BRIEF HISTORY OF THE DECENNIAL CENSUSES, 1790-1970

A nationwide population census on a regular basis dates from the establishment of the United States. Article 1, section 2, of the United States Constitution requires that:

> Representatives and direct Taxes shall be apportioned among the several States which may be included within this Union, according to their respective Numbers. . . .The actual Enumeration shall be made within three Years after the first Meeting of the Congress of the United States, and within every subsequent Term of ten Years, in such Manner as they shall by Law direct.

The first enumeration began on the first Monday in August 1790, less than a year after the inauguration of President Washington and the assembling of the first Congress of the United States. Responsibility for the 1790 census was assigned to the marshals of the U.S. judicial districts under an act which, with minor modifications and extensions, governed the taking of the censuses through 1840. The law required that the filled-out schedules of the census be posted in two of the most public places within each jurisdiction, "there to remain for the inspection of all concerned. . ." and that "the aggregate amount of each description of persons" for every district be transmitted to the President. The inquiries in 1790 related to six items, and called for the name of the head of the family and the number of persons in each household of the following descriptions: Free white males of 16 years and upward; free white males under 16 years; free white females; all other free persons; and slaves.

Starting with the 1800 census, the census work was carried on under the direction of the Secretary of State, and from 1800 to 1840 the marshals reported the results to him.

The 1800 and 1810 population censuses were similar in scope and methods to the 1790 census. However, members of Congress, as well as statisticians and other scholars both within and outside the Federal Government, urged that while the population was being canvassed, other information needed by the new Government should be collected. The first inquiries on manufacturing were made in 1810, and in later decades censuses of agriculture, mining, governments, religious bodies, business, housing, and transportation were added. (Legislation enacted in 1957 and 1964 provided for the economic censuses to be taken in years which do not conflict with those in which the population and housing censuses are conducted. Those quinquennial censuses of agriculture which are taken for the years ending in "9," however, have continued to be taken within a few months of the decennial censuses of population and housing.)

The census of 1820 covered the subject of population in somewhat greater detail than the preceding one. This census is notable for having obtained for the first time the numbers of the population engaged in agriculture, commerce, and manufacturing.

The census of 1830 related solely to population, but its scope with reference to this subject was substantially extended. The use of uniform printed schedules began with this census. In previous censuses, the marshals or their assistants had used whatever paper they had, ruled it, written in the headings, and bound the sheets together.

The census act for 1840 authorized the establishment of a centralized census office during each enumeration and provided for the collection of statistics pertaining to "the pursuits, industry, education, and resources of the country." The new population inquiries included school attendance, illiteracy, and occupation.

Through the census of 1840, the household, rather than the individual, was the unit of enumeration in the population census. There was no tabulation beyond the simple addition of the entries submitted by the marshals, and there was no attempt to publish details uniformly by cities and towns or to summarize returns for each State by county unless the marshals had done so.

The act which governed the taking of the seventh, eighth, and ninth decennial censuses (1850-1870) provided for several changes in census procedures: Each marshal was responsible for subdividing his district for reporting purposes into "known civil divisions," such as counties, townships, or wards, and for checking to ensure that the returns of his assistants were properly completed. The number of population inquiries was expanded, and the items were related to each individual enumerated; additional "social statistics" (information relating to taxes, schools, crime, wages, value of estate, etc.) and statistics on mortality were collected for the first time in 1850.

A noteworthy feature of the 1870 census was the introduction of a rudimentary tabulating machine in the latter part of 1872 for use in the closing months of data processing. Another innovation was the employment of maps, charts, and diagrams as a means of presenting graphically the most significant facts of the enumeration.

The general scope of the 1880 census was expanded only slightly over that of the 1870 census, but much greater detail was obtained for many of the items. The census act for 1880 provided for the establishment of a census office in the Department of the Interior, and the appointment by the President of a Superintendent of the Census for the duration of the census. An important innovation in the 1880 census was the use of specially appointed enumerators and supervisors in place of the marshals and their assistants. Each supervisor was required to propose to the Superintendent appropriate subdivisions of his district and recommend suitable persons to work as enumerators.

Another provision of the 1880 census act was that, for the first time, enumerators were forbidden to disclose census information. From the time of the first census in 1790, some people had regarded many of the questions asked by the enumerators as an invasion of privacy, but there was no law limiting the extent to which information on any schedule could be used or seen by the public.

Again, in 1890, there was a slight extension of the scope of the decennial census, and some subjects were covered in even greater detail than in 1880. Data were collected in supplemental surveys on farm and home mortgages, and on the indebtedness of private corporations and individuals. The census of 1890 also provided, for the first time in the history of the census, a separate schedule for each family. A distinguishing feature of this census was the introduction of punchcards and electric tabulating machines for processing the data.

The 1900 census was limited to those questions asked for all the population in 1890, with only minor changes in content.

From the 1840 census through the census of 1900, a temporary census office had been established before each decennial census and disbanded after the census was taken and the results were compiled and published. A permanent Bureau of the Census was established in 1902, and the census of 1910 was the first to be taken by this organization. One important feature of this census was the method by which temporary employees were appointed. Since 1880, both supervisors and enumerators had been appointed by Congress; appointees were given noncompetitive examinations to determine whether or not they had the ability to fulfill their duties. In 1910, prospective census employees were given open competitive examinations administered throughout the country.

The 1910 decennial census was also notable for the method of presenting the results. Those statistics which were ready first, and especially those which were in greatest demand (such as the total population of individual cities and States, and of the United States as a whole), were given out first in the form of press releases. Later they were presented in greater detail in the form of official bulletins, and then in an Abstract with state supplements, appearing in this form 6 months to a year before issuance of the final reports.

In 1920, and also in 1930, there were certain improvements in collection methods and minor changes in the scope of the census. A Census of Unemployment was conducted in 1930 in conjunction with the decennial census; unemployment data were collected for each person reported to have gainful occupation but who was not at work on the working day preceding the enumerator's visit.

The 1940 census was, in many ways, the first contemporary census. One of the major innovations introduced at this time was the use of advanced statistical techniques, such as sampling, in census procedures. Previously, such techniques had been tried only experimentally. Sampling allowed the addition of a number of questions without unduly increasing the burden on respondents and on data processing. The introduction of sampling techniques in the 1940 census also made possible the publication of preliminary returns fully 8 months in advance of complete tabulations. The use of sampling also allowed the Bureau to increase the number of detailed tables published and to review the quality of the data processing with more efficiency.

Reflecting the concerns of the Depression years, the Bureau asked several questions in 1940 which measured employment and unemployment, internal migration, and income. A major innovation of the 1940 census was the inclusion of a census of housing to obtain a variety of facts on the general conditions of the Nation's housing and on the need for public housing programs. (Prior to this first census of housing, the housing data collected as part of the population censuses were generally limited to one or two items.)

At the time of the 1950 census, a survey of residential financing was conducted as a related but separate operation, with information collected on a sample basis from owners of owner-occupied and rental properties, and from mortgage lenders. Similar surveys were conducted in conjunction with the 1960 and 1970 censuses. (The inquiries in these surveys are not included in this publication; see references 4, 6 and 8 in the bibliography, p.179.)

Most population and housing inquiries included in the 1940 census were repeated in the 1950, 1960 and 1970 censuses, and a few were added, for example, place of work and means of transportation to work (1960) and occupation 5 years before the census (1970). In 1940 and 1950 the sample population questions were asked only for those persons whose names fell on the sample lines of the schedule. Sampling was first used for the housing schedule in 1950, with a few questions asked on a cycle basis: There was one pair of sample questions for household 1, another pair for household 2, and so on until household 6, when the cycle was started again with the first pair of questions. In the 1960 census, the sampling pattern was changed for population and housing questions alike: If a housing unit was in the sample, all the household members were also in the sample. The only population questions on a 100-percent basis (name and address, age, sex, color or race, marital status, and relationship to head of household) were those necessary to identify the population and avoid duplication.

The major innovation of the 1950 census was the use of an electronic computer, the first of a series, which was delivered to the Bureau of the Census in 1951 to help tabulate some of the data from the census of 1950.

Nearly all of the data processing was done by computer in the 1960 census. An electronic device for "reading" the census schedules was a further innovation. Special schedules were designed on which the answers could be indicated by marking small circles, and the information recorded in this manner could be read by FOSDIC (Film Optical Sensing Device for Input to Computer) rather than by a clerk preparing punchcards. In actual practice the schedules were first microfilmed, and then FOSDIC scanned the microfilm copy. From the position of the marks on the schedule, the information was converted into magnetized spots on tape which was then processed by electronic computers.

The 1960 census was also the first in which the mails were used extensively to collect population and housing data. The field canvass was preceded by delivery to every occupied housing unit of a questionnaire which contained the 100-percent questions (those asked for all persons and housing units). Householders were asked to complete the questionnaire and hold it until an enumerator called. The sample items were on a different questionnaire: In urban areas containing about 80 percent of the Nation's population, the enumerator left a questionnaire containing the sample population and housing questions at every fourth household, and requested the respondent to fill it out and mail it to the census district office. (Self-enumeration had been used on a very limited scale previously, but this was the first time it was made a major part of the decennial procedure.) When these questionnaires were received in the district office, the responses were transcribed to the special FOSDIC schedules. In rural areas, the sample information was obtained from every fourth household at the time of the enumerator's visit and recorded directly on the FOSDIC schedules.

An addition to the 1960 decennial program was the Survey of Components of Change, which measured the quantitative and qualitative impact of basic changes that occurred in the Nation's housing stock during the decade 1950-1960. The survey also provided a measure of "same" units, i.e., the preponderant part of the housing inventory which was not affected by the basic changes. The first survey of this type had been conducted in 1956 as a key part of the National Housing Inventory. A similar survey was conducted in conjunction with the 1970 census. (The inquiries in these surveys are not included in this publication; see references 6 and 8 in the bibliography, p. 179.)

The mails were used even more extensively in the 1970 census than in the 1960 census. Approximately 60 percent of the population, essentially that in large metropolitan areas, received questionnaires by mail and were asked to complete these questionnaires and mail them back to the census district office. These questionnaires contained the 100-percent and, where appropriate, the sample questions. In the areas where this procedure was used, enumerators contacted only those households that had not returned questionnaires or that had given incomplete or inconsistent answers to the questions. For the other 40 percent of the population, most of which was located in rural areas or small towns, mailmen left a census form containing the 100-percent questions at each residential housing unit on their routes. An enumerator visited each of these households to collect the completed questionnaires and to ask the additional questions for any household in the sample.

Although in 1960 the information supplied by householders had to be transcribed to FOSDIC-readable schedules by the enumerators, in 1970 the questionnaires completed by householders were themselves FOSDIC-readable. Thus, respondents could mark the appropriate answer circles on their questionnaires, which could then be processed directly without transcription.

In the 1970 census, the only population data collected on a 100-percent basis related to the same five subjects that had been collected on a 100-percent basis in 1960. Most sample questions were asked of either a 15-percent or a 5-percent sample of households, but some were asked for both, thus constituting a 20-percent sample. Only 15 housing items were asked on a complete-count basis; the remaining items were asked on a sample basis similar to that used for the population inquiries. There were relatively minor changes in subject content.

For 1970, extensive discussions with census data users led to a major increase in the amount of statistics to be tabulated, especially for small geographic areas. As part of the 1970 census program, the Bureau is publishing data for each of 1.5 million city blocks (including all blocks in urbanized areas), as compared with 1960 when the Bureau provided data for the 750,000 blocks within the city limits of places of 50,000 or more.

The 1970 population and housing census data are published in a series of reports similar to those published after the 1960 census. In addition, computer summary tapes, containing much more detail than appears in the printed reports, are available for sale to the many users who now have access to electronic data processing equipment.