regional or local development will find a new benchmark to line up against those of the past. To meet these, and many other requirements for statistical information, the program of decennial censuses has been expanded and adjusted—especially during the last century. Only the first two censuses of the United States were limited to little more than a count of individuals and households. By 1810, it was already necessary to add some inquiries concerning the growing industry of the new nation. After that, the program continued to expand and change as the needs of the country changed. The Eighteenth Decennial Census includes a census of population and unemployment, one of housing (including utilities and equipment) and one of agriculture, irrigation and drainage. Censuses of industry, mineral industries and business are to be taken in 1959, covering activity during 1958.

One of the key numbers to be secured in the 1960 Censuses is the population of the various jurisdictions and areas. Size is not only a matter of civic pride; it has many direct consequences. The apportionment of representation in the Congress and in the Legislatures of most States is based on the latest official census figures. Large sums of money are distributed from the Federal Government to the States and from the States to other governmental units, with the number of people as a major element in the distribution formula. Payments of \$6 to \$10 per person per year are not uncommon in the allocation of State funds.

Cities and States may boast that they have outdistanced a particular rival in population size, but there are far more significant consequences from the establishment of official figures. The rights and duties of municipalities are frequently dependent on the size of their population. The number of certain officials, their salary scales, the number of licenses for particular types of business, the applicability of certain laws, and even the terms on which loans can be negotiated and bonds sold are often dependent on the number of people.

Government planning for roads, schools, hospitals, and other public services will be affected by the new figures—so will business planning for production, sales, advertising, and location of plants. With the growing interest in housing, there is an increased demand for housing data, particularly for small areas within cities. The urban renewal program especially will find the new data of great value. Federal, State, and local governmental agencies concerned with agriculture will evaluate their programs on the basis of new results, and business interests concerned with the production, transportation, processing, and sale

of agricultural commodities, as well as those concerned with the sale of farm equipment or supplies, will find in the new results the materials necessary for efficient planning of their activities in the years ahead.

Many research studies will use the new data on population to analyze such topics as factors in the growth of population, the declining role of the foreign born, but the more enduring effects of differences in ethnic stocks, the geographic redistribution of the population, centralization and decentralization in metropolitan areas, the northward and urbanward movement of the Negro, the continuing growth of the West, the increase of the older population, changing patterns of family life, trends in the income distribution, rising educational levels, the relative growth of service and other white collar occupations, and many others.

Two Major Improvements Desired by Users

In preparation for the 1960 Censuses, the Bureau of the Census several years ago arranged for meetings with census users in various parts of the country. The local chapters of the American Statistical Association were particularly helpful in the conduct of these meetings. Many suggestions and criticisms were made, but two particularly stood out regardless of the part of the country in which the meetings were held. These were: (a) greater timeliness, and (b) more attention to small areas. Steps have been taken to go a long way toward meeting the suggestions, but it must be recognized that when we are dealing with 48 States, 3,000 counties, and 20,000 places, some results are going to come along earlier than others.

Steps taken to assure greater timeliness include efforts to speed up the field collection of data, a greater reliance on sampling for a considerable part of the data to be collected, and the use of new and faster equipment. This includes a document reading device which does away with the need for punching and verifying cards, high speed electronic computers to edit returns for acceptability and to tabulate them, and high speed electronic printers for copy preparation. As a result, much of the published material will appear earlier than was the case in the 1950 Census; gains of 12 to 18 months in the timetable should be possible for many of the tabulations. In the case of the population census, most items will be collected from a 25-percent sample of households. Only age, sex, color, relationship to head, and marital status will be asked of every person. This should speed up the collection of data in the field and expedite the editing and coding, since some of the items which have been placed on a sample basis require manual coding and would have slowed up processing if they were on a 100-percent basis. In the case of the housing census, items which are not needed on a block basis will be collected from a 25-percent (or smaller) sample. In the Census of Agriculture steps have been taken to reduce the

amount of information collected on a 100-percent basis, in part by moving additional items to a sample basis.

Users who are interested in small area data will take particular satisfaction in the fact that the number of census tracts has virtually doubled—from about 12,000 in 1950 to 22,000 in 1960. Nearly every city of 50,000 or more will have been tracted by the time of the 1960 Census, and for most cities of 100,000 and over, the entire standard metropolitan area will have been tracted.

Although the Bureau does not publish tabulations by enumeration districts, a number of users have found data for these small administrative work units useful for analysis where tracts are too large. In about 100 cities or counties arrangements have been made with local groups to have the enumeration districts defined in such a way that they would represent useful units for analysis should tabulations on that basis be desired.

Housing statistics will again be presented by blocks for cities of 50,000 and over. Recognizing that such statistics might be useful in some places with a smaller population, the Bureau has undertaken to develop cooperative arrangements whereby block statistics can be made available for individual places which make the necessary arrangements, including payment of added costs, in advance. Some 133 communities have entered into such arrangements with the Bureau.

The provision of data for minor civil divisions of counties in the past has been both costly and difficult. The cost arises partly from the large number of such units; the difficulty from the fact that in some States these units have little stability or standing. In cooperation with State and county officials of 17 States, stable statistical areas, known as census county divisions, have been established. These will be used for whatever data are presented for subdivisions of counties in 1960. This program is an extension of one developed for the 1950 Census in cooperation with the State of Washington.

Other Urgently Needed Improvements

The staff of the Bureau has been very much aware of the need for improvements in both coverage of the census and the quality of the data to be collected. Studies initiated by the Bureau indicate that the 1950 Census may have missed approximately 3 percent of the population, that this deficit was not evenly distributed, and that, as a consequence, some inequities may have resulted. The question of quality of the data is closely related to the question of coverage. If the census tends to miss young adult nonwhite males more frequently than some other groups, this fact affects sex ratios, age composition, household statistics, occupational statistics, and all other data in which age and sex are involved. If young couples tend to be missed more frequently than the average of the population, this may also affect the degree of coverage of infants. Analysts have long speculated on the reasons why respondents apparently failed sometimes to report such significant items

as the presence of a baby. Studies following the 1950 Census, indicate that much of the underenumeration of small children was accounted for by the underenumeration of their parents.

A number of steps have been taken in the expectation that they will make for improvement in quality and coverage. The work load of enumerators in rural areas has been substantially reduced by taking the Census of Agriculture separately—in the fall of 1959. Methods are being developed to secure greater participation of each individual in providing the responses. In this way it is hoped to take advantage of the growing literacy of the population and the fact that consultation among household members may produce better replies than the off-the-cuff answers of the accessible respondents. In the last two Censuses of Agriculture significant gains were made by mailing copies of questionnaires to farmers in advance of the enumeration, so that they could have the answers ready when the enumerator called. In the Population and Housing Censuses an effort will be made to acquaint the entire population with the questions that are to be asked. A form calling for entry of the 100-percent items is to be sent to every household in advance of the enumeration with the request that it be ready when the enumerator calls. Households included in the sample will also be provided with the additional questions before they will be expected to reply to them.

Procedures and questionnaires have been subject to considerable testing in the search for improvements. Efforts are being made to simplify the enumerator's task. The information on residential finance will again be collected from a relatively small sample through a survey conducted at a time different from that of the main enumeration. A number of areas that might be especially difficult for an enumerator will be identified in advance and special arrangements made to secure the information there. There has been some testing of the possibility that the knowledge which mail carriers have about their service area might be used to help in locating households which the census enumerator may have missed. The Bureau has continued its work of developing methods of checking the quality of the work during field collection and processing. Plans are being developed to institute controls which will permit correction of errors at a time when such correction can be most effective.

Continuity of Statistics

A general purpose inquiry taken once in 10 years must always come to grips with the question of the degree to which continuity of series is to be preserved as over against the fact that conditions and needs change and that apparent comparability with the past may be less useful than forthright recognition that such comparability is not possible. This question has been in the foreground during all of the planning for 1960, as concepts and items have been reviewed to determine whether or not they should be included.

Certain items which were used in past censuses are no longer useful. No one will be able to say truthfully that the 1960 Census asked for

everything, including the kitchen sink. That particular piece of equipment is now so commonly found that no purpose would be served by asking about it. Indexes of levels of living which relied on electricity, running water, or mechanical refrigeration will have to be revised, for these items are now so nearly universal that statistics concerning their presence in the home are no longer pertinent. Certain items of farm machinery have become obsolete, and the fact that the horse is a rapidly vanishing farm animal has meant that the amount of detail concerning horses can be sharply reduced. These illustrate some of the situations which have been encountered. There are, of course, many new claimants for inclusion and some of these could be accommodated.

The spread and importance of what is known as contract farming gives this item special priority. The comparison of place of work and place of residence promises significant information for students of metropolitan area problems and this item is to be included. Dr. Shryock and Mr. Daugherty will report in more detail on these and other changes that are being made.

Where techniques for improving a particular line of information are available, the value of the improvement should be weighed against the impact on comparability. In the case of age there has long been a belief that asking for date of birth would provide data of better quality than those secured when age is asked for directly. Both devices have been used in the past but in recent years considerations of mechanical equipment were important in giving preference to the direct question on age. The new tabulating equipment makes it considerably easier to handle date of birth, and that is to be used in 1960. Some improvements are to be made in the definition of quasi- and other households and of farm residence. Efforts will be made to provide a new grouping within the rural population to identify separately the people who live in population clusters and those in the "open country."

Recognition of new needs does not necessarily mean the elimination of all measures of comparability with the past. The Current Population Survey provides the means of continuing series from the past which no longer merit consideration in the full census. It also gives the possibility of testing alternative procedures and for providing a bridge between the old and the new. Thus, the Current Population Survey is now the only source of data on literacy in the United States. The CPS late in 1958 collected statistics to help interpret the effect of the census rule which counts college students at the place where they are staying when they are attending college. The CPS will provide a bridge between the old and the new concepts of farm residence. The availability of the CPS has made it possible to reduce the pressure on the census schedule and the respondent by providing a vehicle for collecting national figures for a number of items which might otherwise have been required in the census.

Post Enumeration Survey

As an operation, a national census is unique in that it is carried out only once within a rather long time period and that it is not possible to test alternative methods under conditions which simulate the big census. The census itself offers the only real opportunity for examining certain proposed improvements which may be developed for the future. Moreover, the census operation itself is limited to a very short period of time, and once the collection of data has been started it is no longer possible to introduce improvements which may have been indicated by the experience of the first days. Therefore, it is especially important to make a systematic study of the quality of the results that are obtained. Such an evaluation of the quality of the census results is considered an essential part of the census program. The Post Enumeration Survey was the largest such effort in connection with the 1950 Census and a similar effort is planned for 1960. It is an accepted obligation on the census staff to point out the limitations of the data as they affect interpretations, comparisons or other uses that may be made of the data.

Monographs

The 1950 Census issued its findings in some 107,000 pages of reports. In addition to the basic tables, there were a number of special reports relating to individual subjects. There were also a number of analytical reports which were developed in cooperation with other agencies, particularly in the field of agriculture. A number of organizations outside the government issued special reports bringing together in readily available form the census data most needed by their clientele.

In cooperation with the Social Science Research Council a series of 13 census monographs has been issued. These publications provide an opportunity for specialists in the Bureau or in other organizations to bring together census and related materials concerning a particular topic and present them with more analysis and interpretation than is normally possible in a regular census report.

It is planned to encourage such efforts for 1960. One Federal agency has already taken steps to prepare summaries of the census data which are of particular relevance to its constituent agencies. The Social Science Research Council has established a committee to work with the Bureau in the development of a new monograph program.

Census statistics are frequently reissued by private organizations, often in combination with related statistics of interest to particular groups. Despite the fact that we occasionally have to explain why we publish such statistics when they are available in these other sources, we plan to continue to encourage such use of the census results. The widest possible dissemination of census results is desirable to give the public full value from the very large investment that is represented by a Decennial Census.