Appendix A.—AREA CLASSIFICATIONS

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USUAL PLACE OF RESIDENCE

In accordance with census practice dating back to 1790, each person enumerated in the 1970 census was counted as an inhabitant of his usual place of residence, which is generally construed to mean the place where he lives and sleeps most of the time. This place is not necessarily the same as his legal residence, voting residence, or domicile. In the vast majority of cases, however, the use of these different bases of classification would produce substantially the same statistics, although there may be appreciable differences for a few areas.

The implementation of this practice has resulted in the establishing of residence rules for certain categories of persons whose usual place of residence is not immediately clear. Furthermore, this practice means that persons were not always counted as residents of the place where they happened to be found by the census enumerators. Persons without a usual place of residence were, however, counted where they were enumerated.

Members of the Armed Forces living on military installations were counted, as in every previous census, as residents of the area in which the installation was located. Similarly, members of the Armed Forces not living on a military installation were counted as residents of the area in which they were living. Crews of U.S. Navy vessels were counted as residents of the home port to which the particular vessel was assigned; crews of vessels deployed to the overseas fleet were therefore not included in the population of any State or the District of Columbia. Persons in Armed Forces families were counted where they were living on Census Day (e.g., the military installation, "off-base," or elsewhere, as the case might be).

Crews of U.S. merchant marine vessels were counted as part of the population of the U.S. port in which their vessel was berthed on Census Day; or if sailing in inland or coastal waters, as part of the population of the vessel's home port. Crews of all other U.S. merchant marine vessels are not included in the population of any State or the District of Columbia.

College students, as in 1950 and 1960, were counted as residents of the area in which they were living while attending college; whereas, children in boarding schools below the college level were to be counted at their parental home. Inmates of institutions, who ordinarily live there for considerable periods of time, were counted as residents of the area where this institution was located; on the other hand, patients in short-term wards of general hospitals were counted at their usual place of residence. On the night of April 6, 1970, a special enumeration was conducted in missions, flophouses, detention centers, etc., and persons enumerated therein were counted as residents of the particular place.

Americans who were overseas for an extended period (in the Armed Forces, working at civilian jobs, studying in foreign universities, etc.) are not included in the population of any of the States or the District of Columbia. On the other hand, persons temporarily abroad on vacations, business trips, and the like were counted at their usual residence.

Persons in larger hotels, motels, etc., on the night of March 31, 1970, were requested to fill out a census form for allocation back to their homes if they indicated no one was there to report them in the census. A similar approach was used for persons visiting in private residences, as well as for Americans who left the United States during March 1970 via major intercontinental air or ship carriers for temporary travel abroad.

In addition, information on persons away from their usual place of residence was obtained from other members of their families, landladies, etc. If an entire family was expected to be away during the whole period of the enumeration, information on it was obtained from neighbors. A matching process was used to eliminate duplicate reports for a person who reported for himself while away from his usual residence and who was also reported at this usual residence by someone else.

URBAN AND RURAL RESIDENCE

Definition.—According to the definition adopted for use in the 1970 census, the urban population

comprises all persons living in urbanized areas and in places of 2,500 inhabitants or more outside urbanized areas. More specifically, the urban population consists of all persons living in (a) places of 2,500 inhabitants or more incorporated as cities, villages, boroughs (except in Alaska), and towns (except in the New England States, New York, and Wisconsin), but excluding those persons living in the rural portions of extended cities; (b) unincorporated places of 2,500 inhabitants or more; and (c) other territory, incorporated or unincorporated, included in urbanized areas. The population not classified as urban constitutes the rural population.

In censuses prior to 1950, the urban population comprised all persons living in incorporated places of 2,500 or more and areas (usually minor civil divisions) classified as urban under special rules relating to population size and density. The most important component of the urban territory in any definition is the group of incorporated places having 2,500 inhabitants or more. A definition of urban territory restricted to such places, however, would exclude a number of large and densely settled places merely because they are not incorporated. Prior to 1950, an effort was made to avoid some of the more obvious omissions by inclusion of selected places which were classified as urban under special rules. Even with these rules, however, many large and closely built-up places were excluded from the urban territory.

To improve its measure of the urban population, the Bureau of the Census adopted, in 1950, the concept of the urbanized area and delineated boundaries for unincorporated places. With the adoption of the urbanized area and unincorporated place concepts for the 1950 census, the urban population was defined as all persons residing in urbanized areas and, outside these areas, in all places incorporated or unincorporated, which had 2,500 inhabitants or more. With the following two exceptions, the 1950 definition of urban was continued substantially unchanged to 1960 and 1970. In 1960 (but not in 1970), certain towns in the New England States, townships in New Jersey and Pennsylvania, and counties elsewhere were designated as urban. However, most of the population of these "special rule" areas would have been classified as urban in any event because they were residents of an urbanized area or an unincorporated place of 2,500 or more. Second, the introduction of the concept of "extended cities" in 1970 has very little impact on the urban and rural figures generally.

Extended cities.—Over the 1960-1970 decade there has been an increasing trend toward the extension of city boundaries to include territory essentially rural in character. Examples are city-county consolidations such as the creation of the city of Chesapeake, Va., from South Norfolk city and Norfolk County and the extension of Oklahoma City, Okla., into five counties. The classification of all the inhabitants of such cities as urban would include in the urban population persons whose environment is primarily rural in character. In order to separate these people from those residing in the closely settled portions of such cities, the Bureau of the Census examined patterns of population density and classified a portion or portions of each such city as rural. An extended city contains one or more areas, each at least 5 square miles in extent and with a population density of less than 100 persons per square mile according to the 1970 census. The area or areas constitute at least 25 percent of the land area of the legal city or total 25 square miles or more. The delineation of extended cities was limited to cities in urbanized areas.

These cities—designated as extended cities—thus consist of an urban part and a rural part. In table 6, the population figures for the two parts are shown separately, under the total population for the entire city. In chapters A, B, and C, when an extended city is a central city of an urbanized area or a standard metropolitan statistical area, only the urban part is considered as the central city. If the extended city is shown separately under the area, the city name is followed by the term "urban part." In tables in which the city name is not followed by this term, the population figure shown is for the entire city. In chapter D, figures for central cities refer to the entire population within the legal city boundaries.

"Current" and "previous" definitions.—In the tables showing historical data by urban and rural residence, the "current" figures refer to the definitions used in 1950, 1960, and 1970. The "previous" figures refer to the definitions used in 1940 and previous years. Although the definition was not always identical during these earlier years, the "previous" figures presented in this report have been adjusted to constitute a substantially consistent series based on the 1940 definition.

Farm and nonfarm residence.—The rural population is subdivided into the rural-farm population, which comprises all rural residents living on

farms, and the rural-nonfarm population, which comprises the remaining rural population. As in the 1960 census, the farm population consists of persons living on places of 10 or more acres from which sales of farm products amounted to $50 or more in the preceding calendar year or on places of fewer than 10 acres from which sales of farm products amounted to $250 or more in the preceding year.

Farm residence in accordance with this definition was determined from answers to questions H17 and H18, asked of households in the 20-percent sample.

Persons in rural territory who, according to the definition, were not living on farms were classified as nonfarm residents. All persons living in group quarters except those in agricultural workers camps on farms are classified as nonfarm.

Farm and nonfarm residence has been obtained in each census since that of 1930. For 1970, as in the 1960 census, the figures are for the farm population residing in rural territory. In all other censuses, farm or nonfarm residence was determined for persons in cities and other territory classified as urban as well as in rural territory.

Users of the data on farm and nonfarm residence should refer to the "Correction Note" in chapter C.

COUNTIES

The primary divisions of the States are, in general, termed counties, but in Louisiana these divisions are known as parishes. There are no counties in Alaska. In this State, statistical areas called census divisions were developed for general statistical purposes through the cooperation of the State and the Census Bureau and are treated as county equivalents. In four States (Maryland, Missouri, Nevada, and Virginia), there are one or more cities which are independent of any county organization and thus constitute primary divisions of their States.

COUNTY SUBDIVISIONS

Statistics for subdivisions of counties are presented as follows:

(a) By minor civil division in 28 States—Arkansas, Connecticut, Illinois, Indiana, Iowa, Kansas, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Nebraska, Nevada, New Hampshire New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, South Dakota, Vermont, Virginia, West Virginia, and Wisconsin.

(b) By census county divisions in 21 States—Alabama, Arizona, California, Colorado, Delaware, Florida, Georgia, Hawaii, Idaho, Kentucky, Montana, New Mexico, North Dakota, Oklahoma, Oregon, South Carolina, Tennessee, Texas, Utah, Washington, and Wyoming.

(c) In Alaska, by boroughs and reservations for those census divisions (the county equivalent) which are so subdivided.

In table 10, places which are not themselves county subdivisions are shown indented under the subdivision in which they are located. When a place lies in more than one subdivision, each part is shown under the appropriate subdivision and is identified as "part." The total population of such places appears in table 6. Changes in boundaries between 1960 and 1970 are described in the notes at the end of table 10.

Minor civil divisions.—Minor civil divisions (MCD's) represent the primary political or administrative subdivisions established by State law. Where more than one type of primary division exists in a county, the Census Bureau uses the more stable type so as to provide comparable statistics from decade to decade, insofar as possible. The most common type of MCD is the civil township, but there are also towns, magisterial districts, precincts, etc. In some States, incorporated places are MCD's in their own right; in other States they are subordinate to the MCD in which they are located, or the pattern is mixed—some incorporated places are independent minor civil divisions and others are subordinated to the minor civil division. In the New England States, there is considerably more interest in these subdivisions than is generally true elsewhere. Therefore, in the reports for the New England States, statistics for these areas (which are designated as "towns") are presented in the tables which present data for places; the towns are interspersed with the same alphabetical order as the places and are identified by the term "town" after the name.

Census county divisions.—Census county divisions (CCD's) were established first in the State of Washington for use in the 1950 census. Between 1950 and 1960, they were established in 17 other States; and during the last decade, in three additional States (Delaware, North Dakota, and Oklahoma). In reviewing the existing CCD's for the 1970 census, some revisions were made to improve their usefulness. For example, most of the counties which were a single division in 1960 were divided into two census county divisions to provide more area detail.

CCD's represent community areas which have been defined in recent decades by the Census Bureau with the cooperation of the Governors and State and local officials. In these States, the CCD's have replaced a variety of MCD's which were unsatisfactory for statistical purposes principally because their boundaries frequently changed, were imaginary lines, or were not well known by many of the inhabitants. CCD's have relatively permanent boundaries which follow physical features or the limits of incorporated places. Where an unincorporated enclave exists within a city, it is included in the same CCD as the city. In establishing CCD's, consideration was given mainly to the trade or service areas of principal settlements and in some cases to major land use or physiographic differences. Each CCD has a name which is generally the name of the principal place listed within it, except in the State of Washington where most of the divisions are numbered rather than named.

Unorganized territories.—In the States of Maine, Minnesota, and South Dakota there are a number of counties which contain two or more discontiguous unorganized territories, i.e., territory not included in a minor civil division. To improve the utility of census data for these States, each separate area of unorganized territory in these States is recognized as one or more subdivisions and given a name preceded by the designation "Unorg. Terr. of." Small isolated units of unorganized territory also are found in a few counties in other States but do not require special treatment.

PLACES

Two types of places are recognized in the census reports—incorporated places and unincorporated places, as defined below.

Incorporated places.—These are political units incorporated as cities, boroughs, towns, and villages with the following exceptions: (a) boroughs in Alaska and (b) towns in the New England States, New York, and Wisconsin. Boroughs in Alaska are treated as county subdivisions and may include one or more incorporated places. The towns in the New England States, New York, and Wisconsin are minor civil divisions similar to the townships found in other States and not necessarily thickly settled centers of population such as the cities, boroughs, towns, and villages in other States. Similarly, in New Jersey and Pennsylvania, where some townships possess powers and functions similar to those of incorporated places, the townships are not classified as "incorporated places." Thus, some minor civil divisions which are "incorporated" in one legal sense of the word are not regarded by the Census Bureau as "incorporated places." Without this restriction all of the towns in the New England States, New York, and Wisconsin and the townships in New Jersey and Pennsylvania would have to be counted as incorporated places without any consideration of the nature of population settlement. The densely settled portions of some are recognized as unincorporated places or as part of an urbanized area.

In Hawaii, there are no incorporated places in the sense of a functioning local governmental unit. The State, however, has recognized places and established boundaries for them. Such places are treated as incorporated in the 1970 census.

The population figure for an incorporated place at earlier censuses applies to the area of the place at the time of the given census. Hence, the indicated change in population over the decade reflects the effect of any annexations or detachments. In order to permit an analysis of the relative importance of population growth within the old boundaries and of population added in annexed territory, table 8 for incorporated places of 2,000 inhabitants or more in 1960 has been included in this report. No data are available on detachments from incorporated places.

Unincorporated places.—As in the 1950 and 1960 censuses, the Census Bureau has delineated boundaries, in advance of enumeration, for closely settled population centers without corporate limits. Each place so delineated possesses a definite nucleus of residences and has its boundaries drawn to include, if feasible, all the surrounding closely settled area. Outside urbanized areas, those unincorporated places with a population of 1,000 or more are presented in the census reports in the same manner as incorporated places of equal size. Within urbanized areas, unincorporated places are shown only if they have 5,000 inhabitants or more and there was an expression of local interest in their recognition.

The report for Alaska contains table 6a which presents the population of unincorporated places of 25 to 1,000 inhabitants.

Unincorporated places are identified with the letter "U." Unincorporated place boundaries change with changes in the settlement pattern; a place which has the same name in 1970 as in previous decades does not necessarily have the same boundaries. Boundary outlines for unincorporated places appear on maps in chapter A.

Detailed maps are available for purchase from the Census Bureau.

The following modifications in the delineation of unincorporated places were introduced in the 1970 census:

1. Selected towns in the New England States and townships in Pennsylvania and New Jersey are not regarded as urban as in 1960. Therefore, unincorporated places are defined for the built-up area of these towns and townships outside urbanized areas in the same manner as they are in the rest of the country.
2. In urbanized areas outside of the New England States, unincorporated places with 5,000 inhabitants or more are recognized; in 1960 only places of 10,000 inhabitants or more were recognized. In the New England States, no unincorporated places are recognized within urbanized areas.
3. Built-up parts of military installations outside incorporated places are recognized as unincorporated places.
4. All places in Hawaii are treated as incorporated places, with boundaries defined by the State; in 1960, all places other than Honolulu and Hilo were considered as unincorporated places with boundaries defined by the Census Bureau.
5. Arlington County, Virginia, is treated as an unincorporated place; it is the only such place which consists of an entire county.

URBANIZED AREAS

The major objective of the Census Bureau in delineating urbanized areas is to provide a better separation of urban and rural population in the vicinity of the larger cities. An urbanized area consists of a central city, or cities, and surrounding closely settled territory. The specific criteria for the delineation of an urbanized area are as follows:

1a. A central city of 50,000 inhabitants or more in 1960, in a special census conducted by the Census Bureau since 1960, or in the 1970 census; or

b. Twin cities, i.e., cities with contiguous boundaries and constituting, for general social and economic purposes, a single community with a combined population of at least 50,000, and with the smaller of the twin cities having a population of at least 15,000.

2. Surrounding closely settled territory in 1970, including the following (but excluding the rural portions of extended cities, see "Urban and Rural Residence," above):

a. Incorporated places of 2,500 inhabitants or more.

b. Incorporated places with fewer than 2,500 inhabitants, provided that each has a closely settled area of 100 housing units or more.

c. Small parcels of land normally less than one square mile in area having a population density of 1,000 inhabitants or more per square mile. The areas of large nonresidential tracts devoted to such urban land uses as railroad yards, airports, factories, parks, golf courses, and cemeteries are excluded in computing the population density.

d. Other similar small areas in unincorporated territory with lower population density provided that they serve
—to eliminate enclaves, or
—to close indentations in the urbanized areas of one mile or less across the open end, or
—to link outlying enumeration districts of qualifying density that are not more than 1½ miles from the main body of the urbanized area.

The 1970 criteria are essentially the same as those used in 1960 with two exceptions. The extended city concept is new for 1970. Secondly, in 1960, towns in the New England States, townships in New Jersey and Pennsylvania, and counties elsewhere, which were classified as urban in accordance with specific criteria, were included in the contiguous urbanized areas. In 1970, only those portions of towns and townships in these States that met the rules followed in defining urbanized areas elsewhere in the United States are included

All persons residing in an urbanized area are classified as urban. The urbanized area population is sometimes divided into those in the "central city (or cities)" and those in the remainder of the area or the "urban fringe." The "central city" category consists of the population of the cities named in the title of the urbanized area.[1] The title is limited to three names and normally lists the largest city first and the other qualifying cities in size order; this order is, in many cases, based on 1960 population because most names were fixed before the 1970 counts were available. For

[1] The four exceptions are:
New York, N.Y.-Northwestern New Jersey—New York, Newark, Jersey City, Paterson, Clifton, and Passaic
Chicago, Ill.-Northwestern Indiana—Chicago, Gary, Hammond, and East Chicago
Los Angeles-Long Beach—Los Angeles, Long Beach, Anaheim, Santa Ana, and Garden Grove
San Francisco-Oakland—San Francisco, Oakland, and Vallejo

the other cities to be listed in the title, they must have (a) 250,000 inhabitants or more or (b) at least one third the population of the largest city and a population of 25,000 or more (except in the case of the small twin cities).

There is generally one urbanized area in each standard metropolitan statistical area. Sometimes, however, there are two because there exists another qualifying city with 50,000 inhabitants or more whose surrounding urban fringe is separated from the urban fringe of the larger central city or cities. (The Chicago metropolitan area has three urbanized areas wholly or partly within it.) In other cases, a single urbanized area covers portions of two or more standard metropolitan statistical areas. One metropolitan area (New London-Groton-Norwich, Conn.) has no urbanized area.

STANDARD METROPOLITAN STATISTICAL AREAS

The Bureau of the Census recognizes 243 standard metropolitan statistical areas (SMSA's) in the United States and 4 in Puerto Rico, making a total of 247 in the 1970 census. These include the 231 SMSA's as defined and named in the Bureau of the Budget publication, **Standard Metropolitan Statistical Areas: 1967,** U.S. Government Printing Office, Washington, D.C. 20402. Since 1967, 16 SMSA's have been added, of which two were defined in January 1968 and an additional 14 were defined in February 1971 on the basis of the results of the 1970 census. Changes in SMSA boundaries or titles made after February 1971 are not recognized in this series of reports. SMSA's are defined by the Office of Management and Budget (formerly Bureau of the Budget).

Except in the New England States, a standard metropolitan statistical area is a county or group of contiguous counties which contains at least one city of 50,000 inhabitants or more, or "twin cities" with a combined population of at least 50,000. In addition to the county, or counties, containing such a city or cities, contiguous counties are included in an SMSA if, according to certain criteria, they are socially and economically integrated with the central city. In a few SMSA's, where portions of counties outside the SMSA as defined in 1967 were annexed to the central city, the population living in those counties is not considered part of the SMSA or the central city. In the New England States, SMSA's consist of towns and cities instead of counties. Each SMSA must include at least one central city, and the complete title of an SMSA identifies the central city or cities. For a detailed description of the criteria used in defining SMSA's, see the Bureau of the Budget publication cited above.

The population living in SMSA's is designated as the metropolitan population. The population is subdivided as "inside central city or cities" and "outside central city or cities." The population living outside SMSA's constitutes the nonmetropolitan population.

The figures for central cities shown in chapter D may differ from those shown in chapters A, B, and C. In those chapters, if a central city of an SMSA is an extended city, the figures shown for the central city were restricted to the urban portion of the city. In addition, parts of central cities outside the SMSA boundaries were excluded from the central city population. In chapter D, however, figures for central cities refer to the entire population within the legal city boundaries, including any rural and nonmetropolitan parts.

STANDARD CONSOLIDATED AREAS

In view of the special importance of the metropolitan complexes around New York and Chicago, the Nation's two largest cities, several contiguous SMSA's and additional counties that do not appear to meet the formal integration criteria but do have strong interrelationships of other kinds have been combined into the New York-Northeastern New Jersey and the Chicago-Northwestern Indiana Standard Consolidated Areas, respectively. The former consists of Middlesex and Somerset Counties in New Jersey and the following SMSA's: New York, Newark, Jersey City, and Paterson-Clifton-Passaic. The latter consists of the following SMSA's: Chicago and Gary-Hammond-East Chicago

CONGRESSIONAL DISTRICTS

Table 15 presents statistics on the number of persons in each Congressional District in the State. The figures relate to the districts as defined for the 91st Congress. This table is not shown for the five States which had only one Representative each in that Congress (Alaska, Delaware, Nevada, Vermont, and Wyoming) nor for Hawaii which had two Representatives elected at large.

Appendix B.—DEFINITIONS AND EXPLANATIONS OF SUBJECT CHARACTERISTICS

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GENERAL

As stated in the introductory text, the 1970 census was conducted primarily through self-enumeration. The principal determinant for the responses was, therefore, the questionnaire and its accompanying instruction sheet. Furthermore, census takers were instructed, in their telephone and personal-visit interviews, to read the questions directly from the questionnaire. The definitions and explanations given below for each subject are largely drawn from various technical and procedural materials used in the collection of the data. This material helped the enumerative personnel to understand more fully the intent of each question and thus to resolve problem or unusual cases in a manner consistent with this intent. Also included is certain explanatory information to assist the user in the proper utilization of the statistics. Facsimiles of the census questions and respondent instructions are presented on pages App-46 to App-51.

SOCIAL CHARACTERISTICS

AGE

The data on age were derived from answers to questions 5, 6, and 7, which were asked of all persons (see facsimiles of questionnaire items and instructions on page App-46). Only the information in items 6 and 7 was read into the computer. Answers in item 5, which was not FOSDIC readable, were used during field review to fill any blanks in items 6 and 7. The age classification is based on the age of the person in completed years as of April 1, 1970. The data on age represent the difference, as calculated in the computer, between date of birth and April 1, 1970.

In the computation of median age, if the median falls in the terminal category of an age distribution, the method of presentation is to show the initial age of the terminal category followed by a plus sign; thus, if the median falls in the category "75 years and over," it is shown as "75+." Median age in all tables is computed from data for 5-year age groups.

For the category "62 years and over," the 1960 data shown in these tables include an estimate of the number of persons 62 to 64 years old.

The number of persons shown as 100 years old and over in the 1970 census is overstated, apparently because of a misunderstanding by some persons in filling the age portion of the census questionnaire. This kind of reporting error appears to have affected the count of persons 100 years and over in varying degree in all of the States. Available evidence suggests that the true number of persons 100 years old and over in the United States does not exceed several thousand, and is possibly less than 5,000, as compared with the tabulated figure of 106,441.

In each census since 1940 the Bureau of the Census has estimated the age of a person when it was not reported. In censuses before 1940, with the exception of 1880, persons of unknown age were shown as a separate category.

The summary totals for "14 years and over" and "21 years and over" for earlier censuses included all persons of "unknown age" since there is evidence that most of the persons for whom age was not reported were in the age classes above these limits. In 1960 and 1970 assignment of unknown ages was

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performed by the allocation procedure.

SEX

The data on sex were derived from answers to question 3 (see facsimile of questionnaire item on page App-46). At the time of field review, most of the comparatively small number of cases in which sex was not reported were resolved by determining the appropriate entry from the person's given name and household relationship. For the remaining cases, sex was assigned through the allocation process.

RACE

The data on race were derived from answers to question 4, which was asked of all persons (see facsimile of questionnaire item, page App-46). The concept of race as used by the Bureau of the Census does not denote any scientific definition of biological stock. Rather it reflects self-identification by respondents. Since the 1970 census obtained information on race primarily through self-enumeration, the data represent essentially self-classification by people according to the race with which they identify themselves.

For persons of mixed parentage who were in doubt as to their classification, the race of the person's father was to be used. In 1960, persons who reported mixed parentage of white and any other race were classified according to the other race; mixtures of races other than white were classified according to the race of the father.

The category "white" includes persons who indicated their race as white, as well as persons who did not classify themselves in one of the specific race categories on the questionnaire but entered Mexican, Puerto Rican, or a response suggesting Indo-European stock. In the 1930 census reports, Mexicans were classified as in the "other" race category; however, the 1930 data in this report have been revised to include Mexicans in the white population, as is the case for all other census years shown in this report.

The category "Negro" includes persons who indicated their race as Negro or Black, as well as persons who did not classify themselves in one of the specific race categories on the questionnaire but who had such entries as Jamaican, Trinidadian, West Indian, Haitian, and Ethiopian. The term "Negro and other races" include persons of all races other than white.

The category "Indian" includes persons who indicated their race as American Indian or who did not indicate a specific race category but reported the name of an Indian tribe.

White, Negro, Indian, Japanese, Chinese, and Filipino are shown separately in reports for all States. Separate data for Korean are shown for all States except Alaska. For Alaska, separate data are shown also for Aleut and Eskimo. In the report for Hawaii separate data are also shown for Hawaiian (including part-Hawaiian).

In tables 17 and 18, data on Filipinos for certain years are included in the "all other" category; separate figures for some years are available in table 15 of 1960 Population Census Volume I.

The residual category "all other races" includes all races for which data are not shown separately in the particular report. Thus, Hawaiian, Korean, Eskimo, and Aleut may be included in the residual category in some States. In addition, this category includes races covered by the "other" race category on the questionnaire, which was defined to include Malayan, Polynesian, Thai, and other races not included in the specific categories listed on the questionnaire.

A number of persons who marked "other" supplied a write-in entry (e.g., Mexican, Puerto Rican, or Jamaican) which indicated they belonged in one of the specific race categories. Edit and review operations were performed to correct the questionnaire marking for such persons, and the statistics in chapters C and D of this report reflect the effect of those corrections. At the time of the 100-percent processing, however, not all of these cases had been identified, and the residual race category, consequently, is overstated for some areas in the tables in chapter B. Differences between the statistics on race in chapter B, based on 100-percent data, and those in chapters C and D, based on sample data, are partly due to this editing operation.

If the race entry was missing on the questionnaire for a member of a household, an answer was assigned in the computer according to the race of other household members, using specific rules of precedence of relationship. If race was not entered for anyone in the household, the race of the head of the preceding household was assigned. This procedure is a variation of the general allocation process described in Appendix C, "Accuracy of the Data."

NATIVITY, PLACE OF BIRTH, AND PARENTAGE

The data on nativity, place of birth, and parentage were derived from answers to questions 13, 14, 15 and 16

(see facsimiles of questionnaire items and instructions on pages App-47 and 50). Question 13 was asked of all persons in the 20-percent sample; questions 14 and 15, of all persons in the 15-percent sample; and question 16, of all persons in the 5-percent sample.

Nativity.—Information on place of birth is used to classify the population of the United States into two major categories: native and foreign born. The category "native" comprises persons born in the United States, in the Commonwealth of Puerto Rico, in an outlying area of the United States, or at sea. Also included in this category is the small number of persons who, although they were born in a foreign country, have at least one native American parent. When information on place of birth was missing, nativity was assigned on the basis of related information. In previous censuses persons for whom nativity was not reported were generally classified as native. Persons not classified as native are classified as "foreign born." The population of the United States has been classified as native or foreign born in every census since 1850.

Statistics on nativity obtained from the 15-percent and the 5-percent samples may differ for reasons other than sampling variability. Persons born in a foreign country were classified as native if they had at least one native parent. On the 15-percent sample, nativity of parents was determined by the entry for birthplace of parents (questions 14 and 15). On the 5-percent sample, where there was no question on birthplace of parents, nativity of persons born in a foreign country was determined by the entry in question 16a; that is, those with an entry of "Born abroad of American parents" were counted as native and all others as foreign born.

Place of birth.—Data on the State of birth of the native population have been collected in each census beginning with that of 1850. For the more recent censuses, State of birth has been published for the native population of the urban, rural-nonfarm, and rural-farm parts of States, and of individual cities above a specified minimum size. In this report, the native population is classified into the following groups: persons born in the State in which they were residing at the time of the census; persons born in a different State; persons born in Puerto Rico or in an outlying area of the United States; persons born abroad of native parents or at sea; and persons whose place of birth was not reported. Respondents were instructed to report place of birth in terms of the mother's usual State of residence at the time of the birth rather than in terms of the location of the hospital if the birth occurred in a hospital.

The statistics on State of birth are of value mainly for the information they provide on the historic movements of the native population from one State to another within the United States from the time of birth to the date of the census. The statistics afford no indication of the amount of migration within a given State; nor do they take any account of intermediate moves between the time of a person's birth and the time of the census.

Foreign-born persons were asked to report their country of birth according to international boundaries as recognized by the United States government on April 1, 1970. Since numerous changes in boundaries of foreign countries have occurred in the last century, some foreign-born persons may have reported their country of birth in terms of boundaries that existed at the time of their birth or emigration, or in accordance with their own national preference.

Parentage.—Information on birthplace of parents is used to classify the native population into two categories: native of native parentage and native of foreign or mixed parentage. The category native of native parentage comprises native persons with both parents born in the United States. The category native of foreign or mixed parentage includes native persons with one or both parents foreign born. The rules for determining the nativity of parents are generally the same as those for determining the nativity of the person himself.

Foreign stock.—The category "foreign stock" includes the foreign-born population and the native population of foreign or mixed parentage. Persons of foreign stock thus comprise all first- and second-generation Americans. In this report, persons of foreign stock are classified according to their country of origin, with separate distributions shown for the foreign born and the native of foreign or mixed parentage. Native persons of foreign parentage whose parents were born in different foreign countries are classified according to the country of birth of the father.

CITIZENSHIP AND YEAR OF IMMIGRATION

Data on citizenship and year of immigration were derived from answers to questions 16a and 16b (see facsimiles of questionnaire items and instructions on pages App-47 and 50). The questions were asked of persons in

the 5-percent sample who reported being born in a foreign country. Persons born abroad or at sea who had at least one American parent were to report themselves as "Born abroad of American parents."

Citizenship.—Information on citizenship was used to classify the population into two major categories, citizens and aliens. Citizens are further classified as native or naturalized. "Native" includes all persons born in the United States, Puerto Rico, the Canal Zone, Guam, American Samoa, or the Virgin Islands and persons born abroad of American parents or at sea. It was assumed that all natives were citizens. Similar questions on citizenship were asked in the censuses of 1820, 1830, 1870, and 1890 through 1950.

Year of immigration.—The question was asked of foreign-born persons in the 5-percent sample. The respondent was to indicate the period which covered the year he came to stay permanently in the United States. Information on year of immigration permits the classification of the foreign-born population as long-term residents or recent arrivals. A question on year of immigration was previously asked in every census from 1890 to 1930.

MOTHER TONGUE

Definition.—The data on mother tongue were derived from answers to question 17 (see facsimiles of questionnaire item and instructions on pages App-47 and 50).

The question was asked of all persons in the 15-percent sample. Information on mother tongue is used to assist in identification of the various ethnic groups in the population. In particular, the Spanish language population is defined primarily on this basis. The data on mother tongue may not reflect a person's current language skills since the vast majority of persons reporting a mother tongue other than English have learned to speak English during or after their childhood.

Comparability with earlier census data.—Before the 1960 census a question on mother tongue was asked in the censuses of 1910, 1920, 1930, and 1940. The comparability of these data is limited to some extent by changes in question wording, in the categories of the population to whom the question was addressed, and in the detail that was published. In the 1910 and 1920 censuses, statistics on mother tongue were published for the foreign white stock; in 1930, they were published for the foreign-born white population; and in 1940, they were published for the native white of native parentage as well as the foreign white stock. In 1960, the data on mother tongue were shown for the foreign-born population of all races combined. In 1970, they are shown for all persons and according to various subgroups. In 1960 and 1970, if both English and another mother tongue were reported, preference was always given to the language other than English. This procedure may reduce somewhat the proportion of the foreign-born population classified as having English as their mother tongue.

SPANISH HERITAGE

Social and economic characteristics are presented for the population of Spanish heritage, which is identified in various ways, using information derived from the 15-percent sample. In 42 States and the District of Columbia, this population is identified as "Persons of Spanish language"; in five Southwestern States, as "Persons of Spanish language or Spanish surname"; and in the three Middle Atlantic States, as "Persons of Puerto Rican birth or parentage." The specific definitions involved in identifying these population groups are given below. (The number of persons of Spanish language and the number of persons of Puerto Rican birth or parentage are available for this State in table 49.) In tables 51 to 53 and table 162 the statistics on marital history, vocational training, and disability in the columns for the population groups mentioned above refer to persons of Spanish origin or descent (see definition below); those characteristics were collected on a 5-percent sample basis and, therefore, can be cross-tabulated only with the 5-percent item on Spanish origin.

Spanish language.—Persons of Spanish language comprise persons of Spanish mother tongue and all other persons in families in which the head or wife reported Spanish as his or her mother tongue.

Spanish surname.—In five Southwestern States (Arizona, California, Colorado, New Mexico, and Texas) persons with Spanish surnames were identified by means of a list of over 8,000 Spanish surnames originally compiled by the Immigration and Naturalization Service[2] (and later updated by the Bureau of the Census). In the five Southwestern States social and economic characteristics are

[2]U.S. Immigration and Naturalization Service, **Supplement to Manual of Immigration Spanish—Spanish Personal Names,** selected by Inspector George Lockwood, New York, 1936.

presented for persons of Spanish language combined with all other persons of Spanish surname. The number of these additional persons is shown in the category "Other persons of Spanish surname."

Puerto Rican birth or parentage—The population of Puerto Rican birth or parentage includes persons born in Puerto Rico and persons born in the United States or an outlying area with one or both parents born in Puerto Rico. Social and economic characteristics are shown for this group in the reports for New York, New Jersey, and Pennsylvania.

In two standard metropolitan statistical areas that cross State lines, Wilmington, Del.-N.J.-Md., and Texarkana, Tex.-Ark., the population of Spanish heritage in each State portion is identified, for tabulation purposes, in the manner specified above for that State, and the segments for the different States are combined to form a total for the area. The term used to describe this population, however, is the term applicable in the State containing the major portion of the SMSA. Thus, for the Wilmington SMSA, the term applicable in Delaware, "Persons of Spanish language," is used; and in the Texarkana SMSA the term applicable in Texas, "Persons of Spanish language or Spanish surname," is used.

SPANISH ORIGIN OR DESCENT

On the 5-percent sample questionnaire, a question was asked to identify persons of Spanish origin or descent (see facsimile of questionnaire item 13b, page App-47) and was used in cross-tabulations with 5-percent sample data. A person was classified as being of Spanish origin or descent if his or her entry for this question was any of the following: Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish.

For certain areas, the number of persons of Spanish origin or descent is overstated because some respondents apparently misunderstood the question and interpreted "Central or South American" to mean central or southern United States. Available evidence suggests that this misinterpretation resulted in an overstatement which was substantial in some southern States and may have occurred, to a lesser degree, in States in the central area of the country.

YEAR MOVED INTO PRESENT HOUSE

The data on year moved into present house were derived from the answers to question 18 (see facsimiles of questionnaire item and instructions, pages App-47 and 50).

The question was asked of all persons in the 15-percent sample. As in 1960, respondents were asked to answer in terms of the most recent move they had made. The intent was to obtain the year when the person established his usual residence in the housing unit. Thus, a person who had moved back into the same house (or apartment) in which he had previously lived was asked to give the date at which he began the present occupancy. If a person had moved from one apartment to another in the same building, he was expected to give the year when he moved into the present apartment. The category "always lived in this house or apartment" consists of persons who reported that their residence on April 1, 1970, was the same as their residence at birth and who had never had any other place of residence.

RESIDENCE IN 1965

The data on residence in 1965 were derived from answers to question 19 on the 15-percent sample questionnaire and question 36 on the 5-percent sample questionnaire (see facsimiles of questionnaire items and instructions, pages App-47, 49, and 50, 51). Question 19 asked the State (or foreign country), the county, and, if applicable, the city of residence on April 1, 1965. Question 36 asked only the State of residence and was asked only of persons 14 years old and over. In question 36 the respondent was asked to mark "This State" if his State of residence at the time of the 1970 enumeration was the same as in April 1965. Otherwise, the name of the State or foreign country of residence in 1965 was to be entered.

Residence on April 1, 1965, is the usual place of residence 5 years before enumeration. Residence in 1965 was used in conjunction with residence in 1970 to determine the extent of residential mobility of the population. The category "same house" includes all persons 5 years old and over who did not move during the 5 years as well as those who had moved but by 1970 had returned to their 1965 residence.

Persons who had changed residence from 1965 to 1970 were classified into groups according to type of move. The category "different house in United States" includes persons who, on April 1, 1965, lived in the United States in a different house from the one they occupied on April 1, 1970, and for whom sufficient information concerning the 1965 residence was collected. These persons were subdivided into three groups according to their 1965 residence: "different house, same county," "different county, same

State," and "different State." The second and third groups make up the population classified as "migrants." The third group was further subdivided by region of 1965 residence. Data on State of residence in 1965 in this report provide information on geographic mobility for cross-tabulation with occupational mobility for the period 1965 to 1970.

The category "abroad" includes those with residence in a foreign country or an outlying area of the United States in 1965, including Armed Forces stationed overseas. Persons 5 years old and over who indicated they had moved into their present residence after April 1, 1965, but for whom sufficiently complete and consistent information regarding residence on April 1, 1965, was not collected, are included in the group "moved, 1965 residence not reported." When no information was reported for the person himself, information for other members of the family was used, if available. The category "moved, 1965 residence not reported" also includes persons who gave no information on residence on April 1, 1965, but were classified as having moved into their present house since that date on the basis of the final edited information reported for question 18, "When did this person move into this house (or apartment)?" (All nonresponses on the latter question were allocated.)

The number of persons who were living in a different house in 1965 is somewhat less than the total number of moves during the 5 years. Some persons in the same house at the two dates had moved during the 5-year period but by the time of enumeration had returned to their 1965 residence. Other persons who were living in a different house had made two or more intermediate moves. For similar reasons, the number of persons living in a different county or a different State may be understated.

Similar questions on mobility were asked in the 1960, 1950, and 1940 censuses. The questions in the 1950 census, however, applied to residence one year earlier rather than 5 years earlier. Although the questions in the 1940 census covered a 5-year period, comparability with that census is reduced somewhat because of different definitions and categories of tabulation.

SCHOOL ENROLLMENT

Most of the data on school enrollment were derived from answers to question 20, which was asked of all persons in the 15-percent sample. However, in tables containing cross-classifications with social or economic characteristics based on the 20-percent or 5-percent sample, school enrollment was obtained from question 22, which was asked of persons in the 20-percent sample. (See facsimiles of questionnaire items and instructions, pages App-47 and 50.)

The data on year of school in which enrolled were obtained from responses, for those who were enrolled, to the question on highest grade attended, question 21 (see facsimiles of questionnaire item and instructions, pages App-47 and 50).

Schooling included.—Persons were included as enrolled in school if they reported attending a "regular" school or college at any time between February 1, 1970, and the time of enumeration. According to the census definition, "regular" schooling refers to formal education obtained in public and private (denominational or nondenominational) nursery schools, kindergartens, elementary and secondary schools, colleges, universities, or professional schools, whether day or night school, and whether attendance was full time or part time. That is, "regular" schooling is that which may advance a person toward an elementary school certificate or high school diploma, or a college, university, or professional degree. Schooling that was not obtained in a regular school and schooling from a tutor or through correspondence courses were counted only if the credits obtained were regarded as transferable to a school in the regular school system. Persons were included as enrolled in nursery school only if the school included instruction as an important and integral phase of its program. Children enrolled in "Head Start" programs, or similar programs sponsored by local agencies to provide preprimary education to young children, are included as enrolled in school. Persons who had been enrolled in a regular school since February 1, 1970, but who had not actually attended, for example because of illness, were counted as enrolled in school.

Schooling excluded.—Persons were excluded from the enrollment figures if the only schools they had been attending at any time since February 1, 1970, were *not* "regular" (unless courses taken at such schools could have been counted for credit at a regular school). Schooling which is generally regarded as *not* "regular" includes that given in nursery schools which simply provide custodial day care; in specialized vocational, trade, or business schools; in on-the-job training; and through correspondence courses.

Level and year of school in which enrolled.—Persons who were enrolled in school were classified according to the level and year of school in which they were enrolled. The levels which are separately identified in this report are nursery school, kindergarten, elementary school, high school, and college. Children in "Head Start" or similar programs are counted under "Nursery" or "Kindergarten" as appropriate. Elementary school, as defined here, includes grades 1 to 8, and high school includes grades 9 to 12. If a person was attending a junior high school, the equivalent in terms of 8 years of elementary school and 4 years of high school was obtained. (See the section on "Years of School Completed" for a discussion of variations in school organization.) The term "college" includes junior or community colleges, regular 4-year colleges, and graduate or professional schools.

Public, parochial, or other private school.—Persons who were enrolled in school were also classified as attending a public, parochial, or other private school. In general, a "public" school is defined as any school which is controlled and supported primarily by a local, State, or Federal government agency. A "parochial" school is defined here as a private school which is controlled or supported primarily by a religious organization. An "other private" school is defined as a school controlled or supported primarily by private groups other than religious organizations.

Enumeration of college students.—In the 1970 census, as in 1960 and 1950, college students were to be enumerated where they lived while attending college. In most earlier censuses they were enumerated at their parental home.

Comparability with earlier census data.—The corresponding question on schooling in the 1930 census applied to a somewhat longer period, the period since the preceding September 1. Furthermore, in that census the question was not restricted as to the type of school the person was attending. In 1940 the question referred to the period since the preceding March 1. In 1950 the reference period was changed to that between February 1 (the usual date for beginning the second semester) and the time of enumeration. The same reference period was used in 1960 and 1970.

In 1950, kindergarten enrollment was separately identified, but the number of children enrolled in kindergarten was not included with the 1950 statistics on enrollment. In 1960, kindergarten enrollment was separately identified and included with the regular enrollment figures. In 1970, both kindergarten and nursery school enrollment were separately identified and included with the regular enrollment figures.

The age range for which enrollment data have been obtained has varied for the several censuses. Information on enrollment was recorded for persons of all ages in 1930 and 1940, for persons 5 to 29 years old in 1950, for those 5 to 34 years old in 1960, and for those 3 years old and over in 1970. Most of the published enrollment figures relate, however, to ages 5 to 20 in 1930, 5 to 24 in 1940, 5 to 29 in 1950, 5 to 34 in 1960, and 3 to 34 in 1970. The extended age coverage for the published enrollment data in the recent censuses reflects the increasing number of persons in their late twenties and in their thirties who are attending regular colleges and universities.

Comparability with data from other sources.—Data on school enrollment are also collected and published by other Federal, State, and local governmental agencies. This information is generally obtained from reports of school systems and institutions of higher learning and from other surveys and censuses. These data are only roughly comparable with data collected by the Bureau of the Census, however, because of differences in definitions, subject matter covered, time references, and enumeration methods.

YEARS OF SCHOOL COMPLETED

The data on years of school completed were derived from answers to questions 21 and 22 (see facsimiles of questionnaire items and instructions, pages App-47 and 50).

These questions on educational attainment applied only to progress in "regular" schools, as defined above. Both questions were asked of persons in the 20-percent sample.

The data on "Years of school completed for selected age groups" which appear in tables 52, 63, 74, 84, 103, and 120 exclude persons who never attended school. These data are shown for males 20 to 49 years old and for females 15 to 44 years old because these are the main ages for marriage, divorce, and childbearing. Thus, the data are intended for use as bases for vital rates classified by educational attainment, primarily for areas below the State level.

In tables 51, 62, 73, and 83, under the heading "Percent by level of school completed," the line "4 years of high school or more" for "Total

persons, 18 to 24 years old" should read "4 years of high school or 1 to 3 years of college." The percent of persons 18 to 24 years old who have completed 4 years of high school or more may be obtained by adding the two percentages shown for this age group.

Highest grade of school attended.—The first question called for the highest grade attended, regardless of "skipped" or "repeated" grades. In some areas in the United States, the school system formerly had 11 years of school (7 years of elementary school and 4 years of high school) rather than the more conventional 12 years (8 years of elementary school and 4 years of high school, or equivalent years of elementary school, junior high school, and senior high school). Persons who had progressed beyond the 7th grade in this type of school system were treated as though they had progressed beyond the 8th grade of elementary school.

Persons whose highest grade of attendance was in a foreign school system, or in an ungraded school whose highest level of schooling was measured by "readers," or whose training was received through a tutor were instructed to report the approximate equivalent grade in the regular United States school system.

Completion of grade.—The second question on educational attainment asked whether or not the highest grade attended had been finished. It was to be answered "Yes" if the person had successfully completed the entire grade or year indicated in response to the previous question. If the person had completed only a half grade or a semester, or had dropped out or failed to pass the last grade attended, the question was to be answered "No." If the person was still attending school in that grade, he answered "Now attending."

The number in each category of highest grade of school completed represents the combination of (a) persons who reported that they had attended the indicated grade and had finished it, (b) those who had attended the next higher grade but had not finished it, and (c) those still attending the next higher grade. Persons who have not completed the first year of elementary school are classified as having no years of school completed.

Comparability with earlier census data.—In 1940, a single question was asked on highest grade of school completed. However, respondents frequently reported the grade or year in which they were enrolled, or had last been enrolled, instead of the one completed. The two-question approach used in 1950, 1960, and 1970 was designed to reduce this kind of error.

Median school years completed.—The median number of school years completed was computed after the statistics on years of school completed had been converted to a continuous series of numbers (e.g., completion of the 1st year of high school was treated as completion of the 9th year and completion of the 1st year of college as completion of the 13th year). Persons completing a given school year were assumed to be distributed evenly within the interval from .0 to .9 of the year. In fact, at the time of census enumeration, most of the enrolled persons had completed at least three-fourths of a school year beyond the highest grade completed, whereas a large majority of persons who were not enrolled had not attended any part of a grade beyond the highest one completed. The effect of the assumption is to place the median for younger persons slightly below, and for older persons slightly above, the true median.

The same procedure for computing this median has been used in the 1940, 1950, 1960, and 1970 censuses. Because of the inexact assumption as to the distribution within an interval, this median is more appropriately used for comparing different groups and the same group at different dates than as an absolute measure of educational attainment.

VOCATIONAL TRAINING

The data on vocational training were derived from answers to questions 27a and b (see facsimiles of questionnaire items and instructions, pages App-48 and 50).

These questions were asked of persons 14 years old and over in the 5-percent sample. Included as "vocational training" were formal vocational training programs completed in high school, through an apprenticeship program, in a school of business, in a nursing school or trade school, in a technical institute, in the Armed Forces, or in Job Corps Training. Excluded from "vocational training" programs were single courses which were not part of an organized program of study, on-the-job training, training in company schools, training by correspondence, and basic training in the Armed Forces. Persons who reported having completed a vocational training program were asked to designate their main field of vocational training.

In 1970, the question on vocational training was asked of the general population for the first time in a decennial census. Data on vocational

training have been collected by the Bureau of the Census through its Current Population Survey and by other Federal, State, and local governmental agencies through reports of training institutions and from other surveys and censuses. These data, like those on school enrollment collected from other sources, are only roughly comparable with data collected in the decennial census.

VETERAN STATUS

The data on veteran status were derived from answers to question 26 (see facsimiles of questionnaire item and instructions, pages App-47 and 50).

This question was asked of males 14 years old and over in the 15-percent sample. As defined in this report, a "veteran" is a male 16 years old or over who has served but is not now serving in the Armed Forces of the United States. All other civilian males 16 years old and over are classified as nonveterans. The questions on veteran status were asked only of males because relatively few females have served in the Armed Forces of this country.

The veteran population is classified according to period of service. The periods of service are the same as in the 1960 census except for the addition of the Vietnam conflict. Veterans who served in both the Korean conflict and World War II are presented as a separate group. All other persons with more than one period of service reported are shown according to the most recent wartime period of service.

MARITAL STATUS

The data on marital status were derived from question 8 (see facsimiles of questionnaire item and instructions on page App-46).

This question was asked of all persons. The marital status classification refers to the status at the time of enumeration. Persons classified as "married" consist of those who have been married only once and those who remarried after having been widowed or divorced. Persons reported as separated (either legally separated or otherwise absent from their spouse because of marital discord) are classified as a subcategory of married persons. Persons in common-law marriages are classified as married, and persons whose only marriage had been annulled are classified as never married. All persons classified as never married are shown as "single" in this report. Differences between the number of married males and the number of married females arise from the fact that some husbands and wives have their usual residences in different areas, and to a lesser extent, from the different sample weights applied to them.

Married persons with "spouse present" are men or women whose wife, or husband, was enumerated as a member of the same household even though he or she may have been temporarily absent on business or vacation, visiting, in a hospital, etc., at the time of enumeration. The small number of persons living with their spouse in group quarters are classified as married, spouse absent; if a married person in group quarters was in the sample, his spouse was unlikely to be in the sample, because in group quarters the sample consisted of every fifth person in order of enumeration.

By definition, the number of married men, spouse present, shown in this report should be identical with the number of married women, spouse present. However, the two figures may not be exactly the same because, in the weighting of the sample, husbands and their wives were sometimes given different weights.

Married persons with "spouse absent—other" comprise married persons employed and living away from their homes, those whose spouse was absent in the Armed Forces, in-migrants whose spouse remained in other areas, husbands or wives of inmates of institutions, married persons (other than separated) who were living in group quarters, and all other married persons whose place of residence was not the same as that of their spouse.

MARITAL HISTORY

The data on marital history were derived from answers to question 24 (see facsimiles of questionnaire item and instructions, pages App-47 and 50).

Information on whether married more than once and on age at first marriage has been obtained in each census since 1940. In 1970, the question on how the first marriage ended was included for the first time in a decennial census. For all persons in the 5-percent sample reported as married (including separated), widowed, or divorced at the time of the enumeration, data were obtained on the date of the first marriage. From this information and from current age, data on age at first marriage were derived. For each person who had been married more than once, information was obtained on the reason for termination of the first marriage. Persons shown as "known to have been widowed" include widowed persons and those currently married or divorced persons whose first marriage ended in widow-

hood. Persons shown as "known to have been divorced" include divorced persons and those currently married or widowed persons whose first marriage did not end in widowhood.

HOUSEHOLD, RELATIONSHIP TO HOUSEHOLD HEAD, AND GROUP QUARTERS

The data on household relationship were derived from answers to question 2 and entries in item B (see facsimiles of questionnaire item and instructions, page App-46).

The question on household relationship was asked of all persons. The item on type of unit was filled by the enumerator or in the census office for each household.

Household

A household includes all the persons who occupy a group of rooms or a single room which constitutes a housing unit. A group of rooms or single room is regarded as a housing unit when it is occupied as separate living quarters, that is, when the occupants do not live and eat with any other persons in the structure, and when there is either (1) direct access from the outside of the building or through a common hall or (2) complete kitchen facilities for the exclusive use of the occupants of the household.

The average population per household is obtained by dividing the population in households by the number of household heads. Population per household shown for a racial subgroup of the population, especially in small areas, may not in all cases be a true representation of the household size for those subgroups. For example, some persons of a given race may be roomers or domestic employees living with household heads of a different race.

Relationship to Household Head

Detailed categories of relationship to head of household are recognized in this report.

Head of household.—One person in each household is designated as the "head," that is, the person who is regarded as the head by the members of the household. However, if a married woman living with her husband was reported as the head, her husband was considered the head for the purpose of simplifying the tabulations.

Two types of household heads are distinguished—the head of a family and a primary individual. A family head is a household head living with one or more persons related to him by blood, marriage, or adoption. A primary individual is a household head living alone or with nonrelatives only.

Wife of head.—A woman married to and living with a household head, including women in common-law marriages as well as women in formal marriages. The number of women in this category may not always be the same as the number of "husband-wife households" and the number of "husband-wife families," because of differences in the weighting of the sample data.

Child of head.—A son, daughter, stepchild, or adopted child of the head of the household of which he is a member, regardless of the child's age or marital status. The category excludes sons-in-law and daughters-in-law. (See definition of "own child" below.)

Grandchild of head

Parent of head or wife

Son- or daughter-in-law of head

Brother or sister of head or wife

Other relative of head.—Any person related to the household head by blood, marriage, or adoption, who is not included in one of the specific relationship categories shown in the particular table.

Not related to head.—All persons in the household not related to the head by blood, marriage, or adoption. Roomers, boarders, lodgers, partners, resident employees, wards, and foster children are included in this category.

Group Quarters

Living quarters were classified as housing units or group quarters on the basis of answers to question 2 and item B (see facsimiles of questionnaire item and instructions, page App-46. This information was obtained for all persons. All persons not living in households are classified by the Bureau of the Census as living in group quarters. Two general categories of persons in group quarters are recognized:

Inmate of institution.—Persons under care or custody in institutions at the time of enumeration are classified as "inmate of institution" regardless of their length of stay in that place and regardless of the number of people in that place. Institutions are a subcategory of group quarters and include homes, schools, hospitals, or wards for juveniles, for the physically handicapped, or for the mentally handicapped; hospitals for mental, tuber-

cular, or chronic disease patients; homes for unwed mothers; nursing, convalescent and rest homes; homes for the aged and dependent; and correctional institutions. Inmates of mental hospitals and homes for the aged are shown separately in this report.

Other persons in group quarters.—This category includes all persons living in group quarters who are not inmates of institutions. Living quarters are called group quarters if there are five or more persons unrelated to the head; or, when no head is designated, if six or more unrelated persons share the unit. Rooming and boarding houses, communes, workers' dormitories, and convents or monasteries fall into this category. Persons residing in certain other types of living arrangements are classified as living in group quarters regardless of the number or relationship of people in the unit. These include persons residing in military barracks, on ships, in college dormitories, or in sorority and fraternity houses; patients in short-term medical and surgical wards of hospitals who have no usual residence elsewhere; staff members in institutional quarters; and persons enumerated in missions, flophouses, Salvation Army shelters, railroad stations, etc.

Residents of selected types of group quarters are shown separately in this report:

Rooming house.—In addition to residents in rooming houses and in living quarters with 5 or more persons not related to the head, this category includes the small number of persons temporarily residing in hotels, motels, Y's, and residential clubs at the time of enumeration who had no permanent residence elsewhere.

Military barracks.—Military personnel living in barracks or on ships are included in this category. Residents of housing units on military bases are included with the population in households.

College dormitory.—As used here, this term includes college students in dormitories, in fraternity and sorority houses, and in rooming houses in which all occupants are college students.

Certain places and counties have a high proportion of their total population in institutions, colleges, military posts, and other places where many persons live in group quarters. These areas tend to have an unusual age distribution and to have other characteristics that seriously affect not only birth, marriage, and death rates but also other social and economic characteristics of the residents. Therefore, data on the population in households (which excludes the population in group quarters) are often more useful for such areas than data on the total population. Accordingly, age, race, and sex for persons in households only are shown in table 39 for those places and counties with a population of 1,000 or more living in group quarters.

Comparability with Earlier Census Data

The 1970 definition of a household differs from that used in the 1960 census only in the change in the definition of housing unit to require "complete kitchen facilities" now, as compared with "cooking equipment" previously. The definitions for 1970 group quarters are basically the same as those for 1960 but are more specific.

MARRIED COUPLE, FAMILY, AND SUBFAMILY

Married couple.—In the 1970 census, a married couple is defined as a husband and his wife enumerated as members of the same household. Statistics on married couples were compiled in 1970 only for persons in sample housing units; the number of married couples, as shown in this report, is identical to the number of married men with wife present. By definition, the number of married couples in any area should also be identical to the number of married women with husband present; however, the two figures may not be exactly the same in this report, because the methods used to inflate the sample sometimes gave different weights for husbands than for their wives.

A "married couple with own household" is a married couple in which the husband is a household head; the number of such married couples is the same as the number of "husband-wife families." Married couples without own household are, by definition, the same as married couples in subfamilies.

Family and subfamily.—According to 1970 census definitions, a family consists of a household head and one or more other persons living in the same household who are related to the head by blood, marriage, or adoption; all persons in a household who are related to the head are regarded as members of his (her) family. A "husband-wife family" is a family in which the head and his wife are enumerated as members of the same household. Not all households contain families, because a household may be composed of a group of unrelated persons or one person living alone. The mean size of family is derived by

dividing the number of persons in families by the total number of families.

A "family" has the same meaning in the 1970 census as a "primary family" in the 1960 census. Secondary families were defined in the 1960 census as groups of persons related to each other but unrelated to the household head, such as lodgers, friends, partners, or resident employees. However, the number of such families became so small (95,000 in 1969, according to the Current Population Survey) that the Bureau of the Census decided to include persons in these families in the count of secondary individuals for 1970.

A subfamily is a married couple with or without children, or one parent with one or more single children under 18 years old, living in a household and related to, but not including, the head of the household or his wife. The most common example of a subfamily is a young married couple sharing the home of the husband's or wife's parents. Members of a subfamily are also included among the members of a family. The number of subfamilies, therefore, is not included in the number of families.

OWN CHILDREN AND RELATED CHILDREN

Statistics on the presence of "own" children are shown in this report for married couples, families, subfamilies, and women of childbearing age. In the 1970 census, as in 1960, a child under 18 years old is defined as an "own" child if he or she is a single (never married) son, daughter, stepchild, or adopted child of a married couple or of a family or subfamily head. In the 1970 census, the term "sons/daughters under 25" is used with the same meaning as "own children under 25" in the 1960 census; these and other similar terms that include persons 18 years old and over relate to all children of the head regardless of marital status. The number of "children living with both parents" includes stepchildren and adopted children as well as sons and daughters born to the couple. The number of own children under 5 years old shown for women of childbearing age is limited to those living with mothers who have ever been married, whereas the number of own children in families or subfamilies includes those living with parents who have never married.

Certain tables show the number of "related children" under 18 years old in the family. This includes not only "own" children, as defined above, but also all other family members, regardless of marital status, who are under 18 years old (except the head or wife). In the tables on poverty status, the mean number of related children under 18 is derived by dividing the number of children under 18 in families by the number of families having children of that age.

UNRELATED INDIVIDUAL

An unrelated individual may be (1) a household head living alone or with nonrelatives only, (2) a household member who is not related to the head, or (3) a person living in group quarters who is not an inmate of an institution. Thus, included with unrelated individuals are the small number of household members who are related to each other but not related to the head of the household (e.g., a family of lodgers or an employee and his wife) and groups of related persons living in group quarters. Unrelated individuals who are household heads are called "primary individuals"; those who are not household heads are called "secondary individuals." In the tables on income and poverty status, unrelated individuals are limited to those 14 years of age or older. In the statistics on poverty status of unrelated individuals, college students living in dormitories and members of the Armed Forces living in barracks are excluded.

CHILDREN EVER BORN

The data on children ever born were derived from answers to question 25, (see facsimiles of questionnaire item and instructions, pages App-47 and 50).

In this report the statistics presented on this subject are for women ever married who were in the 20-percent sample. Similar information collected from single women was not included because of anticipated weaknesses in the data and because more complete comparability with previous censuses was achieved thereby. In tables showing rates of children ever born to all women, single women have been counted for this report as having no children ever born even though it is known that some of these women have had children. A subsequent report will present national data on fertility that incorporate information for single women.

Although the data on children ever born in this report are for women ever married, the number of children reported undoubtedly includes some illegitimate births. It is likely that some unwed mothers living with an illegitimate child reported themselves as having been married. Also, many of the mothers who married after the

birth of an illegitimate child counted that child (as they were expected to do). Respondents were instructed to include children born to the woman before her present marriage, children no longer living, and children away from home, as well as children born to the woman who were still living in the home. On the other hand, the data are, no doubt, less complete for illegitimate than for legitimate births.

In the 1970 census, a terminal category of "12 or more" was used for recording the number of children ever born. For purposes of computing the total number of children ever born, the terminal category was given a mean value of 13.

Comparability with earlier census data.—The wording of the question on children ever born was the same in 1970 as in 1960, except that in 1960 it was asked only of women ever married. Because the present report counts only the children of women ever married, the data should be strictly comparable with those for 1960.

Replacement index.—Some of the tables show a "replacement index" for women 35 to 44 years old. This index is derived from the statistics on children ever born. An index of 100 means that the women had borne just enough children for replacement of their generation. An index of 120 means that the women had borne children at a rate that would increase the population by 20-percent per generation.

The replacement index was computed by dividing the number of children ever born per 1,000 women 35 to 44 years old by a national replacement quota of 2,070 and by expressing the result on a per 100 basis. The replacement quota is based on (1) an assumption that the women 35 to 44 years old had completed about 97 percent of their eventual lifetime fertility, (2) the number of births of both sexes needed to yield 1,000 daughters as potential replacements for 1,000 women, and (3) mortality conditions prevailing at the time the women were at the mean age of childbearing (about age 27). More precisely, ratios of gross reproduction rates to net reproduction rates in 1955 to 1960 were used to allow for mortality. Separate quotas by race have not been used because the quota for Negroes is less than one percent higher than that for whites.

WORK DISABILITY

The data on work disability were derived from answers to question 28 (see facsimiles of questionnaire item and instructions, pages App-48 and 50).

Data were obtained for persons 14 to 64 years old in the 5-percent sample but were published for persons 16 to 64 years old. The information was used to identify persons hindered because of a health or physical condition from working at a job. The question refers to a serious illness that has lasted (or is likely to last) for a relatively long time, or a serious physical or mental impairment or handicap. Also determined was whether such persons were able to work at all and how long each person had been limited in his working ability.

In 1970, information on disability was collected for the first time in a decennial census. Other government agencies have collected such statistics but, due to differences in enumeration techniques, the data may not be comparable.

ECONOMIC CHARACTERISTICS

EMPLOYMENT STATUS

The data on employment status were derived from answers to questions 29a, 29b, 30, and 31 (see facsimiles of questionnaire items and instructions, pages App-48 and 50).

The series of questions on employment status were asked of all persons 14 years old and over in the 20-percent sample and were designed to identify, in this sequence: (a) persons who worked at any time during the reference week; (b) persons who did not work during the reference week but who had jobs or businesses from which they were temporarily absent (excluding layoff); (c) persons on layoff; and (d) persons who did not work during the reference week, but who were looking for work during the past four weeks and were available for work during the reference week.

Most of the employment status data shown in this and other 1970 census reports relate to persons 16 years old and over. In 1940, 1950, and 1960, employment status data were presented for persons 14 years old and over. The change in the universe for 1970 was made to achieve conformity with the official measurement of the labor force as revised in January 1967. Selected employment status data, however, are shown for persons 14 and 15 years old.

Reference week.—Data on employment status refer to the calendar week prior to the date on which respondents completed their questionnaires or were interviewed by enumerators. Since the week of enumeration was not the same for all persons, the reference week for employment data is not entirely uniform. For many persons, the refer-

ence week for answering the 1970 census employment status questions was the last week in March. Good Friday occurred during this week, and some workers took time off for this occasion. The effect of this holiday on the 1970 census employment status data varies from area to area depending on the leave practices and time of census enumeration in the area. It is not likely that there was much effect on the overall measurement of employment since employment is based on the work activity during the entire week. The effect of the holiday on the statistics on hours worked should, however, be considered in any interpretation or other use of the data.

Employed.—Employed persons comprise all civilians 16 years old and over who were (a) "at work"—those who did any work at all as paid employees or in their own business or profession, or on their own farm, or who worked 15 hours or more as unpaid workers on a family farm or in a family business; or (b) were "with a job but not at work"—those who did not work during the reference week but had jobs or businesses from which they were temporarily absent due to illness, bad weather, industrial dispute, vacation, or other personal reasons. Excluded from the employed are persons whose only activity consisted of work around the house or volunteer work for religious, charitable, and similar organizations.

Unemployed.—Persons are classified as unemployed if they were civilians 16 years old and over and: (a) were neither "at work" nor "with a job, but not at work" during the reference week, (b) were looking for work during the past 4 weeks, and (c) were available to accept a job. Examples of jobseeking activities are: (1) registering at a public or private employment office, (2) meeting with prospective employers, (3) checking with friends or relatives, (4) placing or answering advertisements, (5) writing letters of application, and (6) being on a union or professional register.

Also included as unemployed are persons who did not work at all during the reference week and were waiting to be called back to a job from which they had been laid off.

Experienced unemployed.—Unemployed persons who have worked at any time in the past are classified as the "experienced unemployed."

Civilian labor force.—The civilian labor force consists of persons classified as employed or unemployed in accordance with the criteria described above.

Experienced civilian labor force.—The "experienced civilian labor force" is comprised of the employed and the experienced unemployed.

Labor force.—The labor force includes all persons classified in the civilian labor force plus members of the Armed Forces (persons on active duty with the United States Army, Air Force, Navy, Marine Corps, or Coast Guard).

Not in labor force.—All persons 16 years old and over who are not classified as members of the labor force are defined as "not in labor force." This category consists mainly of students, housewives, retired workers, seasonal workers enumerated in an "off" season who were not looking for work, inmates of institutions, disabled persons, and persons doing only incidental unpaid family work (less than 15 hours during the reference week).

Wife in paid labor force.—In table 209 the term "wife in paid labor force" refers to wives who were employed during the reference week and reported earnings in 1969.

Worker.—The term "worker" appears in connection with several subjects in this report: nonworker-worker ratio, place of work, means of transportation, activity 5 years ago, and weeks worked in 1969. Its meaning varies and, therefore, should be determined in each case by referring to the definition of the subject in which it appears.

Nonworker-worker ratio.—This is the ratio of persons not in the labor force (including persons under 14 years of age) to persons 14 years old and over in the labor force.

Comparability with earlier census data.—The questionnaire items and employment status concepts for the 1970 census differed in many respects from those associated with the 1950 and 1960 censuses. The employment status concepts were revised to conform with the official government concepts of employment and unemployment instituted in January 1967. The employment status items for 1970 differed from the series of items asked in the earlier censuses in the following ways:

1. The 1970 questionnaire introduced a distinction between persons "looking for work" and persons "on layoff." (In 1960 the two groups were combined.)
2. A specific time period—during the past four weeks—was added to the "looking for work" question. This was done to introduce an explicit

time reference for jobseeking activities and to extend the one-week time reference, which was implied but not stated in the 1960 and 1950 jobseeking items.

3. The requirement that a person be currently available for work in order to be counted as unemployed was added for 1970. Therefore, a choice of responses designed to determine availability to accept a job was provided in the question on looking for work.

4. Persons reported as being temporarily absent from a job during the reference week for reasons other than layoff were classified as "employed, with a job but not at work" even if they were looking for work. In 1960, such persons were classified as unemployed if they were looking for work.

Comparability with data from other sources.—Because employment data from the census are obtained from respondents in households, they differ from statistics based on reports from individual business establishments, farm enterprises, and certain government programs. Persons employed at more than one job are counted only once in the census and are classified according to the job at which they worked the greatest number of hours during the reference week. In statistics based on reports from business and farm establishments, persons who work for more than one establishment may be counted more than once. Moreover, other series, unlike those presented here, may exclude private household workers, unpaid family workers, and self-employed persons, but may include workers less than 16 years of age.

An additional difference in the data arises from the fact that persons who had a job but were not at work are included with the employed in the statistics shown here whereas many of these persons are likely to be excluded from employment figures based on establishment payroll reports. Furthermore, the data in this report include persons on the basis of their place of residence regardless of where they work, whereas establishment data report persons at their place of work regardless of where they live. This latter consideration is particularly significant when comparing data for workers who commute between areas.

For a number of reasons, the unemployment figures of the Bureau of the Census are not comparable with published figures on unemployment compensation claims. Generally, persons such as private household workers, agricultural workers, State and local government workers, self-employed workers, new workers, and workers whose rights to unemployment benefits have expired are not eligible for unemployment compensation. Further, many employees of small firms are not covered by unemployment insurance. In addition, the qualifications for drawing unemployment compensation differ from the definition of unemployment used by the Bureau of the Census. Persons working only a few hours during the week, and persons temporarily absent from work for reasons other than layoff are sometimes eligible for unemployment compensation but are classified as "employed" in the census reports. Differences in the geographical distribution of unemployment data arise because the place where claims are filed may not necessarily be the same as the place of residence of the unemployed worker.

HOURS WORKED

All persons in the 20-percent sample who reported working during the reference week were asked to report the number of hours that they worked. The statistics on hours worked pertain to the number of hours actually worked at all jobs, and do not necessarily reflect the number of hours usually worked or the scheduled number of hours. The category "at work, full-time" includes persons who worked 35 hours or more during the reference week, and the category "at work, part-time" includes persons who worked 1 to 34 hours during the reference week. The number of persons who worked only a small number of hours is probably understated since such persons sometimes consider themselves as not working. The possible effect on "hours worked" of the occurrence of a holiday during the reference week is discussed in the section on "Reference week," above.

WEEKS WORKED IN 1969

Definition.—The data on weeks worked in 1969 were derived from answers to questions 39a and b (see facsimiles of questionnaire items and instructions on pages App-49 and 51).

The questions were asked of all persons 14 years old and over in the 20-percent sample. In most tables, data are shown for persons 16 years old and over to conform with the universe for employment status data. Data on weeks worked in 1969 for persons 14 and 15 years old are also shown in selected tables.

The data pertain to the number of weeks during 1969 in which a person did any work for pay or profit (including paid vacation and sick leave) or worked without pay on a family farm

or in a family business. Weeks of active service in the Armed Forces are also included. It is probable that the number of persons who worked in 1969 and the number of weeks they worked are understated since there is some tendency for respondents to forget intermittent or short periods of employment or to exclude weeks worked without pay.

Comparability with earlier census data.—The data on weeks worked collected in the 1970 census are comparable with data from the 1960 census but may not be entirely comparable with data from the 1940 and 1950 censuses. On the 1970 and 1960 questionnaires, two separate questions were used to obtain this information. The first identified persons with any work experience during the year and, thus, indicated those persons for whom the questions on number of weeks worked and earned income were applicable. In 1940 and 1950, however, the questionnaires contained only a single question on number of weeks worked.

Median weeks worked.—The median weeks worked is the value which divides the distribution of persons with work experience into two equal parts—one-half the cases falling below this value and one-half the cases exceeding this value. The median is based on the distribution among the 6 weeks-worked categories of all persons who reported working during the previous year. If the value fell in the terminal category of 50 to 52 weeks, a median of 52 weeks was assigned: if the value fell in the category 13 weeks or less, a median of 10 weeks was assigned. The determination of set medians for these two categories was based on previous experience with the central tendency of the distribution within the categories. Specifically, a median of 52 weeks reflects the predominance of full-year workers, and a median of 10 weeks reflects the predominance of students working at summer jobs.

YEAR LAST WORKED

The data on year last worked were derived from answers to question 32 (see facsimiles of questionnaire item and instructions on pages App-48 and 50).

This question was asked of persons 14 years old and over in the 20-percent sample who were not at work during the reference week. The data are presented, in this report, for persons classified as not in the labor force. The "year last worked" pertains to the most recent year in which a person did any work for pay or profit, or worked without pay on a family farm or in a family business, or was on active duty in the Armed Forces. The data from this question were used to define the "experienced unemployed" and persons not in the labor force who have had previous work experience. A similar question was introduced in the 1960 census but the data are not entirely comparable because of differences in the response categories.

PLACE OF WORK

The data on place of work were derived from answers to question 29c (see facsimiles of questionnaire item and instructions on pages App-48 and 50).

The question was asked of all persons 14 years old and over in the 15-percent sample who reported working during the reference week. Place of work refers to the geographic location at which civilians at work during the reference week and Armed Forces personnel (except those on leave, sick, etc.) carried out their occupational or job activities.

These locations are classified in various ways in the tables of this report. In chapter C, place of work is classified simply as to whether it was in the same county (or equivalent area) as the worker's county of residence or in a different county.

In chapter D two levels of classification are shown. In the statistics for standard metropolitan statistical areas of 100,000 or more (table 190), the locations are: (1) central city (or cities) of the SMSA, divided into the central business district[3] and elsewhere in the central city, (2) in the SMSA but outside the central city, and (3) the area outside the SMSA. In the statistics for the State (table 191) the areas are: (1) in the State of residence, (2) in a State contiguous to the State of residence (with the specific State indicated) and (3) in a noncontiguous State or abroad.

In 1960, place of work was identified only by county and city. In 1970, for the first time in a decennial census the exact address (number and street name) for the place of work was asked. Persons working at more than one job were asked to report the location of the job at which they

[3]The central business district (CBD) is usually the downtown retail trade area of the city. As defined by the Bureau of the Census, the CBD is an area of very high land valuation characterized by a high concentration of retail business offices, theaters, hotels, and service businesses, and with a high traffic flow. CBD's consist of one or more census tracts and have been defined only in cities with a population of 100,000 or more. In order to be counted as working in the CBD, the respondent had to give the exact address (street name and number) of his place of work. Since all respondents did not do this, the data for CBD's is usually understated by an unknown quantity.

worked the greatest number of hours during the census week. Salesmen, deliverymen, and others who work in several places each week were requested to give the address at which they began work each day, if they reported to a central headquarters. For cases in which daily work was not begun at a central place each day, the person was asked to report the exact address of the place where he worked the most hours last week. If his employer operated in more than one location (such as a grocery store chain or public school system), the exact address of the location or branch where the respondent worked was requested. When the number or street name could not be given, the name of the building or the name of the company for which he worked was to be entered.

MEANS OF TRANSPORTATION TO WORK

The data on means of transportation to work were derived from the answers to question 29d (see facsimiles of questionnaire item and instructions on pages App-48 and 50).

The question was asked of all persons 14 years old and over in the 15-percent sample who reported working during the reference week. Means of transportation to work refers to the chief means of travel or type of conveyance used in traveling to and from work on the last day the respondent worked at the address given in question 29c (place of work). In 1960 the question on means of transportation to work referred to "last week" rather than the "last day."

If more than one means was used, the respondent was instructed to report the one covering the greatest distance. "Worked at home" was to be marked by a person who worked on a farm where he lived or in an office or shop in his home. The category "public transportation" includes bus, streetcar, subway, elevated, and railroad.

OCCUPATION, INDUSTRY, AND CLASS OF WORKER

The data on occupation, industry, and class of worker were derived from answers to questions 33 to 35 (see facsimiles of questionnaire items and instructions on pages App-49 and 50).

This series of questions, asked of all persons in the 20-percent sample, was used to obtain industry occupation, and class-of-worker information for the employed, the experienced unemployed, and persons not currently in the labor force but with previous work experience. The data presented for the last two categories relate to persons who had worked at some time during the previous ten years. All three items refer to one specific job held by the person. For an employed person, the information refers to the job held during the reference week; and, for a person employed at two or more jobs, the information refers to the job at which he worked the greatest number of hours during the reference week. For experienced unemployed persons and for those not in the labor force, the information refers to the last job the person held.

This report presents industry and occupation data for the employed, for the experienced civilian labor force, and for persons with work experience but not currently in the labor force. Occupation data are shown also for the experienced unemployed; industry data for this group may be derived by subtraction of the employed from the experienced civilian labor force in each industry category. Class-of-worker information is shown only for employed persons.

The written occupation and industry descriptions from the questionnaire were converted to identifying codes by relating these descriptions to an entry in the 1970 Census of Population **Alphabetical Index of Industries and Occupations**, U.S. Government Printing Office, Washington, D.C., 1971. For the industrial code, however, the first coding attempt was by reference to the **Company Name List.** This list, prepared from the master address file of the 1968 Censuses of Business, Construction, Manufactures, and Minerals, contains the name of the establishment and its Standard Industrial Code converted to the equivalent code in the population census industrial classification system. This listing facilitates coding and helps maintain industrial classification comparability.

The classification systems used to prepare the **Alphabetical Index of Industries and Occupations** for the 1970 census were developed in consultation with many individuals, private organizations, and government agencies. For occupation, the primary consultant was the Interagency Occupational Classification Committee under the auspices of the United States Office of Management and Budget.

Occupation

Classification system.—The system developed for the 1970 census consists of 441 specific occupational categories arranged into 12 major occupation groups. In this report several levels of classification are presented. Classification by "detailed occupation" appears

in tables 170 and 171. Here, the 441 occupational categories are regrouped into 407 occupations, which are shown for employed persons and for the experienced civilian labor force. In this most detailed level of classification some of the 407 categories represent subgroupings of an occupation on the basis of industry or class of worker.

In tables presenting cross-tabulations of occupation by various demographic and economic characteristics, less detailed occupational classifications are used. In some of these tables, e.g., table 151, statistics are presented by major occupation group. In others, an intermediate classification is used. This intermediate classification consists of 158 categories for males and 86 for females (see table 172, for example). In tables showing greater detail in cross-tabulations with other subjects or considerable area detail, various condensed versions of the occupation classification are used, or information is shown only for the major groups. The classification shown for the State in chapter C (tables 54, 65, and 76), for example, consists of 32 categories for the total employed and 22 categories for females.

The relationship between the detailed and intermediate levels of classification is provided in list A for males and list B for females on pages App-36 and 39. Lists C and D (page App-42) show the relationship between the intermediate classification and the condensed version shown for the State in chapter C.

Four occupation divisions.—The major groups are arranged in four divisions as follows:

White collar.—Professional, technical, and kindred workers; managers and administrators, except farm; sales workers; and clerical and kindred workers.

Blue collar.—Craftsmen and kindred workers; operatives, except transport; transport equipment operatives; and laborers, except farm.

Farm workers.—Farmers and farm managers, farm laborers and farm foremen.

Service workers.—Service workers including private household.

The sequence in which these four divisions appear is not intended to imply that any division has a higher social or skill level than another.

Relation to Dictionary of Occupational Titles classification.—The occupational classification system of the population census is generally comparable with the system used in the **Dictionary of Occupational Titles** (DOT) with the exception of the blue collar workers.[4] The DOT structure for these occupations is quite different from that used by the Bureau of the Census, largely because the two systems are designed to meet different needs and to be used under different circumstances. The DOT system is basically a job-defining scheme and is more detailed than the system used by the Bureau of the Census, which is data collection oriented. Thus, job classification by DOT often requires more detailed information than is obtained on the census questionnaires.

Industry

Classification system.—The industry classification system developed for the 1970 Census of Population consists of 227 categories classified into 12 major industry groups. Several levels of classification are presented in this report. The most detailed classification, containing all 227 categories, appears in tables 183 and 184 for employed persons and the experienced civilian labor force. An intermediate level is used in tables 185 to 189, which present cross-tabulations of industry by demographic and economic characteristics. This intermediate level consists of 82 categories and represents combinations of the categories in the detailed system. In tables showing greater detail in cross-tabulations with other subjects or greater area detail, various condensed versions of the industry classification are used, or information is shown only for the major groups. The classification shown for the State in chapter C (tables 55, 66, and 77), for example, consists of 40 industry groups.

The relationship between the detailed and intermediate classification levels is shown in list E, page App-43. List F shows the relationship between the intermediate classification and the condensed version shown for the State in chapter C.

Relation to Standard Industrial Classification.—The Standard Industrial Classification (SIC) was developed under the sponsorship of the Office of Management and Budget and is designed for the classification of establishments by type of industrial activity in which they are engaged.[5] One of the major purposes of the SIC is to promote uniformity and comparability

[4] See United States Department of Labor, Bureau of Employment Security, **Dictionary of Occupational Titles**, Third edition, Vols. I and II, Washington, 1965.

[5] See Executive Office of the President, Bureau of the Budget, **Standard Industrial Classification Manual** (1967). For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

in the presentation of statistical data collected by various agencies. Accordingly, in the Census of Population, the industry categories are defined in these terms. However, census reports, which are collected from households, differ in nature and detail from those obtained from establishment reports. Therefore, the census classification system, though defined in SIC terms, cannot reflect the full detail in all categories. Moreover, there is an important distinction between the census and SIC classification of government establishments. The census system distributes all activities into their respective industrial categories regardless of whether government-operated or not. The SIC, however, incorporates all government-related activities, regardless of the industry, in goverment categories 91 to 94. The SIC does allow for some industrial detail (two-digit) within this framework. Thus, uniquely governmental activities, e.g., judicial and legislative, are identified by code 90 in the third and fourth digits. This is the equivalent of the industry "Public administration" in the census.

The census identifies all government workers in its "class of worker" item (see below). This identification allows for cross-classification with industry data, thus providing the full array of industry categories in both government and nongovernment terms.

In addition to such classification differences, census data may differ from other industrial data because the dates to which the data refer may not be the same; workers who live in one geographic area and work in another may be reported at their place of residence by the census but at their place of work in other surveys; and dual jobholders may be counted in the reports of two establishments but counted in the census for only their major job.

Relation to certain occupation groups.—Although some occupation groups are closely related to certain industries, the industry categories are broader and include occupations other than those concentrated in that industry. For example, persons employed in agriculture include truck drivers and bookkeepers in addition to farm workers; persons employed in the transportation industry include mechanics and secretaries in addition to transport operatives; and persons employed in the private household industry include occupations such as chauffeur, gardener, and secretary.

Class of Worker

As noted earlier, the economic activity of each person is classified in three distinct dimensions—occupation, industrial attachment, and class of worker. The last dimension shows the type of ownership of the employing organization. Placement of a person in a particular class-of-worker category is, in most cases, independent of the occupation or industry in which he worked. The class-of-worker item on the questionnaire consists of seven categories which are defined as follows:

Private wage and salary workers.—Persons who worked for a private employer for wages, salary, commission, tips, pay in kind, or pay at piece rates.

Government workers.—Persons who worked for any governmental unit, regardless of the activity of the particular agency. This category is subdivided by the level of government: a) Federal, b) State, and c) local (county, city, village, township, etc.).

Self-employed workers.—

a. Own business not incorporated.—Persons who worked for profit or fees in their own unincorporated business, profession, or trade, or who operated a farm. Included here are the owner-operators of large stores and manufacturing establishments as well as small merchants, independent craftsmen and professional men, farmers, peddlers, and other persons who conducted enterprises on their own.
b. Own business incorporated.—Persons who consider themselves self-employed but work for corporations. (In most cases the respondents will own or be part of a group that owns controlling interest in the corporation.) Since all workers of a corporation are defined as wage and salary workers, this category is tabulated with "private wage and salary workers." (The category is shown separately in some tables of chapter C.)

Unpaid family workers.—Persons who worked without pay on a farm or in a business operated by a person to whom they are related by blood or marriage. These are usually the children or the wife of the owner of a business or farm. About one-half of the unpaid family workers are farm laborers.

In some States, teachers in elementary and secondary schools, who were in fact local government workers, tended to report themselves as State government workers. The result is an overstatement of the number of State government workers.

Special Edit and Allocation Procedures

A factor to be considered in the interpretation of these data is that occasionally respondents returned oc-

cupation, industry, or class-of-worker designations which were not sufficiently specific for precise classification. Many such cases were corrected through the field editing process and during the coding and editing operations. In the coding operation certain types of incomplete entries or errors were corrected using the **Alphabetic Index of Industries and Occupations.** The **Index**, besides providing a code for each occupation or industry, also reflects some restrictions such as occupations that occur only within one industry or for which only one class-of-worker code is allowed. Moreover, in certain situations, it provides for the assignment of an industry code on the basis of the occupation reported.

Following the coding operation, there was a computer edit and allocation process. The edit first determined whether a respondent was in the universe which required an occupation and industry code. For those with an incomplete code or one for which no valid category exists (impossible codes), a valid code was assigned. The items (industry, occupation, and class of worker) were then edited for internal consistency.

If one or more of the occupation, industry, or class-of-worker items were blank after edit, the respondent was "allocated" to a major group on the basis of sex, age, farm or nonfarm residence, education, and weeks worked. In the presentation of data in this report where only the major group is shown, the allocated cases are included in the appropriate major group. Where subcategories of the major group are shown, the allocation cases are included in the "other" category for each major group.

Since industry and occupation data from earlier censuses were not allocated, the tables which compare 1970 data with 1960 data show the not reported cases for 1970 as a separate category, rather than allocated to the major groups.

Additional information on edit and allocation procedures is presented in Appendix C, "Accuracy of the Data."

Comparability

Data from earlier censuses.—Changes made in the classification systems for each of the three decennial censuses since 1940 limit the comparability of the data from one census to another. Between 1960 and 1970 the number of categories was greatly increased. A new major group, "transport equipment operatives," added to the occupation classification in 1970, includes occupations formerly part of the "operatives" major group. The allocation of "not reported" cases to the major groups in 1970 (see preceding section) increased the size of those totals relative to the totals for 1960, when there was no allocation of these characteristics. Unemployed persons who last worked in 1949 or earlier were included with the "not reported" in 1960, but the corresponding group, persons who last worked in 1959 or earlier, were shown separately in 1970. The age coverage for statistics on these subjects in 1960 included persons 14 years old and over, in accordance with the definition of the labor force at that time; whereas, most of the 1970 statistics are shown for persons 16 years old and over, to agree with the current definition of the labor force.

In tables 46, 47, 170, and 183, comparable statistics for 1960 and 1970 are presented for persons 14 years old and over. Adjustments have been made in the 1960 data to achieve as close comparability with the 1970 classification systems as possible. Since these adjustments sometimes involved estimates, the reader should exercise caution in interpreting small changes between the two censuses. In the figures for persons 14 years old and over, the "not reported" cases are treated according to the 1960 presentation; that is, the cases allocated to major groups in 1970 are removed from those groups and combined into a separate "not reported" category. The 1970 category "unemployed, last worked 1959 or earlier," also is included with the "not reported" for consistency with the 1960 presentation.

Two additional occupation questions were included on the 1970 census questionnaire. These questions were added to obtain more complete answers from respondents and, therefore, facilitate more accurate coding.

In 1970, as noted above, persons who reported that they were self-employed in own business but had marked "own business incorporated" were tabulated as private wage and salary workers. Since no attempt was made in earlier censuses to determine the validity of the respondent's classification as self-employed, there is probably an overstatement of this category in the figures shown for 1940 to 1960.

The following publications contain information on the various factors affecting comparability and are particularly useful for understanding differences in the occupation and industry information from earlier censuses: U.S. Bureau of the Census, Sixteenth Census Reports, Population, **Comparative Occupation Statistics for the United States, 1870 to 1940;** U.S. Bureau of the Census, **Occupation Trends in the United States, 1900 to 1950,** Working Paper No. 5, 1959;

U.S. Bureau of the Census, **Changes Between the 1950 and 1960 Occupation and Industry Classifications—With Detailed Adjustments of 1950 Data to the 1960 Classifications,** Technical Paper No. 18, 1968; and U.S. Bureau of the Census, **1970 Occupation and Industry Classification Systems, in Terms of Their 1960 Occupation and Industry Elements,** Technical Paper No. 26, 1972.

Data from other sources.—Comparability between the statistics presented in this report and statistics from other sources is frequently affected by the use of different classification systems, and by many of the differences in reporting described in the paragraphs on comparability with other data in the section on "Employment Status," page App-19. Occupation data from the census and data from government licensing agencies, professional associations, trade unions, etc., are not directly comparable. Such listings may include persons not in the labor force or persons devoting all or most of their time to another occupation; or the same person may be included in two or more different listings. Moreover, relatively few organizational listings attain complete coverage of membership in a particular occupation field.

ACTIVITY 5 YEARS AGO

The data on "activity 5 years ago" were obtained from answers to question 37 (see facsimiles of questionnaire item and instructions, pages App-49 and 51).

The series of questions on activity in April 1965 were asked of all persons 14 years old and over in the 20-percent sample. In 1970, this question was asked for the first time in a decennial census. Data obtained from this question are presented in this report in connection with the subjects "Residence in 1965," "Labor mobility," and "Occupation 5 years ago."

A person was classified as a worker in 1965 if he answered "yes" to either (a) working or (b) in the Armed Forces. All other persons were classified as nonworkers in 1965. Since there were no imputation procedures for nonresponses to this question, the category "nonworkers in 1965" includes persons who failed to answer parts "a" and "b" of the question. Tests have shown that the number of persons who were working in April 1965 is probably understated to some extent since there is a tendency for respondents to forget intermittent or short periods of employment. To minimize this error, published data have been restricted to those age groups with the highest degree of reliability in reporting this information.

Data on labor mobility for males pertain to men who were 30 to 49 years old as of April 1, 1970. The tabulations cover the work status of these men in both 1965 and 1970. The category "worker in 1970" includes the employed plus members of the Armed Forces; "nonworker in 1970" includes the unemployed and persons not in the labor force. The terms "unemployed" and "labor force" are defined in the section on "Employment Status."

Data for females pertain to women 16 to 44 years old in April 1965 (21 to 49 years old in April 1970). The tabulations concentrate on the working patterns of women in child-bearing years with reference to marital status and the presence and age of children. The definitions of workers and nonworkers in 1965 and 1970 are the same for females as for males.

OCCUPATION 5 YEARS AGO

The data on "occupation 5 years ago" were derived from answers to question 38 (see facsimiles of questionnaire item and instructions, pages App-49 and 51).

This question, relating to industry, occupation, and class of worker in 1965, was asked of persons in the 5-percent sample who answered "Yes" to "Working at a job or business" in item 37a. The data on occupation were tabulated for persons 25 years old and over. There are indications that, because of failure of the respondent to recall accurately, the responses on occupation in 1965 are subject to greater error than those on current occupation. Therefore, the occupational classification in 1965 presented in this report is restricted to the major occupation group.

INCOME IN 1969

The data on income were derived from answers to questions 40 and 41 (see facsimiles of questionnaire items and instructions, pages App-49 and 51).

Information on money income received in the calendar year 1969 was requested from all persons 14 years old and over in the 20-percent sample. "Total income" is the algebraic sum of the amounts reported in item 40a (Wage or salary income), item 40b (Nonfarm net self-employment income), item 40c (Farm net self-employment income), item 41a (Social Security or railroad retirement income), item 41b (Public assistance or welfare income), and item 41c (All other income). "Earnings" is the algebraic sum of the amounts reported as

wage or salary income and nonfarm and farm net self-employment income. The figures represent the amount of income received before deductions for personal income taxes, Social Security, bond purchases, union dues, medicare deductions, etc.

Receipts from the following sources were not included as income: money received from the sale of property (unless the recipient was engaged in the business of selling such property, in which case, the net proceeds would be counted as income from self-employment); the value of income "in kind" such as free living quarters or food produced and consumed in the home; withdrawal of bank deposits; money borrowed; tax refunds; exchange of money between relatives living in the same household; gifts and lump-sum inheritances, insurance payments, and other types of lump-sum receipts.

Definitions

Type of income.—The six types of income reported in the census are defined as follows:

Wage or salary income.—Total money earnings received for work performed as an employee at any time during the calendar year 1969. It includes wages, salary, pay from Armed Forces, commissions, tips, piece-rate payments, and cash bonuses earned.

Nonfarm net self-employment income.—Net money income (gross receipts minus business expenses) received from a business, professional enterprise, or partnership in which the person was engaged on his own account. Gross receipts include the value of all goods sold and services rendered. Business expenses include cost of goods purchased, rent, heat, light, power, depreciation charges, wages and salaries paid, business taxes (not personal income taxes), etc.

Farm net self-employment income.—Net money income (gross receipts minus operating expenses) received from the operation of a farm by a person on his own account, as an owner, renter, or sharecropper. Gross receipts include the value of all products sold, governmental subsidies, money received from the rental of farm equipment to others, and incidental receipts from the sale of wood, sand, gravel, etc. Operating expenses include the cost of fuel, fertilizer, seed, and other farming supplies, cash wages paid to farmhands, depreciation charges, cash rent, interest on farm mortgages, farm building repairs, farm taxes (not Federal, State, and local income taxes), etc. The value of fuel, food, and other farm products used for family living is not included as part of net income.

Social Security or railroad retirement income.—Cash receipts of Social Security pensions, survivors' benefits, permanent disability insurance payments, and special benefit payments made by the Social Security Administration (under the National old-age, survivors, disability, and health insurance programs) before deductions of health insurance premiums. "Medicare" reimbursements are not included. Cash receipts of retirement, disability, and survivors' benefit payments made by the U.S. Government under the Railroad Retirement Act are also included.

Public assistance income.—Cash receipts of payments made under the following public assistance programs: aid to families with dependent children, old-age assistance, general assistance, aid to the blind, and aid to the permanently and totally disabled. Separate payments received for hospital or other medical care are excluded from this item.

Income from all other sources.—Money income received from sources such as interest; dividends; net income (or loss) from property rentals; net receipts from roomers or boarders; veteran's payments; public or private pensions; periodic receipts from insurance policies or annuities; unemployment insurance benefits; workmen's compensation cash benefits; net royalties; periodic payments from estates and trust funds; alimony or child support from persons who are not members of the household; net gambling gains; nonservice scholarships and fellowships; and money received for transportation and/or subsistence by persons participating in special governmental training programs, e.g., under the Manpower Development and Training Act.

Income of families and unrelated individuals.—This report includes information on income of families, unrelated individuals 14 years old and over, and persons 14 years old and over by detailed social and economic characteristics. In compiling statistics on family income, the incomes of all members 14 years old and over in each family are summed and treated as a single amount. However, in compiling the income data for unrelated individuals and persons 14 years old and over, the total amount of their own income is used. Although the income statistics cover the calendar year 1969, the characteristics of persons and the

composition of families refer to the time of enumeration (April 1970). Thus, the income of the family does not include amounts received by persons who were members of the family during all or part of the calendar year 1969 if these persons no longer resided with the family at the time of enumeration. On the other hand, family income amounts reported by related persons who did not reside with the family during 1969 but who were members of the family at the time of enumeration were included. For most families, however, the income reported was received by persons who were members of the family throughout 1969.

Income of households.—Income of households includes the income of the household head and all other persons 14 years old and over in the household, whether related to the head or not. Since many households consist of only one person, average household income is usually less than average family income.

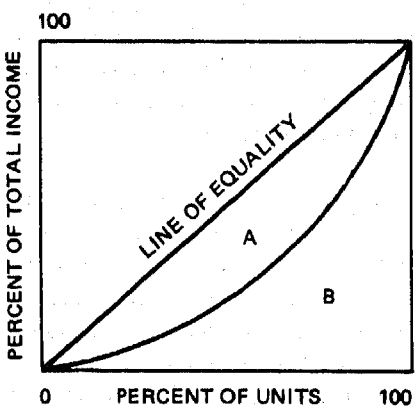
Median, mean, and per capita income.—The median income was generally computed on the basis of the income intervals shown in each table; however, median incomes in some tables were calculated on the basis of more detailed income intervals. For families and unrelated individuals the median income is based on the distribution of the total number of families and unrelated individuals, whereas for persons the medians are based on the distribution of persons 14 years old and over with income. The medians for wage or salary income, nonfarm self-employment income, farm self-employment income, Social Security income, public assistance income, and all other income are based on the distributions of families and unrelated individuals having these types of income. When the median income falls in the terminal category of a distribution, the method of presentation is to show the initial value of the terminal category followed by a plus sign; thus, for example, if the median income falls in the terminal category "$25,000 or more," it is shown as "$25,000+."

The mean income is the amount obtained by dividing the total income of a particular statistical universe by the number of units in that universe. Thus, mean family income is obtained by dividing total family income by the total number of families. Mean income for persons is obtained by dividing the total income of persons (including patients or inmates in institutional quarters) by the number of persons with income. For the six income types the means are based on families or unrelated individuals having those types of income. When the mean income for an area or population subgroup is a net loss, the dollar amount is shown preceded by a minus sign (e.g., —$123). Per capita income is the mean income computed for every man, woman, and child in a particular group. It is derived by dividing the total income of a particular group by the total population (including patients or inmates in institutional quarters) in that group. It should be noted that the maximum income amount that can be aggregated for each family or unrelated individual is 1.3 million dollars for total income and $995,000 for any one type of income. Thus, it is conceivable that the sum of the aggregates of all income types may exceed the aggregate of the total.

Care should be exercised in using and interpreting mean income values in the statistics for small subgroups of the population. Since the mean is strongly influenced by extreme values in the distribution, it is especially susceptible to the effects of sampling variability, misreporting, and processing errors. The median, which is not affected by extreme values, is, therefore, a better measure than the mean when the population base is small. The mean, nevertheless, is shown in this report for most small subgroups because, when weighted according to the number of cases, the means can be added to obtain summary measures for areas and groups other than those shown in this report.

Index of income concentration.—The index of income concentration is a statistical measure derived from the Lorenz Curve. The Lorenz Curve is obtained by plotting the cumulative percent of units (families, unrelated individuals, or persons) on the abscissa against the cumulative percent of aggregate income on the ordinate as accounted for by these units. Aggregate income is obtained by multiplying the frequency in each income class interval by an assumed mean for that income class interval. Midpoints were used for income intervals below $15,000. For income distributions of families, adjusted mean values were used for the $15,000 to $19,999 interval and the $20,000 to $24,999 interval. In general, the means for the open-end intervals ($25,000 or more for families and $15,000 or more for unrelated individuals and persons) were obtained by fitting a Pareto Curve to the data. When the use of the Pareto formula resulted in what appeared to be an extraneous mean value, exceeding $75,000 for families or exceeding $40,000 for unrelated individuals or persons, the assumed

mean was set at $36,000 for families and $23,000 for unrelated individuals or persons. If all units had exactly the same relative income, perfect equality would be represented by the diagonal shown in the diagram. Curves drawn to actual data invariably fall below this line and the greater the inequality in the distribution of income, the greater the area between the diagonal line and the Lorenz Curve.



The index of income concentration is defined as the ratio of the area between the diagonal and the Lorenz Curve to the total area under the diagonal. This relationship can be expressed as follows, using the notation in the diagram above.

$$L = \frac{A}{A+B} = \frac{\text{area betw. curve and diagonal}}{\text{area under diagonal}}$$

The index of income concentration ranges from 0.0 to 1.0. As the index approaches the limit of 1.0, the inequality of the income distribution increases. For more detailed information on this measure, see **Trends in the Income of Families and Persons in the United States 1947 to 1964**, Technical Paper No. 17, published in August 1967 by the Bureau of the Census.

Limitations of the Data

Since questionnaire entries for income are frequently based on memory and not on records, many persons tend to forget minor or irregular sources of income, and therefore, underreport their income. In addition, there are errors of reporting due to misunderstanding of the income questions. One such error is the reporting of gross instead of net dollar amounts for the two questions on net self-employment income, which results in an overstatement of these items. Another common error is the reporting of identical dollar amounts in two of the six income items where a respondent with only one source of income assumed that the second amount should be entered to represent total income. Such instances of overreporting would have an impact on the level of mean nonfarm or farm self-employment income and mean total income published for the various geographical subdivisions of the State. Telephone callback procedures were instituted in the coding operation to reduce some of these reporting errors and to improve the accuracy of income data. Moreover, many reporting errors were rectified through the coding and the computer editing procedures, with the result that consistency of reported income items with work experience, occupation, and class-of-worker information was improved. For example, if a person reported that he was self-employed on his own farm, not incorporated, but had reported wage and salary earnings only, the latter amount was shifted to net farm self-employment income. Another type of problem involved nonreporting of income data. Where income information was not reported, editing and allocation procedures were devised to impute appropriate values (either "none" or positive or negative dollar amounts) for the missing entries. These procedures are described in more detail in Appendix C, "Accuracy of the Data."

In income tables for families and unrelated individuals, the lowest income group (less than $1,000) includes families and individuals that were classified as having no 1969 income as defined in the census. Many of these were living on income "in kind," savings, or gifts; were newly created families; or were families in which the sole breadwinner had recently died or left the household. However, many of the families and unrelated individuals who reported no income probably had some money income which was not recorded in the census.

The income data in this report cover money income only. The fact that many farm families receive an important part of their income in the form of "free" housing and goods produced and consumed on the farm rather than in money should be taken into consideration in comparing the income of farm and nonfarm residents. Nonmoney income is also received by some nonfarm residents. Such income often takes the form of business expense accounts, use of business transportation and facilities, or partial compensation by business for medical and educational expenses. Many low income families also receive income "in kind" from public welfare programs. In comparing income data for 1969 with earlier years, it should be noted that an increase or decrease in money income does not necessarily represent a comparable change in real income, unless adjustments for changes in prices are made.

Comparability

Data from earlier censuses.—The income data collected in the 1950 and 1960 censuses are basically similar to the 1970 census data, but there are variations in the detail of the questions. In 1960, information on income was obtained from all members in every fourth housing unit and from every fourth person 14 years old and over living in groups quarters. Each person was required to report (a) wage or salary income, (b) net self-employment income, and (c) income other than earnings received in 1959. Between the 1960 and 1970 censuses, there were also some changes in the processing of the data. In the 1960 census, an assumption was made in the editing process that no other type of income was received by a person who reported the receipt of either wage and salary income or self-employment income but who had failed to report the receipt of other money income. This person was considered as unallocated. In the 1970 census, this assumption was not made. Generally, all missing values were imputed either as "none" or as a dollar amount. If a person reported a dollar amount in (a) wage or salary income, (b) net nonfarm self-employment income, or (c) net farm self-employment income, he was designated as unallocated only if no further dollar amounts were imputed for any additional missing entries. Moreover, there was a difference in the method of computer derivation of aggregate income from individual amounts that were coded in tens, hundreds, and thousands in the coding operation. In the 1960 census processing, $5, $50, and $500, respectively, were added by the computer to the absolute value of each amount that was coded in tens, hundreds, or thousands of dollars. Entries of $25,000 or more were treated as $50,000, and losses of $9,900 or more were treated as minus $10,500. In the 1970 census, income amounts under $100,000 were coded in hundreds of dollars, and amounts of $100,000 or more were coded in tens of thousands; $50 was added by the computer to each amount coded in hundreds of dollars and $5,000 to each amount coded in tens of thousands of dollars. Entries of $990,000 or more were treated as $995,000, and losses of $9,900 or more were treated as minus $9,950, in all of the computer derivations of income aggregates. The coding schemes used in both the 1960 and 1970 censuses were developed to accommodate space limitations on the questionnaires.

In both the 1960 and 1970 censuses, all nonrespondents on income (whether heads of families or other persons) were assigned the reported income of persons with similar characteristics, as described in Appendix C, "Accuracy of the Data."

In 1950, information on income was obtained from every fifth person 14 years old and over. If the sample person was the head of the family, the income questions were repeated for the other family members as a group in order to obtain the income of the whole family. In the tabulations of family income for the 1950 census, if only the head's income was reported, it was assumed that there was no other income in the family.

In 1940, all persons 14 years old and over were asked to report (a) the amount of wages or salary received in 1939 and (b) whether income amounting to $50 or more was received in 1939 from sources other than wages or salaries.

Income tax data.—For several reasons, the income data shown in this report are not directly comparable with those which may be obtained from statistical summaries of income tax returns. Income, as defined for tax purposes, differs somewhat from the Bureau of the Census concept. Moreover, the coverage of income tax statistics is different because of the exemptions of persons having small amounts of income and the inclusion of net capital gains in tax returns. Furthermore, members of some families file separate returns and others file joint returns; consequently, the income reporting unit is not consistently either a family or a person.

Social Security Administration earnings record data.—The earnings data shown in this report are not directly comparable with earnings records of the Social Security Administration. The earnings record data for 1969 exclude the earnings of most civilian government employees, some employees of nonprofit organizations, workers covered by the Railroad Retirement Act, and persons not covered by the program because of insufficient earnings. Furthermore, earnings received from any one employer in excess of $7,800 in 1969 are not covered by earnings records. Finally, since census data are obtained from household questionnaires, they differ from Social Security Administration earnings record data, which are based upon employers' reports and the Federal income tax returns of self-employed persons.

Bureau of Economic Analysis income series.—The Bureau of Economic Analysis (BEA), formerly the Office of Business Economics, of the Depart-

ment of Commerce publishes annual data on aggregate and per capita personal income received by the population for each State and selected standard metropolitan statistical areas. Aggregate income estimates based on the income statistics shown in this report would be less than those shown in the BEA income series for several reasons. The Bureau of the Census data are obtained directly from households, whereas the BEA income series is estimated largely on the basis of data from administrative records of business and governmental sources. Moreover, the definitions of income are different. The BEA income series includes some items not included in the income data shown in this report, such as income "in kind," income received by nonprofit institutions, the value of services of banks and other financial intermediaries rendered to persons without the assessment of specific charges, medicare payments, and the income of persons who died or emigrated prior to April 1, 1970. On the other hand, the census income data include contributions for support received from persons not residing in the same household and employee contributions for social insurance.

POVERTY STATUS IN 1969

The data on poverty status were derived from answers to the same questions as the income data (see income definitions, above). Poverty statistics have not been published in previous decennial census reports. They have, however, been published annually since 1959 from data collected in the annual March Current Population Survey (CPS) by the Bureau of the Census. The population covered in the poverty statistics presented in this report excludes inmates of institutions, members of the Armed Forces living in barracks, college students living in dormitories, and unrelated individuals under 14 years old.

Definition.—The poverty statistics presented in this report are based on a definition originated by the Social Security Administration in 1964 and subsequently modified by a Federal Interagency Committee.[6] The index provides a range of poverty income cutoffs adjusted by such factors as family size, sex of the family head, number of children under 18 years old, and farm and nonfarm residence. At the core of this definition of poverty is a nutritionally adequate food plan ("economy" plan) designed by the Department of Agriculture for "emergency or temporary use when funds are low." The index allows for differences in the cost of living between farm and nonfarm families by setting the poverty thresholds for farm families at 85 percent of the corresponding levels for nonfarm families. The poverty income cutoffs are revised annually to allow for changes in the cost of living as reflected in the Consumer Price Index.

In 1969, the poverty thresholds ranged from $1,487 for a female unrelated individual 65 years old and over living on a farm to $6,116 for a nonfarm family with a male head and with seven or more persons (table A). The average poverty threshold for a nonfarm family of four headed by a male was $3,745.

Poverty thresholds are computed on a national basis only. No attempt has been made to adjust these thresholds for regional, State or other local variations in the cost of living (except for the farm-nonfarm differential described above).

Alternate poverty levels.—Because the poverty levels currently in use by the Federal Government do not meet all the needs of the analysts of the data, two variations of the poverty definition were created: one is set at 75 percent of the official government standard and the other at 125 percent of this standard. Some data based on these two alternate poverty levels are presented in this report.

Poverty thresholds.—The poverty cutoffs used by the Bureau of the Census to determine the poverty status of families and unrelated individuals consist of a set of 124 thresholds based on size of family unit (from one person, i.e., unrelated individual, to seven-or-more-person family) cross-classified by presence and number of family members under 18 years old (from no children present to six or more children present), sex of head, and farm and nonfarm residence. Unrelated individuals and 2-person families are further differentiated by age of head (under 65 years and 65 years and over). The total family income of each family in the sample is tested against the appropriate poverty threshold to determine the poverty status of that family. (If the family's total income is less than its corresponding poverty cutoff, the family is classified as poor. Otherwise, it is classified as nonpoor.) The average thresholds shown in table A, however, were weighted by the presence and number of children. For example, for a given size of family, sex of head, and residence category, the weighted average threshold for that group is

[6] For a detailed explanation of the poverty definition, see U.S. Bureau of the Census, Current Population Reports, Series P-23, No. 28, **Revision in Poverty Statistics, 1959 to 1968.**

obtained by multiplying the dollar amount for each presence and number of children category within the given family size by the number of families in that category. These products are then aggregated across the entire range of presence and number of children categories, and the total aggregate is divided by the total number of families in the group to yield the weighted average threshold at the poverty level for that size of family.

Because family composition varies by farm and nonfarm residence, the weighted average thresholds at the poverty level for farm families, as shown in table A, will not be exactly 85 percent of the nonfarm levels. Moreover, since family composition does not remain constant from year to year, the weighted average thresholds for 1969 will not reflect exactly the increase in the Consumer Price Index between 1969 and earlier years.

Since the basic thresholds used to determine the poverty status of families and unrelated individuals are applied to all families and unrelated individuals, the weighted poverty thresholds are derived using all families and unrelated individuals rather than just those families and unrelated individuals classified as poor. Consequently, to obtain the weighted poverty thresholds for families and unrelated individuals below 75 percent and below 125 percent of the poverty level, the weighted poverty thresholds shown in table A may be multiplied directly by 0.75 and 1.25, respectively.

The average weighted thresholds presented in table A are based on the March 1970 Current Population Survey. The complete matrix of poverty thresholds can be found in U.S. Bureau of the Census, **Public Use Samples of Basic Records from the 1970 Census: Description and Technical Documentation**, Washington, D.C., 1972.

Poverty status of persons.—The poverty status of a person who is a family member is determined by the family income and its relation to the appropriate poverty threshold for that family. The poverty status of a person who is an unrelated individual is determined by his or her own income in relation to the appropriate poverty threshold.

The number of persons below the poverty level shown in chapter D may differ slightly from the number presented in chapter C for this State. This difference is caused in part by differences in the weighting procedures used to tabulate the sample data. In chapter D, the number of family members below the poverty level was calculated by adding the sample weights of all family members. In chapter C, the number of family members below the poverty level was calculated by multiplying the number of persons in the family by the sample weight of the family head. Since the sample weight of the family head is not necessarily identical with the sample weight of any other member of the family, the two weighting procedures may produce different results.

Households below poverty level.—Households below the poverty level are defined as households in which the total income of the family or primary individual is below the poverty level. The incomes of persons in the household other than members of the family or the primary individual are not included in the total income of the family or primary individual when determining poverty status of a household.

The number of households shown in the poverty status tables is the sum of the households for which rent and value data are shown. This number may be less than the total number of household heads (i.e., households) shown in other tables since the rent and value data are tabulated only for households in specified types of

TABLE A. **Weighted Average Thresholds at the Poverty Level in 1969, by Size of Family Unit and Sex of Head, by Farm and Nonfarm Residence**

Size of family unit	Total	Nonfarm			Farm		
		Total	Male head	Female head	Total	Male head	Female head
All unrelated individuals	$1,834	$1,840	$1,923	$1,792	$1,569	$1,607	$1,512
Under 65 years	1,888	1,893	1,974	1,826	1,641	1,678	1,552
65 years and over	1,749	1,757	1,773	1,751	1,498	1,508	1,487
All families	3,388	3,410	3,451	3,082	2,954	2,965	2,757
2 persons	2,364	2,383	2,394	2,320	2,012	2,017	1,931
Head under 65 years	2,441	2,458	2,473	2,373	2,093	2,100	1,984
Head 65 years and over	2,194	2,215	2,217	2,202	1,882	1,883	1,861
3 persons	2,905	2,924	2,937	2,830	2,480	2,485	2,395
4 persons	3,721	3,743	3,745	3,725	3,195	3,197	3,159
5 persons	4,386	4,415	4,418	4,377	3,769	3,770	3,761
6 persons	4,921	4,958	4,962	4,917	4,244	4,245	4,205
7 or more persons	6,034	6,101	6,116	5,952	5,182	5,185	5,129

housing units as described below in the paragraphs on value and gross rent.

Ratio of family income to poverty level.—This ratio is obtained by dividing the income of a family or unrelated individual by the corresponding poverty threshold.

Income deficit.—The income deficit is the difference between the total income of families and unrelated individuals below the poverty level and their respective poverty thresholds. In computing the income deficit, families reporting a net income loss are assigned zero dollars and for such cases the income deficit is equal to the poverty threshold. The aggregate income deficit provides an estimate of the amount of money which would be required to raise the incomes of all poor families and unrelated individuals to their respective thresholds at the poverty levels.

Median income deficit.—The median income deficit is the amount which divides the distribution into two equal parts, one having an income deficit above the median and the other having an income deficit below the median.

Mean income deficit.—The mean income deficit is the amount obtained by dividing the aggregate income deficit of a group below the poverty level by the number of families or unrelated individuals (as appropriate) in that group.

Percentage distribution by type of income.—Two percentage distributions by type of income are shown in table 212. In the first, which is a distribution of aggregate family income by type of income, a negative (—) sign denotes a net loss from that particular type of income. Some types of income may be shown as contributing more than 100 percent of the total aggregate because of losses from other types. In the second distribution, which is a percentage distribution of families by type of income received, the figures may add to more than 100 percent, since some families receive income from more than one source.

Housing Items Related to Poverty Status

Occupied housing unit.—A housing unit is a group of rooms or a single room occupied as separate living quarters. A housing unit can be occupied by a family, a family and unrelated persons living together, a group of unrelated persons living together, or by one person.

For each occupied housing unit there is one household. The former term refers to a type of living quarters and the latter term refers to the persons who occupy the quarters. Thus, the total number of households in the United States is equal to the total number of occupied housing units in the United States.

Tenure.—The data on tenure were derived from answers to question H9. A housing unit is tabulated as "owner occupied" if the owner or co-owner lives in the unit, even if it is mortgaged or not fully paid for; a cooperative or condominium is "owner occupied" only if the owner or co-owner lives in it. All other occupied units are classified as "renter occupied."

Value.—The data on value were derived from answers to question H11.

Value data are tabulated for owner-occupied one-family houses which are located on a place of less than 10 acres and which do not have a commercial establishment or medical office on the property. Cooperatives, condominiums, mobile homes, and trailers are excluded from the value tabulations.

Mean value is the sum of the individual values reported divided by the number of owner-occupied units for which value is shown. For purposes of computation, the midpoints of the intervals were used, except that a mean value of $3,500 was assigned housing units in the interval "less than $5,000" and a mean of $60,000 was assigned units in the interval "$50,000 or more."

Gross rent.—The data on gross rent are based on the information reported for contract rent and the cost of utilities and fuel from questions H12 and H13. Rent data are tabulated for renter-occupied units, excluding one-family houses on 10 acres or more.

Monthly gross rent is the summation of contract rent plus the estimated average monthly cost of utilities (water, electricity, gas) and fuels (oil, coal, kerosene, wood, etc.) if these items are paid for by the renter. Thus, gross rent eliminates individual differences which result from varying practices with respect to the inclusion of utilities and fuel as part of the contract rental payment. While the estimated costs of water and fuel are reported on a yearly basis, they are converted to monthly figures in the computation process.

Mean gross rent is the sum of the individual rental amounts divided by the number of renter-occupied units, excluding one-family houses on 10 acres or more.

Plumbing facilities.—Data on plumbing facilities were derived from answers to questions H5, H6, and H7.

"With all plumbing facilities" consists of units which have hot and cold piped water, and also a flush toilet and a bathtub or shower inside the structure for the exclusive use of the occupants of the unit.

Units "lacking some or all plumbing facilities" may lack hot water, bathtub (or shower), or flush toilet, or all of these facilities. Also included in this category are units having no piped water inside the structure and units with toilet or bathing facilities which are also used by another household.

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List A. Intermediate Occupational Classification for Males (158 Items) with Component Detailed Items

This listing presents the relationship between the detailed occupation stub (e.g., table 170) and the intermediate occupation stub (e.g., table 173). The occupation groups marked with an asterisk (*) are not shown in the tables using the intermediate classification but can be derived by subtraction.

1. Accountants
2. Architects
3. Computer specialists
   - Computer programers
   - Computer systems analysts
   - Computer specialists, n.e.c.
4. Engineers, aeronautical and astronautical
5. Engineers, civil
6. Engineers, electrical and electronic
7. Engineers, mechanical
8. Other engineers
   - Engineers, chemical
   - Engineers, industrial
   - Engineers, metallurgical and materials
   - Engineers, mining
   - Engineers, petroleum
   - Engineers, sales
   - Engineers, n.e.c.
9. Lawyers and judges
   - Judges
   - Lawyers
10. Life and physical scientists
11. Chemists
* Other life and physical scientists
   - Agricultural
   - Atmospheric and space
   - Biological
   - Geologists
   - Marine
   - Physicists and astronomers
   - Life and physical, n.e.c.
12. Dentists
13. Pharmacists
14. Physicians, medical and osteopathic
15. Other related practitioners
   - Chiropractors
   - Optometrists
   - Podiatrists
   - Veterinarians
   - Health practitioners, n.e.c.
16. Health technologists and technicians
   - Clinical laboratory technologists and technicians
   - Dental hygienists
   - Health record technologists and technicians
   - Radiologic technologists and technicians
   - Therapy assistants
   - Health technologists and technicians, n.e.c.
17. Religious workers
   - Clergymen
   - Religious workers, n.e.c.
18. Social scientists
   - Economists
   - Political scientists
   - Psychologists
   - Sociologists
   - Urban and regional planners
   - Social scientists, n.e.c.
19. Social and recreation workers
   - Social
   - Recreation
20. Teachers
21. College and university
   - Biology
   - Chemistry
   - Engineering
   - Physics
   - Other life and physical sciences
   - Mathematics
   - Economics
   - English
   - History
   - Miscellaneous social sciences
   - Other specified teachers
   - Not specified teachers
22. Elementary and prekindergarten
   - Elementary school
   - Prekindergarten and kindergarten
23. Secondary
* Other teachers
   - Adult education teachers
   - Teachers, except college and university, n.e.c.
24. Engineering and science technicians
25. Draftsmen and surveyors
   - Draftsmen
   - Surveyors
26. Electrical and electronic engineering technicians
* Other engineering and science technicians
   - Agriculture and biological, except health
   - Chemical
   - Industrial engineering
   - Mechanical engineering
   - Mathematical
   - Engineering and science, n.e.c.
27. Technicians, except health, and engineering and science
28. Airplane pilots
* Other technicians, except health, and engineering, and science
   - Air traffic controllers
   - Embalmers
   - Flight engineers
   - Radio operators
   - Tool programers, numerical control
   - Technicians, n.e.c.
29. Writers, artists, and entertainers
   - Actors
   - Athletes and kindred workers
   - Authors
   - Dancers
   - Designers
   - Editors and reporters
   - Musicians and composers
   - Painters and sculptors
   - Photographers
   - Public relations men and publicity writers
   - Radio and television announcers
   - Writers, artists, and entertainers, n.e.c.
30. Other professional, technical, and kindred workers
   - Actuaries
   - Archivists and curators
   - Dietitians
   - Farm management advisors
   - Foresters and conservationists
   - Home management advisors
   - Librarians
   - Mathematicians
   - Operations and systems researchers and analysts
   - Personnel and labor relations workers
   - Registered nurses
   - Research workers, not specified
   - Statisticians
   - Therapists
   - Vocational and educational counselors
   - Professional, technical, and kindred workers—allocated
31. Buyers, purchasing agents, and sales managers
   - Buyers and shippers, farm products
   - Buyers, wholesale and retail trade
   - Purchasing agents and buyers, n.e.c.
   - Sales managers and department heads, retail trade
   - Sales managers, except retail trade
32. School administrators
   - School administrators, college
   - School administrators, elementary and secondary
33. Specified managers and administrators, public administration
   - Assessors, controllers, and treasurers; local public administration
   - Construction inspectors, public administration
   - Inspectors, except construction; public administration
   - Officials and administrators; public administration, n.e.c.
   - Postmasters and mail superintendents
34. Other specified managers and administrators
   - Bank officers and financial managers
   - Credit men
   - Funeral directors
   - Health administrators
   - Managers and superintendents, building
   - Officers, pilots, and pursers; ship
   - Officials of lodges, societies, and unions
   - Railroad conductors
   - Restaurant, cafeteria, and bar managers
   - Managers and administrators, except farm—allocated
35. Managers and administrators, n.e.c.—salaried
36. Manufacturing
37. Wholesale and retail trade
   - Wholesale trade
   - Hardware, farm equipment, and building material retailing
   - General merchandise stores
   - Food stores
   - Motor vehicles and accessories retailing
   - Gasoline service stations
   - Apparel and accessories stores
   - Furniture, home furnishings, and equipment stores
   - Other retail trade
38. Transportation, communications, and other public utilities
   - Transportation
   - Communications, and utilities and sanitary services
39. All other industries
   - Construction
   - Finance, insurance, and real estate
   - Business and repair services
   - Personal services
   - All other industries
40. Managers and administrators, n.e.c.—self-employed
41. Construction
42. Manufacturing
43. Wholesale and retail trade
   - Wholesale trade
   - Hardware, farm equipment, and building material retailing
   - General merchandise stores
   - Food stores
   - Motor vehicles and accessories retailing
   - Gasoline service stations
   - Apparel and accessories stores
   - Furniture, home furnishings, and equipment stores
   - Other retail trade
44. All other industries
   - Transportation
   - Communications, and utilities and sanitary services
   - Finance, insurance, and real estate
   - Business and repair services
   - Personal services
   - All other industries
45. Insurance agents, brokers, and underwriters

List A.—Continued

46. Real estate agents and brokers
47. Sales representatives, manufacturing industries
48. Sales representatives, wholesale trade
49. Sales clerks, retail trade
50. Salesmen, retail trade
51. Salesmen of services and construction
52. Other sales workers
    - Advertising agents and salesmen
    - Auctioneers
    - Demonstrators
    - Hucksters and peddlers
    - Newsboys
    - Stock and bond salesmen
    - Sales workers—allocated
53. Bank tellers and cashiers
    - Bank tellers
    - Cashiers
54. Bookkeepers and billing clerks
    - Billing clerks
    - Bookkeepers
55. Mail handlers and postal clerks
    - Mail carriers, post office
    - Mail handlers, except post office
    - Postal clerks
56. Other clerical and kindred workers
    - Clerical assistants, social welfare
    - Clerical supervisors, n.e.c.
    - Collectors, bill and account
    - Counter clerks, except food
    - Dispatchers and starters, vehicle
    - Enumerators and interviewers
    - Estimators and investigators, n.e.c.
    - Expediters and production controllers
    - File clerks
    - Insurance adjusters, examiners, and investigators
    - Library attendants and assistants
    - Messengers, including telegraph, and office boys
    - Meter readers, utilities
    - Bookkeeping and billing machine operators
    - Calculating machine operators
    - Computer and peripheral equipment operators
    - Duplicating machine operators
    - Key punch operators
    - Tabulating machine operators
    - Office machine operators, n.e.c.
    - Payroll and timekeeping clerks
    - Proofreaders
    - Real estate appraisers
    - Receptionists
    - Secretaries
    - Shipping and receiving clerks
    - Statistical clerks
    - Stenographers
    - Stock clerks and storekeepers
    - Teacher aides, except school monitors
    - Telegraph operators
    - Telephone operators
    - Ticket, station, and express agents
    - Typists
    - Weighers
    - Miscellaneous clerical workers
    - Not specified clerical workers
    - Clerical and kindred workers—allocated
57. Apparel craftsmen and upholsterers
    - Furriers
    - Tailors
    - Upholsterers
58. Bakers
59. Cabinetmakers
60. Carpenters
61. Excavating, grading, and road machine operators
    - Bulldozer operators
    - Excavating, grading, and road machine operators; except bulldozer
62. Electricians
63. Masons and tile setters
    - Brickmasons and stonemasons
    - Tile setters
64. Painters, construction and maintenance; and paperhangers
    - Painters, construction and maintenance
    - Paperhangers
65. Plasterers and cement finishers
    - Cement and concrete finishers
    - Plasterers
66. Plumbers and pipe fitters
67. Other construction craftsmen
    - Floor layers, except tile setters
    - Roofers and slaters
    - Structural metal craftsmen
68. Foremen, n.e.c., manufacturing
    - Durable goods
    - Nondurable goods
69. Foremen, n.e.c., nonmanufacturing industries
    - Construction
    - Transportation, communications, and other public utilities
    - All other industries
70. Linemen and servicemen, telephone and power
    - Electric power linemen and cablemen
    - Telephone installers and repairmen
    - Telephone linemen and splicers
71. Locomotive engineers and firemen
    - Locomotive engineers
    - Locomotive firemen
72. Mechanics and repairmen, air-conditioning, heating, and refrigeration
73. Mechanics and repairmen, aircraft
74. Mechanics and repairmen, automobile, including body
    - Automobile body repairmen
    - Automobile mechanics
75. Mechanics and repairmen, radio and television
76. Other mechanics and repairmen
    - Data processing machine repairmen
    - Farm implement
    - Heavy equipment mechanics, incl. diesel
    - Household appliance and accessory installers and mechanics
    - Loom fixers
    - Office machine
    - Railroad and car shop
    - Miscellaneous mechanics and repairmen
    - Not specified mechanics and repairmen
77. Machinists and job and die setters
    - Job and die setters, metal
    - Machinists
78. Sheetmetal workers and tinsmiths
79. Tool and die makers
80. Other metal craftsmen
    - Blacksmiths
    - Boilermakers
    - Forgemen and hammermen
    - Heat treaters, annealers, and temperers
    - Millwrights
    - Molders, metal
    - Pattern and model makers, except paper
    - Rollers and finishers, metal
    - Shipfitters
81. Printing craftsmen
82. Compositors and typesetters
83. Pressmen and plate printers, printing
    - Other printing craftsmen
        - Bookbinders
        - Electrotypers and stereotypers
        - Photoengravers and lithographers
84. Stationary engineers and power station operators
    - Power station operators
    - Stationary engineers
85. Other craftsmen and kindred workers
    - Automobile accessories installers
    - Carpet installers
    - Cranemen, derrickmen, and hoistmen
    - Decorators and window dressers
    - Dental laboratory technicians
    - Engravers, except photoengravers
    - Furniture and wood finishers
    - Glaziers
    - Inspectors, scalers, and graders; log and lumber
    - Inspectors, n.e.c.
        - Construction
        - Railroads and railway express service
    - Jewelers and watchmakers
    - Millers; grain, flour, and feed
    - Motion picture projectionists
    - Opticians, and lens grinders and polishers
    - Piano and organ tuners and repairmen
    - Shoe repairmen
    - Sign painters and letterers
    - Stone cutters and stone carvers
    - Craftsmen and kindred workers, n.e.c.
    - Former members of the Armed Forces
    - Craftsmen and kindred workers—allocated
86. Assemblers
87. Checkers, examiners, and inspectors; manufacturing
88. Garage workers and gas station attendants
89. Laundry and dry cleaning operatives, n.e.c.
90. Meat cutters and butchers
    - Meat cutters and butchers, except manufacturing
    - Meat cutters and butchers, manufacturing
91. Mine operatives, n.e.c.
92. Packers and wrappers, except produce
    - Meat wrappers, retail trade
    - Packers and wrappers, except meat and produce
93. Painters, manufactured articles
94. Precision machine operatives
    - Drill press operatives
    - Grinding machine operatives
    - Lathe and milling machine operatives
    - Precision machine operatives, n.e.c.
95. Sawyers
96. Stationary firemen
97. Textile operatives
    - Carding, lapping, and combing operatives
    - Knitters, loopers, and toppers
    - Spinners, twisters, and winders
    - Weavers
    - Textile operatives, n.e.c.
98. Welders and flamecutters
99. Other metal working operatives
    - Filers, polishers, sanders, and buffers
    - Furnacemen, smeltermen, and pourers
    - Heaters, metal
    - Metal platers
    - Punch and stamping press operatives
    - Riveters and fasteners
    - Solderers
100. Other specified operatives, n.e.c.
    - Asbestos and insulation workers
    - Blasters and powdermen
    - Bottling and canning operatives

List A.–Continued

Chainmen, rodmen, and axmen; surveying
Clothing ironers and pressers
Cutting operatives, n.e.c.
Dressmakers and seamstresses, except factory
Drillers, earth
Dry wall installers and lathers
Dyers
Graders and sorters, manufacturing
Produce graders and packers, except factory and farm
Millliners
Mixing operatives
Oilers and greasers, except auto
Photographic process workers
Sailors and deckhands
Sewers and stitchers
Shoemaking machine operatives
Winding operatives, n.e.c.
Operatives, except transport—allocated

101. Machine operatives, miscellaneous specified
102. Machine operatives, not specified
103. Miscellaneous operatives
104. Not specified operatives
Miscellaneous and not specified operatives by industry
105. Wood products, including furniture
Lumber and wood products, except furniture
Furniture and fixtures
106. Primary metal industries
Blast furnaces, steel works, and rolling and finishing mills
* Other primary metal industries
107. Fabricated metal industries
108. Machinery, including electrical
Machinery, except electrical
Electrical machinery, equipment, and supplies
109. Motor vehicles and equipment
110. Transportation equipment, except motor vehicles
111. Other durable goods
Stone, clay, and glass products
Professional and photographic equipment, and watches
Ordnance
Miscellaneous manufacturing industries
Durable goods—allocated
112. Food and kindred products
113. Apparel and other fabricated textile products
114. Paper and allied products
115. Chemicals and allied products
116. Other nondurable goods
Tobacco manufactures
Printing, publishing, and allied industries
Petroleum and coal products
Rubber and miscellaneous plastic products
Leather and leather products
Nondurable goods—allocated
117. Not specified manufacturing industries
118. Transportation, communications, and other public utilities
119. Wholesale and retail trade
120. All other industries
Construction
Business and repair services
Public administration
All other industries
121. Bus drivers
122. Taxicab drivers and chauffeurs
123. Truck drivers and deliverymen
Deliverymen and routemen
Truck drivers
124. Other transport equipment operatives
Boatmen and canalmen
Conductors and motormen, urban rail transit
Fork lift and tow motor operatives
Motormen; mine, factory, logging camp, etc.
Parking attendants
Railroad brakemen
Railroad switchmen
Transport equipment operatives—allocated
125. Construction laborers
Carpenters' helpers
Construction laborers, except carpenters' helpers
126. Freight, stock, and material handlers
Freight and material handlers
Garbage collectors
Longshoremen and stevedores
Stockhandlers
Warehousemen, n.e.c.
127. Other specified laborers
Animal caretakers, except farm
Fishermen and oystermen
Gardeners and groundskeepers, except farm
Lumbermen, raftsmen, and woodchoppers
Teamsters
Vehicle washers and equipment cleaners
Laborers, except farm—allocated
128. Miscellaneous laborers
129. Not specified laborers
Miscellaneous and not specified laborers by industry
130. Wood products, including furniture
Lumber and wood products, except furniture
Furniture and fixtures
131. Metal industries
Primary metal industries
Blast furnaces, steel works, and rolling and finishing mills
* Other primary metal industries
Fabricated metal industries, including not specified metal
132. Machinery, including electrical
Machinery, except electrical
Electrical machinery, equipment, and supplies
133. Transportation equipment
134. Motor vehicles and motor vehicle equipment
* Other transport equipment
135. Other durable goods
Stone, clay, and glass products
Professional and photographic equipment, and watches
Ordnance
Miscellaneous manufacturing industries
Durable goods—allocated
136. Nondurable goods
137. Food and kindred products
* Other nondurable goods
Tobacco manufactures
Textile mill products
Apparel and other fabricated textile products
Paper and allied products
Printing, publishing, and allied industries
Chemicals and allied products
Petroleum and coal products
Rubber and miscellaneous plastic products
Leather and leather products
Nondurable goods—allocated
138. Not specified manufacturing industries
139. Railroads and railway express service
140. Transportation, except railroads
141. Communications, and utilities and sanitary services
142. Wholesale and retail trade
143. All other industries
Business and repair services
Public administration
All other industries
144. Farmers and farm managers
(All occupations in this major group)
145. Paid farm laborers and farm foremen
Farm foremen
Farm laborers, wage workers
Farm service laborers, self-employed
Farm laborers and farm foremen—allocated (class of worker other than unpaid family worker)
146. Unpaid family workers
Unpaid family workers
Farm laborers and farm foremen—allocated (unpaid family class of worker)
147. Service workers, except private household
148. Cleaning service workers
Chambermaids and maids, except private household
Cleaners and charwomen
Janitors and sextons
149. Food service workers
150. Cooks, except private household
151. Busboys and dishwashers
Busboys
Dishwashers
* Other food service workers
Bartenders
Food counter and fountain workers
Waiters
Food service workers, n.e.c., except private household
152. Health service workers
Dental assistants
Health aides, except nursing
Health trainees
Lay midwives
Nursing aides, orderlies, and attendants
Practical nurses
153. Personal service workers
Airline stewardesses
Attendants, recreation and amusement
Attendants, personal service, n.e.c.
Baggage porters and bellhops
Barbers
Boarding and lodging house keepers
Bootblacks
Child care workers, except private household
Elevator operators
Hairdressers and cosmetologists
Housekeepers, except private household
School monitors
Ushers, recreation and amusement
Welfare service aides
154. Protective service workers
155. Firemen, fire protection
156. Guards and watchmen
157. Policemen and detectives
* Other protective service workers
Crossing guards and bridge tenders
Marshalls and constables
Sheriffs and bailiffs
* Service workers, except private household—allocated
158. Private household workers
(All occupations in this major group)

List B. Intermediate Occupational Classification for Females (86 Items) with Component Detailed Items

This listing presents the relationship between the detailed occupation stub (e.g., table 170) and the intermediate occupation stub (e.g., table 173). The occupation groups marked with an asterisk (*) are not shown in the tables using the intermediate classification but can be derived by subtraction.

1. Accountants
2. Computer specialists
   - Computer programers
   - Computer systems analysts
   - Computer specialists, n.e.c.
3. Librarians
4. Mathematical specialists
   - Actuaries
   - Mathematicians
   - Statisticians
5. Life and physical scientists
   - Agricultural
   - Atmospheric and space
   - Biological
   - Chemists
   - Geologists
   - Marine
   - Physicists and astronomers
   - Life and physical, n.e.c.
6. Nurses, dietitians, and therapists
7. Dietitians
8. Registered nurses
* Therapists
9. Health technologists and technicians
   - Clinical laboratory technologists and technicians
   - Dental hygienists
   - Health record technologists and technicians
   - Radiologic technologists and technicians
   - Therapy assistants
   - Health technologists and technicians, n.e.c.
10. Social scientists
    - Economists
    - Political scientists
    - Psychologists
    - Sociologists
    - Urban and regional planners
    - Social scientists, n.e.c.
11. Social and recreation workers
    - Social
    - Recreation
12. Teachers: College and university
    - Biology
    - Chemistry
    - Engineering
    - Physics
    - Other life and physical sciences
    - Mathematics
    - Economics
    - English
    - History
    - Miscellaneous social sciences
    - Other specified teachers
    - Not specified teachers
13. Teachers: Elementary and prekindergarten
    - Elementary school
    - Prekindergarten and kindergarten
14. Teachers: Secondary
15. Other teachers
    - Adult education teachers
    - Teachers, except college and university, n.e.c.
16. Engineering and science technicians
    - Agriculture and biological, except health
    - Chemical
    - Draftsmen
    - Electrical and electronic engineering
    - Industrial engineering
    - Mechanical engineering
    - Mathematical
    - Surveyors
    - Engineering and science, n.e.c.
17. Technicians, except health, and engineering and science
    - Airplane pilots
    - Air traffic controllers
    - Embalmers
    - Flight engineers
    - Radio operators
    - Tool programers, numerical control
    - Technicians, n.e.c.
18. Writers, artists, and entertainers
19. Actors and dancers
    - Actors
    - Dancers
20. Authors, editors, and reporters
    - Authors
    - Editors and reporters
* Other writers, artists, and entertainers
    - Athletes and kindred workers
    - Designers
    - Musicians and composers
    - Painters and sculptors
    - Photographers
    - Public relations men and publicity writers
    - Radio and television announcers
    - Writers, artists, and entertainers, n.e.c.
21. Other professional, technical, and kindred workers
    - Architects
    - Archivists and curators
    - Chiropractors
    - Clergymen
    - Dentists
    - Engineers, aeronautical and astronautical
    - Engineers, chemical
    - Engineers, civil
    - Engineers, electrical and electronic
    - Engineers, industrial
    - Engineers, mechanical
    - Engineers, metallurgical and materials
    - Engineers, mining
    - Engineers, petroleum
    - Engineers, sales
    - Engineers, n.e.c.
    - Farm management advisors
    - Foresters and conservationists
    - Health practitioners, n.e.c.
    - Home management advisors
    - Judges
    - Lawyers
    - Operations and systems researchers and analysts
    - Optometrists
    - Personnel and labor relations workers
    - Pharmacists
    - Physicians, medical and osteopathic
    - Podiatrists
    - Religious workers, n.e.c.
    - Research workers, not specified
    - Veterinarians
    - Vocational and educational counselors
    - Professional, technical, and kindred workers—allocated
22. Buyers, purchasing agents, and sales managers
    - Buyers and shippers, farm products
    - Buyers, wholesale and retail trade
    - Purchasing agents and buyers, n.e.c.
    - Sales managers and department heads, retail trade
    - Sales managers, except retail trade
23. Restaurant, cafeteria, and bar managers
24. School administrators
    - School administrators, college
    - School administrators, elementary and secondary
25. Other specified managers and administrators
    - Assessors, controllers, and treasurers; local public administration
    - Bank officers and financial managers
    - Credit men
    - Funeral directors
    - Health administrators
    - Construction inspectors, public administration
    - Inspectors, except construction, public administration
    - Managers and superintendents, building
    - Officers, pilots, and pursers; ship
    - Officers and administrators; public administration, n.e.c.
    - Officers of lodges, societies, and unions
    - Postmasters and mail superintendents
    - Railroad conductors
    - Managers and administrators, except farm—allocated
26. Managers and administrators, n.e.c.—salaried
27. Wholesale and retail trade
    - Wholesale trade
    - Hardware, farm equipment, and building material retailing
    - General merchandise stores
    - Food stores
    - Motor vehicles and accessories retailing
    - Gasoline service stations
    - Apparel and accessories stores
    - Furniture, home furnishings, and equipment stores
    - Other retail trade
* All other industries
    - Construction
    - Manufacturing
    - Transportation
    - Communications, and utilities and sanitary services
    - Finance, insurance, and real estate
    - Business and repair services
    - Personal services
    - All other industries
28. Managers and administrators, n.e.c.—self-employed
29. Wholesale and retail trade
    - Wholesale trade
    - Hardware, farm equipment, and building material retailing
    - General merchandise stores
    - Food stores
    - Motor vehicles and accessories retailing
    - Gasoline service stations
    - Apparel and accessories stores
    - Furniture, home furnishings, and equipment stores
    - Other retail trade
* All other industries
    - Construction
    - Manufacturing
    - Transportation
    - Communications, and utilities and sanitary services
    - Finance, insurance, and real estate
    - Business and repair services
    - Personal services
    - All other industries
30. Demonstrators, hucksters, and peddlers
    - Demonstrators
    - Hucksters and peddlers
31. Insurance, real estate agents, and brokers
    - Insurance agents, brokers, and underwriters

List B.–Continued

- Real estate agents and brokers
- 32. Sales clerks, retail trade
- 33. Salesmen, retail trade
- 34. Other sales workers
  - Advertising agents and salesmen
  - Auctioneers
  - Newsboys
  - Stock and bond salesmen
  - Sales representatives, manufacturing industries
  - Sales representatives, wholesale trade
  - Salesmen of services and construction
  - Sales workers—allocated
- 35. Bank tellers
- 36. Bookkeepers
- 37. Cashiers
- 38. Counter clerks, except food
- 39. Enumerators and interviewers
- 40. File clerks
- 41. Office machine operators
- 42. Bookkeeping and billing machine
- 43. Key punch
- * Other office machine operators
  - Calculating machine
  - Computer and peripheral equipment
  - Duplicating machine
  - Tabulating machine
  - Office machine, n.e.c.
- 44. Payroll and timekeeping clerks
- 45. Receptionists
- 46. Secretaries
- 47. Stenographers
- 48. Telephone operators
- 49. Typists
- 50. Other clerical and kindred workers
  - Billing clerks
  - Clerical assistants, social welfare
  - Clerical supervisors, n.e.c.
  - Collectors, bill and account
  - Dispatchers and starters, vehicle
  - Estimators and investigators, n.e.c.
  - Expediters and production controllers
  - Insurance adjusters, examiners, and investigators
  - Library attendants and assistants
  - Mail carriers, post office
  - Mailhandlers, except post office
  - Messengers, including telegraph, and office boys
  - Meter readers, utilities
  - Postal clerks
  - Proofreaders
  - Real estate appraisers
  - Shipping and receiving clerks
  - Statistical clerks
  - Stock clerks and storekeepers
  - Teacher aides, except school monitors
  - Telegraph operators
  - Ticket, station, and express agents
  - Weighers
  - Miscellaneous clerical workers
  - Not specified clerical workers
  - Clerical and kindred workers—allocated
- 51. Craftsmen and kindred workers
- 52. Foremen, n.e.c.
  - Construction
  - Durable goods manufacturing
  - Nondurable goods manufacturing
  - Transportation, communications, and other public utilities
  - All other industries
- * Other craftsmen and kindred workers (All other occupations in this major group)
- 53. Assemblers
- 54. Bottling and canning operatives
- 55. Checkers, examiners, and inspectors; manufacturing
- 56. Dressmakers and seamstresses, except factory
- 57. Laundry and drycleaning operatives, including ironers
  - Clothing ironers and pressers
  - Laundry and drycleaning operatives, n.e.c.
- 58. Graders and sorters, manufacturing
- 59. Packers and wrappers, except produce
  - Meat wrappers, retail trade
  - Packers and wrappers, except meat and produce
- 60. Sewers and stitchers
- 61. Textile operatives
  - Carding, lapping, and combing operatives
  - Knitters, loopers, and toppers
  - Spinners, twisters, and winders
  - Weavers
  - Textile operatives, n.e.c.
- 62. Other specified operatives
  - Asbestos and insulation workers
  - Blasters and powdermen
  - Chainmen, rodmen, and axmen; surveying
  - Cutting operatives, n.e.c.
  - Drillers, earth
  - Dry wall installers and lathers
  - Dyers
  - Filers, polishers, sanders, and buffers
  - Furnacemen, smeltermen, and pourers
  - Garage workers and gas station attendants
  - Produce graders and packers, except factory and farm
  - Heaters, metal
  - Meat cutters and butchers, except manufacturing
  - Meat cutters and butchers, manufacturing
  - Metal platers
  - Milliners
  - Mine operatives, n.e.c.
  - Mixing operatives
  - Oilers and greasers, except auto
  - Painters, manufactured articles
  - Photographic process workers
  - Drill press operatives
  - Grinding machine operatives
  - Lathe and milling machine operatives
  - Precision machine operatives, n.e.c.
  - Punch and stamping press operatives
  - Riveters and fasteners
  - Sailors and deckhands
  - Sawyers
  - Shoemaking machine operatives
  - Solderers
  - Stationary firemen
  - Welders and flamecutters
  - Winding operatives, n.e.c.
  - Operatives, except transport—allocated
- Miscellaneous and not specified operatives by industry
- 63. Machinery, including electrical
  - Machinery, except electrical
  - Electrical machinery, equipment, and supplies
- 64. Other durable goods
  - Lumber and wood products, except furniture
  - Furniture and fixtures
  - Stone, clay, and glass products
  - Primary metal industries
  - Fabricated metal industries
  - Transportation equipment
  - Professional and photographic equipment, and watches
  - Ordnance
  - Miscellaneous manufacturing industries
  - Durable goods—allocated
- 65. Nondurable goods: Manufacturing
- 66. Food and kindred products
- 67. Apparel and other fabricated textile products
  - Textile mill products
  - Apparel and other fabricated textile products
- * Other nondurable goods
  - Tobacco manufactures
  - Paper and allied products
  - Printing, publishing, and allied industries
  - Chemicals and allied products
  - Petroleum and coal products
  - Rubber and miscellaneous plastic products
  - Leather and leather products
  - Nondurable goods—allocated
  - Not specified manufacturing
- 68. Nonmanufacturing industries
  - Construction
  - Transportation, communications, and other public utilities
  - Wholesale and retail trade
  - Business and repair services
  - Public administration
  - All other industries
- 69. Transport equipment operatives (All occupations in this major group)
- 70. Laborers, except farm (All occupations in this major group)
- 71. Farmers and farm managers (All occupations in this major group)
- 72. Paid farm laborers and farm foremen
  - Farm foremen
  - Farm laborers, wage workers
  - Farm service workers, self-employed
  - Farm laborers and farm foremen—allocated (class of worker other than unpaid family worker)
- 73. Unpaid family workers
  - Unpaid family workers
  - Farm laborers and farm foremen—allocated (unpaid family class of worker)
- 74. Service workers, except private household
- 75. Cleaning service workers
- 76. Chambermaids and maids, except private household
- * Other cleaning service workers
  - Cleaners and charwomen
  - Janitors and sextons
- 77. Food service workers
- 78. Cooks, except private household
- 79. Waiters and food counter workers
  - Food counter and fountain workers
  - Waiters
- * Other food service workers
  - Bartenders
  - Busboys
  - Dishwashers
  - Food service workers, n.e.c., except private household
- 80. Health service workers
- 81. Nursing aides, orderlies, and attendants
- 82. Practical nurses
- * Other health service workers
  - Dental assistants
  - Health aides, except nursing
  - Health trainees

List B.–Continued

Lay midwives
83. Personal service workers
84. Hairdressers and cosmetologists
*. Other personal service workers
Airline stewardesses
Attendants, recreation and amusement
Attendants, personal service, n.e.c.
Baggage porters and bellhops
Barbers
Boarding and lodging house keepers
Bootblacks
Child care workers, except private household
Elevator operators
Housekeepers, except private household
School monitors
Ushers, recreation and amusement
Welfare service aides
* Service workers, except private household—allocated, and protective service workers
85. Private household workers—living in
Child care workers, private household
Cooks, private household
Housekeepers, private household
Laundresses, private household
Maids and servants, private household
Private household workers—allocated
86. Private household workers—living out
Child care workers, private household
Cooks, private household
Housekeepers, private household
Laundresses, private household
Maids and servants, private household
Private household workers—allocated

LIST C. Condensed Occupational Classification Used for Total Employed in Chapter C as Related to Component Detailed Items Presented in List A

(Numbers in parentheses refer to items in List A.)

- Professional, technical, and kindred workers
  - Engineers (Items 4, 5, 6, 7, 8)
  - Physicians, dentists, and related practitioners (Items 12-15)
  - Health workers, except practitioners (Item 16)
  - Teachers, elementary and secondary school (Items 22, 23)
  - Technicians, except health (Items 24, 27)
  - Other professional workers (Items 1, 2, 3, 9, 10, 17, 18, 19, part 20, 29, 30)
- Managers and administrators, except farm (Items 31-35, 40)
  - Salaried: Manufacturing; Retail trade; Other industries
  - Self-employed: Retail trade; Other industries
- Sales workers (Items 45-52)
  - Manufacturing and wholesale trade
  - Retail trade
  - Other industries
- Clerical and kindred workers
  - Bookkeepers (Part item 54)
  - Secretaries, stenographers, and typists (Part item 56)
  - Other clerical workers (Items 53, part item 54, 55, part item 56)
- Craftsmen and kindred workers
  - Automobile mechanics, including body repairmen (Item 74)
  - Mechanics and repairmen, except auto (Items 72, 73, 75, 76)
  - Machinists (Part item 77)
  - Metal craftsmen, except mechanics and machinists (Part item 77, 78, 79, 80)
  - Carpenters (Item 60)
  - Construction craftsmen, except carpenters (Items 61-67)
  - Other craftsmen (Items 57, 58, 59, 68-71, 81, 84, 85)
- Operatives, except transport (Items 86-104)
  - Durable goods, manufacturing
  - Nondurable goods, manufacturing
  - Nonmanufacturing industries
- Transport equipment operatives
  - Truck drivers (Part item 123)
  - Other transport equipment operatives (Items 121, 122, part item 123, 124)
- Laborers, except farm
  - Construction laborers (Item 125)
  - Freight, stock, and material handlers (Item 126)
  - Other laborers, except farm (Items 127, 128, 129)
- Farmers and farm managers (Item 144)
- Farm laborers and farm foremen (Items 145, 146)
- Service workers, except private household[1] (Item 147)
  - Cleaning service workers (Item 148)
  - Food service workers (Item 149)
  - Health service workers (Item 152)
  - Personal service workers (Item 153)
  - Protective service workers (Item 154)
- Private household workers (Item 158)

[1] Includes allocated cases not shown separately.

LIST D. Condensed Occupational Classification Used for Female Employed in Chapter C as Related to Component Detailed Items Presented in List B

(Numbers in parentheses refer to items in List B.)

- Professional, technical, and kindred workers
  - Nurses (Item 8)
  - Health workers, except nurses (Items 6, 7, 9)
  - Teachers, elementary and secondary schools (Items 13, 14)
  - Technicians, except health (Items 16, 17)
  - Other professional workers (Items 1-5, 10, 11, 12, 15, 18, 21)
- Managers and administrators, except farm (Items 22-26, 28)
- Sales workers (Items 30-34)
  - Retail trade
  - Other than retail trade
- Clerical and kindred workers
  - Bookkeepers (Item 36)
  - Secretaries, stenographers, and typists (Items 46, 47, 49)
  - Other clerical workers (Items 35, 37-41, 44, 45, 48, 50)
- Craftsmen, foremen, and kindred workers (Item 51)
- Operatives, except transport (Items 53-62, 63, 64, 65, 68)
  - Durable goods, manufacturing
  - Nondurable goods, manufacturing
  - Nonmanufacturing industries
- Transport equipment operatives (Item 69)
- Laborers, except farm (Item 70)
- Farmers and farm managers (Item 71)
- Farm laborers and farm foremen (Items 72, 73)
- Service workers, except private household[1] (Item 74)
  - Cleaning service workers (Item 75)
  - Food service workers (Item 77)
  - Health service workers (Item 80)
  - Personal service workers (Item 83)
  - Protective service workers (Part item 74)
- Private household workers (Items 85, 86)

[1] Includes allocated cases not shown separately.

List E. Intermediate Industrial Classification with Component Detailed Items

This listing presents the relationship between the detailed industry stub (e.g., in table 184) and the intermediate industry stub (e.g., in table 186). The industry groups marked with an asterisk (*) are not shown in the tables using the intermediate classification but can be derived by subtraction. Numbers in parentheses following the industry categories are the SIC definitions.

1. Agriculture
   - Agricultural production (01)
   - Agricultural services, except horticultural (07 except 0713 and 073)
   - Horticultural services (073)
   - Agriculture, forestry, and fisheries—allocated
2. Forestry and fisheries
   - Forestry (08)
   - Fisheries (09)
3. Mining
   - (All industries in this major group) (10-14)
4. Construction
   - (All industries in this major group) (15-17)
5. Logging (241)
6. Sawmills, planing mills, and mill work (242, 243)
7. Miscellaneous wood products (244, 249)
8. Furniture and fixtures (25)
9. Stone, clay, and glass products
10. Cement, concrete, gypsum, and plaster products (324, 327)
* Other stone, clay, and glass products
   - Glass and glass products (321-323)
   - Structural clay products (325)
   - Pottery and related products (326)
   - Miscellaneous nonmetallic mineral and stone products (328-329)
11. Primary iron and steel industries
   - Blast furnaces, steel works, rolling, and finishing mills (3312, 3313)
   - Other primary iron and steel industries (3315-3317, 332, 3391, part 3399)
12. Primary nonferrous industries
   - Primary aluminum industries (3334, part 334, 3352, 3361, part 3392, part 3399)
   - Other primary nonferrous industries (3331-3333, 3339, part 334, 3351, 3356, 3357, 3362, 3369, part 3392, part 3399)
13. Fabricated metal industries, including not specified metal
   - Cutlery, hand tools, and other hardware (342)
   - Fabricated structural metal products (344)
   - Screw machine products (345)
   - Metal stamping (346)
   - Miscellaneous fabricated metal products (341, 343, 347, 348, 349)
   - Not specified metal industries
14. Machinery, except electrical
15. Office, accounting, and computing machines
   - Office and accounting machines (357 except 3573)
   - Electronic computing equipment (3573)
* Other machines, except electrical
   - Engines and turbines (351)
   - Farm machinery and equipment (352)
   - Construction and material handling machines (353)
   - Metalworking machinery (354)
   - Machinery, except electrical, n.e.c. (355, 356, 358, 359)
   - Not specified machinery
16. Electrical machinery, equipment, and supplies
17. Radio, television, and communication equipment (365, 366)
* Other electrical machinery, equipment, and supplies
   - Household appliances (363)
   - Electrical machinery, equipment, and supplies, n.e.c. (361, 362, 364, 367, 369)
   - Not specified electrical machinery, equipment, and supplies
18. Motor vehicles and motor vehicle equipment (371)
19. Aircraft and parts (372)
20. Other transportation equipment
   - Ship and boat building and repairing (373)
   - Railroad locomotives and equipment (374)
   - Mobile dwellings and campers (3791)
   - Cycles and miscellaneous transportation equipment (375, 3799)
21. Professional and photographic equipment, and watches
   - Scientific and controlling instruments (381, 382)
   - Optical and health services supplies (383, 384, 385)
   - Photographic equipment and supplies (386)
   - Watches, clocks, and clockwork-operated devices (387)
   - Not specified professional equipment
22. Ordnance (19)
23. Miscellaneous manufactures and durable goods—allocated
   - Miscellaneous manufacturing industries (39)
   - Manufacturing, durable goods—allocated
24. Meat products (201)
25. Canning and preserving produce, sea foods, and beverages
   - Canning and preserving fruits, vegetables, and sea foods (203)
   - Beverage industries (208)
26. Bakery products (205)
27. Other food industries
   - Dairy products (202)
   - Grain-mill products (204, 0713)
   - Confectionery and related products (207)
   - Miscellaneous food preparation and kindred products (206, 209)
   - Not specified food industries
28. Yarn, thread, and fabric mills (221-224, 228)
29. Other textile mill products
   - Knitting mills (225)
   - Dyeing and finishing textiles, except wool and knit goods (226)
   - Floor coverings, except hard surface (227)
   - Miscellaneous textile mill products (229)
30. Apparel and other fabricated textile products
   - Apparel and accessories (231-238)
   - Miscellaneous fabricated textile products (239)
31. Paper and allied products
   - Pulp, paper, and paperboard mills (261-263, 266)
   - Miscellaneous paper and pulp products (264)
   - Paperboard containers and boxes (265)
32. Printing, publishing, and allied industries
   - Newspaper publishing and printing (271)
   - Printing, publishing, and allied industries, except newspapers (272-279)
33. Chemicals and allied products
   - Industrial chemicals (281)
   - Plastics, synthetics, and resins, except fibers (282, except 2823 and 2824)
   - Synthetic fibers (2823,2824)
   - Drugs and medicines (283)
   - Soaps and cosmetics (284)
   - Paints, varnishes, and related products (285)
   - Agricultural chemicals (287)
   - Miscellaneous chemicals (286, 289)
   - Not specified chemicals and allied products
34. Petroleum and coal products
   - Petroleum refining (291)
   - Miscellaneous petroleum and coal products (295, 299)
35. Rubber and miscellaneous plastic products
   - Rubber products (301-303, 306)
   - Miscellaneous plastic products (307)
36. Footwear, except rubber (313, 314)
37. Other nondurable goods
   - Tobacco manufactures (21)
   - Tanned, curried, and finished leather (311)
   - Leather products, except footwear (312, 315-317, 319)
   - Manufacturing, nondurable goods—allocated
38. Not specified manufacturing industries
39. Transportation, communications, and other public utilities
40. Railroads and railway express service (40)
41. Street railways and bus lines (411, 413-415, 417)
42. Trucking service and warehousing
   - Trucking service (421, 423)
   - Warehousing and storage (422)
43. Water transportation (44)
44. Air transportation (45)
45. All other transportation
   - Taxicab service (412)
   - Pipe lines, except natural gas (46)
   - Services incidental to transportation (47)
46. Communications
   - Radio broadcasting and television (483)
   - Telephone (wire and radio) (481)
   - Telegraph and miscellaneous communication services (482, 489)
47. Electric and gas utilities
   - Electric light and power (491)
   - Electric-gas utilities (493)
   - Gas and steam supply systems (492, 496)
48. Water supply, sanitary services, and other utilities
   - Water supply (494)
   - Sanitary services (495)
   - Other and not specified utilities (497)
* Transportation, communications, and other public utilities—allocated
49. Wholesale trade
50. Food and farm products
   - Food and related products (504)
   - Farm products—raw materials (505)
* Other wholesale trade
   - Motor vehicles and equipment (501)
   - Drugs, chemicals, and allied products (502)
   - Dry goods and apparel (503)
   - Electrical goods (506)
   - Hardware, plumbing, and heating supplies (507)
   - Not specified electrical and hardware products
   - Machinery, equipment, and supplies (508)
   - Metals and minerals, n.e.c. (5091)
   - Petroleum products (5092)
   - Scrap and waste materials (5093)
   - Alcoholic beverages (5095)

List E.—Continued

- Paper and its products (5096)
- Lumber and construction materials (5098)
- Wholesalers, n.e.c. (5094, 5097, 5099)
- Not specified wholesale trade
- Wholesale trade—allocated

51. Hardware, farm equipment, and building material retailing
    - Lumber and building material retailing (521-524)
    - Hardware and farm equipment stores (525)
52. General merchandise stores
    - Department and mail order establishments (531, 532)
    - Limited-price variety stores (533)
    - Vending machine operators (534)
    - Direct-selling establishments (535)
    - Miscellaneous general merchandise stores (539)
53. Food stores
    - Grocery stores (541)
    - Dairy products stores (545)
    - Retail bakeries (546)
    - Food stores, n.e.c. (542-544, 549)
54. Motor vehicles and accessories retailing
    - Motor vehicle dealers (551, 552)
    - Tire, battery, and accessory dealers (553)
    - Miscellaneous vehicle dealers (559)
55. Gasoline service stations (554)
56. Apparel and accessories stores
    - Apparel and accessories stores, except shoe stores (56 except 566)
    - Shoe stores (566)
57. Furniture, home furnishings, and equipment stores
    - Furniture and home furnishings stores (571)
    - Household appliances, television, and radio stores (572, 573)
58. Eating and drinking places (58)
59. Drug stores (591)
60. Other retail trade
    - Liquor stores (592)
    - Farm and garden supply stores (596)
    - Jewelry stores (597)
    - Fuel and ice dealers (598)
    - Retail florists (5992)
    - Miscellaneous retail stores (593-595, 599 except 5992)
    - Not specified retail trade
    - Retail trade—allocated
61. Banking and credit agencies
    - Banking (60)
    - Credit agencies (61)
62. Insurance (63, 64)
63. Other finance and real estate
    - Security, commodity brokerage, and investment companies (62, 67)
    - Real estate, including real estate - insurance - law offices (65, 66)
    - Finance, insurance, and real estate—allocated
64. Advertising (731)
65. Commercial research, management, and programing services
    - Commercial research, development, and testing labs (7391, 7397)
    - Business management and consulting services (part 7392)
    - Computer programing services (part 7392)
66. Automobile services
    - Automobile services, except repair (751, 752, 754)
    - Automobile repair and related services (753)
67. Other business and repair services
    - Services to dwellings and other buildings (734)
    - Employment and temporary help agencies (736, 7398)
    - Detective and protective services (7393)
    - Business services, n.e.c. (732, 733, 735, 7394, 7395, 7396, 7399)
    - Electrical repair shops (762, 7694)
    - Miscellaneous repair services (763, 764, 769 except 7694)
    - Business and repair services—allocated
68. Private households (88)
69. Hotels and lodging places
    - Hotels and motels (701)
    - Lodging places, except hotels and motels (702, 703, 704)
70. Laundering, cleaning, and other garment services (721, 727)
71. Barber and beauty shops
    - Beauty shops (723)
    - Barber shops (724)
72. Other personal services
    - Shoe repair shops (725)
    - Dressmaking shops (part 729)
    - Miscellaneous personal services (722, 726, part 729)
    - Personal services—allocated
73. Entertainment and recreation services
    - (All industries in this major group) (78, 79)
74. Health services
    - Offices of physicians (801, 803)
    - Offices of dentists (802)
    - Offices of chiropractors (804)
    - Hospitals (806)
    - Convalescent institutions (8092)
    - Offices of health practitioners, n.e.c. (part 8099)
    - Health services, n.e.c. (807, part 8099)
75. Educational services, government
    - Elementary and secondary schools (821)
    - Colleges and universities (822)
    - Libraries (823)
    - Educational services, n.e.c. (824, 829)
    - Not specified educational services
    - (These categories include all class of worker entries of federal, State, and local government.)
76. Educational services, private
    - (This group includes all of the industries shown in number 75 with class of worker entries other than federal, State, and local government.)
77. Welfare, religious, and nonprofit membership organizations
    - Religious organizations (866)
    - Welfare services (part 867)
    - Residential welfare facilities (part 867)
    - Nonprofit membership organizations (861-865, 869)
78. Other professional and related services
    - Legal services (81)
    - Museums, art galleries, and zoos (84)
    - Engineering and architectural services (891)
    - Accounting, auditing, and bookkeeping services (893)
    - Miscellaneous professional and related services (892, 899)
    - Professional and related services—allocated
79. Public administration
80. Postal service (part 9190)
81. Federal public administration (part 9190, 9490)
82. State and local public administration
    - State public administration (9290)
    - Local public administration (9390)

* Public administration—allocated

LIST F. Condensed Industrial Classification Used in Chapter C as Related to Component Detailed Items Presented in List E

(Numbers in parentheses refer to items in List E.)

- Agriculture, forestry, and fisheries (Items 1, 2)
- Mining (Item 3)
- Construction (Item 4)
- Manufacturing
  - Furniture and lumber and wood products (Items 5, 6, 7, 8)
  - Primary metal industries (Items 11, 12)
  - Fabricated metal industries (including not specified metal) (Item 13)
  - Machinery, except electrical (Item 14)
  - Electrical machinery, equipment, and supplies (Item 16)
  - Motor vehicles and other transportation equipment (Items 18, 19, 20)
  - Other durable goods (Items 9, 21, 22, 23)
  - Food and kindred products (Items 24, 25, 26, 27)
  - Textile mill and other fabricated textile products (Items 28, 29, 30)
  - Printing, publishing, and allied industries (Item 32)
  - Chemicals and allied products (Item 33)
  - Other nondurable goods (including not specified manufacturing industries) (Items 31, 34, 35, 36, 37, 38)
- Railroads and railway express service (Item 40)
- Trucking service and warehousing (Item 42)
- Other transportation (Items 41, 43, 44, 45)
- Communications (Item 46)
- Utilities and sanitary services (Items 47, 48)
- Wholesale trade (Item 49)
- Food, bakery, and dairy stores (Item 53)
- Eating and drinking places (Item 58)
- General merchandise retailing (Item 52)
- Motor vehicle retailing and service stations (Items 54, 55)
- Other retail trade (Items 51, 56, 57, 59, 60)
- Banking and credit agencies (Item 61)
- Insurance, real estate, and other finance (Items 62, 63)
- Business services (Items 64, 65, part item 67)
- Repair services (Items 66, part item 67)
- Private households (Item 68)
- Other personal services (Items 69, 70, 71, 72)
- Entertainment and recreation services (Item 73)
- Hospitals (Part item 74)
- Health services, except hospitals (Item 74 except hospitals)
- Elementary and secondary schools and colleges
  - Government (Part item 75)
  - Private (Part item 76)
- Other education and kindred services (Residual of items 75 and 76, and Museums, art galleries, and zoos from 78)
- Welfare, religious, and nonprofit membership organizations (Item 77)
- Legal, engineering, and miscellaneous professional services (Part item 78)
- Public administration (Item 79)

FACSIMILES OF THE POPULATION QUESTIONS ON THE 1970 CENSUS QUESTIONNAIRES

(Questions on this page appeared on all questionnaires)

Line No.	1. WHAT IS THE NAME OF EACH PERSON who was living here on Wednesday, April 1, 1970 or who was staying or visiting here and had no other home? Print names in this order: Head of the household; Wife of head; Unmarried children, oldest first; Married children and their families; Other relatives of the head; Persons not related to the head	2. HOW IS EACH PERSON RELATED TO THE HEAD OF THIS HOUSEHOLD? Fill one circle. If "Other relative of head," also give exact relationship, for example, mother-in-law, brother, niece, grandson, etc. If "Other not related to head," also give exact relationship, for example, partner, maid, etc.
1	Last name First name Middle initial	○ Head of household ○ Wife of head ○ Son or daughter of head ○ Other relative of head—Print exact relationship → ○ Roomer, boarder, lodger ○ Patient or inmate ○ Other not related to head—Print exact relationship

3. SEX	4. COLOR OR RACE	DATE OF BIRTH			8. WHAT IS EACH PERSON'S MARITAL STATUS?
		5. Month and year of birth and age last birthday	6. Month of birth	7. Year of birth	
Fill one circle	Fill one circle. If "Indian (American)," also give tribe. If "Other," also give race.	Print	Fill one circle	Fill one circle for first three numbers / Fill one circle for last number	Fill one circle
○ Male ○ Female	○ White ○ Negro or Black ○ Indian (Amer.) Print tribe → ○ Japanese ○ Chinese ○ Filipino ○ Hawaiian ○ Korean ○ Other—Print race →	Month Year Age	○ Jan.-Mar. ○ Apr.-June ○ July-Sept. ○ Oct.-Dec.	○ 186- ○ 187- ○ 188- ○ 189- ○ 190- ○ 191- ○ 192- ○ 193- ○ 194- ○ 195- ○ 196- ○ 197- / ○ 0 ○ 1 ○ 2 ○ 3 ○ 4 ○ 5 ○ 6 ○ 7 ○ 8 ○ 9	○ Now married ○ Widowed ○ Divorced ○ Separated ○ Never married

Note: On the questionnaires used in Alaska, the categories "Aleut" and "Eskimo" were substituted for "Hawaiian" and "Korean" in question 4.

FACSIMILE OF THE RESPONDENT INSTRUCTIONS FOR POPULATION QUESTIONS 1 TO 8

1. If you are not sure about whether to list a person, see the rules on the flap of the census form.
2. If two or more unrelated people live together and share the rent, mark the first one you list **Head of household**. Mark the rest **Other not related to head** and print "partner" in the space.

   A stepchild or legally adopted child of the head should be marked **Son or daughter**.

5. If the month or year of birth, or the age, is not known, give your best estimate.

6, 7. If you are not sure how to fill these circles, look at the examples shown above.

8. If the person's only marriage was annulled, mark **Never married**.

FACSIMILES OF THE POPULATION QUESTIONS ON THE 1970 CENSUS QUESTIONNAIRES
(Percent indicates sample size)

Name of person on line (1) of page 2

Last name First name Initial

15 and 5 percent

13a. Where was this person born? *If born in hospital, give State or country where mother lived. If born outside U.S., see instruction sheet; distinguish Northern Ireland from Ireland (Eire).*

O This State

OR

(Name of State or foreign country; or Puerto Rico, Guam, etc.)

5 percent

b. Is this person's origin or descent— *(Fill one circle)*

O Mexican O Central or South American
O Puerto Rican O Other Spanish
O Cuban O No, none of these

15 percent

14. What country was his father born in?

O United States

OR

(Name of foreign country; or Puerto Rico, Guam, etc.)

15. What country was his mother born in?

O United States

OR

(Name of foreign country; or Puerto Rico, Guam, etc.)

5 percent

16. *For persons born in a foreign country—*

a. Is this person naturalized?

O Yes, naturalized
O No, alien
O Born abroad of American parents

b. When did he come to the United States to stay?

O 1965 to 70 | O 1950 to 54 | O 1925 to 34
O 1960 to 64 | O 1945 to 49 | O 1915 to 24
O 1955 to 59 | O 1935 to 44 | O Before 1915

15 percent

17. What language, other than English, was spoken in this person's home when he was a child? *Fill one circle.*

O Spanish O Other— *Specify* _____
O French
O German O None, English only

18. When did this person move into this house (or apartment)? *Fill circle for date of last move.*

O 1969 or 70 | O 1965 or 66 | O 1949 or earlier
O 1968 | O 1960 to 64 | O Always lived in this house or apartment
O 1967 | O 1950 to 59

19a. Did he live in this house on April 1, 1965? *If in college or Armed Forces in April 1965, report place of residence there.*

O Born April 1965 or later } *Skip to 20*
O Yes, this house ..... }
O No, different house

b. Where did he live on April 1, 1965?

(1) State, foreign country, U.S. possession, etc. _____

(2) County _____

(3) Inside the limits of a city, town, village, etc.?

O Yes O No

(4) *If "Yes,"* name of city, town, village, etc. _____

15 percent

20. Since February 1, 1970, has this person attended regular school or college at any time? *Count nursery school, kindergarten, and schooling which leads to an elementary school certificate, high school diploma, or college degree.*

O No
O Yes, public
O Yes, parochial
O Yes, other private

21. What is the highest grade (or year) of regular school he has ever attended?
Fill one circle. If now attending, mark grade he is in.

O Never attended school— *Skip to 23*
O Nursery school
O Kindergarten

Elementary through high school (grade or year)

1 2 3 4 5 6 7 8 9 10 11 12
O O O O O O O O O O O O

College (academic year)

1 2 3 4 5 6 or more
O O O O O O

22. Did he finish the highest grade (or year) he attended?

O Now attending this grade (or year)
O Finished this grade (or year)
O Did not finish this grade (or year)

23. When was this person born?

O Born before April 1956— *Please go on with questions 24 through 41.*

O Born April 1956 or later— *Please omit questions 24 through 41 and go to the next page for the next person.*

15 and 5 percent

24. *If this person has ever been married—*

a. Has this person been married more than once?

O Once O More than once

b. When did he get married? **When did he get married for the first time?**

Month *Year* *Month* *Year*

c. *If married more than once—* **Did the first marriage end because of the death of the husband (or wife)?**

O Yes O No

5 percent

25. *If this is a girl or a woman—*
How many babies has she ever had, not counting stillbirths?
Do not count her stepchildren or children she has adopted.

1 2 3 4 5 6 7 8
O O O O O O O O

9 10 11 12 or more None
O O O O O

15 and 5 percent

26. *If this is a man—*

a. Has he ever served in the Army, Navy, or other Armed Forces of the United States?

O Yes
O No

b. Was it during— *(Fill the circle for each period of service.)*

Vietnam Conflict *(Since Aug. 1964)* ..... O
Korean War *(June 1950 to Jan. 1955)* ..... O
World War II *(Sept. 1940 to July 1947)* ..... O
World War I *(April 1917 to Nov. 1918)* ..... O
Any other time ..... O

15 percent

FACSIMILES OF THE POPULATION QUESTIONS ON THE 1970 CENSUS QUESTIONNAIRES
(Percent indicates sample size)

5 percent

27a. Has this person ever completed a vocational training program?
For example, in high school; as apprentice; in school of business, nursing, or trades; technical institute; or Armed Forces schools.

O Yes O No— *Skip to 28*

b. What was his main field of vocational training? *Fill one circle.*

- O Business, office work
- O Nursing, other health fields
- O Trades and crafts *(mechanic, electrician, beautician, etc.)*
- O Engineering or science technician; draftsman
- O Agriculture or home economics
- O Other field– *Specify* ——

_____

28a. Does this person have a health or physical condition which limits the kind or amount of work he can do at a job?
If 65 years old or over, skip to question 29.

- O Yes
- O No

b. Does his health or physical condition keep him from holding any job at all?

- O Yes
- O No

c. *If "Yes" in a or b—* **How long has he been limited in his ability to work?**

- O Less than 6 months
- O 6 to 11 months
- O 1 to 2 years
- O 3 to 4 years
- O 5 to 9 years
- O 10 years or more

15 and 5 percent

QUESTIONS 29 THROUGH 41 ARE FOR ALL PERSONS BORN BEFORE APRIL 1956 INCLUDING HOUSEWIVES, STUDENTS, OR DISABLED PERSONS AS WELL AS PART-TIME OR FULL-TIME WORKERS

29a. Did this person work at any time last week?

- O Yes– *Fill this circle if this person did full- or part-time work. (Count part-time work such as a Saturday job, delivering papers, or helping without pay in a family business or farm; and active duty in the Armed Forces)*
- O No– *Fill this circle if this person did not work, or did only own housework, school work, or volunteer work.* *Skip to 30*

b. How many hours did he work last week (at all jobs)?
Subtract any time off and add overtime or extra hours worked.

- O 1 to 14 hours
- O 15 to 29 hours
- O 30 to 34 hours
- O 35 to 39 hours
- O 40 hours
- O 41 to 48 hours
- O 49 to 59 hours
- O 60 hours or more

15 percent

c. Where did he work last week?
If he worked in more than one place, print where he worked most last week.
If he travels about in his work or if the place does not have a numbered address, see instruction sheet.

(1) Address *(Number and street name)* _____

(2) Name of city, town, village, etc. _____

(3) Inside the limits of this city, town, village, etc.?
- O Yes
- O No

(4) County _____

(5) State (6) ZIP Code _____

d. How did he get to work last week? *Fill one circle for chief means used on the last day he worked at the address given in 29c.*

- O Driver, private auto
- O Passenger, private auto
- O Bus or streetcar
- O Subway or elevated
- O Railroad
- O Taxicab
- O Walked only
- O Worked at home
- O Other means– *Specify* ——

_____

After completing question 29d, skip to question 33.

15 and 5 percent

30. Does this person have a job or business from which he was temporarily absent or on layoff last week?

- O Yes, on layoff
- O Yes, on vacation, temporary illness, labor dispute, etc.
- O No

31a. Has he been looking for work during the past 4 weeks?

O Yes O No— *Skip to 32*

b. Was there any reason why he could not take a job last week?

- O Yes, already has a job
- O Yes, because of this person's temporary illness
- O Yes, for other reasons (in school, etc.)
- O No, could have taken a job

32. When did he last work at all, even for a few days?

- O In 1970
- O In 1969
- O In 1968
- O 1964 to 1967
- O 1960 to 1963
- O 1959 or earlier
- O Never worked

Skip to 36

FACSIMILES OF THE POPULATION QUESTIONS ON THE 1970 CENSUS QUESTIONNAIRES
(Percent indicates sample size)

33–35. Current or most recent job activity

Describe clearly this person's chief job activity or business last week, if any. If he had more than one job, describe the one at which he worked the most hours.

If this person had no job or business last week, give information for last job or business since 1960.

33. Industry

a. For whom did he work? *If now on active duty in the Armed Forces, print "AF" and skip to question 36.*

(Name of company, business, organization, or other employer)

b. What kind of business or industry was this?
Describe activity at location where employed.

(For example: Junior high school, retail supermarket, dairy farm, TV and radio service, auto assembly plant, road construction)

c. Is this mainly— *(Fill one circle)*

- ○ Manufacturing
- ○ Wholesale trade
- ○ Retail trade
- ○ Other *(agriculture, construction, service, government, etc.)*

34. Occupation

a. What kind of work was he doing?

(For example: TV repairman, sewing machine operator, spray painter, civil engineer, farm operator, farm hand, junior high English teacher)

b. What were his most important activities or duties?

(For example: Types, keeps account books, files, sells cars, operates printing press, cleans buildings, finishes concrete)

c. What was his job title?

35. Was this person— *(Fill one circle)*

- ○ Employee of private company, business, or individual, for wages, salary, or commissions...
- ○ Federal government employee .....
- ○ State government employee.....
- ○ Local government employee *(city, county, etc.)*...
- Self-employed in own business, professional practice, or farm—
  - ○ Own business not incorporated .....
  - ○ Own business incorporated .....
- ○ Working without pay in family business or farm

36. In April 1965, what State did this person live in?

- ○ This State

OR

(Name of State or foreign country; or Puerto Rico, etc.)

37. In April 1965, was this person— *(Fill three circles)*

a. Working at a job or business *(full or part-time)*?
○ Yes ○ No

b. In the Armed Forces?
○ Yes ○ No

c. Attending college?
○ Yes ○ No

38. *If "Yes" for "Working at a job or business" in question 37—* **Describe this person's chief activity or business in April 1965.**

a. What kind of business or industry was this?

b. What kind of work was he doing (occupation)?

c. Was he—
An employee of a private company or government agency... ○
Self-employed or an unpaid family worker ..... ○

39a. Last year (1969), did this person work at all, even for a few days?
○ Yes ○ No— *Skip to 41*

b. How many weeks did he work in 1969, either full-time or part-time?
Count paid vacation, paid sick leave, and military service.

- ○ 13 weeks or less
- ○ 14 to 26 weeks
- ○ 27 to 39 weeks
- ○ 40 to 47 weeks
- ○ 48 to 49 weeks
- ○ 50 to 52 weeks

40. Earnings in 1969— *Fill parts a, b, and c for everyone who worked any time in 1969 even if he had no income.*
(If exact amount is not known, give best estimate.)

a. How much did this person earn in 1969 in wages, salary, commissions, bonuses, or tips from all jobs?
(Before deductions for taxes, bonds, dues, or other items.)
$ .00 *(Dollars only)* OR ○ None

b. How much did he earn in 1969 from his own nonfarm business, professional practice, or partnership?
(Net after business expenses. If business lost money, write "Loss" above amount.)
$ .00 *(Dollars only)* OR ○ None

c. How much did he earn in 1969 from his own farm?
(Net after operating expenses. Include earnings as a tenant farmer or sharecropper. If farm lost money, write "Loss" above amount.)
$ .00 *(Dollars only)* OR ○ None

41. Income other than earnings in 1969— *Fill parts a, b, and c.*
(If exact amount is not known, give best estimate.)

a. How much did this person receive in 1969 from Social Security or Railroad Retirement?
$ .00 *(Dollars only)* OR ○ None

b. How much did he receive in 1969 from public assistance or welfare payments?
Include aid for dependent children, old age assistance, general assistance, aid to the blind or totally disabled. Exclude separate payments for hospital or other medical care.
$ .00 *(Dollars only)* OR ○ None

c. How much did he receive in 1969 from all other sources?
Include interest, dividends, veterans' payments, pensions, and other regular payments. (See instruction sheet.)
$ .00 *(Dollars only)* OR ○ None

15 and 5 percent

5 percent

15 and 5 percent

5 percent

15 and 5 percent

FACSIMILES OF THE RESPONDENT INSTRUCTIONS FOR POPULATION QUESTIONS IN THE 1970 CENSUS

13. Mark the circle for **This State** if he now lives in the same State as he was born in. If born in a **different State**, print name of State.

    If **born outside U.S.**, print name of country, U.S. possession, etc. Use international boundaries as now recognized by the U.S.

16. Mark one circle in part a **and** one circle in part b for persons born outside the 50 States, District of Columbia, Puerto Rico, Canal Zone, Guam, or Virgin Islands of U.S.

17. If more than one language other than English was spoken, mark principal language.

18. Mark the date for the **last** time he moved into **this particular** house or apartment.

19a. Mark **Yes** if he lived in this same house or apartment on April 1, 1965, even if he moved away and came back between then and now. Mark **No** if he lived in the same building but in a different apartment on April 1, 1965.

b. If he lived somewhere else on April 1, 1965, give the address of his usual residence at that time.

Part (2) For addresses in Louisiana, print the parish name.

For addresses in Alaska, print the borough name.

For addresses in **independent cities**, print the name of the city and word "city," for example, "Baltimore city."

Part (3) Mark **Yes** if you know that the address is **now** inside the limits of a city, town, village, or other incorporated place, even if it was not inside the limits on April 1, 1965.

20. Do not count trade or business school, company training, or tutoring unless you think he could get credit for it at a regular school or college.

21. Mark the highest grade he attended even if he did not finish it. If he is still in school, mark the grade he is in now.

    If he skipped or repeated grades, mark the highest grade ever attended, regardless of how long it took to get there.

    If he finished high school, but did not go to college, mark **12**.

    For college, mark the highest academic year attended.

22. Mark **Finished this grade (or year)** only if he finished the **entire** grade or year shown in question 21.

24b. If exact dates of marriage are unknown, estimate as closely as possible.

25. Count all the children the girl or woman has ever had, even if some of them have died or no longer live with her.

26. Mark **Yes** if he was ever on active duty in the Army, Navy, Air Force, Marine Corps, or Coast Guard, no matter how short a time he served. Count only **active** duty in National Guard or Reserves.

    Mark **No** if he had only civilian duty in the Armed Forces or merchant marine. Mark **No** if he was in the National Guard or Reserves, but was **not** called to active duty. Mark **No** if his only military service was in the Armed Forces of another country.

27a. Count only programs that he finished. Do not count courses which are not part of an organized program of study. Do not count training he got on-the-job, in company schools, in college after the second year, or by correspondence.

28a. **Health condition.** This is a **serious** illness, or a **serious** handicap (impairment) affecting some part of the body or mind, which interferes with his ability to **work at a job**. Answer **No** for pregnancy, common colds, etc.

29a. Mark **Yes** if he worked on any day Sunday through Saturday of last week.

Count as work	Do not count as work
Work for someone else for wages, salary, piece rate, commission, tips, or payment "in kind"	Housework or yard work at own home
Work in own business, professional practice, or farm	Unpaid volunteer work.
Any work in a family business or farm, paid or not	Work done as an inmate of an institution.
Any part-time work	
Active duty in the Armed Forces	

b. Give the **actual** number of hours he worked at **all jobs last week**, even if that was more or fewer hours than he usually works.

c. For a person who travels about in his work or who works in more than one place--If he usually checks in or out at the same place every day, give the address of that place.
If he does not check in or out at the same place, give the address of the place where he worked the most hours last week.

Give the **exact address** of the location or branch where he works if his employer operates in more than one location (such as a grocery store chain or public school system).

When you cannot give the number or street name, print the name of the building, if any, or the name of the company for which he works.

d. Mark **Worked at home** for a person who worked on a farm where he lives or in an office or shop in his home.

30. Mark **No** if he works only during certain seasons or is "on call" to work when needed.

31a. Mark **Yes** if he tried to get a job or to start a business or profession at any time in the past **four** weeks; for example, if he registered at an employment office, went for a job interview, or did anything toward starting a business. Mark **Yes** if he was waiting to hear from places he had applied to or registered with within the past four weeks.

b. Mark **Yes, already has a job** if he was on layoff or was expecting to report to a job within 30 days.

Mark **Yes, because of this person's temporary illness** if he expects to be able to work within 30 days.

Mark **Yes, for other reasons** for reasons such as going to school or taking care of children.

32. Look at the instruction for 29a to see what **work** means. Mark **Never worked** if he: (1) never worked at any kind of job or business, either full or part-time, (2) never did any unpaid work in a family business or farm, **and** (3) never served in the Armed Forces.

33a. If he worked for a company, business, or government agency, print the name of the company, not the name of his supervisor. If he worked for a person or a small business that has no company name, print the name of the person he worked for.

b. Write two or more words to tell what the business, industry, or person named in 33a does. Write what it makes or what it sells or what service it gives. Some examples of acceptable answers are shown on the Census form and here.

Acceptable	Unacceptable
Cattle ranch	Ranch
Wholesale grocery store	Grocery store
Retail gas station	Oil company
Metal furniture manufacturing	Furniture company

If a company does more than one thing (like make household electrical appliances and electric generators) describe only the **major** activity at the place where he works. If, however, he works at a warehouse, repair shop, etc., that is part of and used only by a larger organization, give the major activity of the larger organization; for example, department store warehouse – report department store.

FACSIMILES OF THE RESPONDENT INSTRUCTIONS FOR POPULATION QUESTIONS IN THE 1970 CENSUS—cont.

33c. Mark **Manufacturing** if the factory, plant, mill, etc. makes things, even if it also sells them.

Mark **Wholesale trade** if a business does not make things but buys them to sell to stores or other companies.

Mark **Retail trade** if the business mostly sells things (not services) to individuals.

Mark **Other** if the main purpose of the employer is **not** making or selling things. Some examples of "Other" are services, such as those given by hotels, dry cleaners, repair shops, schools, and banks. Farming and building houses, bridges, roads, are also examples of "Other" kinds of businesses.

34a. Write two or more words to tell the kind of work he does. If he is a trainee, apprentice, or helper, write that down too. See examples of acceptable answers on the Census form and here.

Acceptable	Unacceptable
Sales clerk	Clerk
Carpenter's helper	Helper
Practical nurse	Nurse

b. Write the most important things that he does on the job. Some examples are shown on the Census form.

c. Print his job title (what his employer calls his job). If he has no job title, print **None**.

35. If he was an employee of a **private** non-profit organization, mark the first circle.

Mark **Local government employee** for a teacher in a local public school.

36. Mark **This State** if he now lives in the same State as he did in April 1965.

37. If he had two or more activities during the same period, mark **Yes** for each of these activities.

39. Look at the instruction for question 29a to see what **work** means. Count every week in which he did any work at all, even for a few hours.

40. Enter the amount or fill the **None** circle in a, b, **and** c. Part 40a **includes** "sick leave" pay. Part 40a **excludes** military bonuses, reimbursement for business expenses, and pay "in kind." The owner of an **unincorporated** nonfarm business should include his net earnings in part 40b. If the business or farm is **incorporated**, his earnings should be included in part 40a.

41. Enter the amount or fill the **None** circle in a, b, **and** c.

a. Social Security or Railroad Retirement – include U.S. Government payments to retired persons, to dependents of deceased insured workers, or to disabled workers. Include "Medicare" premiums; exclude receipts.

b. Public assistance or public welfare payments – include amounts received from Federal, State, or local public programs. Exclude private welfare payments.

c. Interest, dividends – include amounts received or credited to your account.

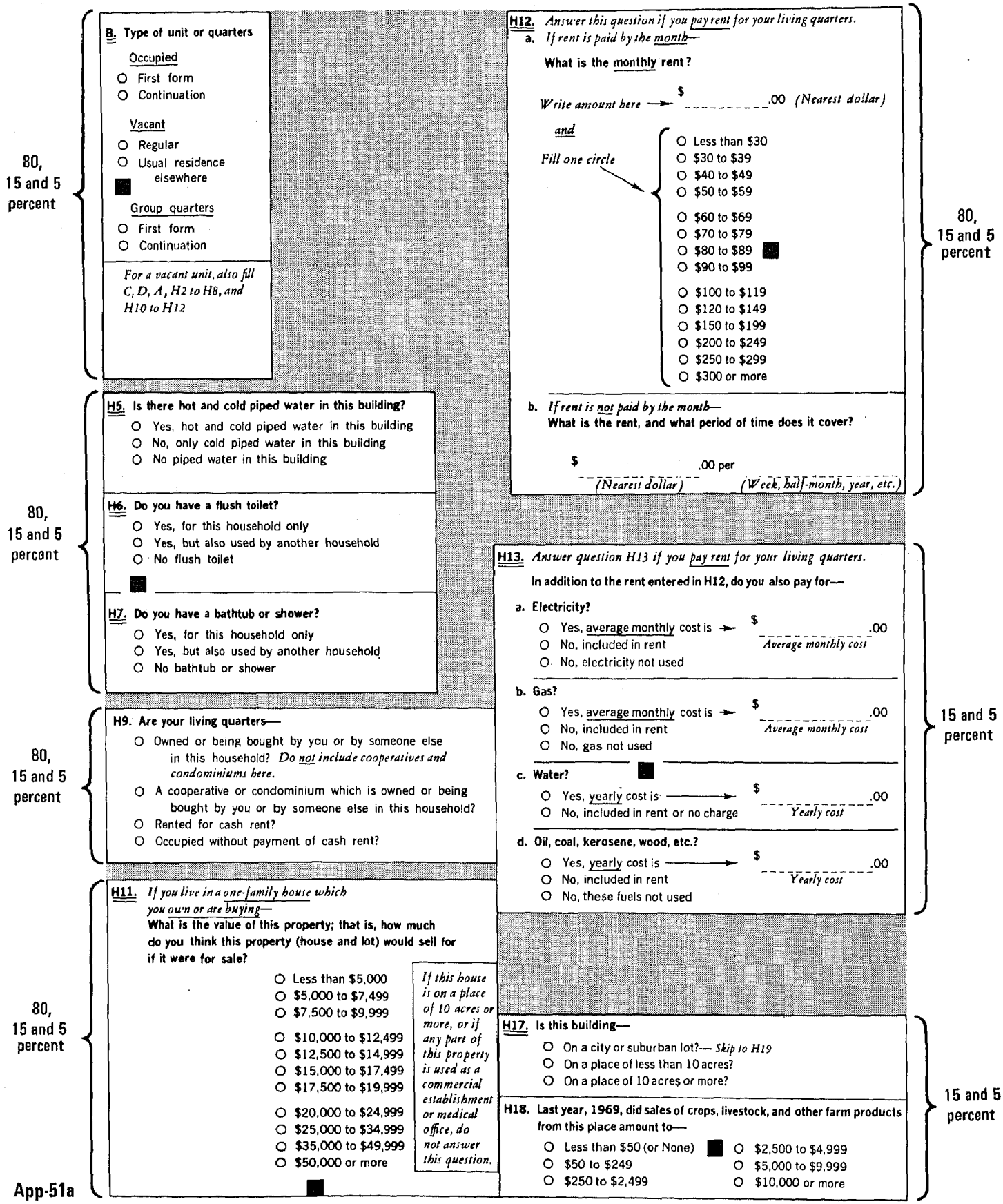
Veterans' payments – include money paid for service-connected disabilities, to survivors of deceased veterans, for education and on-the-job training subsistence allowances, and for "refunds" on "GI" insurance premiums.

Retirement pensions – include amounts paid by former private employers and by unions, and amounts paid by Federal, State, county, or other governmental agencies.

Other regular payments – include such periodic income as net rental income, unemployment insurance benefits, workmen's compensation, private welfare payments, alimony or child support, Armed Forces allotments, and regular contributions from persons who are not members of your household.

Exclude receipts from the sale of personal property, capital gains, lump-sum insurance or inheritance payments, or pay "in kind."

FACSIMILES OF SELECTED HOUSING QUESTIONS ON THE 1970 CENSUS QUESTIONNAIRES
(Percent indicates sample size)



FACSIMILES OF THE RESPONDENT INSTRUCTIONS FOR SELECTED HOUSING QUESTIONS IN THE 1970 CENSUS

H5. Mark **hot water** even if you have it only part of the time.

H6, H7. **Also used by another household** means that someone else who lives in the same building, but is not a member of your household, also uses the equipment. Mark this circle also if the occupants of living quarters now vacant would also use the equipment.

H9. **Owned or being bought** means that the living quarters are owned outright or are mortgaged. Also mark **Owned or being bought** if the living quarters are owned but the land is rented.

Mark **Rented for cash rent** if any money rent is paid. Rent may be paid by persons who are not members of your household.

Occupied without payment of cash rent includes, for example, a parsonage, a house or apartment provided free of rent by the owner, or a house or apartment occupied by a janitor or caretaker in exchange for services.

H11. Include the value of the house, the land it is on, and any other structures on the same property. If the house is owned but the land is rented, estimate the combined value of the house **and** the land.

H12. Report the rent agreed to or contracted for, even if the furnishings, utilities, or services are included.

a. If you pay rent by the month, write in the amount of **rent and** fill one circle.

b. If rent is **not** paid by the month, answer both parts of **b**. For example, **$20** per **week, $1,500** per **year,** etc.

H13. If exact costs are not known, estimate as closely as possible. Report amounts even if bills are unpaid or are paid by someone else. If the bills include utilities or fuel used also by another apartment or a business establishment, estimate the amounts for your own living quarters. If gas and electricity are billed together, enter the combined amount on the electricity line and bracket ({) the two utilities.

H17. A **city or suburban lot** is usually located in a city, a community, or any built-up area outside a city or community, and is not larger than the house and yard. All living quarters in apartment buildings, including garden-type apartments in the city or suburbs, are considered **on a city or suburban lot.**

A **place** is a farm, ranch, or any other property, other than a city or suburban lot, on which this **residence** is located.

H18. Fill the circle for the total (gross) amount of money received from the sales of crops, livestock, and other farm products produced on this place during the calendar year 1969.

Appendix C.—ACCURACY OF THE DATA

SOURCES OF ERROR App-52
EDITING OF UNACCEPTABLE DATA App-52
ALLOCATION TABLES App-53
SAMPLE DESIGN App-54
RATIO ESTIMATION App-55
SAMPLING VARIABILITY App-56

SOURCES OF ERROR

Human and mechanical errors occur in any mass statistical operation such as a decennial census. Errors during the data collection phase can include failure to obtain required information from respondents, obtaining incorrect or inconsistent information, and recording information in the wrong place or incorrectly. Errors can also occur during the field review of the enumerator's work, the clerical handling of the questionnaires, and the various stages of the electronic processing of the material. Careful efforts are made in every census to keep the errors in each step at an acceptably low level. Quality control and check measures are utilized throughout the census operation.

In the manual editing and coding operation, a sample of the work of each coder was verified, and a coder who showed consistently high error rates was retrained. A coder who still did not produce work of acceptable quality after retraining was removed from the coding operation. In addition, provision was made for correction of any work units for which the error rate exceeded an acceptable level. Information on error rates will be given in later publications.

As was done for the 1950 and 1960 censuses, evaluative material on many aspects of the 1970 census will be published as soon as the appropriate data are accumulated and analyzed. A major concern in the evaluation work is to ascertain, insofar as possible, the degree of completeness of the count of both population and housing units.

EDITING OF UNACCEPTABLE DATA

The objective of the processing operation is to produce a set of statistics that describes the population as accurately and clearly as possible. To meet this objective, certain unacceptable entries were edited.

In the field, questionnaires were reviewed for omissions and certain inconsistencies by a census clerk or enumerator, and a followup was made for missing information. The major review occurred in the central processing office, where the editing and coding operation provided an opportunity to correct obvious errors in the respondents' entries for those items which required manual processing. In coding relationship to household head, for example, the clerk made use of written entries, which the computer is not able to read, in determining the correct entry where the machine readable item was blank or contained conflicting information. For a few of the items, the respondents' entries were reviewed for reasonableness or consistency on the basis of other information on the questionnaire. As a rule, however, editing was performed by hand only when it could not be done effectively by machine.

Because of limitations of computer capacity and other resources, a number of complicated editing steps were not introduced when the effect upon the final data was considered to be small. Thus, there may be a small number of cases having unlikely combinations of characteristics.

As one of the first steps in mechanical editing, the configuration of marks on the questionnaire was scanned electronically to determine whether it contained information for a person or merely spurious marks. If the questionnaire contained entries for at least two of the basic characteristics (relationship, sex, race, age, marital status), or for at least two relevant sample characteristics, the inference was made that the marks represented a person. Names were not used as a criterion of the presence of a person because the electronic scanning was unable to distinguish between a name and any other entry in the name space.

If any characteristics for a person were missing, they were, in most cases, supplied by allocation. Allocations, or assignments of acceptable codes in place of unacceptable entries, were needed most often where an entry for a given item was lacking or where the information reported for a person on that item was inconsistent with other information for the person. As in earlier censuses, the general procedure for changing unacceptable entries was to assign an entry that was consistent with entries for other persons with similar characteristics. Thus, a person who was reported as a 20-year-old son of the household head, but for whom marital status was not reported, was assigned the same marital status as that of the last son processed in the same age group. The assignment of acceptable codes in place of blanks or unacceptable entries, it is believed, enhances the usefulness of the data. The allocation technique may be illustrated by the procedure used in the assignment of wage or salary income. The allocation of this item was carried out in the following steps:

1. The computer stored reported wage or salary income entries, by sex, age, relationship to household head, race, major occupation group, class of worker, and number of weeks worked in 1969, for persons 14 years old and over who worked in 1969.

2. Each stored wage or salary entry was retained in the computer only until a succeeding person having the same characteristics and having wage or salary income reported was processed through the computer during the mechanical edit operation. Then the reported wage or salary income entry of the succeeding person was stored in place of the one previously stored.

3. When the wage or salary income of a person 14 years old or over who worked in 1969 was not reported or the entry was unacceptable, the wage or salary income assigned to this person was that stored for the last person who otherwise had the same characteristics.

This process insured that the distribution of wage or salary income assigned by the computer for persons of a given set of characteristics would correspond closely to the wage or salary income distribution of persons who had reported that item in the current census.

The editing process also includes another type of correction; namely, the assignment of a full set of characteristics for a person. When there was indication that a housing unit was occupied but the questionnaire contained no information for any person, a previously processed household was selected as a substitute and the full set of characteristics for each substitute person was duplicated. These duplications fall into two classes: (1) "persons substituted due to noninterview," e.g., a housing unit indicated as occupied but the occupants were not listed on the questionnaire and (2) "persons substituted due to mechanical failure," e.g., where the questionnaire page on which persons are listed was not properly microfilmed.

Specific tolerances were established for the number of computer allocations and substitutions that would be permitted. If the number of corrections was beyond tolerance, the questionnaires in which the errors occurred were clerically reviewed. If it was found that the errors resulted from damaged questionnaires, from improper microfilming, from faulty reading by FOSDIC of undamaged questionnaires, or from other types of machine failure, the questionnaires were reprocessed.

ALLOCATION TABLES

The extent of the various editing and allocation procedures and their effect on each of the subjects is shown in tables B-1 to B-5 (which follow table 39) and tables C-1 to C-4 (which follow table 137). Information on the number of substitutions for each State, with separate counts of those for enumeration reasons and those for processing reasons, is presented in the United States Summary report, PC(1)-B1. Tables B-1 to B-5 relate to 100-percent tabulations and tables C-1 to C-4 relate to sample tabulations.

There is a difference in the method of counting allocations between tables B-1 and B-5 on the one hand, and tables B-3 and B-4 on the other hand. In tables B-1 and B-5, a person with one or more allocations whose record is duplicated for substitution purposes is counted twice (i.e., both "originally" and as a "substitute"). In tables B-3 and B-4, such a person is counted only once.

The sum of the percentages of persons having assignments in each population characteristic is greater than the number of persons with one or more allocations because some persons had allocations for more than one characteristic. Not tallied, and therefore not included in these tables, are the allocations for missing information on quarter of year of birth; these allocations were made on a random basis.

The number of persons and housing units enumerated in the sample is shown in table C-1. The extent of allocations or substitutions for nonresponse or inconsistency is shown for selected characteristics in tables C-2 and C-4; and distributions as they appeared before allocations or substitutions are shown in table C-3.

In table C-1, the "unweighted sample count" of persons and housing units represents a count of one for each sample person and each sample housing unit readable by the computer; thus, it is the unweighted universe before ratio estimation.

In table C-2 "persons with two or more sample characteristics reported" are persons with acceptable entries in two or more relevant sample characteristics (for example, entries in weeks worked in 1969 and wage or salary income for persons 14 years old and over). The column "persons with sample information" in table C-4 refers to the same information for specific places and counties. The characteristics listed in tables C-2 and C-4 cover most of the items that are published in this report. For each subject in tables C-2 and C-4 the universe applicable to the charac-

teristic is described, along with the percent of persons in the relevant universe for whom nonresponses were allocated. In table C-2, the number of persons in each universe is also shown.

The figures in table C-3, representing distributions for each subject as they appeared before substitution and allocation for nonresponse, may be compared with the corresponding statistics in the appropriate detailed table, category by category, to measure the net effect of substitution and allocation.

The allocation rates shown in these tables are generally, but not always, comparable with the rates shown in similar tables in the 1960 reports. Certain types of response allocation are included as allocations in 1970 but were not so included in 1960. For example, allocations of race are counted for household members when allocating from the race of the household head, and allocations of marital status and sex are counted for persons identified as wives of household heads or as heads of households with wife present. Moreover, the characteristics of sample persons in substituted households are counted as allocations in 1970 but were not so counted in 1960 (except when the person in the substituted household had a nonresponse on a given characteristic).

In tables C-2 and C-4 the allocated characteristics resulting from substituted households include only those substitutions made when a housing unit enumerated as occupied contained no information for any person. Other substitutions made in the processing of the 100-percent data are mainly accounted for in the sample processing by adjusting the weights of the sample persons.

The nonresponse rates shown in tables C-2 to C-4 do not necessarily reflect omissions on the questionnaire. Processing difficulties, particularly as related to the income items, resulted in the loss of some answers and the subsequent treatment of those entries as blanks.

SAMPLE DESIGN

For persons living in housing units at the time of the 1970 census, the housing unit, including all its occupants, was the sampling unit; for persons in group quarters identified in advance of the census, the sampling unit was the person. In nonmail areas, the enumerator canvassed his assigned area and listed all housing units in an address register sequentially in the order in which he first visited the units whether or not he completed the interview. Every fifth line of the address register was designated as a sample line, and the housing units listed on these lines were included in the sample. Each enumerator was given a random line on which he was to start listing and the order of canvassing was indicated in advance, although the instructions allowed some latitude in the order of visiting addresses. In mail areas, the list of housing units was prepared prior to Census Day either by employing commercial mailing lists corrected through the cooperation of the post office or by listing the units in a process similar to that used in nonmail areas. As in other areas, every fifth housing unit of these lists was designated to be in the sample. In group quarters, all persons were listed and every fifth person was selected for the sample.

This 20-percent sample was subdivided into a 15-percent and a 5-percent sample by designating every fourth 20-percent sample unit as a member of the 5-percent sample. The remaining sample units became the 15-percent sample. Two types of sample questionnaires were used, one for the 5-percent and one for the 15-percent sample units. Some questions were included on both the 5-percent and 15-percent sample forms and therefore appear for a sample of 20 percent of the units in the census. Other items appeared on either the 15-percent or the 5-percent questionnaires. The sample rates for various subjects collected in the census are given in Appendix B.

Although the sampling procedure did not automatically insure an exact 20-percent sample of persons or housing units in each locality, the sample design was unbiased if carried through according to instructions; generally for larger areas the deviation from 20 percent was found to be quite small. Biases may have arisen, however, when the enumerator failed to follow his listing and sampling instructions exactly. Quality control procedures were used throughout the census process, however, and where there was clear evidence that the sampling procedures were not properly followed, some enumerators' assignments were returned to the field for resampling. The percent of the total population and housing units enumerated in the sample is shown in table C-1, chapter C. The computation of these proportions excluded several classes of the population for which no attempt at sampling was made. These were the relatively small numbers of persons and housing units (in most States, less than one percent) added to the enumeration from the post-census post office check, the various supplemental forms, and the special check of vacant units. However, the ratio estimation procedure described below adjusts the sample data to reflect these classes of population and housing units.

RATIO ESTIMATION

The statistics based on 1970 census sample data are estimates made through the use of ratio estimation procedures, which were applied separately for population and for housing data for each of the 5-, 15-, and 20-percent samples. The first step in carrying through the ratio estimates was to establish the areas within which separate ratios were to be prepared. These are referred to as "weighting areas." For the 15- and 20-percent samples, the weighting areas contained a minimum population size of 2,500. The weighting areas used for the 5-percent ratio estimate were larger areas, having a minimum population size of 25,000 and comprising combinations of the weighting areas used for the 15- and 20-percent samples. Weighting areas were established by a mechanical operation on the computer and were defined to conform, as nearly as possible, to areas for which tabulations are produced. Where these areas do not agree, there may be some differences between complete counts and sample estimates.

The ratio estimation process for population operated in three stages. The first stage employed 19 household-type groups (the first of which was empty by definition). The second stage used two groups, head of household and not head of household, and the third stage used 24 age-sex-race groups.

Group	
	STAGE I
	Male head with own children under 18
1	1-person household
2	2-person household
3	3-person household
.	.
.	.
6	6-or-more-person household
	Male head without own children under 18
7-12	1-person to 6-or-more-person households
	Female head
13-18	1-person to 6-or-more-person households
19	*Group quarters persons*
	STAGE II
20	*Head of household*
21	*Not head of household (including persons in group quarters)*
	STAGE III
	Male Negro
22	Age under 5 years
23	5-13
24	14-24
25	25-44
26	45-64
27	65 and older
	Male, not Negro
28-33	Same age groups as for Male Negro
	Female Negro
34-39	Same age groups as for Male Negro
	Female, not Negro
40-45	Same age groups as for Male Negro

At each stage, for each of the groups, the ratio of the complete count to the weighted sample count of the population in the group was computed and applied to the weight of each sample person in the group. This operation was performed for each of the 19 groups in the first stage, then for the two groups in the second stage and finally for the 24 groups in the third stage. As a rule, the weighted sample counts within each of the 24 groups in the third stage should agree with the complete counts for the weighting areas. Close, although not exact, consistency can be expected for the two groups in the second stage and the 19 groups in the first stage.

There are some exceptions to this general rule, however. As indicated above, there may be differences between the complete counts and sample estimates when the tabulation area is not made up of whole weighting areas. Furthermore, in order to increase the reliability, a separate ratio was not computed in a group whenever certain criteria pertaining to the complete count of persons and the magnitude of the weight were not met. For example, for the 20-percent sample the complete count of persons in a group had to exceed 85 persons and the ratio of the complete count to the unweighted sample count could not exceed 20. Where these criteria were not met, groups were combined in a specific order until the conditions were met. Where this occurred, consistency between the weighted sample and the complete counts would apply as indicated above for the combined group but not necessarily for each of the groups in the combination.

Each sample person was assigned an integral weight to avoid the complications involved in rounding in the final tables. If, for example, the final weight for a 20-percent group was 5.2, one-fifth of the persons in the group (selected at random) were assigned a weight of 6 and the remaining four-fifths a weight of 5.

The estimates realize some of the gains in sampling efficiency that would have resulted had the population been stratified into the groups before sampling. The net effect is a reduction in both the sampling error and possible bias of most statistics below what would be obtained by weighting the results of the sample by a uniform factor (e.g., by weighting the 20-percent sample results by a uniform factor of 5). The reduction in sampling error will be trivial for some items and substantial for others. A byproduct of this estimation procedure is that estimates for this sample are, in general, consistent with the complete count for the population groups used in the estimation procedure. A more complete discussion of the technical aspects of these ratio estimates will be presented in a separate report.

SAMPLING VARIABILITY

The estimates from the 20-, 15-, and 5-percent sample tabulations are subject to sampling variability. The standard errors of these estimates can be approximated by using the data in tables D through F. The chances are about 2 out of 3 that the difference (due to sampling variability) between the sample estimate and the figure that would have been obtained from a complete count of the population is less than the standard error. The chances are about 19 out of 20 that the difference is less than twice the standard error and about 99 out of 100 that it is less than 2½ times the standard error. The amount by which the estimated standard error must be multiplied to obtain other odds deemed more appropriate can be found in most statistical textbooks. The sampling errors may be obtained by using the factors shown in table F in conjunction with table D for absolute numbers and in conjunction with table E for percentages. These tables reflect the effect of simple response variance, but not of bias arising in the collection, processing, and estimation steps nor of the correlated errors enumerators introduce; estimates of the magnitude of some of these factors in the total error are being evaluated and will be published at a later date.

Table D shows approximate standard errors of estimated numbers for most statistics based on the 20-percent sample. In determining the figures for this table, some aspects of the sample design, the estimation process, and the population of the area over which the data have been compiled are ignored. Table E shows standard errors of most percentages based on the 20-percent sample. Linear interpolation in tables D and E will provide approximate results that are satisfactory for most purposes.

Table F provides a factor by which the standard errors shown in tables D and E should be multiplied to adjust for the combined effect of the sample design, the estimation procedure, and the sample size (i.e., whether 20-percent, 15-percent, or 5-percent). Some items collected from the 20-percent sample are tabulated from the 15-percent or 5-percent samples in specific tables. Table B shows the tabulation rate for data published in tables 40-137 (chapter C). Table C shows the tabulation rate for data published in tables 138-216 (chapter D).

To estimate the standard error for a given characteristic based on the 15- or 5-percent sample, or for a more precise estimate for the 20-percent sample, locate in table F the factor applying to the characteristic and sample size used to tabulate the data and multiply this factor by the standard error found in table D or E. If the estimate is not identified in table F, use the factor shown for "all other." Where data are shown as cross-classifications of two characteristics, locate and use the larger factor. Similarly, if an item, although collected on one sample basis, has been tabulated for a smaller sample, use the factor appropriate for the smaller sample.

The standard errors estimated from these tables are not directly applicable to differences between two sample estimates. In order to estimate the standard error of a difference, the tables are to be used somewhat differently in the three following situations:

1. For a difference between the sample figure and one based on a complete count (e.g., arising from comparisons between 1970 sample statistics and complete-count statistics for 1960 or 1950), the standard error is identical with the standard error of the 1970 estimate alone.

2. For a difference between two sample figures (that is, one from 1970 and the other from 1960, or both from the same census year), the standard error is approximately the square root of the sum of the squares of the standard errors of each estimate considered separately. This formula will represent the actual standard error quite accurately for the difference between estimates of the same characteristics in two different areas, or for the difference between separate and uncorrelated characteristics in the same area. If, however, there is a high positive correlation between the two characteristics, the formula will overestimate the true standard error. The approximate standard

error for the 1970 sample figure is derived directly from tables D through F. The standard error of a 25-percent 1960 sample figure may be obtained from the relevant 1960 census report or an approximate value may be obtained by multiplying the appropriate value in table D or E by 0.9.

3. For a difference between two sample estimates, one of which represents a subclass of the other, the tables can be used directly with the difference considered as the sample estimate.

The sampling variability of the medians presented in certain tables (median age, median years of school completed, and median income) depends on the size of the base and on the distribution on which the median is based. An approximate method for measuring the reliability of an estimated median is to determine an interval about the estimated median such that there is a stated degree of confidence the true median lies within the interval. As the first step in estimating the upper and lower limits of the interval (that is, the confidence limits) about the median, compute one-half the number on which the median is based (designated $\frac{N}{2}$). From table D, following the method outlined in other parts of this section, compute the standard error of an estimated number equal to $\frac{N}{2}$. Subtract this standard error from $\frac{N}{2}$. Cumulate the frequencies (in the table on which the median is based) until the total first exceeds the difference between $\frac{N}{2}$ and its standard error and by linear interpolation obtain a value corresponding to this number. In a corresponding manner, add the standard error to $\frac{N}{2}$, cumulate the frequencies in the table, and obtain a value in the table on which the median is based corresponding to the sum of $\frac{N}{2}$ and its standard error. The chances are about 2 out of 3 that the median would lie between these two values. The range for 19 chances out of 20 and for 99 in 100 can be computed in a similar manner by multiplying the standard error by the appropriate factors before subtracting from and adding to one-half the number reporting the characteristic. Interpolation to obtain the values corresponding to these numbers gives the confidence limits for the median.

The sampling variability of a mean, such as the number of children ever born per 1,000 women or mean income, presented in certain tables, depends on the variability of the distribution on which the mean is based, the size of the sample, the sample design (for example, the use of households as the sampling unit), and the use of ratio estimates.

An approximation to the variability of the mean may be obtained as follows: compute the standard deviation of the distribution on which the mean is based; divide this figure by the square root of one-fifth of the total units in the distribution; multiply this quotient by the factor from table F appropriate to the statistic and the actual sample rate on which the mean is based. If the distribution is not published in the detailed tables, calculate the standard deviation from a comparable distribution for a larger area or for a similar population group; divide by the square root of one-fifth of the units on which the mean of interest is based; multiply the quotient by the factor from table F.

TABLE B. **Tabulation Rates for Subjects in Tables 40 to 137 (Chapter C)**

(Cross-classifications of two or more items are tabulated on the smaller rate)

Subject	Tabulation rate (percent)	Subject	Tabulation rate (percent)	Subject	Tabulation rate (percent)
Sex	20	Mother tongue	15	Activity 5 years ago	20
Race	20	Spanish surname	15	Place of work	15
Age	20	Year moved into present house	15	Means of transportation to work	15
Household relationship	20	Residence in 1965	15	Occupation	20
Family composition	20	School enrollment	[1]15	Industry	20
Families and subfamilies	20	Years of school completed	20	Class of worker	20
Type of group quarters	20	Vocational training	5	Income	20
Marital status	20	Veteran status	15	Poverty status	20
Marital history	5	Disability	5	Tenure of housing unit	20
Children ever born	20	Employment status	20	Farm residence	20
State of birth	20	Labor force participation	20	Value of housing unit	20
Country of origin	15	Weeks worked in 1969	20	Gross rent	20
Spanish origin or descent	5			Plumbing facilities	20
Nativity and parentage	15				

[1]The data under the heading "Males 16 to 21 years old not attending school" and the data on school enrollment for persons not in the labor force are based on question 22, which has a 20-percent sample tabulation rate.

TABLE C. **Tabulation Rates for Subjects in Tables 138 to 216 (Chapter D)**

Table number	Tabulation rate (percent)	Table number	Tabulation rate (percent)	Table number	Tabulation rate (percent)
138-142	15	159-160	5	179-181	[1]20
143, 144	5	161	[1]20	182	15
145, 146	15	162	([2])	183-189	[1]20
147, 148	[1]20	163-168	[1]20	190, 191	15
149, 150	5	169	5	192-214	[1]20
151	15	170-177	[1]20	215	15
152	5	178	5	216	[1]20
153-158	[1]20				

[1]Data for the Spanish heritage population are tabulated from the 15-percent sample.

[2]In this table, data on marital history are based on the 5-percent sample; data on State of birth and ethnic group are based on the 15-percent sample; and all other data are based on the 15-percent sample when shown for persons of Spanish heritage and on the 20-percent sample when shown for other subgroups and the total.

TABLE D. **Approximate Standard Error of Estimated Number Based on 20-Percent Sample**

(Range of 2 chances out of 3; for factors to be applied see table F and text)

Estimated number[1]	Number of persons, families, or households in area[2]								
	1,000	10,000	25,000	100,000	250,000	1,000,000	3,000,000	5,000,000	20,000,000
50	15	15	15	15	15	15	15	15	15
100	20	20	20	20	20	20	20	20	20
250	30	30	30	30	30	30	30	30	30
500	30	45	45	45	45	45	45	45	45
1,000	...	60	60	65	65	65	65	65	65
2,500	...	90	95	100	100	100	100	100	100
5,000	...	100	130	140	140	140	140	140	140
10,000	...	...	150	190	200	200	200	200	200
15,000	...	...	150	230	240	240	240	240	240
25,000	...	...	...	270	300	310	310	320	320
50,000	...	...	...	320	400	440	440	440	450
75,000	...	...	...	270	450	520	540	540	540
100,000	...	...	...	...	490	600	620	630	630

[1] For estimated numbers larger than 100,000, the relative errors are somewhat smaller than for 100,000.

[2] This relates to the smallest complete geographic area to which the estimate under consideration pertains. Thus, the area may be the State, city, county, standard metropolitan statistical area, urbanized area, or the urban or rural portion of the State or county. The rural farm or rural nonfarm persons in the State or county, the Negro families, etc., do not represent complete areas.

TABLE E. **Approximate Standard Error of Estimated Percentage Based on 20-Percent Sample**

(Range of 2 chances out of 3; for factors to be applied see table F and text)

Estimated percentage	Base of percentage						
	500	1,000	2,500	10,000	25,000	100,000	250,000
2 or 98	1.3	0.9	0.6	0.3	0.2	0.1	0.1
5 or 95	2.0	1.4	0.9	0.4	0.3	0.1	0.1
10 or 90	2.7	1.9	1.2	0.6	0.4	0.2	0.1
25 or 75	3.9	2.7	1.7	0.9	0.5	0.3	0.2
50	4.5	3.2	2.0	1.0	0.6	0.3	0.2

TABLE F. **Factor to Be Applied to Standard Error**

(For cross-classifications of two or more subjects, locate the factor for each subject at the appropriate tabulation rate and use the largest)

Subject	Factor if tabulation rate is—			Subject	Factor if tabulation rate is—		
	20 percent	15 percent	5 percent		20 percent	15 percent	5 percent
Race	1.0	1.2	2.2	Labor force status or participation	0.8	0.9	1.7
Age	0.8	1.0	1.8	Unemployed	1.1	1.3	2.4
Household relationship	0.5	0.6	1.1	Hours worked	0.8	0.9	...
Families and subfamilies[1]	0.6	0.7	...	Weeks worked in 1969	0.8	0.9	...
Unrelated individuals	1.2	1.4	...	Year last worked	0.8	0.9	...
Type of group quarters	0.5	0.6	...	Activity 5 years ago	...	0.9	1.7
Marital status	0.6	0.8	1.4	Place of work	...	1.3	...
Marital history	...	...	2.1	Means of transportation to work	...	1.3	...
Own children under 5 years old	0.8	1.0	1.8	Occupation	1.1	1.3	2.4
State of birth	1.3	1.6	3.0	Industry	1.0	1.2	...
Country of origin	...	1.6	...	Class of worker	1.0	1.2	...
Country of birth	...	1.6	3.0	Income in 1969			
Spanish origin or descent[2]	...	...	3.0	Persons	1.0	1.2	2.3
Spanish heritage[2]	...	1.6	...	Families[1]	1.1	1.3	2.3
Nativity and parentage	...	1.6	3.0	Poverty status in 1969			
Mother tongue	...	1.8	...	Persons	1.9	2.2	4.0
Year moved into present house	...	1.9	...	Families[1]	1.0	1.2	2.2
Residence in 1965	...	2.1	3.8	Housing characteristics			
Rural farm-nonfarm residence	1.5	1.8	3.3	Tenure[1]	0.2	0.3	...
School enrollment	0.8	1.0	...	Other[1]	1.0	1.2	...
Years of school completed	1.0	1.2	2.3	All other	1.0	1.2	2.2
Vocational training	...	...	1.7				
Veteran status	...	0.9	...				
Disability	...	...	2.4				

[1]When determining the standard error of a number relating to families or households, use the number of families or households in the area for selecting the appropriate column in table D.

[2]Tabulations of characteristics for persons of Spanish heritage (Puerto Rican birth or parentage, Spanish language or Spanish surname) are based on the 15-percent sample, and the appropriate factor is found in the 15-percent column for the subject or for Spanish heritage, whichever is the larger. Tabulations of characteristics for persons of Spanish origin or descent are based on the 5-percent sample and the appropriate factor is found in the 5-percent column for the subject or for Spanish origin or descent, whichever is the larger.

ILLUSTRATION. Assume table 150 shows that a total of 100,000 males in an area of 2,000,000 have 4 years of high school and some vocational training. This represents a cross-classification of years of school completed and vocational training, and the tabulation rate is 5 percent, according to table C. The largest of the factors for those subjects at the 5-percent tabulation rate is found in table F to be 2.3. Interpolation in table D shows that the approximate standard error of an estimate of 100,000 in an area of 2,000,000 when based on a 20-percent sample is about 610. The product of 2.3 times 610 is 1403 which means the chances are about 2 out of 3 the results of a complete census will not differ by more than 1403 from the estimated 100,000 when based on the 5-percent sample. It also follows there are only 5 chances in 100 that a complete census would differ by as much as 2806; that is, by about 2 times the number estimated from tables D and F.

Appendix D.—PUBLICATION AND COMPUTER SUMMARY TAPE PROGRAM

The results of the 1970 Census of Population and Housing are being issued in the form of printed reports, microfiche copies of the printed reports, computer summary tapes, computer printouts, and microfilm. Listed below are short descriptions of the final report series and computer tapes, as currently planned. More detailed information on this program can be obtained by writing to the Publications Distribution Section, Bureau of the Census, Washington, D.C. 20233.

Population Census Reports

Volume I.
CHARACTERISTICS OF THE POPULATION

This volume consists of 58 "parts"—number 1 for the United States, numbers 2 through 52 for the 50 States and the District of Columbia in alphabetical order, and numbers 53 through 58 for Puerto Rico, Guam, Virgin Islands, American Samoa, Canal Zone, and Trust Territory of the Pacific Islands, respectively. Each part, which is a separate clothbound book, contains four chapters designated as A, B, C, and D. Each chapter (for each of the 58 areas) is issued as an individual paperbound report in four series designated as PC(1)-A, B, C, and D, respectively. The 58 PC(1)-A reports have been specially assembled and issued in a clothbound book, designated as Part A.

- Series PC(1)-A.
  NUMBER OF INHABITANTS

Final official population counts are presented for States, counties by urban and rural residence, standard metropolitan statistical areas (SMSA's), urbanized areas, county subdivisions, all incorporated places, and unincorporated places of 1,000 inhabitants or more.

- Series PC(1)-B.
  GENERAL POPULATION CHARACTERISTICS

Statistics on age, sex, race, marital status, and relationship to head of household are presented for States, counties by urban and rural residence, SMSA's, urbanized areas, county subdivisions, and places of 1,000 inhabitants or more.

- Series PC(1)-C.
  GENERAL SOCIAL AND ECONOMIC CHARACTERISTICS

Statistics are presented on nativity and parentage, State or country of birth, Spanish origin, mother tongue, residence 5 years ago, year moved into present house, school enrollment (public or private), years of school completed, vocational training, number of children ever born, family composition, disability, veteran status, employment status, place of work, means of transportation to work, occupation group, industry group, class of worker, and income (by type) in 1969 of families and individuals. Each subject is shown for some or all of the following areas: States, counties (by urban, rural-nonfarm, and rural-farm residence), SMSA's, urbanized areas, and places of 2,500 inhabitants or more.

- Series PC(1)-D.
  DETAILED CHARACTERISTICS

These reports cover most of the subjects shown in Series PC(1)-C, above, presenting the data in considerable detail and cross-classified by age, race, and other characteristics. Each subject is shown for some or all of the following areas: States (by urban, rural-nonfarm, and rural-farm residence), SMSA's, and large cities.

Volume II.
SUBJECT REPORTS

Each report in this volume, also designated as Series PC(2), concentrates on a particular subject. Detailed information and cross-relationships are generally provided on a national and regional level; in some reports, data for States or SMSA's are also shown. Among the characteristics covered are national origin and race, fertility, families, marital status, migration, education, unemployment, occupation, industry, and income.

Housing Census Reports

Volume I.
HOUSING CHARACTERISTICS FOR STATES, CITIES, AND COUNTIES

This volume consists of 58 "parts"—number 1 for the United States, numbers 2 through 52 for the 50 States and the District of Columbia in alphabetical order, and numbers 53 through 58 for Puerto Rico, Guam, Virgin Islands, American Samoa, Canal Zone, and Trust Territory of the Pacific Islands, respectively. Each part, which is a separate clothbound book, contains two chapters designated as A and B. Each chapter (for each of the 58 areas) is issued as an individual paperbound report in two series designated as HC(1)-A and B, respectively.

- Series HC(1)-A.
  GENERAL HOUSING CHARACTERISTICS

Statistics on tenure, kitchen facilities, plumbing facilities, number of rooms, persons per room, units in structure, mobile home, telephone, value, contract rent, and vacancy status are presented for some or all of the following areas: States (by urban and rural residence), SMSA's, urbanized areas, places of 1,000 inhabitants or more, and counties.

- Series HC(1)-B.
  DETAILED HOUSING CHARACTERISTICS

Statistics are presented on a more detailed basis for the subjects included in the Series HC(1)-A reports, as well as on such additional subjects as year moved into unit, year structure built, basement, heating equipment, fuels, air conditioning, water and sewage, appliances, gross rent, and ownership of second home. Each subject is shown for some or all of the following areas: States (by urban, rural-nonfarm, and rural-farm residence), SMSA's, urbanized areas, places of 2,500 inhabitants or more, and counties (by rural and rural-farm residence).

Volume II.
METROPOLITAN HOUSING CHARACTERISTICS

These reports, also designated as Series HC(2), cover most of the 1970 census housing subjects in considerable detail and cross-classification. There is one report for each SMSA, presenting data for the SMSA and its central cities and places of 50,000 inhabitants or more, as well as a national summary report.

Volume III.
BLOCK STATISTICS

One report, under the designation Series HC(3), is issued for each urbanized area showing data for individual blocks on selected housing and population subjects. The series also includes reports for the communities outside urbanized areas which have contracted with the Census Bureau to provide block statistics from the 1970 census.

Volume IV.
COMPONENTS OF INVENTORY CHANGE

This volume will contain data on the disposition of the 1960 inventory and the source of the 1970 inventory, such as new construction, conversions, mergers, demolitions, and other additions and losses. Cross-tabulations of 1970 and 1960 characteristics for units that have not changed and characteristics of the present and previous residence of recent movers will also be provided. Statistics will be shown for 15 selected SMSA's and for the United States and regions.

Volume V.
RESIDENTIAL FINANCE

This volume will present data regarding the financing of privately owned nonfarm residential properties. Statistics will be shown on amount of outstanding mortgage debt, manner of acquisition of property, homeowner expenses, and other owner, property, and mortgage characteristics for the United States and regions.

Volume VI.
ESTIMATES OF "SUBSTANDARD" HOUSING
This volume will present counts of "substandard" housing units for counties and cities, based on the number of units lacking plumbing facilities combined with estimates of units with all plumbing facilities but in "dilapidated" condition.

Volume VII.
SUBJECT REPORTS
Each report in this volume will concentrate on a particular subject. Detailed information and cross-classifications will generally be provided on a national and regional level; in some reports, data for States or SMSA's may also be shown. Among the subjects to be covered are housing characteristics by household composition, housing of minority groups and senior citizens, and households in mobile homes.

Joint Population-Housing Reports

Series PHC(1).
CENSUS TRACT REPORTS
This series contains one report for each SMSA, showing data for most of the population and housing subjects included in the 1970 census.

Series PHC(2).
GENERAL DEMOGRAPHIC TRENDS FOR METROPOLITAN AREAS, 1960 TO 1970
This series consists of one report for each State and the District of Columbia, as well as a national summary report, presenting statistics for the State and for SMSA's and their central cities and constituent counties. Comparative 1960 and 1970 data are shown on population counts by age and race and on such housing subjects as tenure, plumbing facilities, value, and contract rent.

Series PHC(3).
EMPLOYMENT PROFILES OF SELECTED LOW-INCOME AREAS
This series consists of 76 reports, each presenting statistics on the social and economic characteristics of the residents of a particular low-income area. The data relate to low-income neighborhoods in 51 cities and seven rural poverty areas. Each report provides statistics on employment and unemployment, education, vocational training, availability for work, job history, and income, as well as on value or rent and number of rooms in the housing unit.

Additional Reports

Series PHC(E).
EVALUATION REPORTS
This open series will present the results of the extensive evaluation program conducted as an integral part of the 1970 census program, and relating to such matters as completeness of enumeration and quality of the data on characteristics.

Series PHC(R).
PROCEDURAL REPORTS
This open series presents information on various administrative and methodological aspects of the 1970 census, and will include a comprehensive procedural history of the 1970 census.

Computer Summary Tapes

The major portion of the results of the 1970 census are produced in a set of six tabulation counts. To help meet the needs of census users, these counts are designed to provide data with much greater subject and geographic detail than it is feasible or desirable to publish in printed reports. The data so tabulated are generally available—subject to suppression of certain detail where necessary to protect confidentiality—on magnetic computer tape, printouts, and microfilm, at the cost of preparing the copy.

First Count—source of the PC(1)-A reports; contains about 400 cells of data on the subjects covered in the PC(1)-B and HC(1)-A reports and tabulated for each of the approximately 250,000 enumeration districts in the United States.

Second Count—source of the PC(1)-B, HC(1)-A, and part of the PHC(1) reports; contains about 3,500 cells of data covering the subjects in these reports and tabulated for the approximately 35,000 tracts and 35,000 county subdivisions in the United States.

Third Count—source of the HC(3) reports; contains about 250 cells of data on the subjects covered in the PC(1)-B and HC(1)-A reports and tabulated for approximately 1,500,000 blocks in the United States.

Fourth Count—source of the PC(1)-C, HC(1)-B, and part of the PHC(1) reports; contains about 13,000 cells of data covering the subjects in these reports and tabulated for the approximately 35,000 tracts and 35,000 county subdivisions in the United States; also contains about 30,000 cells of data for each county.

Fifth Count—contains approximately 800 cells of population and housing data for 5-digit ZIP code areas in SMSA's and 3-digit ZIP code areas outside SMSA's; the ZIP code data are available only on tape.

Sixth Count—source of the PC(1)-D and HC(2) reports; contains about 260,000 cells of data covering the subjects in these reports and tabulated for States, SMSA's, and large cities.

The tapes are generally organized on a State basis. To use the First Count and Third Count tapes, it is necessary to purchase the appropriate enumeration district and block maps.

The term "cells" used herein to indicate the scope of subject content of the several counts refers to each figure or statistic in the tabulation for a specific geographic area. For example, in the Third Count, there are six cells for a cross-classification of race by sex: three categories of race (white, Negro, other race) by two categories of sex (male, female).

In addition to the above-mentioned summary tapes, the Census Bureau makes available for purchase certain sample tape files containing population and housing characteristics as shown on individual census records. These files contain no names or addresses, and the geographic identification is sufficiently broad to protect confidentiality. There are six files, each containing a 1-percent national sample of persons and housing units. Three of the files are drawn from the population covered by the census 15-percent sample and three from the population in the census 5-percent sample. Each of these three files provides a different type of geographic information: One identifies individual large SMSA's and, for the rest of the country, groups of counties; the second identifies individual States and, where they are sufficiently large, provides urban-rural and metropolitan-nonmetropolitan detail; and the third identifies State groups and size of place, with each individual record showing selected characteristics of the person's neighborhood.

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