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AND HOUSING : 1960**
Final Report PHC(1)-118

CENSUS TRACTS

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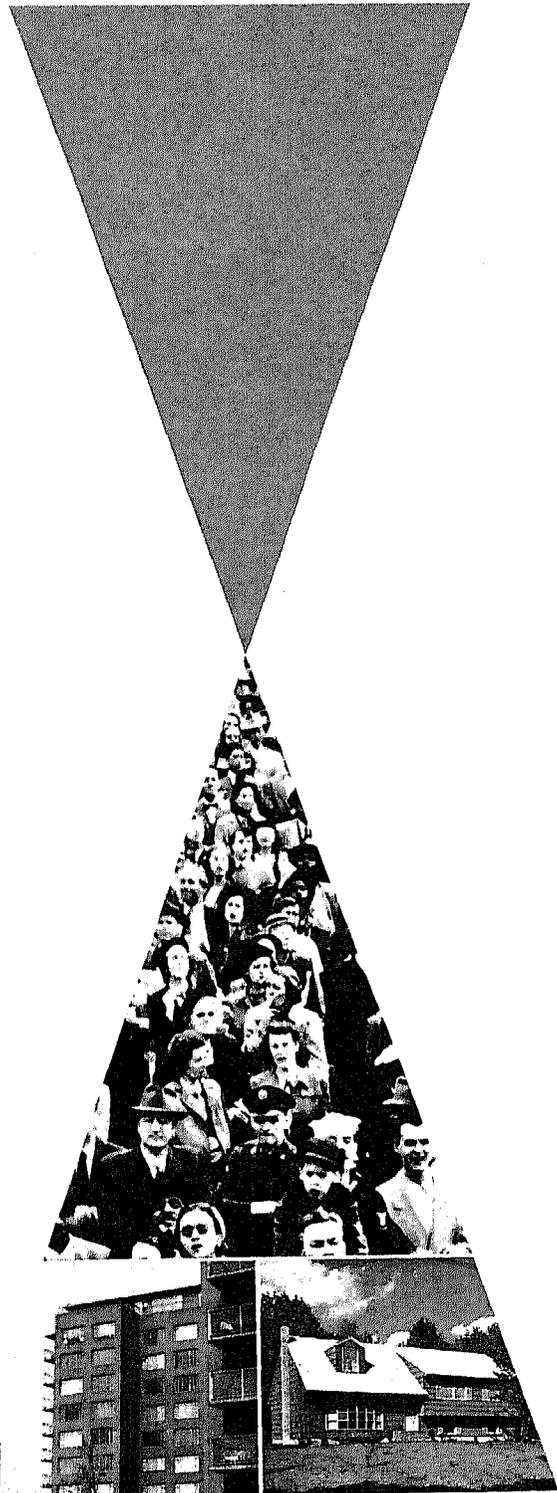
Standard Metropolitan Statistical Area

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PREFACE

This report presents statistics by census tracts from the 1960 Censuses of Population and Housing. Legal provision for these censuses, which were conducted as of April 1, 1960, was made in the Act of Congress of August 31, 1954 (amended August 1957), which codified Title 13, United States Code.

Census tracts are small, permanently established, geographical areas into which large cities and adjacent areas have been divided for statistical purposes. The boundaries of tracts are developed by a local committee and approved by the Bureau of the Census. For all areas where census tracts are established, a Census Tract Key Person is appointed by the Director of the Census to serve as the representative of the Bureau to the local committee on all matters concerning census tracts. Usually he is chairman or secretary of the local census tract committee. The historical background of the concept of census tracts and a more detailed definition are given in the Introduction to this report.

The PHC(1) publication series consists of 180 reports and provides data for approximately 23,000 census tracts. The areas covered by these reports are listed on page 12. A description of the other final reports from the 1960 Censuses of Population and Housing is presented on pages 11 and 12.

The census program was designed in consultation with a number of advisory committees and many individuals in order to maximize the usefulness of the data. Among the groups organized for this purpose were the Council of Population and Housing Census Users, Technical Advisory Committee for the 1960 Population Census, Housing Advisory Committee, and the Federal Agency Population and Housing Census Council (sponsored by the U.S. Bureau of the Budget). The persons who served with these groups represented a wide range of interest in the census program; their affiliations included universities, private industry, research organizations, labor groups, Federal agencies, State and local governments, and professional associations.

ACKNOWLEDGMENTS

A large number of persons participated in the various activities of the 1960 Censuses of Population and Housing. Primary responsibilities were exercised by many of the persons listed on the preceding page. Within the Population, Housing, Decennial Operations, Field, Geography, and Statistical Methods Divisions, most of the staff members worked on this program.

The following members of the Population Division had a major role in planning the content of this series of reports: Stuart H. Garfinkle, Paul C. Glick, Selma F. Goldsmith, and Henry D. Sheldon. Within the Housing Division, Alexander Findlay, J. Hugh Rose, and Herbert Shapiro had major roles in planning the content; and Nathan Krevor supervised the operational aspects of the housing portion of this series of reports. The technical editorial work was performed by Mildred M. Russell, Leah S. Anderson, and Louise L. Douglas of the Population Division.

Important contributions were made by Glen S. Taylor, then Chief, Richard A. Hornseth, Denver K. Ingram, and Willard P. Hess of the Decennial Operations Division in the processing and compilation of the statistics; Robert B. Voight, then Chief, Ivan Munro, and Paul R. Squires of the Field Division in the collection of the information; Robert C. Klove, Robert L. Hagan, and Toshi Toki of the Geography Division in the delineation and mapping of tracts; and Robert Hanson and Herman Fasteau of the Statistical Methods Division in the sampling and quality control operations.

Important contributions were also made by Lowell T. Galt and Herman P. Miller of the Office of the Director, and by the staffs of the Administrative Service Division, Everett H. Burke, Chief; Budget and Management Division, Charles H. Alexander, Chief; Census Operations Office, Robert D. Krook, Executive Officer; Electronics Systems Division, Robert F. Drury, Chief; Personnel Division, James P. Taff, Chief; and Statistical Research Division, William N. Hurwitz, Chief.

March 1962.

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Census Tracts

INTRODUCTION

GENERAL

This report presents statistics by census tracts on population and housing characteristics enumerated in the 1960 Censuses of Population and Housing, taken as of April 1, 1960. The population items are: Race and color, nativity and parentage, foreign stock and country of origin, age, relationship to head of household, marital status, married couples and families, school enrollment, years of school completed, residence in 1955, income in 1959, employment status, occupation, industry, class of worker, place of work, and means of transportation to work. The housing items are: Tenure of housing unit, color of occupants, vacancy status, number of persons in the unit, persons per room, year moved into the unit, number of units in structure, year structure built, basement in structure, number of rooms, condition and plumbing, number of bathrooms, heating equipment, automobiles available, value of property, contract rent, and gross rent. Some of these items were enumerated on a complete-count basis and others were collected for a sample of persons and housing units (see section on "Sample design").

The 1960 Censuses contained several innovations. One of them was the use of forms which household members were asked to complete—the Advance Census Report form for the complete-count items and, in the more populous sections of the country, the Household Questionnaire for the sample items. Other innovations included the wider use of sampling and the extensive use of the electronic computer and related equipment to process the data and produce the final tables. These innovations were designed primarily to improve the quality of the statistics and to reduce the time required to collect and publish the data; at the same time, they have introduced an element of difference between the 1960 statistics and those of earlier censuses. Innovations are discussed in later sections of this report and in more detail in *1960 Census of Population, Volume I, Characteristics of the Population*, and in *1960 Census of Housing, Volume I, States and Small Areas*.

Definition of census tract.—Census tracts are small areas into which large cities and adjacent areas have been divided for statistical purposes. Tract boundaries were established cooperatively by a local committee and the Bureau of the Census, and were generally designed to be relatively uniform with respect to population characteristics, economic status, and living conditions. The average tract has about 4,000 residents. Tract boundaries are established with the intention of being maintained over a long time so that comparisons may be made from census to census.

In the decennial censuses, the Bureau of the Census tabulates population and housing information for each census tract. The practice of local agencies to tabulate locally collected data by tracts has increased the value of census tract data in many areas.

Historical background.—The concept of census tracts was originated by the late Dr. Walter Laidlaw in New York City in 1906. He was convinced of the need for data for homogeneous subdivisions of cities as a basis for studying neighborhoods smaller than

boroughs or wards. At his request, the Bureau of the Census tabulated census tract data from the 1910 Census for New York and seven other cities with a population of over 500,000. Tract data were again tabulated for the same 8 cities in 1920, and in 1930 this number was increased to 18. In 1940, tract data were tabulated for 60 cities, some with adjacent tracted areas; and, beginning in 1940, housing data were added to the population data in the tract reports. In 1950, final reports were published for 64 tracted areas, many of which included statistics for two or more large cities. By 1960, the program had expanded to include reports for 180 tracted areas (of which 3 are in Puerto Rico).

Much of the credit for the growing interest in tract data belongs to the late Howard Whipple Green of Cleveland. He aroused the interest of research workers in numerous cities in the potential usefulness of tract statistics for the analysis of sociological, marketing, and administrative problems. In his capacity as Chairman of the Committee on Census Enumeration Areas of the American Statistical Association for 25 years, he accepted the responsibility for appointing a Census Tract Key Person in each area where tracts were established, for providing guidance on delineating and maintaining census tracts, and for maintaining a census tract library. These duties were assumed by the Bureau of the Census in 1955.

For a further discussion of census tract data and their uses, see U.S. Bureau of the Census, *Census Tract Manual*, Fourth Edition, 1958, Government Printing Office, Washington 25, D.C.

Description of tables.—Tables P-1, P-2, and P-3 present population characteristics and tables H-1 and H-2 present housing characteristics for all tracts. Tables P-4 and H-3 show population and housing data for nonwhite persons. Tables P-5 and H-4 show population and housing data for white persons with Spanish surname in the tracted areas of Arizona, California, Colorado, New Mexico, and Texas. In all other States, tables P-5 and H-4 show population and housing data for persons of Puerto Rican birth or parentage. Tables P-4, P-5, H-3, and H-4 are presented only when there are at least 5,000 persons in the particular group in the standard metropolitan statistical area. Furthermore, data are shown in tables P-4 and P-5 only for tracts with 400 or more of these persons; in table H-3 for tracts containing 100 or more housing units with nonwhite persons as household heads; and in table H-4 for tracts with 400 or more units with heads that are Puerto Ricans or white persons with Spanish surname. In table H-3, only data from the 100-percent tabulations are shown for tracts with fewer than 400 nonwhite occupied units.

In tables P-4, P-5, H-3, and H-4, a tract may appear in the population tables but not in the housing tables, and vice versa, depending on whether or not the criteria for presentation are met. The "total" columns (for the SMSA, counties, cities, etc.) include statistics for those tracts which are omitted from the tables because they have fewer than the specified number of persons or housing units. These totals, therefore, are not necessarily the sum of the figures for the tracts that are shown in the tables. Moreover, in the "total" columns of tables P-4, P-5, H-3, and H-4, the

number of persons or housing units is shown but data on characteristics are suppressed if there are fewer than the specified number of cases.

In order to avoid disclosure of information for individual persons or housing units, characteristics other than value and rent are not shown for a tract if the total number of persons or housing units in the tract is four or fewer. Data on value of property are not shown for a tract if there are four or fewer owner-occupied housing units of the type for which value of property is presented. Likewise, data on rent are not shown if there are four or fewer renter-occupied nonfarm housing units. However, the data on characteristics not shown for such tracts are included in the totals for the city or other area.

Medians are not shown where the base is smaller than the minimum required. For items tabulated on a complete-count basis, the median is not shown if the base is less than 50 persons or housing units; for items tabulated from a sample, the median is suppressed if the base is less than 200 persons or housing units.

Leaders (. . .) in a data column indicate that either there are no cases in the category or the data are suppressed as described above. In addition, in table H-3, data for items based on a sample are suppressed in tracts with fewer than 400 housing units with nonwhite heads; and in table H-2, data on automobiles are suppressed in individual tracts where the information was based wholly or partly on a 5-percent sample (see table A in the section on "Sample design").

Description of tracted area.—The map included in this report identifies the boundaries of the area for which the tract statistics are presented. The map also identifies the location and number of each tract and, when appropriate, the limits of cities, townships, counties, or other subdivisions of the tracted area. If only a part of the standard metropolitan statistical area (SMSA) is tracted, the map shows only the tracted portion; in the tables, however, totals are shown for the entire SMSA.

Most of the tracted areas constitute entire SMSA's. Some tracted areas, however, consist of only a part of the SMSA or only the central city. A few include all or part of the SMSA plus an adjoining area outside it, and two (Middlesex and Somerset Counties, New Jersey) comprise counties which were within an SMSA when they were divided into census tracts but were removed from the SMSA as a result of a change in boundary definitions.

Within each table, the first set of columns presents totals for the SMSA, the component counties, cities and other urban places having a population of 25,000 or more, and "balances" of the SMSA. Following the totals, data for individual tracts are shown for the component parts which are tracted. If the report presents data for tracts adjacent to the SMSA, they are shown after the tracts within the SMSA. (Unincorporated places are designated by the letter "U" following the place name, and urban towns and townships by "UT".)

Statistics for the central county (the county containing the central city of the SMSA) are presented ahead of those for the other counties in the area. Within a county, any central city is first, followed by other cities and urban places, arranged alphabetically, and finally the balance of the county. If the balance of the county is only partially tracted, it is shown in two parts—tracted balance and untracted balance.

When a tract crosses the boundary of an urban place of 25,000 inhabitants or more, statistics for the portion of the tract which lies inside the city are shown with the figures for the city; statistics for the remainder of the tract are shown in the tracted balance. The totals for each of these tracts appear at the end of the table. Separate statistics on nonwhites, Puerto Ricans, and white persons of Spanish surname are shown for the tract total and for each part of a split tract which qualifies under the criteria for presentation of such data.

Tracts are generally numbered in a consecutive series, with separate series for the central city and for each county. Insofar

as possible, the numbers are consecutive within each city, community, township, and the like. A tract number followed by the symbol "CV" indicates that the statistics are for crews of vessels only; these statistics are not included in the statistics for the rest of the tract. In 1950, data for crews of vessels were included in the data for the entire tract.

Comparability from census to census.—One of the objectives of providing statistics by tracts is to preserve comparability. Keeping tract boundaries unchanged from census to census makes possible the study of changes in social and economic characteristics of neighborhoods. Though the character of the people and land use within a tract may change with time, the principle of permanent boundaries is ordinarily given priority over the principle of internal homogeneity. Major revisions in the tract plan for a whole city or county are, therefore, rarely made. There are, nonetheless, several situations where boundaries of individual tracts are changed. For example, it is sometimes necessary to change the boundaries of tracts to add small areas annexed to a city. Similarly, changes in tract boundaries occur when territory is detached from a city or separately incorporated. Changes may also occur in physical features that are used as tract boundaries, such as street or highway relocations. The census tract limits are changed to conform with the revised feature or to follow another nearby visible feature. Census tracts with very large increases in population are subdivided into two or more smaller tracts. On the other hand, a re-examination of the existing tract boundaries may result in modifications of boundaries to provide larger or more homogeneous units.

A number of population and housing characteristics which were not reported for 1950 are included in this report. Population items shown in the 1960 tract reports, but not in the 1950 reports, are school enrollment, industry, means of transportation to work, and place of work. Housing items added in 1960 are number of rooms, bathrooms, heating equipment, year moved into unit, automobiles available, basement in structure, and gross rent. A few housing items which appeared in the 1950 tabulations for census tracts have been omitted from the 1960 reports, either because no information was collected in the 1960 Census or because alternative data were considered more valuable for the program by users of tract statistics. Items omitted are type of structure, refrigeration equipment, television, and heating fuel.

In addition to showing data on new items, the 1960 tract reports include more detail on many of the 1950 items. For example, data on marital status are shown separately for the nonwhite population in 1960, whereas in 1950 these data were shown only for the total population; and the detail about persons per room has been expanded to show four categories rather than just one. Furthermore, there were some changes in concepts and procedures. These changes may affect comparisons between the 1960 and 1950 statistics.

Availability of unpublished data.—Photocopies of tabulated but unpublished data for census tracts can be provided at cost. For population items, the tabulated material covers farm-nonfarm residence of the rural population, characteristics of persons 14 years old and over not in the labor force, class of worker of farm workers, and greater detail than shown here on place of residence in 1955 and place of work. Unpublished housing data cover farm-nonfarm residence and tenure of rural housing units, type of trailers, source of water, method of sewage disposal, year structure was built and year moved into the unit for owner-occupied units, and number of stories and presence of elevator in the structure.

For all tracts, data are available for nonwhites on household relationship, condition and plumbing facilities of the housing unit, number of persons and number of rooms in the unit, and persons per room. For tracts with a specified number of nonwhites, the unpublished tabulations include the greater detail for nonwhites on place of residence in 1955 and farm-nonfarm residence of rural housing units by tenure. For tracts with a specified number of

Puerto Ricans or white persons with Spanish surname, they include year moved into unit for these groups.

Requests for unpublished statistics should be addressed to the Chief, Population Division, or the Chief, Housing Division, Bureau of the Census, Washington 25, D.C.

Median.—The median is presented in connection with the data on age, years of school completed, income, number of persons, number of rooms, and value or rent of the unit. The median is the theoretical value which divides the distribution into two equal parts—one-half the cases falling below this value and one-half the cases exceeding this value.

A plus (+) or minus (−) sign after the median indicates that the median is above or below that number. For example, a median of "\$5,000—" for value of property indicates that the median fell in the interval "less than \$5,000" and was not computed from the data as tabulated.

Standard metropolitan statistical area (SMSA).—Except in New England, an SMSA 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 essentially metropolitan in character and are socially and economically integrated with the central city. In New England, SMSA's consist of towns and cities, rather than counties.

Definitions and explanations.—Some of the definitions used in 1960 differ from those used in 1950. These changes were made after consultation with users of census data in order to improve the statistics even though it was recognized that comparability would be affected.

The definitions and explanations should be interpreted in the context of the 1960 Censuses, in which data were collected by a combination of self-enumeration, direct interview, and observation by the enumerator. Some of the information required for identifying separate housing units was obtained by the enumerator as part of the procedure for securing complete coverage of all living quarters. Furthermore, the condition of a unit was determined solely by the enumerator through his observation. The remaining items were completed by self-enumeration, or by direct interview when the household member did not complete the self-enumeration forms.

The definitions below are consistent with the instructions given to the enumerator. As in all surveys, there were some failures to execute the instructions exactly. Through the forms distributed to households, the respondents were given explanations of some of the questions more uniformly than would have been given in direct interviews. Nevertheless, it was not feasible to give the full instructions to the respondents, and some erroneous replies have undoubtedly gone undetected.

More complete discussions of the definitions of population items are given in the reports in Series PC(1)-B (for complete-count items) and in Series PC(1)-C (for sample items). These reports constitute chapters B and C of each State part of *1960 Census of Population, Volume I, Characteristics of the Population*. Likewise, more complete discussions of housing items are given in *1960 Census of Housing, Volume I, States and Small Areas*.

POPULATION CHARACTERISTICS

Race and color.—The three major race categories distinguished in this report are white, Negro, and other races. Among persons of "other races" are American Indians, Japanese, Chinese, Filipinos, Koreans, Asian Indians, and Malaysians. Negroes and persons of "other races" taken together constitute "nonwhite" persons. Persons of Mexican birth or descent who are not definitely of Indian or other nonwhite race are classified as white. In addition to persons of Negro and of mixed Negro and white

descent, the category "Negro" includes persons of mixed Indian and Negro descent unless the Indian ancestry very definitely predominates or unless the person is regarded as an Indian in the community.

Nativity and parentage.—The category "native" comprises persons born in the United States, the Commonwealth of Puerto Rico, or a possession of the United States; persons born in a foreign country or at sea who have at least one native American parent; and persons whose place of birth was not reported and whose census report contained no contradictory information, such as an entry of a language spoken prior to coming to the United States. The category "foreign born" comprises all persons not classified as native.

Native persons of native parentage comprise native persons, both of whose parents are also natives of the United States. Native persons of foreign or mixed parentage comprise native persons, one or both of whose parents are foreign born.

Persons of Spanish surname and Puerto Ricans.—In order to obtain data on Spanish- and Mexican-Americans for areas of the United States where most of them live, white persons (and white heads of households) of Spanish surname were distinguished separately in five Southwestern States (Arizona, California, Colorado, New Mexico, and Texas). In all other States, Puerto Rican persons (and heads of households) were identified. Puerto Ricans comprise persons born in Puerto Rico and persons of native parentage with at least one parent born in Puerto Rico.

Foreign stock and country of origin.—The foreign-born population is combined with the native population of foreign or mixed parentage in a single category termed "foreign stock." In this report, persons of foreign stock are classified according to their country of origin. Natives of foreign parentage whose parents were born in different countries are classified according to the country of birth of the father. Natives of mixed parentage are classified according to the country of birth of the foreign-born parent. The classification by country of origin is based on international boundaries as recognized by the United States Government on April 1, 1960, although there may have been some deviation from the rules where respondents were unaware of changes in boundaries or jurisdiction.

Age.—The age classification is based on the age of the person in completed years as of April 1, 1960, as determined from the reply to a question on month and year of birth.

Household, group quarters, and relationship to head of household.—A household consists of all the persons who occupy a housing unit (see definition of housing unit in section below on "Living quarters"). The population per household is obtained by dividing the population in households by the number of households. The population per household is not shown for nonwhite persons in tracts where most of the nonwhite persons live in the homes of white persons as "nonrelatives"; these persons perform domestic service work, live as lodgers while attending college, or have some other special living arrangement.

All persons who are not members of households are classified as living in group quarters. Most of the persons in group quarters live in rooming houses, college dormitories, military barracks, or institutions. Inmates of institutions are persons for whom care or custody is provided in such places as homes for delinquent or dependent children; homes and schools for the mentally or physically handicapped; places providing specialized medical care for persons with mental disorders, tuberculosis, or other chronic disease; nursing and domiciliary homes for the aged and dependent; prisons; and jails.

For persons in households, five categories of relationship to head of household are recognized in this report:

1. The head of the household is the member reported as the head by the household respondent. However, if a married woman living with her husband is reported as the head, her husband is classified as the head for the purpose of census tabulations.

2. The wife of a head of a household is a woman married to and living with a household head. This category includes women in common-law marriages as well as women in formal marriages.

3. The children under 18 of the household head are the head's sons and daughters under 18 years old and also his stepchildren and adopted children of this age group.

4. "Other relative of head," in this report, includes all persons who are related to the head of the household by blood, marriage, or adoption except those in the categories "wife of head" and "children under 18 of head."

5. A nonrelative of the head is any member of the household who is not related to the household head by blood, marriage, or adoption. Lodgers, partners, resident employees, wards, and foster children are included in this category.

Marital status.—This classification refers to the person's marital status at the time of enumeration. Persons classified as "married" comprise, therefore, both those who have been married only once and those who remarried after having been widowed or divorced. The enumerators were instructed to report persons in common-law marriages as married and persons whose only marriage had been annulled as single. Separated persons are included in the count of married persons.

Married couple, family, and unrelated individual.—In 1960, a married couple is defined as a husband and wife enumerated as members of the same household. Data are not available for the very small number of married couples living as inmates of institutions or as other members of group quarters. A married couple with own household is a married couple in which the husband is a household head.

An "own child" of a married couple is defined as a single (never married) son, daughter, stepchild, or adopted child of the couple. Persons under 18 living with both parents include stepchildren and adopted children as well as sons and daughters born to the couple.

A family consists of two or more persons in the same household who are related to each other by blood, marriage, or adoption; all persons living in one household who are related to each other are regarded as one family. In a primary family, the head of the family is the head of a household. Other families are secondary families. An unrelated individual is a member of a household who is not related to anyone else in the household, or is a person living in group quarters who is not an inmate of an institution. A head of a household living alone or with nonrelatives only is a primary individual.

School enrollment.—School enrollment is shown for persons 5 to 34 years old. Persons were included as enrolled in school if they were reported as attending or enrolled in a "regular" school or college at any time between February 1, 1960, and the time of enumeration. 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. Schooling which is generally regarded as *not* regular includes that which is given in nursery schools; in specialized vocational, trade, or business schools; in on-the-job training; and through correspondence courses.

Elementary school, as defined here, includes grades 1 to 8, and high school includes grades 9 to 12. College includes junior or community colleges, regular 4-year colleges, and graduate or professional schools. In general, a "public" school is defined as any school which is controlled and supported primarily by a local, State, or Federal agency. All other schools are "private" schools.

Years of school completed.—The data on years of school completed were derived from the answers to the two questions: (a) "What is the highest grade (or year) of regular school he has ever attended?" and (b) "Did he *finish* this grade (or year)?" Enumerators were instructed to obtain the approximate equivalent grade in the American school system for persons whose highest grade of attendance was in a foreign school system, whose highest level of attendance was in an ungraded school, whose highest level

of schooling was measured by "readers," or whose training by a tutor was regarded as qualifying under the "regular" school definition. Persons were to answer "No" to the second question if they were attending school, had completed only part of a grade before they dropped out, or failed to pass the last grade attended.

Residence in 1955.—Residence on April 1, 1955, is the usual place of residence five years prior to the enumeration. The category "same house as in 1960" includes all persons 5 years old and over who were reported as living in the same house on the date of enumeration in 1960 and five years prior to the enumeration. Included in the group are persons who had never moved during the five years as well as those who had moved but by 1960 had returned to their 1955 residence. The category "different house in the U.S." includes persons who, on April 1, 1955, lived in the United States in a different house from the one they occupied on April 1, 1960. For tracted areas in SMSA's, persons in this category are subdivided into several groups according to their 1955 residence, viz., "central city of this SMSA," "other part of this SMSA," and "outside this SMSA." The category "abroad" includes those with residence in 1955 in a foreign country, in the Commonwealth of Puerto Rico, or in a possession of the United States. For tracted areas in Somerset and Middlesex Counties, New Jersey, the categories of residence in 1955 for those living in a different house in the United States are: "Same county," "different county, same State," and "different county, different State."

Income in 1959.—Information on income for the calendar year 1959 was requested from all persons 14 years old and over in the sample. "Total income" is the sum of amounts reported separately for wage or salary income, self-employment income, and other income. Wage or salary income is defined as the total money earnings received for work performed as an employee. It represents the amount received before deductions for personal income taxes, Social Security, bond purchases, union dues, etc. Self-employment income is defined as net money income (gross receipts minus operating expenses) from a business, farm, or professional enterprise in which the person was engaged on his own account. Other income includes money income received from such sources as net rents, interest, dividends, Social Security benefits, pensions, veterans' payments, unemployment insurance, and public assistance or other governmental payments, and periodic receipts from insurance policies or annuities. Not included as income are money received from the sale of property (unless the recipient was engaged in the business of selling such property), the value of income "in kind," withdrawals of bank deposits, money borrowed, tax refunds, and gifts and lump-sum inheritances or insurance payments. Although the time period covered by the income statistics is the calendar year 1959, the composition of families refers to the time of enumeration. For most of the families, however, the income reported was received by persons who were members of the family throughout 1959.

Employment status.—The data on employment status relate to the calendar week prior to the date on which the respondents filled their Household Questionnaires or were interviewed by enumerators. This week is not the same for all respondents because not all persons were enumerated during the same week.

Employed persons comprise all civilians 14 years old and over who were either (a) "at work"—those who did any work for pay or profit, or worked without pay for 15 hours or more on a family farm or in a family business; or (b) were "with a job but not at work"—those who did not work and were not looking for work but had a job or business from which they were temporarily absent because of bad weather, industrial dispute, vacation, illness, or other personal reasons.

Persons are classified as unemployed if they were 14 years old and over and not "at work" but looking for work. A person is considered as looking for work not only if he actually tried to find

*See special note at bottom of page 10.

work but also if he had made such efforts recently (i.e., within the past 60 days) and was awaiting the results of these efforts. Persons waiting to be called back to a job from which they had been laid off or furloughed are also counted as unemployed.

The "civilian labor force" includes all persons classified as employed or unemployed, as described above. The "labor force" also includes members of the Armed Forces (persons on active duty with the United States Army, Air Force, Navy, Marine Corps, or Coast Guard).

Persons "not in the labor force" comprise all those 14 years old and over who are not classified as members of the labor force, including persons doing only incidental unpaid family work (less than 15 hours during the week).

Occupation, industry, and class of worker.—The data on these three subjects in this report are for employed persons and refer to the job held during the week for which employment status was reported. For persons employed at two or more jobs, the data refer to the job at which the person worked the greatest number of hours. The occupation and industry statistics presented here are based on the detailed systems developed for the 1960 Census; see 1960 *Classified Index of Occupations and Industries*, Government Printing Office, Washington 25, D.C.

Place of work and means of transportation to work.—Place of work refers to the geographic location in which civilians at work and Armed Forces personnel not on leave, sick, etc., carried out their occupational or job activities. These locations comprise, for the purposes of this report, central cities, other selected cities, remainders of central counties, and each of the additional counties within the standard metropolitan statistical area (SMSA). In the reports for Somerset and Middlesex Counties in New Jersey, however, the distributions are shown only within these respective counties. In all cases, 13 specific places of work are available in unpublished tabulations for each tract.

Persons with more than one job were asked to report on the job at which they worked the greatest number of hours. If salesmen, deliverymen, and others who work in several places each week reported to a central headquarters, they were requested to name the place in which they began work each day. If work was not begun at a central place each day, the person was asked to report the city and county in which he had worked the greatest number of hours.

Means of transportation to work refers to the principal mode of travel or type of conveyance used in traveling to and from work by civilians at work and Armed Forces personnel not on leave, sick, etc. For persons who used more than one means in daily travel, the enumerator was instructed that "principal means" referred to the means of transportation covering the greatest distance. For persons who used different means on different days, the enumerator was instructed that the proper response was the means of transportation used most frequently.

HOUSING CHARACTERISTICS

Living quarters.—Living quarters were enumerated as housing units or group quarters. Occupied living quarters were classified as housing units or group quarters on the basis of information supplied by household members on the Advance Census Report and questions asked by the enumerator where necessary. Identification of vacant housing units was based partly on observation by the enumerator and partly on information obtained from owners, landlords, or neighbors.

A house, an apartment or other group of rooms, or a single room is regarded as a *housing unit* when it is occupied or intended for occupancy as separate living quarters, that is, when the

occupants do not live and eat with any other persons in the structure and there is either (1) direct access from the outside or through a common hall or (2) a kitchen or cooking equipment for the exclusive use of the occupants of the unit.

Occupied quarters which do not qualify as housing units are classified as group quarters. They are located most frequently in institutions, hospitals, nurses' homes, rooming and boarding houses, military and other types of barracks, college dormitories, fraternity and sorority houses, convents, and monasteries. Group quarters are also located in a house or apartment in which the living quarters are shared by the person in charge and five or more persons unrelated to him. Group quarters are not included in the housing inventory, although the count of persons living in them is included in the population figures.

The inventory of housing units includes both vacant and occupied units. Newly constructed vacant units were included in the inventory if construction had reached the point that all the exterior windows and doors were installed and the final usable floors were in place. Dilapidated vacant units were included provided they were still usable as living quarters; they were excluded if they were being demolished or if there was positive evidence that they were to be demolished.

Trailers, tents, boats, and railroad cars were included in the housing inventory if they were occupied as housing units. They were excluded if they were vacant, used only for extra sleeping space or vacations, or used only for business.

In 1950, the unit of enumeration was the dwelling unit. Although the definition of the housing unit in 1960 is essentially similar to that of the dwelling unit in 1950, the housing unit definition was designed to encompass all private living quarters, whereas the dwelling unit definition did not completely cover all private living accommodations. The main difference between housing units and dwelling units is as follows: In 1960, *separate* living quarters consisting of one room with direct access but without separate cooking equipment qualify as a housing unit whether in an apartment house, rooming house, or house converted to apartment use; in hotels, a single room qualifies as a housing unit if occupied by a person whose usual residence is the hotel or a person who has no usual residence elsewhere. In 1950, a one-room unit without cooking equipment qualified as a dwelling unit only when located in a regular apartment house or when the room constituted the only living quarters in the structure.

The evidence thus far suggests that using the housing unit concept in 1960 instead of the dwelling unit concept as in 1950 had relatively little effect on the counts for large areas and for the Nation. Any effect which the change in concept may have on comparability can be expected to be greatest in statistics for certain census tracts and blocks. Living quarters classified as housing units in 1960 but which would not have been classified as dwelling units in 1950 tend to be clustered in tracts where many persons live separately in single rooms in hotels, rooming houses, and other light housekeeping quarters. In such areas, the 1960 housing unit count for an individual tract may be higher than the 1950 dwelling unit count even though no units were added by new construction or conversion.

Occupied housing unit.—A housing unit is "occupied" if it was the usual place of residence for the person or group of persons living in it at the time of enumeration. Included are units occupied by persons who were only temporarily absent (for example, on vacation) and units occupied by persons with no usual place of residence elsewhere.

Vacant housing unit.—A housing unit is "vacant" if no persons were living in it at the time of enumeration. However, if its occupants were only temporarily absent, the unit was considered occupied. Units temporarily occupied by persons having a usual place of residence elsewhere were considered vacant (classified as "non-resident" units in 1950).

*See special note at bottom of page 10.

Year-round vacant units are those intended for occupancy at any time of the year. Seasonal vacant units are those intended for occupancy during only a season of the year.

Available vacant units are those which are on the market for year-round occupancy, are in either sound or deteriorating condition, and are offered for rent or for sale. The group "for sale only" is limited to available units for sale only and excludes units "for rent or sale." The group "for rent" consists of units offered "for rent" and those offered "for rent or sale." The 1960 category "available vacant" is comparable with the 1950 category "vacant nonseasonal not dilapidated, for rent or sale."

Other vacant units comprise the remaining vacant housing units. They include dilapidated units, seasonal units, units rented or sold and awaiting occupancy, units held for occasional use, and units held off the market for other reasons. This category is comparable with the 1950 category "other vacant and nonresident."

Tenure.—A housing unit is "owner occupied" if the owner or co-owner lives in the unit, even if it is mortgaged or not fully paid for. All other occupied units are classified as "renter occupied," whether or not cash rent is paid. Examples of units for which no cash rent is paid include units occupied in exchange for services rendered, units owned by relatives and occupied without payment of rent, and units occupied by sharecroppers.

Color and ethnic group.—Occupied housing units are classified by the color or ethnic origin of the head of the household. (See sections above on "Race and color" and "Persons of Spanish surname and Puerto Ricans.")

Persons.—All persons enumerated in the 1960 Census of Population as members of the household were counted in determining the number of persons who occupied the housing unit. These persons include any lodgers, foster children, wards, and resident employees who shared the living quarters of the household head.

In the computation of the median number of persons, a continuous distribution was assumed, with the whole number of persons as the midpoint of the class interval. For example, when the median was in the 3-person group, the lower and upper limits were assumed to be 2.5 and 3.5 persons, respectively. The median may be based on a sample or on the complete count of units (see table A).

Persons per room.—The number of persons per room was computed for each occupied housing unit by dividing the number of persons by the number of rooms in the unit.

Year moved into unit.—Data on year moved into unit are based on the information reported for the head of the household. The question relates to the year of latest move.

Units in structure.—A structure is defined as a separate building that either has open space on all four sides, or is separated from other structures by dividing walls that extend from ground to roof.

Statistics are presented in terms of the number of housing units rather than the number of residential structures. However, the number of structures for the first two categories may be derived. For 1-unit structures (which include trailers), the number of housing units and the number of structures are the same. For 2-unit structures, the number of housing units is twice the number of structures. For the remaining categories, the number of structures cannot be derived from the data as tabulated.

The categories for number of housing units in the structure in 1960 are not directly comparable with those in 1950, particularly for 1- and 2-unit structures. In the 1950 tract report, units in detached or attached structures were shown separately but those in semidetached structures containing 1 or 2 units were combined into one category. Comparability between 1950 and 1960 data may also be affected by the change in concept from dwelling unit to housing unit.

Year structure built.—"Year built" refers to the date the original construction of the structure was completed, not to any later remodeling, addition, or conversion.

The figures on the number of units built during a given period do not necessarily represent the number of housing units added

to the inventory during that period. The figures represent the number of units constructed during a given period plus the number created by conversions in structures originally built during that period, minus the number lost in structures built during the period. Losses occur through demolition, fire, flood, disaster, and conversion to nonresidential use or to fewer housing units.

Basement.—Statistics on basements are presented in terms of the number of housing units located in structures built with a basement, on a concrete slab, or in another way. "Basement" is defined as enclosed space accessible to the occupants beneath all or part of a structure and of sufficient depth so that an adult can walk upright. Units built on a "concrete slab" have no basement and no crawl space or air space below the first floor. The category "other" includes units in structures resting on a foundation of posts, those built directly on the ground, and those having only crawl space under the building to provide ventilation or accessibility for service or repairs.

Rooms.—The number of rooms is the count of whole rooms used for living purposes, such as living rooms, dining rooms, bedrooms, kitchens, finished attic or basement rooms, recreation rooms, lodgers' rooms, and rooms used for offices by a person living in the unit. Not counted as rooms are bathrooms; halls, foyers, or vestibules; closets; alcoves; pantries; strip or pullman kitchens; laundry or furnace rooms; unfinished attics, basements, and other space used for storage.

In the computation of the median number of rooms, a continuous distribution was assumed, with the whole number of rooms as the midpoint of the class interval. For example, when the median was in the 3-room group, the lower and upper limits were assumed to be 2.5 and 3.5 rooms, respectively. The median was computed on the basis of the tabulation groups shown in the table. If the median falls in the category "8 rooms or more," it is shown in the table as "7.5+" rooms.

Condition and plumbing.—Data are presented on condition and plumbing facilities in combination. The categories represent various levels of housing quality.

The enumerator determined the condition of the housing unit by observation, on the basis of specified criteria. Nevertheless, the application of these criteria involved some judgment on the part of the individual enumerator. The training program for enumerators was designed to minimize differences in judgment.

Sound housing is defined as that which has no defects, or only slight defects which are normally corrected during the course of regular maintenance.

Deteriorating housing needs more repair than would be provided in the course of regular maintenance. It has one or more defects of an intermediate nature that must be corrected if the unit is to continue to provide safe and adequate shelter.

Dilapidated housing does not provide safe and adequate shelter. It has one or more critical defects, or has a combination of intermediate defects in sufficient number to require extensive repair or rebuilding, or is of inadequate original construction. Critical defects result from continued neglect or lack of repair or indicate serious damage to the structure.

In 1950, the enumerator classified each unit in one of two categories, not dilapidated or dilapidated, as compared with the three categories of sound, deteriorating, and dilapidated in 1960. Although the definition of "dilapidated" was the same in 1960 as in 1950, it is possible that the change in the categories introduced an element of difference between the 1960 and 1950 statistics.

The category "with all plumbing facilities" consists of units which have hot and cold water inside the structure, and flush toilet and bathtub (or shower) inside the structure for the exclusive use of the occupants of the unit. Equipment is for exclusive use when it is used only by the persons in one housing unit, including any lodgers living in the unit.

Units "lacking only hot water" have all the facilities except hot water. Units "lacking other plumbing facilities" may or

may not have hot water but lack one or more of the other specified facilities. Also included in this category are units whose occupants share toilet or bathing facilities with the occupants of another housing unit. The combination of "lacking only hot water" and "lacking other plumbing facilities" is presented as "lacking some or all facilities" in some census reports.

The categories of plumbing facilities presented in the 1960 report are not entirely comparable with those in the 1950 report. However, the 1950 category "no private bath or dilapidated" is equivalent to the following 1960 categories: "Dilapidated," "sound, lacking other plumbing facilities," and "deteriorating, lacking other plumbing facilities."

Bathroom.—A housing unit is classified as having a bathroom if it has a flush toilet and bathtub (or shower) for the exclusive use of the occupants of the unit and also has hot water. The facilities must be located inside the structure but need not be in the same room. Units which have an additional toilet or bathtub (or shower) for exclusive use are classified as having "more than one bathroom."

Heating equipment.—The main type of heating equipment was to be reported even if it was temporarily out of order at the time of enumeration. For vacant units from which the heating equipment had been removed, the equipment used by the last occupants was to be reported.

"Steam or hot water" refers to a central heating system in which heat from steam or hot water is delivered through radiators or heating coils. "Warm air furnace" refers to a central system which provides warm air through ducts leading to the various rooms. "Built-in room units" are permanently installed heating units in floors, walls, or ceilings. They include floor, wall, or pipeless furnaces as well as built-in electrical units. Floor, wall, and pipeless furnaces deliver warm air to immediately adjacent rooms but do not have ducts leading to other rooms. "Other means—with flue" describes stoves, radiant gas heaters, fireplaces, and the like connected to a chimney or flue which carries off the smoke or fumes. "Other means—without flue" describes portable or plug-in devices not connected to a chimney or flue, such as electric heaters, electric steam radiators, kerosene heaters, and radiant gas heaters.

Automobiles available.—The count of automobiles available represents the number of passenger automobiles, including station wagons, owned or regularly used by the occupants of the housing unit. Passenger cars were to be counted if they were owned by a member of the household or if they were regularly used and ordinarily kept at home as are some company cars. Not to be counted were taxis, pickups or larger trucks, and dismantled or dilapidated cars in an early stage of being junked.

Value.—Value is the respondent's estimate of how much the property would sell for on today's market (April 1960). Value data are restricted to owner-occupied units having only one housing unit in the property and no business. Units in multiunit structures and trailers were excluded from the tabulations. In rural territory, units on farms and all units on places of 10 acres or more also were excluded from the value tabulations.

For tracts where information on value was tabulated on a complete-count basis (usually in large cities and other urban places), the median was computed on the basis of the tabulation groups shown in the table and the terminal category was \$25,000 or more. For these tracts, \$25,000+ is the highest median which could be shown. For tracts where information was tabulated from a sample of units, the median was computed on the basis of more detailed categories than are shown in the table and the terminal category was \$35,000 or more. Therefore, a median of \$25,000+ is not to be interpreted as being necessarily lower than a specific median above \$25,000; for example, a median of \$25,000+ for a tract in the city may or may not be lower than \$29,000 for a tract outside the city.

In the 1950 tract report, value was not published separately for owner-occupied units (except for nonwhite owner-occupied units) but was shown in combination with vacant units available for sale. In rural territory, value data excluded values for farm units but may have included some units on places of 10 acres or more.

Contract rent.—Contract rent is the rent agreed upon regardless of any furnishings, utilities, or services that may be included. Renter-occupied units for which no cash rent was paid were excluded from the computation of the median. In rural territory, rent data exclude rent for farm units.

In the 1950 tract report, contract rent was not published separately for renter-occupied units (except for nonwhite renter-occupied units) but was shown in combination with vacant units available for rent.

Gross rent.—The computed rent termed "gross rent" is the contract rent plus the average monthly cost of utilities (water, electricity, gas) and fuels such as wood, coal, and oil if these items are paid for by the renter in addition to contract rent. Thus, gross rent eliminates rent differentials which result from varying practices with respect to the inclusion of heat and utilities as part of the rental payment. In rural territory, rent data exclude rent for farm units.

Renter-occupied units for which no cash rent was paid are shown separately in the tabulation but were excluded from the computation of the median. The median was computed on the basis of more detailed tabulation groups than are shown in the tables.

Farm residence.—In rural territory, farm residence is determined on the basis of number of acres in the place and total sales of farm products in 1959. An occupied housing unit is classified as a farm housing unit if it was located on a place of 10 or more acres from which sales of farm products amounted to \$50 or more in 1959, or on a place of less than 10 acres from which sales of farm products amounted to \$250 or more in 1959. Occupied units for which cash rent was paid are classified as nonfarm housing if the rent did not include any land used for farming (or ranching).

In 1950, farm residence was determined by the respondent's answer to the question, "Is this house on a farm (or ranch)?" In addition, the instructions to the enumerators specified that a house was to be classified as nonfarm if the occupants paid cash rent for the house and yard only.

COLLECTION AND PROCESSING OF DATA

Collection of data.—Several enumeration forms were used to collect the information for the 1960 Censuses of Population and Housing. A few days before the census date, the Post Office Department delivered an Advance Census Report (ACR) to households on postal delivery routes. This form contained questions which were to be answered for every person and every housing unit. Household members were requested to fill the ACR and have it ready for the enumerator. The census enumerator recorded this information on a form specially designed for electronic data processing by FOSDIC (Film Optical Sensing Device for Input to Computer). The information was either transcribed from the ACR to the complete-count FOSDIC schedule or entered on this schedule during direct interview.

In the densely populated areas, containing over nine-tenths of the census tracts in the Nation, the enumerator left a Household Questionnaire to be completed by each household (or person) in the sample and mailed to the local census office. The population and housing information was transcribed from the Household Questionnaire to a sample FOSDIC schedule. When the Household Questionnaire was not returned or was returned without having been completed, the enumerator collected the missing information by personal visit or by telephone and entered it directly on the sample FOSDIC schedule. In the remaining

areas, when the enumerator picked up the ACR, he obtained all the information by direct interview and recorded it directly on the sample FOSDIC schedule. For vacant units, the enumerator collected the information by direct interview with the owner, landlord, or neighbor.

Soon after the enumerator started work, his schedules were examined in a formal field review. This operation was designed to assure at an early stage of the work that the enumerator was performing his duties properly and had corrected any errors he had made.

A more detailed description of the 1960 Census practices in the collection of data is given in a report entitled *United States Censuses of Population and Housing, 1960: Principal Data Collection Forms and Procedures*, Government Printing Office, Washington 25, D.C.

Electronic processing.—Several steps were required to process the data. First, the enumerator recorded the information by marking appropriate circles on the FOSDIC schedules. These schedules were later microfilmed and the information was read by FOSDIC, which converted the markings to signals on magnetic tape. The tape, in turn, was processed in an electronic computer, which was used extensively to edit and tabulate the data and to produce the publication tables.

Editing.—In a mass statistical operation, such as a national census, human and mechanical errors occasionally arise in one form or another, such as failure to obtain or record the required information, recording information in the wrong place, misreading position markings, and skipping pages. These were kept to a tolerable level by means of operational control systems. Non-responses and inconsistencies were eliminated by using the computer to assign entries and correct inconsistencies. In general, few assignments or corrections were required, although the amount varied by subject and by enumerator. Whenever information was missing for a housing item, an allocation procedure was used to assign an acceptable entry, thereby eliminating the need for a "not reported" category in the tabulations. An acceptable entry was assigned also when the reported information was inconsistent. A similar procedure was followed when information was missing or was unacceptable for a population item, although for several items a "not reported" category was retained.

The assignment of an acceptable entry was based on related information reported for the housing unit or person or on information reported for a similar unit or person in the immediate neighborhood. For example, if tenure for an occupied unit was omitted but a rental amount was reported, the computer automatically edited tenure to "rented." Another technique is illustrated by the procedure used in the assignment of age in the complete-count tabulations: the computer stored reported ages of persons by sex, color or race, household relationship, and marital status; each stored age was retained in the computer only until a succeeding person having the same characteristics and having age reported was processed through the computer; this stored age was assigned to the next person whose age was unknown and who otherwise had the same characteristics. This procedure ensured that the distribution of ages assigned by the computer for persons of a given set of characteristics would correspond closely to the reported age distribution of such persons as obtained in the current census.

The extent of the allocations for nonresponse or for inconsistency is shown for States, places of 10,000 inhabitants or more, and other areas in appendix tables in chapters B, C, and D of *1960 Census of Population*, Volume I, *Characteristics of the Population*, and in *1960 Census of Housing*, Volume I, *States and Small Areas*.

Specific tolerances were established for the number of computer allocations acceptable for a given area. If the number was beyond tolerance, the data were rejected and the original schedules were re-examined to determine the source of the error. Correction and reprocessing were undertaken as necessary and feasible.

Accuracy of the data.—Tract statistics provide data for relatively small numbers of housing units and persons; hence, information for one tract almost always represents the work of only a few enumerators (sometimes one or two). Moreover, such items as the delineation of living quarters into housing units and the classification of the condition of a housing unit were always determined by the enumerator. Therefore, users of the data should bear in mind that misinterpretation of the instructions or variation in interpretation of responses may lead to a wider margin of relative error and response variability in data for census tracts than for larger areas. The systematic field review early in the enumeration corrected some of the errors arising from misunderstandings on the part of the enumerator.

To the extent that answers to the census questions were entered on the ACR and on the Household Questionnaire by household members, the responses were not affected by any misunderstanding on the part of the enumerator. The self-enumeration forms provided brief but uniform explanations and called attention to the response categories in a uniform manner.

Some innovations in the 1960 Censuses reduced errors in processing and others produced a more consistent quality of editing. The elimination of the card-punching operation removed one important source of error. The extensive use of electronic equipment ensured a more uniform and more flexible edit than could have been accomplished manually or by less intricate mechanical equipment. It is believed that the use of electronic equipment in the 1960 Censuses has improved the quality of the editing compared with that of earlier censuses but, at the same time, it has introduced an element of difference in the statistics.

SAMPLE DESIGN AND SAMPLING VARIABILITY

Sample design.—The unit of sampling was the housing unit and all its occupants; in group quarters, the sampling unit was the person. On the first visit to an address, the enumerator was instructed to assign a Sample Key letter (A, B, C, or D) to each housing unit sequentially in the order in which he first visited the unit, whether or not he completed the interview. Each enumerator was given a random key letter to start his assignment, and the order of canvassing was indicated in advance, although the instructions allowed some latitude in the order of visiting individual units at an address. Each housing unit which was assigned the key letter "A" was designated as a sample unit for housing data, and all persons enumerated in the unit were included in the sample for population data. In group quarters, the sample for population data consisted of every fourth person in the order listed, and no information was collected on housing.

Information for the persons and housing units in the sample was recorded on a sample FOSDIC schedule. For population data, there was one form of the sample FOSDIC schedule. For housing data, every fifth sample FOSDIC schedule carried questions comprising the 5-percent sample items; the other four-fifths carried questions comprising the 20-percent sample items. Items which appeared on both types of housing schedules comprised the 25-percent sample items. Thus, the population sample consisted of approximately 25 percent of the population, while the housing sample was 5, 20, or 25 percent of the housing units. In some situations, the same item was tabulated from various samples, as indicated in table A.

The sample rate for "automobiles available" generally was 20 percent of the housing units in large urban places¹ and 5 percent in all other places. For balance of county, places with fewer than 25,000 inhabitants, and individual tracts where the sample rate was 5 percent of the housing units, data on automobiles are not shown. Totals for the SMSA and component counties usually were based partly on a 20-percent sample and partly on a 5-percent sample.

¹ Places with a population of 50,000 or more in 1950 or in a subsequent special census.

TABLE A.—SAMPLE RATE FOR POPULATION AND HOUSING ITEMS

Item	Tables P-1 to P-4, H-1 to H-3	Tables P-5, H-4
	Percent	Percent
Population:		
Age, race, sex, relationship to head, marital status.....	100	25
All other items.....	25	25
Housing:		
Tenure, color, vacancy status, persons, ¹ persons per room, rooms, condition and plumbing.....	100	25
Year moved into unit, year structure built, heating equipment, contract rent, gross rent.....	25	25
Units in structure, basement, bathrooms.....	20	20
Automobiles available.....	20 or 5	25
Value.....	100 or 25	25

¹ Median number of persons for owner-occupied and renter-occupied units in table H-1 based on 25-percent sample.

² Sample items not shown in table H-3 if fewer than 400 housing units in tract. Data on automobiles not shown in H-2 for individual tracts with 5-percent sample.

For value of property in table H-2, the data generally were tabulated on a 100-percent basis for the individual tracts in large urban places;² for all other individual tracts, and for the totals of the SMSA, city, county, balance of county, and other areas, the sample rate was 25 percent of the housing units. The figures for the individual tracts in large urban places, therefore, do not necessarily add to the figures in each of the categories in the total columns. For table H-3, value data were tabulated from a 25-percent sample for individual tracts as well as the totals for all places.

Data on automobiles and value of property were usually tabulated at different sample rates in the case of "split tracts," where the city boundary divides a tract. This situation occurs when part of a tract is located inside and part outside a large urban place according to the boundaries at the time of the census. Data on value of property are shown for split tracts, but data on automobiles are suppressed for the part of the tract outside the city as well as for the tract total.

Although the sampling procedure did not automatically insure an exact 25-percent sample of persons or 25-, 20-, or 5-percent sample of housing units in each tract, the sample design was unbiased if carried through according to instructions. Generally, for large areas, the deviation from the estimated sample size was found to be quite small. Biases may have arisen, however, when the enumerator failed to follow his listing and sampling instructions exactly. According to preliminary estimates, 25.07 percent of the total population in the United States as a whole and 24.95 percent of the total housing units were designated for the 25-percent samples.

Ratio estimation.—The statistics based on samples of persons and housing units are estimates that were developed through the use of a ratio estimation procedure. For population items, essentially this procedure was carried out for each of 44 groups of persons in each tract.³ The groups are as follows:

Group	Sex, color, and age	Relationship and tenure
	Male white:	
1	Under 5	
2	5 to 13	
3	14 to 24	Head of owner household
4	14 to 24	Head of renter household
5	14 to 24	Not head of household
6-8	25 to 44	Same groups as age group 14 to 24
9-11	45 and over	Same groups as age group 14 to 24
	Male nonwhite:	
12-22	Same groups as Male white	
	Female white:	
23-33	Same groups as Male white	
	Female nonwhite:	
34-44	Same groups as Male white	

³ Places with a population of 50,000 or more in 1960 for which housing statistics are published in 1960 Census of Housing, City Blocks.

For each of the 44 groups, the ratio of the complete count to the sample count of the population in the group was determined. Each sample person in the group was assigned an integral weight so that the sum of the weights would equal the complete count for the group. For example, if the ratio for a group was 4.2, one-fifth of the persons (selected at random) within the group were assigned a weight of 5, and the remaining four-fifths, a weight of 4. The use of such a combination of integral weights rather than a single fractional weight was adopted to avoid the complications involved in rounding. In order to increase the reliability, where there were fewer than 50 persons in the complete count in a group, or where the resulting weight was over 16, groups were combined in a specific order to satisfy these two conditions.

For housing items, a similar ratio estimation procedure was carried out for each of 7 groups of housing units in the tract, separately for the 25-, 20-, and 5-percent samples. The 7 groups are as follows:

Group	Tenure, color, vacancy status
1	Owner occupied, white
2	Owner occupied, nonwhite
3	Renter occupied, white
4	Renter occupied, nonwhite
5	Vacant, available for sale only
6	Vacant, available for rent
7	Vacant, other

The ratio estimates achieve some of the gains of stratification which would have been obtained if the sample had been stratified by the groups for which separate ratio estimates were computed. The net effect is a reduction in the sampling error and in the bias of most statistics below that which would be obtained by weighting the results of the 25-percent sample by a uniform factor of four (the 20-percent sample by 5 or the 5-percent sample by 20). The reduction in sampling error is trivial for some items and substantial for others. Further, as a byproduct of this procedure, estimates from the sample are generally consistent with the total numbers of persons and housing units obtained from the complete count in each tract.

Sampling variability.—The figures from sample tabulations are subject to sampling variability, which can be estimated by using the factors shown in table D in conjunction with table B for absolute numbers and with table C for percentages. These tables do not reflect the effect of response variance, processing variance, or bias arising in the collection, processing, and estimation steps. Estimates of the magnitude of some of these factors in the total error are being evaluated and will be published at a later date. The chances are about two out of three that the difference due to sampling variability between an estimate based on a sample and the figure that would have been obtained from a complete count 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 text books.

For most population characteristics, the use of the household as a sampling unit increases slightly the standard error above what would be expected for a simple random sample of persons taken

⁴ Estimates of characteristics of the population from the sample for a given tract are produced using the formula:

$$x' = \sum_{i=1}^{44} \frac{z_i}{y_i} Y_i$$

where x' is the estimate of the characteristic for the tract obtained through the use of the ratio estimation procedure,
 z_i is the count of sample persons with the characteristic for the tract in one (i) of the 44 groups,
 y_i is the count of sample persons for the tract in the same one of the 44 groups, and
 Y_i is the count of persons in the complete count for the tract in the same one of the 44 groups.

with the same sampling fraction. In particular, characteristics which tend to be the same for all members of a household (e.g., race and residence in 1955) will have a somewhat higher variance than if a simple random sample of persons had been used. However, for many population characteristics as well as for many housing characteristics; the standard error is reduced below what would be expected for a simple random sample because of geographic stratification in the selection of the sample and the use of ratio estimation.

TABLE B.—ESTIMATES PROPORTIONATE TO STANDARD ERROR OF ESTIMATED NUMBER

[Range of 2 chances out of 3; for multiplying factors see table D and text]

Estimated number (persons or housing units)	Estimate proportionate to standard error	Estimated number (persons or housing units)	Estimate proportionate to standard error
50.....	15	1,000.....	50
100.....	20	2,500.....	70
250.....	30	5,000.....	100
500.....	40	10,000.....	120

TABLE C.—ESTIMATES PROPORTIONATE TO STANDARD ERROR OF ESTIMATED PERCENTAGE

[Range of 2 chances out of 3; for multiplying factors see table D and text]

Estimated percentage	Base of percentage (persons or housing units)					
	500	1,000	2,500	5,000	10,000	15,000
2 or 98.....	1.3	0.9	0.5	0.3	0.3	0.2
5 or 95.....	2.0	1.4	0.9	0.5	0.4	0.3
10 or 90.....	2.8	2.0	1.2	0.7	0.6	0.4
25 or 75.....	3.8	2.7	1.5	0.9	0.7	0.5
50.....	4.4	3.1	1.6	1.1	0.8	0.6

TABLE D.—FACTOR TO BE APPLIED TO TABLES B AND C

[Refer to table A for sample rate]

Item	Factor
Population, 25-percent sample:	
Age.....	1.0
Marital status.....	1.0
Nativity and parentage.....	1.4
Country of origin.....	1.4
Married couples and families.....	1.0
School enrollment.....	0.8
Years of school completed.....	1.0
Residence in 1955.....	1.6
Income in 1955.....	1.0
Employment status.....	1.0
Occupation.....	1.0
Industry.....	1.0
Class of worker.....	1.0
Place of work.....	1.0
Means of transportation to work.....	1.0
Housing, 25-percent sample:	
Tenure.....	0.6
Rooms.....	1.0
Condition and plumbing.....	1.2
Year moved into unit.....	1.2
Year structure built.....	1.0
Contract rent.....	1.0
Gross rent.....	1.0
Value.....	1.0
Housing, 20-percent sample:	
Units in structure.....	1.2
Basement.....	1.2
Bathrooms.....	1.2
Automobiles available.....	1.2
Housing, 5-percent sample:	
Automobiles available.....	2.6

Table D provides a factor by which the estimates proportionate to the standard errors in tables B and C should be multiplied to adjust for the combined effect of the sample design and the estimation procedure. Table B shows estimates proportionate to the standard errors for estimated numbers of persons or housing units, Table C shows estimates proportionate to the standard errors of estimated percentages of persons or housing units.

To estimate a standard error for a given characteristic, locate in table D the factor applying to the item; multiply this factor by the estimate proportionate to the standard error given for the number shown in table B. The product of this multiplication is the approximate standard error. Similarly, to obtain an estimate of the standard error of a percentage, multiply the figure as shown in table C by the factor from table D. For most estimates, linear interpolation in tables B and C will provide reasonably accurate results.

The sampling variability of the medians, presented in some of the tables, depends on the size of the base and on the distribution on which the median is based.

The standard errors estimated from tables B and C (using the factors given in table D) are not directly applicable to differences between two sample estimates. These estimates are to be applied differently in the following three situations:

1. For a difference between the sample figure and one based on a complete count (e.g., a difference arising from comparisons between value of property from the 100-percent tabulation for one tract and value based on a 25-percent sample in another tract), the standard error of the difference is identical with the standard error of the estimate which is based on the sample.

2. For a difference between two sample figures (e.g., one from 1960 and the other from 1950, or both from the same census year), the standard error is approximately the square root of the sum of the squares of the standard error of each estimate considered separately. This formula will represent the standard error quite accurately for the difference between estimates of the same characteristic in two different tracts, or for the difference between separate and uncorrelated characteristics in the same tract. If, however, there is a high positive correlation between the two characteristics, the formula will overestimate the true standard error.

3. For a difference between two sample estimates, one of which represents a subclass of the other, the difference should be considered as the sample estimate and an estimate of the sampling error of the difference obtained directly.

Illustration: Let us assume that, for a tract, table P-1 shows that there are an estimated 800 persons 25 years old and over who had completed 4 years of high school. Table D shows that for "years of school completed" the appropriate number in table B should be multiplied by a factor of 1.0. Table B shows that the estimate proportionate to the standard error for an estimate of 800 is about 46. The factor of 1.0 times 46, or 46, means that the chances are approximately two out of three that the results of a complete count would not differ by more than 46 from the estimated 800. It also follows that there is only about 1 chance in 100 that the results of a complete count would differ by as much as 115, that is, by about 2½ times the standard error. Assume also that table H-1 shows an estimated 50 units with more than one bathroom. The factor of 1.2 from table D multiplied by 15 from table B gives an estimated standard error of 18.

Statistics in the tract report may differ from those in other reports from the 1960 Censuses of Population and Housing. In some reports an item may be tabulated on a 100-percent basis, whereas in other reports it was tabulated from a sample and the figures will differ because of sampling variability. Differences arise also through errors of processing and enumeration, some of which are discovered in early reports and are corrected in subsequent reports.

SPECIAL NOTE: During the tabulation of statistics on residence in 1955 and on place of work, it was discovered that some enumerators working in unincorporated areas near large cities had failed to identify correctly these large cities as places of previous residence and places of work, respectively. A corrective mechanical edit was introduced that allocated such cases to the largest city in the same county. This procedure was limited to central cities of standard metropolitan statistical areas and to other cities of 50,000 or more, since these are the only cities shown separately in tabulations of residence in 1955 and place of work. This edit may have overcorrected in some cases, and undercorrected in others, the number of persons moving or commuting from the balance of the county to the given city. The correction was deemed unnecessary for SMSA's in New England and New Jersey. It was also deemed unnecessary for urban townships in Pennsylvania.

FINAL REPORTS OF THE 1960 CENSUSES OF POPULATION AND HOUSING

The publication program for these two censuses includes the final reports listed below, the present series of PHC(1) reports entitled *Census Tracts*, and a number of evaluation, procedural, and administrative reports. Prior to issuance of some of the final reports, selected data are being released in several series of advance reports. Certain types of unpublished statistics will be available for the cost of preparing a copy of the data; and, under certain conditions, special tabulations of the data from the 1960 Censuses can be prepared on a reimbursable basis. Further information may be obtained by writing to the Chief, Population Division, or the Chief, Housing Division, Bureau of the Census, Washington 25, D.C., and giving a specific description of the statistics desired.

CENSUS OF POPULATION

Volume I. Characteristics of the Population. This volume consists of separate reports for the United States, each of the 50 States, the District of Columbia, Puerto Rico, Guam, Virgin Islands of the United States, American Samoa, and Canal Zone. For each of these 57 areas, the data are first being issued in four separate, paper-bound "chapters," designated as PC(1)-A, B, C, and D. After the four chapters for each area are published, they will be assembled and issued in a buckram-bound "part." In addition, all of the 57 chapters "A" are being assembled for issuance in a buckram-bound edition, designated as Part A. (For Guam, Virgin Islands, American Samoa, and Canal Zone, the material normally contained in chapters B, C, and D is included in chapter B.)

Series PC(1)-1A to 57A: Chapter A. Number of Inhabitants. These reports contain final population counts for States and counties and their urban and rural parts, and for standard metropolitan statistical areas, urbanized areas, all incorporated places, unincorporated places of 1,000 inhabitants or more, and minor civil divisions.

Series PC(1)-1B to 57B: Chapter B. General Population Characteristics. These reports present statistics on sex, age, marital status, color or race, and relationship to head of household for States and counties and their urban and rural parts, and for standard metropolitan statistical areas, urbanized areas, places of 1,000 inhabitants or more, and minor civil divisions.

Series PC(1)-1C to 57C: Chapter C. General Social and Economic Characteristics. These reports cover the subjects of nativity and parentage, State of birth, country of origin of the foreign stock, mother tongue, place of residence in 1955, year moved into present house, school enrollment by level and type, years of school completed, families and their composition, fertility, veteran status, employment status, weeks worked in 1959, year last worked, occupation group, industry group, class of worker, place of work, means of transportation to work, and income of persons and families. Each subject is shown for some or all of the following areas: States and counties and their urban, rural-nonfarm, and rural-farm parts, standard metropolitan statistical areas, urbanized areas, and urban places.

Series PC(1)-1D to 57D: Chapter D. Detailed Characteristics. These reports will present most of the subjects covered in chapter C, above, cross-classified by age, color, and other characteristics. There will also be included additional information on families, as well as data on single years of age, detailed occupation, and detailed industry. Each subject will be shown for some or all of the following areas: States and their urban, rural-nonfarm, and rural-farm parts; and large counties, cities, and standard metropolitan statistical areas.

Volume I, Parts 1 to 57: Characteristics of the Population. This will consist of 57 parts—one for the United States, each of the 50 States, District of Columbia, Puerto Rico, Guam, Virgin Islands, American Samoa, and Canal Zone. Each part will consist of the data previously published in the four chapters A, B, C, and D, and will be in the form of a separate, buckram-bound book. Parts 54, 55, 56, and 57—for Guam, Virgin Islands, American Samoa, and Canal Zone, respectively—will be bound in a single book.

Volume I, Part A: Number of Inhabitants. This is a compendium of the 57 chapter A reports, i.e., PC(1)-1A to 57A.

Volume II (Series PC(2) reports). Subject Reports. This volume will consist of approximately 40 reports devoted essentially to detailed cross-classifications for the United States and regions for such subjects as national origin and race, fertility, families, marital status, migration, education, employment, unemployment, occupation, industry, and income. On some subjects (e.g., migration) statistics will also be shown for standard metropolitan statistical areas or States. In addition, there will be reports on veterans, the U.S. population overseas, and the geographic distribution and characteristics of the institutional population.

Volume III (Series PC(3) reports). Selected Area Reports. This volume will consist of two reports showing selected characteristics of the population (1) for State economic areas, and (2) according to the size of place where the individual resided.

Volume IV. Summary and Analytical Report. This report will present an analytical review of the results of the 1960 Census of Population for each major field.

CENSUS OF HOUSING

[The source of the data is the April 1960 enumeration, except for Volumes IV and V which will be based largely on the enumeration of units in a sample of land area segments started in late 1959 and extended into 1960]

Volume I (Series HC(1) reports). States and Small Areas. These reports present information about all housing subjects covered in the April 1960 enumeration. There is a separate report for the United States by regions and geographic divisions, each of the 50 States, the District of Columbia, Puerto Rico, Guam, and Virgin Islands of the United States. In the State reports, information is shown for the State as a whole and for each standard metropolitan statistical area, urbanized area, urban place, place of 1,000 to 2,500 inhabitants, county, and the rural-farm and rural-nonfarm parts of the county. The volume covers occupancy characteristics such as tenure, vacancy status, color, number of persons; structural characteristics such as rooms, year built, and condition of unit; equipment and facilities including water supply, toilet and bathing facilities, heating equipment, air conditioning, television, clothes washing machine, and the like; and financial characteristics including value and rent.

Volume II (Series HC(2) reports). Metropolitan Housing. These reports will present cross tabulations of housing and household characteristics. There will be a separate report for the United States by geographic divisions, and for each of the 192 standard metropolitan statistical areas with 100,000 inhabitants or more in the United States and Puerto Rico. Separate statistics for each city of 100,000 inhabitants or more will be included in the metropolitan area report.

Volume III (Series HC(3) reports). City Blocks. This volume consists of separate reports for cities and urban places with 50,000 inhabitants or more prior to and at the time of the 1960 Census, and for a number of smaller localities which arranged for block statistics. Data for a limited number of characteristics are presented by blocks. Statistics for 467 cities and localities in the United States and Puerto Rico are published in 421 separate reports.

Volume IV (Series HC(4) reports). Components of Inventory Change. These reports will present information on the source of the 1959 inventory and the disposition of the 1950 and 1956 inventories. Data will be provided for components of change such as new construction,

conversion, merger, demolition, and other additions and other losses. Part 1 of the volume will contain the 1950 to 1959 comparison, with a separate report for the United States by regions, and each of 17 selected standard metropolitan statistical areas. Part 2 will contain the 1957 to 1959 comparison, with a separate report for the United States by regions, and each of 9 selected standard metropolitan statistical areas.

Volume V. Residential Finance. These reports will present information on financing of residential property, including characteristics of mortgages, properties, and homeowners. Part 1 of the volume will be a report on homeowner properties for the United States by regions, and each of 17 selected standard metropolitan statistical areas. Part 2 will be a report on rental and vacant properties for the United States.

Volume VI. Rural Housing. This volume will show cross tabulations of housing and household characteristics for the 121 economic subregions of the United States, for rural-farm and for rural-nonfarm housing units.

Series HC(SI). Special Reports for Local Housing Authorities. This series consists of separate reports for 139 localities in the United States. The program was requested by, and planned in cooperation with, the Public Housing Administration. The reports contain data on both owner- and renter-occupied housing units defined as substandard by Public Housing Administration criteria, with emphasis on gross rent, size of family, and income of renter families.

LIST OF PHC(1) REPORTS

[Of the 180 areas listed below, all are standard metropolitan statistical areas except two, Middlesex and Somerset Counties, N.J., which are not part of an SMSA. For 136 of the 178 SMSA's, the entire area is tracted; for 17, only the central city (or cities) is tracted; and for the remaining 25, the central city (or cities) and part of the balance of the SMSA are tracted. In 13 of the reports, tracts adjacent to the SMSA are also shown]

- | | | | |
|--|---|--|---|
| 1. Abilene, Tex. ¹ | 46. Fall River, Mass.-R.I. | 91. Middlesex County, N.J. ⁴ | 136. San Diego, Calif. |
| 2. Akron, Ohio | 47. Flint, Mich. | 92. Milwaukee, Wis. | 137. San Francisco-Oakland, Calif. |
| 3. Albany-Schenectady-Troy, N.Y. | 48. Fort Smith, Ark. ² | 93. Minneapolis-St. Paul, Minn. | 138. San Jose, Calif. |
| 4. Albuquerque, N. Mex. | 49. Fort Wayne, Ind. | 94. Mobile, Ala. ² | 139. Santa Barbara, Calif. |
| 5. Allentown-Bethlehem-Easton, Pa.-N.J. ¹ | 50. Fort Worth, Tex. | 95. Monroe, La. ¹ | 140. Savannah, Ga. |
| 6. Altoona, Pa. ² | 51. Fresno, Calif. | 96. Montgomery, Ala. | 141. Scranton, Pa. ² |
| 7. Ann Arbor, Mich. | 52. Gadsden, Ala. | 97. Muncie, Ind. | 142. Seattle, Wash. |
| 8. Atlanta, Ga. | 53. Galveston-Texas City, Tex. | 98. Muskegon-Muskegon Heights, Mich. ¹ | 143. Shreveport, La. |
| 9. Atlantic City, N.J. ² | 54. Gary-Hammond-East Chicago, Ind. | 99. Nashville, Tenn. | 144. Sioux City, Iowa ² |
| 10. Augusta, Ga.-S.C. ¹ | 55. Grand Rapids, Mich. ¹ | 100. New Bedford, Mass. ² | 145. Somerset County, N.J. ⁴ |
| 11. Austin, Tex. | 56. Green Bay, Wis. ² | 101. New Britain, Conn. ³ | 146. South Bend, Ind. |
| 12. Bakersfield, Calif. ³ | 57. Greensboro-High Point, N.C. | 102. New Haven, Conn. | 147. Spokane, Wash. |
| 13. Baltimore, Md. | 58. Greenville, S.C. | 103. New Orleans, La. | 148. Springfield, Mo. |
| 14. Baton Rouge, La. | 59. Hamilton-Middletown, Ohio | 104. New York, N.Y. ⁴ | 149. Springfield, Ohio |
| 15. Beaumont-Port Arthur, Tex. ¹ | 60. Harrisburg, Pa. | 105. Newark, N.J. | 150. Springfield-Chicopee-Holyoke, Mass. ¹ |
| 16. Binghamton, N.Y. | 61. Hartford, Conn. ³ | 106. Newport News-Hampton, Va. ¹ | 151. Stamford, Conn. |
| 17. Birmingham, Ala. | 62. Honolulu, Hawaii | 107. Norfolk-Portsmouth, Va. | 152. Steubenville-Weirton, Ohio-W. Va. |
| 18. Boston, Mass. ³ | 63. Houston, Tex. | 108. Norwalk, Conn. ¹ | 153. Stockton, Calif. |
| 19. Bridgeport, Conn. | 64. Indianapolis, Ind. | 109. Odessa, Tex. | 154. Syracuse, N.Y. |
| 20. Brockton, Mass. | 65. Jackson, Mich. | 110. Ogden, Utah ³ | 155. Tacoma, Wash. |
| 21. Buffalo, N.Y. | 66. Jacksonville, Fla. ² | 111. Oklahoma City, Okla. ¹ | 156. Tampa-St. Petersburg, Fla. |
| 22. Canton, Ohio | 67. Jersey City, N.J. | 112. Omaha, Nebr.-Iowa | 157. Texarkana, Tex.-Ark. ² |
| 23. Charleston, S.C. | 68. Johnstown, Pa. ¹ | 113. Orlando, Fla. ¹ | 158. Toledo, Ohio |
| 24. Charlotte, N.C. | 69. Kalamazoo, Mich. | 114. Paterson-Clifton-Passaic, N.J. | 159. Topeka, Kans. |
| 25. Chattanooga, Tenn.-Ga. ¹ | 70. Kansas City, Mo.-Kans. ¹ 3 | 115. Peoria, Ill. | 160. Trenton, N.J. |
| 26. Chicago, Ill. | 71. Knoxville, Tenn. ² | 116. Philadelphia, Pa.-N.J. | 161. Tucson, Ariz. |
| 27. Cincinnati, Ohio-Ky. ¹ | 72. Lancaster, Pa. | 117. Phoenix, Ariz. | 162. Tulsa, Okla. ¹ |
| 28. Cleveland, Ohio | 73. Lansing, Mich. ¹ | 118. Pittsburgh, Pa. | 163. Tyler, Tex. |
| 29. Colorado Springs, Colo. | 74. Laredo, Tex. | 119. Pittsfield, Mass. ³ | 164. Utica-Rome, N.Y. |
| 30. Columbia, S.C. | 75. Las Vegas, Nev. ² | 120. Portland, Maine | 165. Waco, Tex. |
| 31. Columbus, Ga.-Ala. | 76. Lawrence-Haverhill, Mass.-N.H. ¹ | 121. Portland, Oreg.-Wash. R.I.-Mass. ³ | 166. Washington, D.C.-Md.-Va. |
| 32. Columbus, Ohio | 77. Lexington, Ky. | 122. Providence-Pawtucket, R.I.-Mass. ³ | 167. Waterbury, Conn. |
| 33. Corpus Christi, Tex. | 78. Lima, Ohio | 123. Pueblo, Colo. | 168. Waterloo, Iowa |
| 34. Dallas, Tex. | 79. Lincoln, Nebr. ¹ | 124. Raleigh, N.C. | 169. Wheeling, W. Va.-Ohio ¹ |
| 35. Davenport-Rock Island-Moline, Iowa-Ill. ² | 80. Little Rock-North Little Rock, Ark. | 125. Reading, Pa. | 170. Wichita, Kans. |
| 36. Dayton, Ohio ¹ | 81. Lorain-Elyria, Ohio | 126. Richmond, Va. | 171. Wichita Falls, Tex. ² |
| 37. Decatur, Ill. | 82. Los Angeles-Long Beach, Calif. | 127. Rochester, N.Y. | 172. Wilkes-Barre-Hazleton, Pa. |
| 38. Denver, Colo. | 83. Louisville, Ky.-Ind. | 128. Rockford, Ill. | 173. Wilmington, Del.-N.J. |
| 39. Des Moines, Iowa | 84. Lowell, Mass. | 129. Sacramento, Calif. ³ | 174. Winston-Salem, N.C. |
| 40. Detroit, Mich. | 85. Lubbock, Tex. ² | 130. Saginaw, Mich. | 175. Worcester, Mass. ³ |
| 41. Duluth-Superior, Minn.-Wis. ² | 86. Macon, Ga. ¹ | 131. St. Louis, Mo.-Ill. | 176. York, Pa. ¹ |
| 42. Durham, N.C. | 87. Madison, Wis. | 132. Salt Lake City, Utah ³ | 177. Youngstown-Warren, Ohio ¹ 3 |
| 43. El Paso, Tex. | 88. Manchester, N.H. | 133. San Angelo, Tex. ² | 178. Mayagüez, P.R. |
| 44. Erie, Pa. | 89. Memphis, Tenn. | 134. San Antonio, Tex. | 179. Ponce, P.R. |
| 45. Evansville, Ind.-Ky. | 90. Miami, Fla. | 135. San Bernardino-Riverside-Ontario, Calif. | 180. San Juan, P.R. ³ |

¹ Central city (or cities) and only part of balance of SMSA are tracted.
² Only central city (or cities) is tracted.
³ Report also shows tracts adjacent to the SMSA.

⁴ This county is not part of an SMSA.
⁵ Report to be published in two parts: 1. New York City; 2. Outside New York City.

COMPARABILITY OF CENSUS TRACTS, 1960 AND 1950

Only Pittsburgh city and some adjacent area were tracted for 1950. The numbering system for the tracts in Allegheny County, outside Pittsburgh city, has been completely revised since 1950. Shown below are the 1960 tracts that are not comparable to the 1950 tracts.

<u>1960 tract number</u>	<u>1950 tract number¹</u>	<u>1960 tract number</u>		<u>1950 tract number¹</u>	
1-A.....	1-A and part of 1-B	19-E.....		19-E part (part to 19-D) and part of 20-K	
1-B.....	1-B part (part to 1-A)	19-F.....		19-F part (parts to 20-N and 20-L) and part of 20-K	
2-F.....	2-C, 2-D, 2-E, and part of 5-A	19-J.....		19-H part (parts to 19-K, 19-L, and 32-A) and parts of 19-I and 32-C	
3-A.....	3-A and part of 3-B	19-K.....		19-I part (part to 19-J) and part of 19-H	
3-F.....	3-B part (part to 3-A) and 3-C part (parts to 3-G and 3-H)	19-L.....		19-H part	
3-G.....	3-D and part of 3-C	20-A.....		20-A part (parts to 20-D and 28-A)	
3-H.....	3-E and part of 3-C	20-B.....		20-B part (part to 20-D)	
4-Fa.....	4-F	20-D.....		20-D and parts of 20-A and 20-B	
4-Fb.....		20-E.....		20-E part (part to 20-G)	
4-I.....	4-I part (part to 15-F)	20-G.....		20-G and parts of 19-A and 20-E	
4-J.....	4-B, 4-G, and 4-H part (part to 15-D and 15-F)	20-H.....		20-H part (part to 28-B)	
5-K.....	5-E and part of 5-B	20-L.....		20-L and part of 19-F	
5-L.....	5-A part (part to 2-F) and 5-B part (part to 5-K)	20-M.....		20-J part (part to 20-N) and parts of 20-K and 28-F	
10-B.....	10-B part (part to 10-D)	20-N.....		20-K part (parts to 19-D, 19-E, 19-F, and 20-M) and parts of 19-A, 19-F, and 20-J	
10-D.....	10-D and part of 10-B	21-G.....		21-A and 21-F part (part to 21-H)	
10-Fa.....	10-F	21-H.....		21-E and part of 21-F	
10-Fb.....		11-F.....		11-F part (part to 12-E)	
11-K.....	11-A, 11-D, and 11-E	22-H.....		22-D and 22-E part (part to 22-I)	
11-L.....	11-G part (part to 11-M) and part of 11-I	22-I.....		22-F, 22-G, and part of 22-E	
11-M.....	11-I part (part to 11-L) and part of 11-G	25-Ba.....	} 25-B		
12-E.....	12-E and part of 11-F	25-Bb.....			
13-H.....	13-F and 13-Z	26-L.....		26-D, 26-E, and 26-F	
14-J.....	14-J part and part of 14-K	26-M.....		26-C part (part to 26-N)	
14-K.....	14-K part (part to 14-J)	26-N.....		26-Y part (part to 26-P) and parts of 26-C and 26-K	
15-D.....	15-D and part of 4-H	26-P.....		26-K part (part to 26-N) and part of 26-Y	
15-Ea.....	15-E	28-A.....		28-A and parts of 20-A and 227	
15-Eb.....		28-B.....		28-B and part of 20-H	
15-Ec.....		28-F.....		28-F part (part to 20-M)	
15-F.....	15-A part (part to 15-G), 15-B part (part to 15-G), and parts of 4-H and 4-I	29-A.....		29-A and part of 32-C	
15-G.....	15-A part and part of 15-B	29-C.....		29-C part (part to 32-B)	
16-A.....	16-A part (part to 16-Ca)	31-A.....		31-A and part of 7	
16-Ca.....	16-C part (parts to 16-Cb and 16-Cc) and part of 16-A	32-A.....		32-A and parts of 8 and 19-H	
16-Cb.....	16-C part	32-B.....		32-B and part of 29-C	
16-Cc.....	16-C part	32-C.....		32-C part (parts to 19-J and 29-A)	
17-C.....	17-C and part of 18-A	HNT-1.....	} 106		
18-A.....	18-A part (part to 17-C)	HNT-2.....			
18-Da.....	18-D part (part to 18-E)	HNT-3.....			
18-Db.....		18-B.....		18	
18-E.....	18-E and part of 18-D	BRB-4.....		19	
19-A.....	19-A part (parts to 20-G and 20-N)	TAB-5.....		262	
19-C.....	19-C part (part to 19-D)	TAB-6.....		261	
19-D.....	19-D and parts to 19-C, 19-E, and 20-K	TAB-7.....		263	
		TAB-8.....		75	
		EDT-9.....		97	
		FZT-10.....			

¹ Tract numbers in parentheses refer to 1960 tracts.

COMPARABILITY OF CENSUS TRACTS, 1960 AND 1950--Con.

1960 tract number	1950 tract number ¹	1960 tract number	1950 tract number ¹
FAT-11.....	92	OOT-70.....	204
WET-12.....	278	SHB-71.....	238 part (part to SYB-73)
RIT-13.....	226	SET-72.....	237
PIT-14.....	214	SYB-73.....	207 part (part to SEB-80) and parts of 1 and 238
BWB-15.....	28	AIT-74.....	1 part (part to SYB-73)
MAT-16.....	163	GDB-75.....	102
FRT-17.....	96	HYB-76.....	107
MCT-18.....	130	OSB-77.....	205
MCT-19.....		SEB-78.....	234
MCT-20.....		SEB-79.....	236
HAT-21.....	104	SEB-80.....	235 and part of 207
INT-22.....	119 part (part to FCB-31)	EGB-81.....	83
SPT-23.....	250	LET-82.....	126
SPB-24.....	248	LEB-83.....	127
SPB-25.....	249	CRT-84.....	61
CKB-26.....	42	COB-85.....	51
HRT-27.....	105	COB-86.....	53
BXB-28.....	17	COB-87.....	55
OHT-29.....	203	COB-88.....	54
OHT-30.....		COB-89.....	52
FCB-31.....	202 and part of 119	MOT-90.....	175
ASB-32.....	2	FIT-91.....	93
SGB-33.....	244	NFT-92.....	195
SGB-34.....	242	MDB-93.....	131
SGB-35.....	243	OAB-94.....	198
ETB-36.....	89	SFT-95.....	246
ETB-37.....	87 and part of 88	BGB-96.....	30
ETB-38.....	88 part (part to ETB-37)	BGB-97.....	31 and part of 271
ETB-39.....	90	COT-98.....	50
ETB-40.....	91	ROT-99.....	227 part (parts to 28-A and CAB-123)
SRT-41.....	240	KET-100.....	124
SRT-42.....	239 part (part to SRT-44)	NET-101.....	186
SRT-43.....		SRT-44.....	251 and part of 254
SRT-44.....		241 part (part to SRT-44)	STT-103.....
SRT-45.....	241 part (part to SRT-44)	STT-104.....	255 and part of 254
MIB-46.....	174 and 173 part (part to MIB-49)	STT-105.....	253
MIB-47.....	170 and part of 171	STT-106.....	252
MIB-48.....	171 part (part to MIB-47) and part of 172	MRB-107.....	134 part (part to MRB-110) and part of 135
MIB-49.....	172 part (part to MIB-48) and part of 173	MRB-108.....	135 part (part to MRB-107)
RET-50.....	225	MRB-109.....	133
RET-51.....	224	MRB-110.....	132 and part of 134
RST-52.....	231 part (part to RST-56)	MRB-111.....	137 part (part to MRB-112) and 138 part (part to MRB-112)
RST-53.....	228	MRB-112.....	136 and parts of 137 and 138
RST-54.....		RST-55.....	229
RST-55.....	229	RST-56.....	230 and part of 231
RST-56.....	230 and part of 231	WVB-57.....	284
WVB-57.....	284	WVB-58.....	283
WVB-58.....	283	BEB-59.....	10
BEB-59.....	10	BEB-60.....	11
BEB-60.....	11	BEB-61.....	13
BEB-61.....	13	BEB-62.....	12
BEB-62.....	12	AVB-63.....	4 part (part to AVB-64)
AVB-63.....	4 part (part to AVB-64)	AVB-64.....	3 and part of 4
AVB-64.....	3 and part of 4	AVB-65.....	5 and 6
AVB-65.....	5 and 6	BSB-66.....	15
BSB-66.....	15	BNB-67.....	14
BNB-67.....	14	EMB-68.....	86
EMB-68.....	86	KIT-69.....	125
KIT-69.....	125		

¹ Tract numbers in parentheses refer to 1960 tracts.

COMPARABILITY OF CENSUS TRACTS, 1960 AND 1950--Con.

1960 tract number	1950 tract number ¹	1960 tract number	1950 tract number ¹
CAB-127.....	37	WMB-182.....	168 part (part to WMB-183)
GRB-128.....	103	WMB-183.....	169 and part of 168
SCT-129.....	233 part (parts to SCT-130 and SCT-131) and part of 176	PHB-184.....	208 and part of 8
SCT-130.....	} 233 part	SNT-185.....	245 part (part to BLB-146) and part of 16
SCT-131.....		JEB-186.....	122 and part of 123
HEB-132.....	108	JEB-187.....	123 part (part to JEB-186)
DOB-133.....	62	CLC-188.....	43
DOB-134.....	63	CLC-189.....	44
DOB-135.....	64	CLC-190.....	45 part (part to CLC-194) and part of 46
DOB-136.....	65	CLC-191.....	46 part (parts to CLC-190 and CLC-194) and part of 49
MLT-137.....	176 part (part to SCT-129)	CLC-192.....	49 part (parts to CLC-191, CLC-193, and CLC-194)
MLT-138.....	177	CLC-193.....	49 part
MLT-139.....	178 part (parts to MLT-140, MLT-141, and BAT-152)	CLC-194.....	47, 48, and parts of 45, 46, and 49
MLT-140.....	178 part and part of 16	WEB-195.....	279
MLT-141.....	179 part (part to MLT-142) and part of 178	ELB-196.....	84
MLT-142.....	179 part	FOT-197.....	95
UST-143.....	271 part (part to BGB-97)	ELT-198.....	} 85
BLB-144.....	16 part (parts to MLT-140, BLB-145, BLB-146, and SNT-185)	ELT-199.....	
BLB-145.....	16 part	LNB-200.....	129
BLB-146.....	16 part and part of 245	LTB-201.....	128
CSB-147.....	39, 38 part (part to CSB-148), and 40 part (part to CSB-148)	GLB-202.....	101 part (parts to GLB-203 and GLB-204) and part of 100
CSB-148.....	38 part and part of 40	GLB-203.....	99 part (part to GLB-204) and part of 101
WLB-149.....	301	GLB-204.....	98, 100 part (part to GLB-202), and parts of 99 and 101
WLB-150.....	300	PVB-205.....	219 and part of 220
BDB-151.....	29	PVB-206.....	220 part (part to PVB-205)
BAT-152.....	8 part and part of 178	MKC-207.....	160 and part of 159
BAB-153.....	8 part (parts to 32-A, BAT-152, and PHB-184)	MKC-208.....	159 part (part to MKC-207)
BAB-154.....	7 part (part to 31-A)	MKC-209.....	139, 145, 148, 146 part (part to MKC-213), and part of 154
MOB-155.....	180	MKC-210.....	140, 141, and 143
MOB-156.....	181 and part of 182	MKC-211.....	142 part (part to MKC-212), 144 part (parts to MKC-221 and MKC-222), and part of 151
MOB-157.....	182 part (part to MOB-156)	MKC-212.....	150, 147 part (part to MKC-213), and part of 142
WHB-158.....	281	MKC-213.....	149 and parts of 146 and 147
WHB-159.....	280	MKC-214.....	155
WHB-160.....	282	MKC-215.....	154 part (part to MKC-209)
HOB-161.....	109, 110, 111, 112, 115, and 117	MKC-216.....	156
HOB-162.....	118	MKC-217.....	157 part (parts to MKC-218, MKC-222, and MKC-223), 158 part (parts to MKC-223 and MKC-224); and 164 part (parts to MKC-222, MKC-223, and MKC-224)
HOB-163.....	116	MKC-218.....	152 part and parts of 153, 157, and 161
HOB-164.....	114	MKC-219.....	152 part (parts to MKC-218 and MKC-220) and part of 153
HOB-165.....	113	MKC-220.....	153 part (parts to MKC-218 and MKC-219) and part of 152
MUB-166.....	185	MKC-221.....	151 part (parts to MKC-211 and MKC-222) and parts of 144 and 161
MUB-167.....	183	MKC-222.....	161 part (parts to MKC-218 and MKC-221), 162 part (part to MKC-223), and parts of 144, 151, 157, and 164
MUB-168.....	184	MKC-223.....	157 part and parts of 158, 162, and 164
MUB-169.....	} 165	MKC-224.....	158 part and part of 164
MUB-170.....		VSB-225.....	274
WRB-171.....	285		
DUC-172.....	67 and 69		
DUC-173.....	68		
DUC-174.....	70 part (part to DUC-178)		
DUC-175.....	71		
DUC-176.....	72		
DUC-177.....	74 and part of 73		
DUC-178.....	73 part (part to DUC-177) and part of 70		
DRB-179.....	66		
WMB-180.....	166 part (part to WMB-181)		
WMB-181.....	167 and part of 166		

¹ Tract numbers in parentheses refer to 1960 tracts.

COMPARABILITY OF CENSUS TRACTS, 1960 AND 1950--Con.

1960 tract number	1950 tract number ¹	1960 tract number	1950 tract number ¹
SVT-226.....	247	SWB-262.....	259 and part of 260
WOB-227.....	275	SWB-263.....	260 part (part to SWB-262)
NVT-228.....	197	SWB-264.....	258 part (part to SWB-265)
NVT-229.....		SWB-265.....	257 and part of 258
NVT-230.....	196	SWB-266.....	256
TRB-231.....	265	EDB-267.....	81 part (part to EDB-268)
WAB-232.....	276 and 277	EDB-268.....	82 and part of 81
EMB-233.....	76 and part of 77	WIB-269.....	289 and part of 291
EMB-234.....	77 part (part to EMB-233)	WIB-270.....	288
WGB-235.....	297	WIB-271.....	287
WGB-236.....	298 and part of 299	WIB-272.....	295
WGB-237.....	299 part (part to WGB-236)	WIB-273.....	296
TCB-238.....	266 and part of 270	WIB-274.....	292
TCB-239.....	267	WIB-275.....	290
TCB-240.....	269, 270 part (part to TCB-238), and part of 268	WIB-276.....	291 part (part to WIB-269)
TCB-241.....	268 part (part to TCB-240)	WIB-277.....	294
EPB-242.....	80 and parts of 78 and 79	WIB-278.....	293
EPB-243.....	78 part (part to EPB-242) and 79 part (part to EPB-242)	BHB-279.....	27 and part of 94
CHB-244.....	41	FHB-280.....	94 part (part to BHB-279)
NBB-245.....	187 and parts of 188 and 189	CLB-281.....	206
NBB-246.....	188 part (part to NBB-245) and 189 part (part to NBB-245)	WIT-282.....	286
NBB-247.....	190 part (part to NBB-249)	MVB-283.....	209 and part of 210
NBB-248.....	192	MVB-284.....	210 part (part to MVB-283)
NBB-249.....	191 and part of 190	PIB-285.....	215 part (part to PIB-286) and parts of 216 and 217
NBB-250.....	193	PIB-286.....	216 part (part to PIB-285) and part of 215
NBB-251.....	194	PIB-287.....	217 part (part to PIB-285)
BKB-252.....	26	PHT-288.....	211
BKB-253.....	24	PHT-289.....	213 part (part to PHT-292)
BKB-254.....	22 part (part to BKB-257)	PHT-290.....	
BKB-255.....	20 part (part to BKB-256)	PHT-291.....	212 part (part to PHT-292)
BKB-256.....	21 and part of 20	PHT-292.....	212 part and part of 213
BKB-257.....	23 and part of 22	VEB-293.....	272 part (part to VEB-294)
BKB-258.....	25	VEB-294.....	273 and part of 272
RAB-259.....	221 part and part of 223	OKB-295.....	201 part (part to OKB-297) and part of 218
RAB-260.....	222 part (part to RAB-261) and part of 221	OKB-296.....	200
RAB-261.....	221 part (part to RAB-259 and RAB-260) and part of 222	OKB-297.....	199 and parts of 201 and 218
		PLB-298.....	218 part (parts to OKB-295 and OKB-297)

The following 1950 tract numbers have been deleted:

2-C	3-C	4-G	5-E	11-G	15-A	20-J	21-F	22-G	26-F
2-D	3-D	4-H	11-A	11-I	15-B	20-K	22-D	26-C	26-K
2-E	3-E	5-A	11-D	13-F	19-H	21-A	22-E	26-D	26-Y
3-B	4-B	5-B	11-E	13-Z	19-I	21-E	22-F	26-E	

¹ Tract numbers in parentheses refer to 1960 tracts.

NOTE ON BIAS IN SAMPLE STATISTICS

Sample statistics of certain census tracts may be subject to substantial bias as the result of (a) under- or overenumeration in the sample, or (b) inadequate reporting of information for sample items. Among tracts with 1,000 inhabitants or more, there was one case where one or more component ED's (comprising more than 20 percent of the total population of the tract) had allocation rates of 50 percent or more for a majority of the sample items. In tract 12-A, 30 percent of the population was in such ED's. The extent to which cancellation and replication of sample items may have affected the quality of sample tract statistics, however, has not been determined. Further information on editing procedures is available in the section on editing in the text of this report and that of chapters C and D of 1960 Census of Population, Volume 1, Characteristics of the Population.