

CENSUSES OF POPULATION AND HOUSING IN PUERTO RICO, 1960: PROCESSING THE DATA

INTRODUCTION

At 10-year intervals, the Government of the United States through the Bureau of the Census takes population and housing censuses of the United States and its outlying areas. The first population census of the United States in which Puerto Rico was included was taken in 1899. The first housing census of the United States was taken in 1940 together with the population census, and included Puerto Rico. The 1960 Censuses of Population and Housing of Puerto Rico were carried out as a joint effort of the Bureau of the Census of the United States and the Planning Board of the Government of the Commonwealth of Puerto Rico, with personnel and facilities in Puerto Rico being used for most of the work.

A series of formal agreements between the Puerto Rico Planning Board and the U. S. Bureau of the Census established that the data from the 1960 Population and Housing Censuses of Puerto Rico would be processed in Puerto Rico. Included in these agreements was the provision that the census data published for Puerto Rico would in general be comparable to those published for the United States, though the census content was to be adapted somewhat to meet the special needs and circumstances of the area. The 1960 Censuses of Puerto Rico were processed on punchcard tabulating equipment, rather than on the electronic equipment used in the United States. Consequently, the preparation of the questionnaires and other forms, flow charts, tabulation specifications, and instructions for the processing procedures had to be geared to data processing with punchcard equipment. Essentially the same pattern was followed as that used for processing the 1950 Censuses of Population and Housing.

THE CENSUS SCHEDULES

In the enumeration of population and housing in Puerto Rico, as in the United States, every fourth housing unit (and every fourth person in group quarters such as institutions and boarding houses) was designated a sample unit for which the enumerator asked a series of supplementary questions in addition to the census items which were obtained on a 100-percent basis. The enumeration of the 75 percent of the population and housing for which only the 100-percent questions were asked was carried out using a short household questionnaire referred to as the 100-percent questionnaire. Another household questionnaire was used for the enumeration of the 100-percent items and also the sample items for the remaining 25 percent of the population and housing. This questionnaire, since it carried the questions asked only of households in the sample, was referred to as the sample questionnaire though in fact it contained the 100-percent questions as well as the sample questions. Under special circumstances, other varieties of forms were also used

for the collection of data, but the information was transcribed from them to the standard questionnaires prior to processing.

Many of the questions on both the 100-percent and the sample questionnaires were designed so the enumerator could record the response by entering a checkmark in the appropriate box. This not only simplified the work of the enumerator but also made it possible to precode all the possible answers to these questions in advance and thus reduce the amount of coding to be done by the clerical staff in the data-processing office.

100-Percent Questionnaires

There were two variations of the 100-percent questionnaires. The one used in most of Puerto Rico was form 60PR-1PR. The other, form 60PH-2PR (see appendix), used only in the cities of San Juan, Mayaguez, and Ponce, was designed to permit data to be published by city block. The "block city" questionnaire provided for the inclusion of the housing questions on rent or value and description of property for every housing unit (outside the block cities these items were asked only for sample housing units) and provided a space for the enumerator to enter the block number.

There were seven questions on population on the 100-percent questionnaires. These questions were on name, relationship to head of the household, sex, month and year of birth, marital status, place of birth, and citizenship.

There were 11 housing questions that were common to both types of 100-percent questionnaires. These referred to the number of persons in the unit, access to the unit, kitchen or cooking equipment, condition of the housing unit, water supply, toilet facilities, bathtub or shower, number of bedrooms, occupancy, tenure, and vacancy status. The 100-percent questionnaire used in the three large cities contained the additional questions on rent, value of property, and description of property. The questionnaire also included a question on the address of the unit and one to establish whether or not the unit was a sample unit.

The 100-percent questionnaires were bound into enumeration books.

Sample Questionnaires

The "sample" questionnaires, form 60PH-3PR (see appendix), contained all the questions on the 100-percent questionnaires, including the housing questions that appeared only on the block city questionnaire, plus the questions that were asked for only 25 percent of the population and housing units.

The sample population questions were on social and economic characteristics of the population such as educational level, occupation, income, etc., and on migration and veteran status (see form 60PH-3PR, in appendix).

The sample housing questions were on type of construction, electricity, sewage system, and household equipment such as washing machines, refrigerators, television sets, etc. (see form 60PH-3PR).

Each sample questionnaire was a 15-page booklet which provided for recording the responses to the housing questions and for recording population information for six persons. For households¹ containing seven or more persons, the population portions of additional booklets were used.

THE PUBLICATION PLAN

Since the main purpose of the data processing was the production of statistical tables giving the results of the censuses, a basic requirement for planning the data-processing operations was having the specifications for the tables to be published and a determination of their priorities for publication.

The final table specifications prepared by the population and housing subject specialists of the Bureau called for four separate population reports, three housing reports, and a census tract report containing both population and housing data for Puerto Rico, to be published as an integral part of the United States census reports.

Reports of final population statistics were published first as separate chapters A, B, C, and D of Volume I, Characteristics of the Population, and were designated as series PC(1)-53A, number of inhabitants (11 tables); series PC(1)-53B, general population characteristics (20 tables); series PC(1)-53C, general social and economic characteristics (42 tables); and series PC(1)-53D, detailed characteristics (51 tables). (These four chapters were later assembled and issued as the cloth-bound Volume I, part 53, for Puerto Rico.) The PC(1)-A and PC(1)-B reports contain 100-percent data only and the PC(1)-C and PC(1)-D reports contain sample data only.

Final housing information was given in report HC(1)-53, on housing characteristics for Puerto Rico and small areas (14 tables); HC(2)-202 for the San Juan standard metropolitan statistical area (SMSA) and HC(2)-201 for the

¹A household was defined as all the persons who occupied a housing unit.

Ponce SMSA, on metropolitan housing (9 tables); and separate reports on housing characteristics by city blocks (2 tables) for each of the cities of San Juan, HC(3)-419; Ponce, HC(3)-402; and Mayaguez, HC(3)-421. (The HC(1) report appears also in part 9 of Volume I, States and Small Areas; the HC(2) reports are included also in part 7 of Volume II, Metropolitan Housing.) The HC(1) report contains both 100-percent and sample data. The HC(2) reports contain sample data only. The HC(3) reports contain 100-percent data only.

Separate reports containing both housing and population data by census tracts² (3 tables) were prepared for San Juan, PHC(1)-180; Ponce, PHC(1)-179; and Mayaguez, PHC(1)-178. These reports contain both 100-percent and sample data.

THE CENSUS ENUMERATION

Beginning on April 1, 1960, each housing unit in Puerto Rico was visited by a census enumerator.

There were 2,819 enumeration districts (ED's) established originally and assigned to enumerators for the 1960 Census of Puerto Rico. However, in both the field operation and the processing operations, it was sometimes necessary to "split" an ED into two or more parts. This was done during enumeration primarily to redistribute and equalize the enumerators' workload. It was also done during the processing because of errors in block numbering found in the questionnaires for block cities. The total number of ED's including splits was 2,966, of which 42 had no population.

For each of these ED's the enumerator used one or more of enumeration books containing 100-percent questionnaires, depending upon the number of housing units in the area, and for each household he used one or more questionnaires in the enumeration book depending on the number of persons comprising the household he was enumerating. He also used one or more sample questionnaires for every fourth housing unit in the ED, depending on the number of persons comprising that household.

²Census tracts are geographic areas delineated for statistical purposes within large cities and that part of the surrounding territory which is a part of the metropolitan area. The areas tracted in Puerto Rico for the 1960 censuses were the SMSA's of San Juan, Mayaguez, and Ponce. The Municipio of Carolina, which is adjacent to San Juan and which is tracted, is considered a part of the San Juan tracted area even though outside the San Juan SMSA.