

which it is located) amounted to at least \$1,000 in 1989. A one-family unit occupied by a tenant household that does not pay cash rent is enumerated as a farm residence if the remainder of the farm (including its yard) qualifies as a farm.

Farm residence is provided as an independent data item only for housing units located in rural areas. It may be derived for housing units in urban areas from the data items on acreage and sales of agricultural products on the public-use microdata sample (PUMS) files. (For more information on PUMS, see Appendix F, Data Products and User Assistance.)

The farm population consists of persons in households living in farm residences. Some persons who are counted on a property classified as a farm (including in some cases farm workers) are excluded from the farm population. Such persons include those who reside in multi-unit buildings or group quarters.

**Comparability**—These are the same criteria that were used to define a farm residence in 1980. In 1960 and 1970, a farm was defined as a place of 10 or more acres with at least \$50 worth of agricultural sales or a place of less than 10 acres with at least \$250 worth of agricultural sales. Earlier censuses used other definitions.

(continued from the National Agricultural Statistics, Bureau of the Census, 1989).

Gross rent is the contract rent plus the estimated average monthly cost of utilities (electricity, gas, and water) and fuels (oil, coal, kerosene, wood, etc.) if these are paid for by the renter (or paid for the renter by someone else). Gross rent is intended to eliminate differentials which result from varying practices with respect to the inclusion of utilities and fuels as part of the rental payment. The estimated costs of utilities and fuels are reported on a yearly basis but are converted to monthly figures for the tabulations. Renter units occupied without payment of cash rent are shown separately as "No cash rent" in the tabulations. Gross rent is calculated on a sample basis.

**Comparability**—Data on gross rent have been collected since 1940 for renter-occupied housing units. In 1980, costs for electricity and gas were collected as average monthly costs. In 1990, all utility and fuel costs were collected as yearly costs and divided by 12 to provide an average monthly cost.

### GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME IN 1989

Gross rent as a percentage of household income in 1989 is a computed ratio of monthly gross rent to monthly household income (total household income in

1989 divided by 12). The ratio was computed separately for each unit and was rounded to the nearest whole percentage. Units for which no cash rent is paid and units occupied by households that reported no income or a net loss in 1989 comprise the category "Not computed." This item is calculated on a sample basis.

## HOUSE HEATING FUEL

The data on house heating fuel were obtained from questionnaire item H14, which was asked at occupied housing units. This item was asked on a sample basis. The data show the type of fuel used most to heat the house or apartment.

**Utility Gas**—Includes gas piped through underground pipes from a central system to serve the neighborhood.

**Bottled, Tank, or LP Gas**—Includes liquid propane gas stored in bottles or tanks which are refilled or exchanged when empty.

**Fuel Oil, Kerosene, Etc.**—Includes fuel oil, kerosene, gasoline, alcohol, and other combustible liquids.

Sawmill or construction scraps, or the like.

**Solar Energy**—Includes heat provided by sunlight which

the rooms.

**Other Fuel**—Includes all other fuels not specified elsewhere.

**No Fuel Used**—Includes units that do not use any fuel or that do not have heating equipment.

**Comparability**—Data on house heating fuel have been collected since 1940. The category, "Solar energy" is new for 1990.

## INSURANCE FOR FIRE, HAZARD, AND FLOOD

The data on fire, hazard, and flood insurance were obtained from questionnaire item H22, which was asked at a sample of owner-occupied one-family houses, condominiums, and mobile homes. The statistics for this item refer to the annual premium for fire, hazard, and flood insurance on the property (land and buildings); that is, policies that protect the property and its contents against loss due to damage by fire, lightning, winds, hail, flood, explosion, and so on.

Liability policies are included only if they are paid with the fire, hazard, and flood insurance premiums and the amounts for fire, hazard, and flood cannot be separated. Premiums are included even if paid by someone outside

the household or remain unpaid. When premiums are paid on other than a yearly basis, the premiums are converted to a yearly basis.

The payment for fire, hazard, and flood insurance is added to payments for real estate taxes, utilities, fuels, and mortgages (both first and junior mortgages and home equity loans) to derive "Selected Monthly Owner Costs" and "Selected Monthly Owner Costs as a Percentage of Household Income in 1989."

A separate question (H23d) determines whether insurance premiums are included in the mortgage payment to the lender(s). This makes it possible to avoid counting these premiums twice in the computations.

**Comparability**—Data on payment for fire and hazard insurance were collected for the first time in 1980. Flood insurance was not specifically mentioned in the wording of the question in 1980. The question was asked only at owner-occupied one-family houses. Excluded were mobile homes, condominiums, houses with a business or medical office on the property, houses on 10 or more acres, and housing units in multi-unit buildings. In 1990, the question was asked of all one-family owner-occupied houses, including houses on 10 or more acres. It also was asked at mobile homes, condominiums, and one-family houses with a business or medical office on the property.

## KITCHEN FACILITIES

Data on kitchen facilities were obtained from questionnaire item H11, which was asked at both occupied and vacant housing units. A unit has complete kitchen facilities when it has all of the following: (1) an installed sink with piped water, (2) a range, cook top and convection or microwave oven, or cookstove, and (3) a refrigerator. All kitchen facilities must be located in the structure. They need not be in the same room. Portable cooking equipment is not considered a range or cookstove. An ice box is not considered to be a refrigerator.

**Comparability**—Data on complete kitchen facilities were collected for the first time in 1970. Earlier censuses collected data on individual components, such as kitchen sink and type of refrigeration equipment. In 1970 and 1980, data for kitchen facilities were shown only for year-round units. In 1990, data are shown for all housing units.

## MEALS INCLUDED IN RENT

The data on meals included in the rent were obtained from questionnaire item H7b, which was asked of all occupied housing units that were rented for cash and all vacant housing units that were for rent at the time of enumeration.

The statistics on meals included in rent are presented for specified renter-occupied and specified vacant-for-rent units. Specified renter-occupied and specified vacant-for-rent units exclude one-family houses on 10 or more acres. (For more information, see the discussion under "Contract Rent.")

**Comparability**—This is a new item in 1990. It is intended to measure "congregate" housing, which generally is considered to be housing units where the rent includes meals and other services, such as transportation to shopping and recreation.

## MOBILE HOME COSTS

The data on mobile home costs were obtained from questionnaire item H26, which was asked at owner-occupied mobile homes. This item was asked on a sample basis.

These data include the total yearly costs for personal property taxes, land or site rent, registration fees, and license fees on all owner-occupied mobile homes. The instructions are to not include real estate taxes already reported in question H21.

Costs are estimated as closely as possible when exact costs are not known. Amounts are the total for an entire 12-month billing period, even if they are paid by someone outside the household or remain unpaid.

The data from this item are added to payments for mortgages, real estate taxes, fire, hazard, and flood insurance payments, utilities, and fuels to derive selected monthly owner costs for mobile homes owners.

**Comparability**—This item is new for 1990.

## MORTGAGE PAYMENT

The data on mortgage payment were obtained from questionnaire item H23b, which was asked at owner occupied one-family houses, condominiums, and mobile homes. This item was asked on a sample basis. Question H23b provides the regular monthly amount required to be paid the lender for the first mortgage (deed of trust, contract to purchase, or similar debt) on the property. Amounts are included even if the payments are delinquent or paid by someone else. The amounts reported are included in the computation of "Selected Monthly Owner Costs" and "Selected Monthly Owner Costs as a Percentage of Household Income in 1989" for units with a mortgage.

The amounts reported include everything paid to the lender including principal and interest payments, real estate taxes, fire, hazard, and flood insurance payments, and mortgage insurance premiums. Separate questions determine whether real estate taxes and fire, hazard, and flood insurance payments are included in

the mortgage payment to the lender. This makes it possible to avoid counting these components twice in the computation of "Selected Monthly Owner Costs."

**Comparability**—Information on mortgage payment was collected for the first time in 1980. It was collected only at owner-occupied one-family houses. Excluded were mobile homes, condominiums, houses with a business or medical office on the property, one-family houses on 10 or more acres, and housing units in multi-unit buildings. In 1990, the questions on monthly mortgage payments were asked of all owner-occupied one-family houses, including one-family houses on 10 or more acres. They were also asked at mobile homes, condominiums, and one-family houses with a business or medical office.

The 1980 census obtained total regular monthly mortgage payments, including payments on second or junior mortgages, from a single question. Two questions were used in 1990; one for regular monthly payments on first mortgages, and one for regular monthly payments on second or junior mortgages or home equity loans. (For more information, see the discussion under "Second or Junior Mortgage Payment.")

## MORTGAGE STATUS

The data on mortgage status were obtained from questionnaire items H23a and H24a, which were asked at owner-occupied one-family houses, condominiums, and mobile homes. "Mortgage" refers to all forms of debt where the property is pledged as security for repayment of the debt. It includes such debt instruments as deeds of trust, trust deeds, contracts to purchase, land contracts, junior mortgages and home equity loans.

A mortgage is considered a first mortgage if it has prior claim over any other mortgage or if it is the only mortgage on the property. All other mortgages, (second, third, etc.) are considered junior mortgages. A home equity loan is generally a junior mortgage. If no first mortgage is reported, but a junior mortgage or home equity loan is reported, then the loan is considered a first mortgage.

In most census data products, the tabulations for "Selected Monthly Owner Costs" and "Selected Monthly Owner Costs as a Percentage of Household Income in 1989" usually are shown separately for units "with a mortgage" and for units "not mortgaged." The category "not mortgaged" is comprised of housing units owned free and clear of debt.

**Comparability**—A question on mortgage status was included in the 1940 and 1950 censuses, but not in the 1960 and 1970 censuses. The item was reinstated in 1980 along with a separate question dealing with the existence of second or junior mortgages. In 1980, the mortgage status questions were asked at owner-occupied

one-family houses on less than 10 acres. Excluded were mobile homes, condominiums, houses with a business or medical office, houses on 10 or more acres, and housing units in multi-unit buildings. In 1990, the questions were asked of all one-family owner-occupied housing units, including houses on 10 or more acres. They were also asked at mobile homes, condominiums, and houses with a business or medical office.

## PERSONS IN UNIT

This item is based on the 100-percent count of persons in occupied housing units. All persons occupying the housing unit are counted, including the householder, occupants related to the householder, and lodgers, roomers, boarders, and so forth.

The data on "persons in unit" show the number of housing units occupied by the specified number of persons. The phrase "persons in unit" is used for housing tabulations, "persons in households" for population items. Figures for "persons in unit" match those for "persons in household" for 100-percent data products. In sample products, they may differ because of the weighting process.

**Median Persons in Unit**—In computing median persons in unit, a whole number is used as the midpoint of an interval; thus, a unit with 4 persons is treated as an interval ranging from 3.5 to 4.5 persons. Median persons is rounded to the nearest hundredth. (For more information on medians, see the discussion under "Derived Measures.")

**Persons in Occupied Housing Units**—This is the total population minus those persons living in group quarters. "Persons per occupied housing unit" is computed by dividing the population living in housing units by the number of occupied housing units.

## PERSONS PER ROOM

"Persons per room" is obtained by dividing the number of persons in each occupied housing unit by the number of rooms in the unit. Persons per room is rounded to the nearest hundredth. The figures shown refer, therefore, to the number of occupied housing units having the specified ratio of persons per room.

**Mean Persons Per Room**—This is computed by dividing persons in housing units by the aggregate number of rooms. This is intended to provide a measure of utilization. A higher mean may indicate a greater degree of utilization or crowding; a low mean may indicate underutilization. (For more information on means, see the discussion under "Derived Measures.")

## PLUMBING FACILITIES

The data on plumbing facilities were obtained from questionnaire item H10, which was asked at both occupied and vacant housing units. This item was asked on a sample basis. Complete plumbing facilities include hot and cold piped water, a flush toilet, and a bathtub or shower. All three facilities must be located inside the house, apartment, or mobile home, but not necessarily in the same room. Housing units are classified as lacking complete plumbing facilities when any of the three facilities are not present.

**Comparability**—The 1990 data on complete plumbing facilities are not strictly comparable with the 1980 data. In 1980, complete plumbing facilities were defined as hot and cold piped water, a bathtub or shower, and a flush toilet in the housing unit for the exclusive use of the residents of that unit. In 1990, the Census Bureau dropped the requirement of exclusive use from the definition of complete plumbing facilities. Of the 2.3 million year-round housing units classified in 1980 as lacking complete plumbing for exclusive use, approximately 25 percent of these units had complete plumbing but the facilities were also used by members of another household. From 1940 to 1970, separate and more detailed questions were asked on piped water, bathing, and toilet facilities. In 1970 and 1980, the data on plumbing facilities were shown only for year-round units.

## POVERTY STATUS OF HOUSEHOLDS IN 1989

The data on poverty status of households were derived from answers to the income questions. The income items were asked on a sample basis. Households are classified below the poverty level when the total 1989 income of the family or of the nonfamily householder is below the appropriate poverty threshold. The income of persons living in the household who are unrelated to the householder is not considered when determining the poverty status of a household, nor does their presence affect the household size in determining the appropriate poverty threshold. The poverty thresholds vary depending upon three criteria: size of family, number of children, and age of the family householder or unrelated individual for one and two-persons households. (For more information, see the discussion of "Poverty Status in 1989" and "Income in 1989" under Population Characteristics.)

## REAL ESTATE TAXES

The data on real estate taxes were obtained from questionnaire item H21, which was asked at owner-occupied one-family houses, condominiums, and mobile homes. The statistics from this question refer to the total amount of all real estate taxes on the entire

property (land and buildings) payable in 1989 to all taxing jurisdictions, including special assessments, school taxes, county taxes, and so forth.

Real estate taxes include State, local, and all other real estate taxes even if delinquent, unpaid, or paid by someone who is not a member of the household. However, taxes due from prior years are not included. If taxes are paid on other than a yearly basis, the payments are converted to a yearly basis.

The payment for real estate taxes is added to payments for fire, hazard, and flood insurance; utilities and fuels; and mortgages (both first and junior mortgages and home equity loans) to derive "Selected Monthly Owner Costs" and "Selected Monthly Owner Costs as a Percentage of Household Income in 1989." A separate question (H23c) determines whether real estate taxes are included in the mortgage payment to the lender(s). This makes it possible to avoid counting taxes twice in the computations.

**Comparability**—Data for real estate taxes were collected for the first time in 1980. The question was asked only at owner-occupied one-family houses. Excluded were mobile homes or trailers, condominiums, houses with a business or medical office on the property, houses on 10 or more acres, and housing units in multi-unit buildings. In 1990, the question was asked of all one-family owner-occupied houses, including houses on 10 or more acres. It also was asked at mobile homes, condominiums, and one-family houses with a business or medical office on the property.

## ROOMS

The data on rooms were obtained from questionnaire item H3, which was asked at both occupied and vacant housing units. The statistics on rooms are in terms of the number of housing units with a specified number of rooms. The intent of this question is to count the number of whole rooms used for living purposes.

For each unit, rooms include living rooms, dining rooms, kitchens, bedrooms, finished recreation rooms, enclosed porches suitable for year-round use, and lodger's rooms. Excluded are strip or pullman kitchens, bathrooms, open porches, balconies, halls or foyers, half-rooms, utility rooms, unfinished attics or basements, or other unfinished space used for storage. A partially divided room is a separate room only if there is a partition from floor to ceiling, but not if the partition consists solely of shelves or cabinets.

**Median Rooms**—This measure divides the room distribution into two equal parts, one-half of the cases falling below the median number of rooms and one-half above the median. In computing median rooms, the whole number is used as the midpoint of the interval; thus, the category "3 rooms" is treated as an interval ranging



from 2.5 to 3.5 rooms. Median rooms is rounded to the nearest tenth. (For more information on medians, see the discussion under "Derived Measures.")

**Aggregate Rooms**—To calculate aggregate rooms, an arbitrary value of "10" is assigned to rooms for units falling within the terminal category, "9 or more." (For more information on aggregates and means, see the discussion under "Derived Measures.")

**Comparability**—Data on rooms have been collected since 1940. In 1970 and 1980, these data were shown only for year-round housing units. In 1990, these data are shown for all housing units.

## SECOND OR JUNIOR MORTGAGE PAYMENT

The data on second or junior mortgage payments were obtained from questionnaire items H24a and H24b, which were asked at owner-occupied one-family houses, condominiums, and mobile homes. Question H24a asks whether a second or junior mortgage or a home equity loan exists on the property. Question H24b provides the regular monthly amount required to be paid to the lender on all second or junior mortgages and home equity loans. Amounts are included even if the payments are delinquent or paid by someone else. The amounts reported are included in the computation of "Selected Monthly Owner Costs" and "Selected Monthly Owner Costs as a Percentage of Household Income in 1989" for units with a mortgage.

All mortgages other than first mortgages are classified as "junior" mortgages. A second mortgage is a junior mortgage that gives the lender a claim against the property that is second to the claim of the holder of the first mortgage. Any other junior mortgage(s) would be subordinate to the second mortgage. A home equity loan is a line of credit available to the borrower that is secured by real estate. It may be placed on a property that already has a first or second mortgage, or it may be placed on a property that is owned free and clear.

If the respondents answered that no first mortgage existed, but a second mortgage did (as in the above case with a home equity loan), a computer edit assigned the unit a first mortgage and made the first mortgage monthly payment the amount reported in the second mortgage. The second mortgage data were then made "No" in question H24a and blank in question H24b.

**Comparability**—The 1980 census obtained total regular monthly mortgage payments, including payments on second or junior mortgages, from one single question. Two questions were used in 1990: one for regular monthly payments on first mortgages, and one for regular monthly payments on second or junior mortgages and home equity loans.

## SELECTED MONTHLY OWNER COSTS

The data on selected monthly owner costs were obtained from questionnaire items H20 through H26 for a sample of owner-occupied one-family houses, condominiums, and mobile homes. Selected monthly owner costs is the sum of payments for mortgages, deeds of trust, contracts to purchase, or similar debts on the property (including payments for the first mortgage, second or junior mortgages, and home equity loans); real estate taxes; fire, hazard, and flood insurance on the property; utilities (electricity, gas, and water); and fuels (oil, coal, kerosene, wood, etc.). It also includes, where appropriate, the monthly condominium fee for condominiums and mobile home costs (personal property taxes, site rent, registration fees, and license fees) for mobile homes.

In certain tabulations, selected monthly owner costs are presented separately for specified owner-occupied housing units (owner-occupied one-family houses on fewer than 10 acres without a business or medical office on the property), owner-occupied condominiums, and owner-occupied mobile homes. Data usually are shown separately for units "with a mortgage" and for units "not mortgaged."

**Median Selected Monthly Owner Costs**—This measure is rounded to the nearest whole dollar.

**Comparability**—The components of selected monthly owner costs were collected for the first time in 1980. The 1990 tabulations of selected monthly owner costs for specified owner-occupied housing units are virtually identical to 1980, the primary difference was the amounts of the first and second mortgages were collected in separate questions in 1990, while the amounts were collected in a single question in 1980. The component parts of the item were tabulated for mobile homes and condominiums for the first time in 1990.

In 1980, costs for electricity and gas were collected as average monthly costs. In 1990, all utility and fuel costs were collected as yearly costs and divided by 12 to provide an average monthly cost.

## SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME IN 1989

The information on selected monthly owner costs as a percentage of household income in 1989 is the computed ratio of selected monthly owner costs to monthly household income in 1989. The ratio was computed separately for each unit and rounded to the nearest whole percentage. The data are tabulated separately for specified owner-occupied units, condominiums, and mobile homes.

Separate distributions are often shown for units "with a mortgage" and for units "not mortgaged." Units occupied by households reporting no income or a net loss in 1989 are included in the "not computed" category. (For more information, see the discussion under "Selected Monthly Owner Costs.")

**Comparability**—The components of selected monthly owner costs were collected for the first time in 1980. The tabulations of "Selected Monthly Owner Costs as a Percentage of Household Income in 1989" for specified owner-occupied housing units are comparable to 1980.

## SEWAGE DISPOSAL

The data on sewage disposal were obtained from questionnaire item H16, which was asked at both occupied and vacant housing units. This item was asked on a sample basis. Housing units are either connected to a public sewer, to a septic tank or cesspool, or they dispose of sewage by other means. A public sewer may be operated by a government body or by a private organization. A housing unit is considered to be connected to a septic tank or cesspool when the unit is provided with an underground pit or tank for sewage disposal. The category, "Other means" includes housing units which dispose of sewage in some other way.

**Comparability**—Data on sewage disposal have been collected since 1940. In 1970 and 1980, data were shown only for year-round housing units. In 1990, data are shown for all housing units.

## SOURCE OF WATER

The data on source of water were obtained from questionnaire item H15, which was asked at both occupied and vacant housing units. Housing units may receive their water supply from a number of sources. A common source supplying water to five or more units is classified as a "Public system or private company." The water may be supplied by a city, county, water district, water company, etc., or it may be obtained from a well which supplies water to five or more housing units. If the water is supplied from a well serving four or fewer housing units, the units are classified as having water supplied by either an "Individual drilled well" or an "Individual dug well." Drilled wells or small diameter wells are usually less than 1-1/2 feet in diameter. Dug wells are usually larger than 1-1/2 feet wide and generally hand dug. The category, "Some other source" includes water obtained from springs, creeks, rivers, lakes, cisterns, etc.

**Comparability**—Data on source of water have been collected since 1940. In 1970 and 1980, data were shown only for year-round housing units. In 1990, data are shown for all housing units.

## TELEPHONE IN HOUSING UNIT

The data on telephones were obtained from questionnaire item H12, which was asked at occupied housing units. This item was asked on a sample basis. A telephone must be inside the house or apartment for the unit to be classified as having a telephone. Units where the respondent uses a telephone located inside the building but not in the respondent's living quarters are classified as having no telephone.

**Comparability**—Data on telephones in 1980 are comparable to 1990. The 1960 and 1970 censuses collected data on telephone availability. A unit was classified as having a telephone available if there was a telephone number on which occupants of the unit could be reached. The telephone could have been in another unit, in a common hall, or outside the building.

## TENURE

The data for tenure were obtained from questionnaire item H4, which was asked at all occupied housing units. All occupied housing units are classified as either owner occupied or renter occupied.

**Owner Occupied**—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. The owner or co-owner must live in the unit and usually is the person listed in column 1 of the questionnaire. The unit is "Owned by you or someone in this household with a mortgage or loan" if it is being purchased with a mortgage or some other debt arrangement such as a deed of trust, trust deed, contract to purchase, land contract, or purchase agreement. The unit is also considered owned with a mortgage if it is built on leased land and there is a mortgage on the unit.

A housing unit is "Owned by you or someone in this household free and clear (without a mortgage)" if there is no mortgage or other similar debt on the house, apartment, or mobile home including units built on leased land if the unit is owned outright without a mortgage. Although owner-occupied units are divided between mortgaged and owned free and clear on the questionnaire, census data products containing 100-percent data show only total owner-occupied counts. More extensive mortgage information was collected on the long-form questionnaire and are shown in census products containing sample data. (For more information, see the discussion under "Mortgage Status.")

**Renter Occupied**—All occupied housing units which are not owner occupied, whether they are rented for cash rent or occupied without payment of cash rent, are classified as renter occupied. "No cash rent" units are separately identified in the rent tabulations. Such units

are generally provided free by friends or relatives or in exchange for services such as resident manager, caretaker, minister, or tenant farmer. Housing units on military bases also are classified in the "No cash rent" category. "Rented for cash rent" includes units in continuing care, sometimes called life care arrangements. These arrangements usually involve a contract between one or more individuals and a health services provider guaranteeing the individual shelter, usually a house or apartment, and services, such as meals or transportation to shopping or recreation.

**Comparability**—Data on tenure have been collected since 1890. In 1970, the question on tenure also included a category for condominium and cooperative ownership. In 1980, condominium units and cooperatives were dropped from the tenure item, and since 1980, only condominium units are identified in a separate question.

For 1990, the response categories were expanded to allow the respondent to report whether the unit was owned with a mortgage or free and clear (without a mortgage). The distinction between units owned with a mortgage and units owned free and clear was added in 1990 to improve the count of owner-occupied units. Research after the 1980 census indicated some respondents did not consider their units owned if they had a mortgage.

## UNITS IN STRUCTURE

The data on units in structure (also referred to as "type of structure") were obtained from questionnaire item H2, which was asked at all housing units. A structure is a separate building that either has open spaces on all sides or is separated from other structures by dividing walls that extend from ground to roof. In determining the number of units in a structure, all housing units, both occupied and vacant, are counted. Stores and office space are excluded.

The statistics are presented for the number of housing units in structures of specified type and size, not for the number of residential buildings.

**1-Unit, Detached**—This is a 1-unit structure detached from any other house; that is, with open space on all four sides. Such structures are considered detached even if they have an adjoining shed or garage. A one-family house that contains a business is considered detached as long as the building has open space on all four sides. Mobile homes or trailers to which one or more permanent rooms have been added or built also are included.

**1-Unit, Attached**—This is a 1-unit structure that has one or more walls extending from ground to roof separating it from adjoining structures. In row houses (sometimes called townhouses), double houses, or houses

attached to nonresidential structures, each house is a separate, attached structure if the dividing or common wall goes from ground to roof.

**2 or More Units**—These are units in structures containing 2 or more housing units, further categorized as units in structures with 2, 3 or 4, 5 to 9, 10 to 19, 20 to 49, and 50 or more units.

**Mobile Home or Trailer**—Both occupied and vacant mobile homes to which no permanent rooms have been added are counted in this category. Mobile homes or trailers used only for business purposes or for extra sleeping space and mobile homes or trailers for sale on a dealer's lot, at the factory, or in storage are not counted in the housing inventory.

**Other**—This category is for any living quarters occupied as a housing unit that does not fit the previous categories. Examples that fit this category are houseboats, railroad cars, campers, and vans.

**Comparability**—Data on units in structure have been collected since 1940 and on mobile homes and trailers since 1950. In 1970 and 1980, these data were shown only for year-round housing units. In 1990, these data are shown for all housing units. In 1980, the data were collected on a sample basis. The category, "Boat, tent, van, etc." was replaced in 1990 by the category "Other." In some areas, the proportion of units classified as "Other" is far larger than the number of units that were classified as "Boat, tent, van, etc." in 1980.

## USUAL HOME ELSEWHERE

The data for usual home elsewhere are obtained from questionnaire item B, which was completed by census employees. A housing unit temporarily occupied at the time of enumeration entirely by persons with a usual residence elsewhere is classified as vacant. The occupants are classified as having a "Usual home elsewhere" and are counted at the address of their usual place of residence. Typical examples are people in a vacation home, persons renting living quarters temporarily for work, and migrant workers.

**Limitation of the Data**—Evidence from previous censuses suggests that in some areas enumerators marked units as "vacant—usual home elsewhere" when they should have marked "vacant—regular."

**Comparability**—Data for usual home elsewhere was tabulated for the first time in 1980.

## UTILITIES

The data on utility costs were obtained from questionnaire items H20a through H20d, which were asked of occupied housing units. These items were asked on a sample basis.

Questions H20a through H20d asked for the yearly cost of utilities (electricity, gas, water) and other fuels (oil, coal, wood, kerosene, etc.). For the tabulations, these yearly amounts are divided by 12 to derive the average monthly cost and are then included in the computation of "Gross Rent," "Gross Rent as a Percentage of Household Income in 1989," "Selected Monthly Owner Costs," and "Selected Monthly Owner Costs as a Percentage of Household Income in 1989."

Costs are recorded if paid by or billed to occupants, a welfare agency, relatives, or friends. Costs that are paid by landlords, included in the rent payment, or included in condominium or cooperative fees are excluded.

**Limitation of the Data**—Research has shown that respondents tended to overstate their expenses for electricity and gas when compared to utility company records. There is some evidence that this overstatement is reduced when yearly costs are asked rather than monthly costs. Caution should be exercised in using these data for direct analysis because costs are not reported for certain kinds of units such as renter-occupied units with all utilities included in the rent and owner-occupied condominium units with utilities included in the condominium fee.

**Comparability**—The data on utility costs have been collected since 1980 for owner-occupied housing units, and since 1940 for renter-occupied housing units. In 1980, costs for electricity and gas were collected as average monthly costs. In 1990, all utility and fuel costs were collected as yearly costs and divided by 12 to provide an average monthly cost.

## VACANCY STATUS

The data on vacancy status were obtained from questionnaire item C1, which was completed by census enumerators. Vacancy status and other characteristics of vacant units were determined by enumerators obtaining information from landlords, owners, neighbors, rental agents, and others. Vacant units are subdivided according to their housing market classification as follows:

**For Rent**—These are vacant units offered "for rent," and vacant units offered either "for rent" or "for sale."

**For Sale Only**—These are vacant units being offered "for sale only," including units in cooperatives and condominium projects if the individual units are offered "for sale only."

**Rented or Sold, Not Occupied**—If any money rent has been paid or agreed upon but the new renter has not moved in as of the date of enumeration, or if the unit has recently been sold but the new owner has not yet moved in, the vacant unit is classified as "rented or sold, not occupied."

**For Seasonal, Recreational, or Occasional Use**—These are vacant units used or intended for use only in certain seasons or for weekend or other occasional use throughout the year.

Seasonal units include those used for summer or winter sports or recreation, such as beach cottages and hunting cabins. Seasonal units also may include quarters for such workers as herders and loggers. Interval ownership units, sometimes called shared-ownership or time-sharing condominiums, also are included here.

**For Migrant Workers**—These include vacant units intended for occupancy by migratory workers employed in farm work during the crop season. (Work in a cannery, a freezer plant, or a food-processing plant is not farm work.)

**Other Vacant**—If a vacant unit does not fall into any of the classifications specified above, it is classified as "other vacant." For example, this category includes units held for occupancy by a caretaker or janitor, and units held for personal reasons of the owner.

**Homeowner Vacancy Rate**—This is the percentage relationship between the number of vacant units for sale and the total homeowner inventory. It is computed by dividing the number of vacant units for sale only by the sum of the owner-occupied units and the number of vacant units that are for sale only.

**Rental Vacancy Rate**—This is the percentage relationship of the number of vacant units for rent to the total rental inventory. It is computed by dividing the number of vacant units for rent by the sum of the renter-occupied units and the number of vacant units for rent.

**Comparability**—Data on vacancy status have been collected since 1940. For 1990, the category, "seasonal/recreational/occasional use" combined vacant units classified in 1980 as "seasonal or migratory" and "held for occasional use." Also, in 1970 and 1980, housing characteristics generally were presented only for year-round units. In 1990, housing characteristics are shown for all housing units.

## VALUE

The data on value (also referred to as "price asked" for vacant units) were obtained from questionnaire item H6, which was asked at housing units that were owned, being bought, or vacant for sale at the time of enumeration. Value is the respondent's estimate of how much the property (house and lot, mobile home and lot, or condominium unit) would sell for if it were for sale. If the house or mobile home was owned or being bought, but the land on which it sits was not, the respondent was

asked to estimate the combined value of the house or mobile home and the land. For vacant units, value was the price asked for the property.

Value was tabulated separately for all owner-occupied and vacant-for-sale housing units, owner-occupied and vacant-for-sale mobile homes or trailers, and specified owner-occupied and specified vacant-for-sale housing units. Specified owner-occupied and specified vacant-for-sale housing units include only one-family houses on fewer than 10 acres without a business or medical office on the property. The data for "specified units" exclude mobile homes, houses with a business or medical office, houses on 10 or more acres, and housing units in multi-unit buildings.

**Median and Quartile Value**—The median divides the value distribution into two equal parts. Quartiles divide the value distribution into four equal parts. These measures are rounded to the nearest hundred dollars. (For more information on medians and quartiles, see the discussion under "Derived Measures.")

**Aggregate Value**—To calculate aggregate value, the amount assigned for the category "Less than \$10,000" is \$9,000. The amount assigned to the category "\$500,000 or more" is \$600,000. Mean value is rounded to the nearest hundred dollars. (For more information on aggregates and means, see the discussion under "Derived Measures.")

**Comparability**—In 1980, value was asked only at owner-occupied or vacant-for-sale one-family houses on fewer than 10 acres with no business or medical office on the property and at all owner-occupied or vacant-for-sale condominium housing units. Mobile homes were excluded. Value data were presented for specified owner-occupied housing units, specified vacant-for-sale-only housing units, and owner-occupied condominium housing units.

In 1990, the question was asked at all owner-occupied or vacant-for-sale-only housing units with no exclusions. Data presented for specified owner-occupied and specified vacant-for-sale-only housing units will include one-family condominium houses but not condominiums in multi-unit structures since condominium units are now identified only in long-form questionnaires.

For 1990, quartiles have been added because the range of values and rents in the United States has increased in recent years. Upper and lower quartiles can be used to note large value and rent differences among various geographic areas.

## VEHICLES AVAILABLE

The data on vehicles available were obtained from questionnaire item H13, which was asked at occupied housing units. This item was asked on a sample basis. These data show the number of households with a

specified number of passenger cars, vans, and pickup or panel trucks of one-ton capacity or less kept at home and available for the use of household members. Vehicles rented or leased for one month or more, company vehicles, and police and government vehicles are included if kept at home and used for nonbusiness purposes. Dismantled or immobile vehicles are excluded. Vehicles kept at home but used only for business purposes also are excluded.

**Vehicles Per Household**—This is computed by dividing aggregate vehicles available by the number of occupied housing units.

**Limitation of the Data**—The 1980 census evaluations showed that the number of automobiles was slightly overreported; the number of vans and trucks slightly underreported. The statistics do not measure the number of vehicles privately owned or the number of households owning vehicles.

**Comparability**—Data on automobiles available were collected from 1960 to 1980. In 1980, a separate question also was asked on the number of trucks and vans. The data on automobiles and trucks and vans were presented separately and also as a combined vehicles available tabulation. The 1990 data are comparable to the 1980 vehicles available tabulations.

## YEAR HOUSEHOLDER MOVED INTO UNIT

The data on year householder moved into unit were obtained from questionnaire item H8, which was asked at occupied housing units. This item was asked on a sample basis. These data refer to the year of the latest move by the householder. If a householder moved back into a housing unit he or she previously occupied, the year of the latest move was reported. If the householder moved from one apartment to another within the same building, the year the householder moved into the present apartment was reported. The intent is to establish the year the present occupancy by the householder began. The year that the householder moved in is not necessarily the same year other members of the household moved, although in the great majority of cases an entire household moves at the same time.

**Comparability**—In 1960 and 1970, this question was asked of every person and included in population reports. This item in housing tabulations refers to the year the householder moved in. In 1980 and 1990, the question was asked only of the householder.

## YEAR STRUCTURE BUILT

The data on year structure built were obtained from questionnaire item H17, which was asked at both occupied and vacant housing units. This item was asked on

a sample basis. Data on year structure built refer to when the building was first constructed, not when it was remodeled, added to, or converted. For housing units under construction that met the housing unit definition—that is, all exterior windows, doors, and final usable floors were in place—the category “1989 or March 1990” was used. For a houseboat or a mobile home or trailer, the manufacturer’s model year was assumed to be the year built. The figures shown in census data products relate to the number of units built during the specified periods that were still in existence at the time of enumeration.

**Median Year Structure Built**—The median divides the distribution into two equal parts. The median is rounded to the nearest calendar year. Median age of housing can be obtained by subtracting median year structure built from 1990. For example, if the median year structure built is 1957, the median age of housing in that area is 33 years (1990 minus 1957).

**Limitation of the Data**—Data on year structure built are more susceptible to errors of response and nonreporting than data on many other items because respondents must rely on their memory or on estimates by persons who have lived in the neighborhood a long time. Available evidence indicates there is underreporting in the older-year-structure-built categories, especially “Built in 1939 or earlier.” The introduction of the “Don’t know” category (see the discussion on “Comparability”) may have resulted in relatively higher allocation rates. Data users should refer to the discussion in Appendix C, Accuracy of the Data, and to the allocation tables.

**Comparability**—Data on year structure built were collected for the first time in the 1940 census. Since then, the response categories have been modified to accommodate the 10-year period between each census. In 1990, the category, “Don’t Know,” was added in an effort to minimize the response error mentioned in the paragraph above on limitation of the data.

## DERIVED MEASURES

Census data products include various derived measures, such as medians, means, and percentages, as well as certain rates and ratios. Derived measures that round to less than 0.1 are not shown but indicated as zero. In printed reports, zero is indicated by a dash (–).

### Interpolation

Interpolation frequently is used in calculating medians or quartiles based on interval data and in approximating standard errors from tables. Linear interpolation is used to estimate values of a function between two

known values. “Pareto interpolation” is an alternative to linear interpolation. It is used by the Census Bureau in calculating median income within intervals wider than \$2,500. In Pareto interpolation, the median is derived by interpolating between the logarithms of the upper and lower income limits of the median category.

### Mean

This measure represents an arithmetic average of a set of values. It is derived by dividing the sum of a group of numerical items (or aggregate) by the total number of items. Aggregates are used in computing mean values. For example, mean family income is obtained by dividing the aggregate of all income reported by persons in families by the total number of families. (Additional information on means and aggregates is included in the separate explanations of many population and housing subjects.)

### Median

This measure represents the middle value in a distribution. The median divides the total frequency into two equal parts: one-half of the cases fall below the median and one-half of the cases exceed the median. The median is computed on the basis of the distribution as tabulated, which is sometimes more detailed than the distribution shown in specific census publications and other data products.

In reports, if the median falls within the upper interval of the tabulation distribution, the median is shown as the initial value of the interval followed by a plus sign (+); if within the lower interval, the median is shown as the upper value of the category followed by a minus sign (–). For summary tape files, if the median falls within the upper or lower interval, it is set to a specified value. (Additional information on medians is included in the separate explanations of many population and housing subjects.)

## Percentages, Rates, and Ratios

These measures are frequently presented in census products to compare two numbers or two sets of measurements. These comparisons are made in two ways: (1) subtraction, which provides an absolute measure of the difference between two items, and (2) the quotient of two numbers, which provides a relative measure of difference.

### Quartile

This measure divides a distribution into four equal parts. The first quartile (or lower quartile) is the value that defines the upper limit of the lowest one-quarter of the cases. The second quartile is the median. The third quartile (or upper quartile) defines the lower limit of the

upper one-quarter of the cases in the distribution. The difference between the upper and lower quartiles is called the interquartile range. This interquartile range is

less affected by wide variations than is the mean. Quartiles are presented for certain financial characteristics such as housing value and rent.

# APPENDIX C. Accuracy of the Data

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## INTRODUCTION

The data contained in this data product are based on

actual figures that would have been obtained from a complete count. Estimates derived from a sample are expected to be different from the 100-percent figures because they are subject to sampling and nonsampling errors. Sampling error in data arises from the selection of persons and housing units to be included in the sample. Nonsampling error affects both sample and 100-percent data, and is introduced as a result of errors that may occur during the collection and processing phases of the census. Provided below is a detailed discussion of both types of errors and a description of the estimation procedures.

## SAMPLE DESIGN

Every person and housing unit in the United States was asked certain basic demographic and housing questions (for example, race, age, marital status, housing value, or rent). A sample of these persons and housing units was asked more detailed questions about such items as income, occupation, and housing costs in addition to the basic demographic and housing information. The primary sampling unit for the 1990 census was the housing unit, including all occupants. For persons living in group quarters, the sampling unit was the person. Persons in group quarters were sampled at a 1-in-6 rate.

The sample designation method depended on the data collection procedures. Approximately 95 percent of the population was enumerated by the mailback procedure. In these areas, the Bureau of the Census either purchased a commercial mailing list, which was updated by the United States Postal Service and Census Bureau field staff, or prepared a mailing list by canvassing and listing each address in the area prior to Census Day. These lists were computerized and the appropriate units

were electronically designated as sample units. The questionnaires were either mailed or hand-delivered to the addresses with instructions to complete and mail back the form.

Housing units in governmental units with a precensus (1988) estimated population of fewer than 2,500 persons were sampled at 1-in-2. Governmental units were defined for sampling purposes as all incorporated places, all counties, all county equivalents such as parishes in Louisiana, and all minor civil divisions in Connecticut, Maine, Massachusetts, Michigan, Minnesota, New Hampshire, New Jersey, New York, Rhode Island, and

Utah, Vermont, and Wisconsin. Housing units in census tracts and block numbering areas (BNA's) with a precensus housing unit count below 2,000 housing units were sampled at 1-in-6 for those portions not in small governmental units (governmental units with a population less than 2,500). Housing units within census tracts and BNA's with 2,000 or more housing units were sampled at 1-in-8 for those portions not in small governmental units.

In list/enumerate areas (about 5 percent of the population), each enumerator was given a blank address register with designated sample lines. Beginning about Census Day, the enumerator systematically canvassed an assigned area and listed all housing units in the address register in the order they were encountered. Completed questionnaires, including sample information for any housing unit listed on a designated sample line, were collected. For all governmental units with fewer than 2,500 persons in list/enumerate areas, a 1-in-2 sampling rate was used. All other list/enumerate areas were sampled at 1-in-6.

Housing units in American Indian reservations, tribal jurisdiction statistical areas, and Alaska Native villages were sampled according to the same criteria as other governmental units, except the sampling rates were based on the size of the American Indian and Alaska Native population in those areas as measured in the 1980 census. Trust lands were sampled at the same rate as their associated American Indian reservations. Census designated places in Hawaii were sampled at the same rate as governmental units because the Census Bureau does not recognize incorporated places in Hawaii.

The purpose of using variable sampling rates was to provide relatively more reliable estimates for small areas and decrease respondent burden in more densely populated areas while maintaining data reliability. When all sampling rates were taken into account across the



Nation, approximately one out of every six housing units in the Nation was included in the 1990 census sample.

## CONFIDENTIALITY OF THE DATA

To maintain the confidentiality required by law (Title 13, United States Code), the Bureau of the Census applies a confidentiality edit to the 1990 census data to assure that published data do not disclose information about specific individuals, households, or housing units. As a result, a small amount of uncertainty is introduced into the estimates of census characteristics. The sample itself provides adequate protection for most areas for which sample data are published since the resulting data are estimates of the actual counts; however, small areas require more protection. The edit is controlled so that the basic structure of the data is preserved.

The confidentiality edit is implemented by selecting a small subset of individual households from the internal sample data files and blanking a subset of the data items on these household records. Responses to those data items were then imputed using the same imputation procedures that were used for nonresponse. A larger subset of households is selected for the confidentiality edit for small areas to provide greater protection for these areas. The editing process is implemented in such a way that the quality and usefulness of the data were preserved.

## ERRORS IN THE DATA

Since statistics in this data product are based on a sample, they may differ somewhat from 100-percent figures that would have been obtained if all housing units, persons within those housing units, and persons living in group quarters had been enumerated using the same questionnaires, instructions, enumerators, etc. The sample estimate also would differ from other samples of housing units, persons within those housing units, and persons living in group quarters. The deviation of a sample estimate from the average of all possible samples is called the sampling error. The standard error of a sample estimate is a measure of the variation among the estimates from all the possible samples and thus is a measure of the precision with which an estimate from a particular sample approximates the average result of all possible samples. The sample estimate and its estimated standard error permit the construction of interval estimates with prescribed confidence that the interval includes the average result of all possible samples. Described below is the method of calculating standard errors and confidence intervals for the data in this product.

In addition to the variability which arises from the sampling procedures, both sample data and 100-percent data are subject to nonsampling error. Nonsampling error may be introduced during any of the various

complex operations used to collect and process census data. For example, operations such as editing, reviewing, or handling questionnaires may introduce error into the data. A detailed discussion of the sources of non-sampling error is given in the section on "Control of Nonsampling Error" in this appendix.

Nonsampling error may affect the data in two ways. Errors that are introduced randomly will increase the variability of the data and should therefore be reflected in the standard error. Errors that tend to be consistent in one direction will make both sample and 100-percent data biased in that direction. For example, if respondents consistently tend to under-report their income, then the resulting counts of households or families by income category will tend to be understated for the higher income categories and overstated for the lower income categories. Such biases are not reflected in the standard error.

## Calculation of Standard Errors

**Totals and Percentages**—Tables A through C in this appendix contain the information necessary to calculate the standard errors of sample estimates in this data product. To calculate the standard error, it is necessary to know the basic standard error for the characteristic (given in table A or B) that would result under a simple random sample design (of persons, households, or housing units) and estimation technique; the design factor for the particular characteristic estimated (given in table C); and the number of persons or housing units in the tabulation area and the percent of these in the sample. For machine-readable products, the percent-in-sample is included in a data matrix on the file for each tabulation area. In printed reports, the percent-in-sample is provided in data tables at the end of the statistical tables that compose the report. The design factors reflect the effects of the actual sample design and complex ratio estimation procedure used for the 1990 census. Tape purchasers will receive table C, the table of design factors, as a supplement to the technical documentation. Table C is included in this appendix for printed reports.

The steps given below should be used to calculate the standard error of an estimate of a total or a percentage contained in this product. A percentage is defined here as a ratio of a numerator to a denominator where the numerator is a subset of the denominator. For example, the proportion of Black teachers is the ratio of Black teachers to all teachers.

1. Obtain the standard error from table A or B (or use the formula given below the table) for the estimated total or percentage, respectively.
2. Find the geographic area to which the estimate applies in the appropriate percent-in-sample table or appropriate matrix, and obtain the person or housing unit "percent-in-sample" figure for this

area. Use the person "percent-in-sample" figure for person and family characteristics. Use the housing unit "percent-in-sample" figure for housing unit characteristics.

3. Use table C to obtain the design factor for the characteristic (for example, employment status, school enrollment) and the range that contains the percent-in-sample with which you are working. Multiply the basic standard error by this factor.

The unadjusted standard errors of zero estimates or of very small estimated totals or percentages will approach zero. This is also the case for very large percentages or estimated totals that are close to the size of the tabulation areas to which they correspond. Nevertheless, these estimated totals and percentages still are subject to sampling and nonsampling variability, and an estimated standard error of zero (or a very small standard error) is not appropriate. For estimated percentages that are less than 2 or greater than 98, use the basic standard errors in table B that appear in the "2 or 98" row. For an estimated total that is less than 50 or within 50 of the total size of the tabulation area, use a basic standard error of 16.

An illustration of the use of the tables is given in the section entitled "Use of Tables to Compute Standard Errors."

**Sums and Differences**—The standard errors estimated from these tables are not directly applicable to sums of and differences between two sample estimates. To estimate the standard error of a sum or difference, the tables are to be used somewhat differently in the following three situations:

1. For the sum of or difference between a sample estimate and a 100-percent value, use the standard error of the sample estimate. The complete count value is not subject to sampling error.
2. For the sum of or difference between two sample estimates, the appropriate standard error is approximately the square root of the sum of the two individual standard errors squared; that is, for standard errors:

$SE_{\hat{x}}$  and  $SE_{\hat{y}}$  of estimates  $\hat{x}$  and  $\hat{y}$ :

$$SE_{(\hat{x}+\hat{y})} = SE_{(\hat{x}-\hat{y})} = \sqrt{(SE_{\hat{x}})^2 + (SE_{\hat{y}})^2}$$

This method, however, will underestimate (overestimate) the standard error if the two items in a sum are highly positively (negatively) correlated or if the two items in a difference are highly negatively (positively) correlated. This method may also be used for the difference between (or sum of) sample estimates from two censuses or from a census sample and another survey. The

standard error for estimates not based on the 1990 census sample must be obtained from an appropriate source outside of this appendix.

3. For the differences between two estimates, one of which is a subclass of the other, use the tables directly where the calculated difference is the estimate of interest. For example, to determine the estimate of non-Black teachers, one may subtract the estimate of Black teachers from the estimate of total teachers. To determine the standard error of the estimate of non-Black teachers apply the above formula directly.

**Ratios**—Frequently, the statistic of interest is the ratio of two variables, where the numerator is not a subset of the denominator. For example, the ratio of teachers to students in public elementary schools. The standard error of the ratio between two sample estimates is estimated as follows:

1. If the ratio is a proportion, then follow the procedure outlined for "Totals and Percentages."
2. If the ratio is not a proportion, then approximate the standard error using the formula below.

$$SE_{(\hat{x}/\hat{y})} = \frac{\hat{x}}{\hat{y}} \sqrt{\frac{(SE_{\hat{x}})^2}{\hat{x}^2} + \frac{(SE_{\hat{y}})^2}{\hat{y}^2}}$$

**Medians**—For the standard error of the median of a characteristic, it is necessary to examine the distribution from which the median is derived, as the size of the base and the distribution itself affect the standard error. An approximate method is given here. As the first step, compute one-half of the number on which the median is based (refer to this result as  $N/2$ ). Treat  $N/2$  as if it were an ordinary estimate and obtain its standard error as instructed above. Compute the desired confidence interval about  $N/2$ . Starting with the lowest value of the characteristic, cumulate the frequencies in each category of the characteristic until the sum equals or first exceeds the lower limit of the confidence interval about  $N/2$ . By linear interpolation, obtain a value of the characteristic corresponding to this sum. This is the lower limit of the confidence interval of the median. In a similar manner, continue cumulating frequencies until the sum equals or exceeds the count in excess of the upper limit of the interval about  $N/2$ . Interpolate as before to obtain the upper limit of the confidence interval for the estimated median.

When interpolation is required in the upper open-ended interval of a distribution to obtain a confidence bound, use 1.5 times the lower limit of the open-ended confidence interval as the upper limit of the open-ended interval.

### Confidence Intervals

A sample estimate and its estimated standard error may be used to construct confidence intervals about the estimate. These intervals are ranges that will contain

the average value of the estimated characteristic that results over all possible samples, with a known probability. For example, if all possible samples that could result under the 1990 census sample design were independently selected and surveyed under the same conditions, and if the estimate and its estimated standard error were calculated for each of these samples, then:

1. Approximately 68 percent of the intervals from one estimated standard error below the estimate to one estimated standard error above the estimate would contain the average result from all possible samples;
2. Approximately 90 percent of the intervals from 1.645 times the estimated standard error below the estimate to 1.645 times the estimated standard error above the estimate would contain the average result from all possible samples.
3. Approximately 95 percent of the intervals from two estimated standard errors below the estimate to two estimated standard errors above the estimate would contain the average result from all possible samples.

The intervals are referred to as 68 percent, 90 percent, and 95 percent confidence intervals, respectively.

The average value of the estimated characteristic that could be derived from all possible samples is or is not contained in any particular computed interval. Thus, we cannot make the statement that the average value has a certain probability of falling between the limits of the calculated confidence interval. Rather, one can say with a specified probability of confidence that the calculated confidence interval includes the average estimate from all possible samples (approximately the 100-percent value).

Confidence intervals also may be constructed for the ratio, sum of, or difference between two sample figures. This is done by first computing the ratio, sum, or difference, then obtaining the standard error of the ratio, sum, or difference (using the formulas given earlier), and finally forming a confidence interval for this estimated ratio, sum, or difference as above. One can then say with specified confidence that this interval includes the ratio, sum, or difference that would have been obtained by averaging the results from all possible samples.

The estimated standard errors given in this appendix do not include all portions of the variability due to nonsampling error that may be present in the data. The standard errors reflect the effect of simple response variance, but not the effect of correlated errors introduced by enumerators, coders, or other field or processing personnel. Thus, the standard errors calculated represent a lower bound of the total error. As a result,

confidence intervals formed using these estimated standard errors may not meet the stated levels of confidence (i.e., 68, 90, or 95 percent). Thus, some care must be exercised in the interpretation of the data in this data product based on the estimated standard errors.

A standard sampling theory text should be helpful if the user needs more information about confidence intervals and nonsampling errors.

## Use of Tables to Compute Standard Errors

The following is a hypothetical example of how to compute a standard error of a total and a percentage. Suppose a particular data table shows that for City A 9,948 persons out of all 15,888 persons age 16 years and over were in the civilian labor force. The percent-in-sample table lists City A with a percent-in-sample of 16.0 percent (Persons column). The column in table C which includes 16.0 percent-in-sample shows the design factor to be 1.1 for "Employment status."

The basic standard error for the estimated total 9,948 may be obtained from table A or from the formula given below table A. In order to avoid interpolation, the use of the formula will be demonstrated here. Suppose that the total population of City A was 21,220. The formula for the basic standard error, SE, is

$$SE(9,948) = \sqrt{5(9,948) (1 - 9,948 / 21,220)}$$

$$= 163 \text{ persons.}$$

The standard error of the estimated 9,948 persons 16 years and over who were in the civilian labor force is found by multiplying the basic standard error 163 by the design factor, 1.1 from table C. This yields an estimated standard error of 179 for the total number of persons 16 years and over in City A who were in the civilian labor force.

The estimated percent of persons 16 years and over who were in the civilian labor force in City A is 62.6. From table B, the unadjusted standard error is found to be approximately 0.85 percentage points. The standard error for the estimated 62.6 percent of persons 16 years and over who were in the civilian labor force is  $0.85 \times 1.1 = 0.94$  percentage points.

A note of caution concerning numerical values is necessary. Standard errors of percentages derived in this manner are approximate. Calculations can be expressed to several decimal places, but to do so would indicate more precision in the data than is justifiable. Final results should contain no more than two decimal places when the estimated standard error is one percentage point (i.e., 1.00) or more.

In the previous example, the standard error of the 9,948 persons 16 years and over in City A who were in the civilian labor force was found to be 179. Thus, a 90

percent confidence interval for this estimated total is found to be:

$$\begin{aligned} & [9,948 - 1.645(179)] \text{ to } [9,948 + 1.645(179)] \\ & \text{or} \\ & 9,654 \text{ to } 10,242 \end{aligned}$$

One can say, with about 90 percent confidence, that this interval includes the value that would have been obtained by averaging the results from all possible samples.

The following is an illustration of the calculation of standard errors and confidence intervals when a difference between two sample estimates is obtained. For example, suppose the number of persons in City B age 16 years and over who were in the civilian labor force was 9,314 and the total number of persons 16 years and over was 16,666. Further suppose the population of City B was 25,225. Thus, the estimated percentage of persons 16 years and over who were in the civilian labor force is 55.9 percent. The unadjusted standard error determined using the formula provided at the bottom of table B is 0.86 percentage points. We find that City B had a percent-in-sample of 15.7. The range which includes 15.7 percent-in-sample in table C shows the design factor to be 1.1 for "Employment Status." Thus, the approximate standard error of the percentage (55.9 percent) is  $0.86 \times 1.1 = 0.95$  percentage points.

Now suppose that one wished to obtain the standard error of the difference between City A and City B of the percentages of persons who were 16 years and over and who were in the civilian labor force. The difference in the percentages of interest for the two cities is:

$$62.6 - 55.9 = 6.7 \text{ percent.}$$

Using the results of the previous example:

$$\begin{aligned} SE(6.7) &= \sqrt{(SE(62.6))^2 + (SE(55.9))^2} = \sqrt{(0.94)^2 + (0.95)^2} \\ &= 1.34 \text{ percentage points} \end{aligned}$$

The 90 percent confidence interval for the difference is formed as before:

$$\begin{aligned} & [6.70 - 1.645(1.34)] \text{ to } [6.70 + 1.645(1.34)] \\ & \text{or} \\ & 4.50 \text{ to } 8.90 \end{aligned}$$

One can say with 90 percent confidence that the interval includes the difference that would have been obtained by averaging the results from all possible samples.

For reasonably large samples, ratio estimates are normally distributed, particularly for the census population. Therefore, if we can calculate the standard error of a ratio estimate then we can form a confidence interval around the ratio. Suppose that one wished to obtain the standard error of the ratio of the estimate of persons who were 16 years and over and who were in the civilian

labor force in City A to the estimate of persons who were 16 years and over and who were in the civilian labor force in City B. The ratio of the two estimates of interest is:

$$9948/9314 = 1.07$$

$$\begin{aligned} SE(1.07) &= \left( \frac{9948}{9314} \right) \sqrt{\frac{179^2}{(9948)^2} + \frac{188^2}{(9314)^2}} \\ &= .029 \end{aligned}$$

Using the results above, the 90 percent confidence interval for this ratio would be:

$$\begin{aligned} & [1.07 - 1.645(.029)] \text{ to } [1.07 + 1.645(.029)] \\ & \text{or} \\ & 1.02 \text{ to } 1.12 \end{aligned}$$

## ESTIMATION PROCEDURE

The estimates which appear in this publication were obtained from an iterative ratio estimation procedure (iterative proportional fitting) resulting in the assignment of a weight to each sample person or housing unit record. For any given tabulation area, a characteristic total was estimated by summing the weights assigned to the persons or housing units possessing the characteristic in the tabulation area. Estimates of family or household characteristics were based on the weight assigned to the family member designated as householder. Each sample person or housing unit record was assigned exactly one weight to be used to produce estimates of all characteristics. For example, if the weight given to a sample person or housing unit had the value 6, all characteristics of that person or housing unit would be tabulated with the weight of 6. The estimation procedure, however, did assign weights varying from person to person or housing unit to housing unit. The estimation procedure used to assign the weights was performed in geographically defined "weighting areas." Weighting areas generally were formed of contiguous geographic units which agreed closely with census tabulation areas within counties. Weighting areas were required to have a minimum sample of 400 persons. Weighting areas never crossed State or county boundaries. In small counties with a sample count below 400 persons, the minimum required sample condition was relaxed to permit the entire county to become a weighting area.

Within a weighting area, the ratio estimation procedure for persons was performed in four stages. For persons, the first stage applied 17 household-type groups. The second stage used two groups: sampling rate of 1-in-2; sampling rate less than 1-in-2. The third stage used the dichotomy householders/nonhouseholders. The fourth stage applied 180 aggregate age-sex-race-Hispanic origin categories. The stages were as follows:

## PERSONS

### STAGE I: TYPE OF HOUSEHOLD

Group	Persons in Housing Units With a Family With Own Children Under 18
1	2 persons in housing unit
2	3 persons in housing unit
3	4 persons in housing unit
4	5 to 7 persons in housing unit
5	8 or more persons in housing unit
	Persons in Housing Units With a Family Without Own Children Under 18
6-10	2 through 8 or more persons in housing unit
	Persons in All Other Housing Units
11	1 person in housing unit
12-16	2 through 8 or more persons in housing unit
	Persons in Group Quarters
17	Persons in Group Quarters

### STAGE II: SAMPLING RATES

1	Sampling rate of 1-in-2
2	Sampling rate less than 1-in-2

### STAGE III: HOUSEHOLDER/NONHOUSEHOLDER

1	Householder
2	Nonhouseholder

### STAGE IV: AGE/SEX/RACE/HISPANIC ORIGIN

Group	White
	Persons of Hispanic Origin
	Male
1	0 to 4 years
2	5 to 14 years
3	15 to 19 years
4	20 to 24 years
5	25 to 34 years
6	35 to 54 years
7	55 to 64 years
8	65 to 74 years
9	75 years and over
	Female
10-18	Same age categories as groups 1 through 9.
	Persons Not of Hispanic Origin
19-36	Same sex and age categories as groups 1 through 18.
	Black
37-72	Same age/sex/Hispanic origin categories as groups 1 through 36.

### STAGE II: SAMPLING RATES

	Asian or Pacific Islander
73-108	Same age/sex/Hispanic origin categories as groups 1 through 36.
	American Indian, Eskimo, or Aleut
109-144	Same age/sex/Hispanic origin categories as groups 1 through 36.
	Other Race (includes those races not listed above)
145-180	Same age/sex/Hispanic origin categories as groups 1 through 36.

Within a weighting area, the first step in the estimation procedure was to assign an initial weight to each sample person record. This weight was approximately equal to the inverse of the probability of selecting a person for the census sample.

The next step in the estimation procedure, prior to iterative proportional fitting, was to combine categories in each of the four estimation stages, when needed to increase the reliability of the ratio estimation procedure. For each stage, any group that did not meet certain criteria for the unweighted sample count or for the ratio of the 100-percent to the initially weighted sample count, was combined, or collapsed, with another group in the same stage according to a specified collapsing pattern. At the fourth stage, an additional criterion concerning the number of complete count persons in each race/Hispanic origin category was applied.

As the final step, the initial weights underwent four stages of ratio adjustment applying the grouping procedures described above. At the first stage, the ratio of the complete census count to the sum of the initial weights for each sample person was computed for each stage I group. The initial weight assigned to each person in a group was then multiplied by the stage I group ratio to produce an adjusted weight.

In stage II, the stage I adjusted weights were again adjusted by the ratio of the complete census count to the sum of the stage I weights for sample persons in each stage II group. Next, at stage III, the stage II weights were adjusted by the ratio of the complete census count to the sum of the stage II weights for sample persons in each stage III group. Finally, at stage IV, the stage III weights were adjusted by the ratio of the complete census count to the sum of the stage III weights for sample persons in each stage IV group. The four stages of ratio adjustment were performed two times (two iterations) in the order given above. The weights obtained from the second iteration for stage IV were assigned to the sample person records. However, to avoid complications in rounding for tabulated data, only whole number weights were assigned. For example, if the final weight of the persons in a particular group was 7.25 then 1/4 of the sample persons in this group were randomly assigned a weight of 8, while the remaining 3/4 received a weight of 7.

The ratio estimation procedure for housing units was essentially the same as that for persons, except that vacant units were treated differently. The occupied housing unit ratio estimation procedure was done in four stages, and the vacant housing unit ratio estimation procedure was done in a single stage. The first stage for occupied housing units applied 16 household type categories, while the second stage used the two sampling categories described above for persons. The third stage applied three units-in-structure categories; i.e. single units, multi-unit less than 10 and multi-unit 10 or more. The fourth stage could potentially use 200 tenure-race-Hispanic origin-value/rent groups. The stages for ratio estimation for housing units were as follows:

### OCCUPIED HOUSING UNITS

#### STAGE I: TYPE OF HOUSEHOLD

Group	Housing Units With a Family With Own Children Under 18
1	2 persons in housing unit
2	3 persons in housing unit
3	4 persons in housing unit
4	5 to 7 persons in housing unit
5	8 or more persons in housing unit
	Housing Units With a Family Without Own Children Under 18
6-10	2 through 8 or more persons in housing unit
	All Other Housing Units
11	1 person in housing unit
12-16	2 through 8 or more persons in housing unit

#### STAGE II: SAMPLING RATE CATEGORY

1	Sampling rate of 1-in-2
2	Sampling rate less than 1-in-2

#### STAGE III: UNITS IN STRUCTURE

1	Single unit structure
2	Multi-unit structure consisting of fewer than 10 individual units
3	Multi-unit structure consisting of 10 or more individual units

#### STAGE IV: TENURE/RACE AND HISPANIC ORIGIN OF HOUSEHOLDER/VALUE OR RENT

Group	Owner
	White Householder
	Householder of Hispanic Origin
	Value
1	Less than \$20,000
2	\$20,000 to \$39,999
3	\$40,000 to \$59,999
4	\$60,000 to \$79,999

#### STAGE IV: TENURE/RACE AND HISPANIC ORIGIN OF HOUSEHOLDER/VALUE OR RENT—Con.

5	\$80,000 to \$99,999
6	\$100,000 to \$149,999
7	\$150,000 to \$249,999
8	\$250,000 to \$299,999
9	\$300,000 or more
10	Other <sup>1</sup>
	Householder Not of Hispanic Origin
11-20	Same value categories as groups 1 through 10
	Black Householder
21-40	Same Hispanic origin/value categories as groups 1 through 20
	Asian or Pacific Islander Householder
41-60	Same Hispanic origin/value categories as groups 1 through 20
	American Indian, Eskimo, or Aleut Householder
61-80	Same Hispanic origin/value categories as groups 1 through 20
	Householder of Other Race
81-100	Same Hispanic origin/value categories as groups 1 through 20
	Renter
	White Householder
	Householder of Hispanic origin
	Rent
101	Less than \$100
102	\$100 to \$199
103	\$200 to \$299
104	\$300 to \$399
105	\$400 to \$499
106	\$500 to \$599
107	\$600 to \$749
108	\$750 to \$999
109	\$1,000 or more
110	No cash rent
	Householder Not of Hispanic Origin
111-120	Same rent categories as groups 101 through 110
	Black Householder
121-140	Same Hispanic origin/rent categories as groups 101 through 120

<sup>1</sup>Value of units in this category results from other factors besides housing value alone, for example, inclusion of more than 10 acres of land, or presence of a business establishment on the premises.

**STAGE IV: TENURE/RACE AND HISPANIC ORIGIN  
OF HOUSEHOLDER/VALUE OR RENT—  
Con.**

	Asian or Pacific Islander Householder
141-160	Same Hispanic origin/rent categories as groups 101 through 120
	American Indian, Eskimo, or Aleut Householder
161-180	Same Hispanic origin/rent categories as groups 101 through 120
	Householder of Other Race
181-200	Same Hispanic origin/rent categories as groups 101 through 120
	Vacant Housing Units
1	Vacant for rent
2	Vacant for sale
3	Other vacant

The estimates produced by this procedure realize some of the gains in sampling efficiency that would have resulted if the population had been stratified into the ratio estimation groups before sampling, and if the sampling rate had been applied independently to each group. The net effect is a reduction in both the standard error and the possible bias of most estimated characteristics to levels below what would have resulted from simply using the initial, unadjusted weight. A by-product of this estimation procedure is that the estimates from the sample will, for the most part, be consistent with the complete count figures for the population and housing unit groups used in the estimation procedure.

### Control of Nonsampling Error

As mentioned earlier, both sample and 100-percent data are subject to nonsampling error. This component of error could introduce serious bias into the data, and the total error could increase dramatically over that which would result purely from sampling. While it is impossible to completely eliminate nonsampling error from an operation as large and complex as the decennial census, the Bureau of the Census attempted to control the sources of such error during the collection and processing operations. Described below are the primary sources of nonsampling error and the programs instituted for control of this error. The success of these programs, however, was contingent upon how well the instructions actually were carried out during the census. As part of the 1990 census evaluation program, both the effects of these programs and the amount of error remaining after their application will be evaluated.

**Undercoverage**—It is possible for some households or persons to be missed entirely by the census. The undercoverage of persons and housing units can introduce biases into the data.

Several coverage improvement programs were implemented during the development of the census address list and census enumeration and processing to minimize undercoverage of the population and housing units. These programs were developed based on experience from the 1980 census and results from the 1990 census testing cycle. In developing and updating the census address list, the Census Bureau used a variety of specialized procedures in different parts of the country.

- In the large urban areas, the Census Bureau purchased and geocoded address lists. Concurrent with geocoding, the United States Postal Service (USPS) reviewed and updated this list. After the postal check, census enumerators conducted a dependent canvass and update operation. In the fall of 1989, local officials were given the opportunity to examine block counts of address listings (local review) and identify possible errors. Prior to mailout, the USPS conducted a final review.
- In small cities, suburban areas, and selected rural parts of the country, the Census Bureau created the address list through a listing operation. The USPS reviewed and updated this list, and the Census Bureau reconciled USPS corrections and updated through a field operation. In the fall of 1989, local officials participated in reviewing block counts of address listings. Prior to mailout, the USPS conducted a final review.
- The Census Bureau (rather than the USPS) conducted a listing operation in the fall of 1989 and delivered census questionnaires in selected rural and seasonal housing areas in March of 1990. In some inner-city public housing developments, whose addresses had been obtained via the purchased address list noted above, census questionnaires were also delivered by Census Bureau enumerators.

Coverage improvement programs continued during and after mailout. A recheck of units initially classified as vacant or nonexistent improved further the coverage of persons and housing units. All local officials were given the opportunity to participate in a post-census local review, and census enumerators conducted an additional recanvass. In addition, efforts were made to improve the coverage of unique population groups, such as the homeless and parolees/probationers. Computer and clerical edits and telephone and personal visit followup also contributed to improved coverage.

More extensive discussion of the programs implemented to improve coverage will be published by the Census Bureau when the evaluation of the coverage improvement program is completed.

**Respondent and Enumerator Error**—The person answering the questionnaire or responding to the questions posed by an enumerator could serve as a source of error, although the questions were phrased as clearly as possible based on precensus tests, and detailed instructions for completing the questionnaire were provided to each household. In addition, respondents' answers were edited for completeness and consistency, and problems were followed up as necessary.

The enumerator may misinterpret or otherwise incorrectly record information given by a respondent; may fail to collect some of the information for a person or household; or may collect data for households that were not designated as part of the sample. To control these problems, the work of enumerators was monitored carefully. Field staff were prepared for their tasks by using standardized training packages that included hands-on experience in using census materials. A sample of the households interviewed by enumerators for nonresponse were reinterviewed to control for the possibility of data for fabricated persons being submitted by enumerators. Also, the estimation procedure was designed to control for biases that would result from the collection of data from households not designated for the sample.

**Processing Error**—The many phases involved in processing the census data represent potential sources for the introduction of nonsampling error. The processing of the census questionnaires includes the field editing, followup, and transmittal of completed questionnaires; the manual coding of write-in responses; and the electronic data processing. The various field, coding and computer operations undergo a number of quality control checks to insure their accurate application.

**Nonresponse**—Nonresponse to particular questions on the census questionnaire allows for the introduction of bias into the data, since the characteristics of the nonrespondents have not been observed and may differ from those reported by respondents. As a result, any imputation procedure using respondent data may not completely reflect this difference either at the elemental level (individual person or housing unit) or on the average. Some protection against the introduction of large biases is afforded by minimizing nonresponse. In the census, nonresponse was reduced substantially during the field operations by the various edit and followup operations aimed at obtaining a response for every question. Characteristics for the nonresponses remaining after this operation were imputed by the computer by using reported data for a person or housing unit with similar characteristics.

## EDITING OF UNACCEPTABLE DATA

The objective of the processing operation is to produce a set of data that describes the population as accurately and clearly as possible. To meet this objective, questionnaires were edited during field data collection operations for consistency, completeness, and acceptability. Questionnaires also were reviewed by census clerks for omissions, certain specific inconsistencies, and population coverage. For example, write-in entries such as "Don't know" or "NA" were considered unacceptable. For some district offices, the initial edit was automated; however, for the majority of the district offices, it was performed by clerks. As a result of this operation, a telephone or personal visit followup was made to obtain missing information. Potential coverage errors were included in the followup, as well as a sample of questionnaires with omissions and/or inconsistencies.

Subsequent to field operations, remaining incomplete or inconsistent information on the questionnaires was assigned using imputation procedures during the final automated edit of the collected data. Imputations, or computer assignments of acceptable codes in place of unacceptable entries or blanks, are needed most often when an entry for a given item is lacking or when the information reported for a person or housing unit on that item is inconsistent with other information for that same person or housing unit. As in previous censuses, the general procedure for changing unacceptable entries was to assign an entry for a person or housing unit that was consistent with entries for persons or housing units with similar characteristics. The assignment of acceptable codes in place of blanks or unacceptable entries enhances the usefulness of the data.

Another way in which corrections were made during the computer editing process was through substitution; that is, the assignment of a full set of characteristics for a person or housing unit. When there was an indication that a housing unit was occupied but the questionnaire contained no information for the people within the household or the occupants were not listed on the questionnaire, a previously accepted household was selected as a substitute, and the full set of characteristics for the substitute was duplicated. The assignment of the full set of housing characteristics occurred when there was no housing information available. If the housing unit was determined to be occupied, the housing characteristics were assigned from a previously processed occupied unit. If the housing unit was vacant, the housing characteristics were assigned from a previously processed vacant unit.



**Table A. Unadjusted Standard Error for Estimated Totals**

[Based on a 1-in-6 simple random sample]

Estimated Total <sup>1</sup>	Size of publication area <sup>2</sup>													
	500	1,000	2,500	5,000	10,000	25,000	50,000	100,000	250,000	500,000	1,000,000	5,000,000	10,000,000	25,000,000
50 .....	16	16	16	16	16	16	16	16	16	16	16	16	16	16
100 .....	20	21	22	22	22	22	22	22	22	22	22	22	22	22
250 .....	25	30	35	35	35	35	35	35	35	35	35	35	35	35
500 .....	-	35	45	45	50	50	50	50	50	50	50	50	50	50
1,000 .....	-	-	55	65	65	70	70	70	70	70	70	70	70	70
2,500 .....	-	-	-	80	95	110	110	110	110	110	110	110	110	110
5,000 .....	-	-	-	-	110	140	150	150	160	160	160	160	160	160
10,000 .....	-	-	-	-	-	170	200	210	220	220	220	220	220	220
15,000 .....	-	-	-	-	-	170	230	250	270	270	270	270	270	270
25,000 .....	-	-	-	-	-	-	250	310	340	350	350	350	350	350
75,000 .....	-	-	-	-	-	-	-	310	510	570	590	610	610	610
100,000 .....	-	-	-	-	-	-	-	-	550	630	670	700	700	710
250,000 .....	-	-	-	-	-	-	-	-	-	790	970	1 090	1 100	1 100
500,000 .....	-	-	-	-	-	-	-	-	-	-	1 120	1 500	1 540	1 570
1,000,000 .....	-	-	-	-	-	-	-	-	-	-	-	2 000	2 120	2 190
5,000,000 .....	-	-	-	-	-	-	-	-	-	-	-	-	3 540	4 470
10,000,000 .....	-	-	-	-	-	-	-	-	-	-	-	-	-	5 480

<sup>1</sup>For estimated totals larger than 10,000,000, the standard error is somewhat larger than the table values. The formula given below should be used to calculate the standard error.

$$SE(\hat{Y}) = \sqrt{5\hat{Y}\left(1 - \frac{\hat{Y}}{N}\right)}$$

N = Size of area

$\hat{Y}$  = Estimate of characteristic total

<sup>2</sup>The total count of persons in the area if the estimated total is a person characteristic, or the total count of housing units in the area if the estimated total is a housing unit characteristic.

**Table B. Unadjusted Standard Error in Percentage Points for Estimated Percentage**

[Based on a 1-in-6 simple random sample]

Estimated Percentage	Base of percentage <sup>1</sup>												
	500	750	1,000	1,500	2,500	5,000	7,500	10,000	25,000	50,000	100,000	250,000	500,000
2 or 98 .....	1.4	1.1	1.0	0.8	0.6	0.4	0.4	0.3	0.2	0.1	0.1	0.1	0.1
5 or 95 .....	2.2	1.8	1.5	1.3	1.0	0.7	0.6	0.5	0.3	0.2	0.2	0.1	0.1
10 or 90 .....	3.0	2.4	2.1	1.7	1.3	0.9	0.8	0.7	0.4	0.3	0.2	0.1	0.1
15 or 85 .....	3.6	2.9	2.5	2.1	1.6	1.1	0.9	0.8	0.5	0.4	0.3	0.2	0.1
20 or 80 .....	4.0	3.3	2.8	2.3	1.8	1.3	1.0	0.9	0.6	0.4	0.3	0.2	0.1
25 or 75 .....	4.3	3.5	3.1	2.5	1.9	1.4	1.1	1.0	0.6	0.4	0.3	0.2	0.1
30 or 70 .....	4.6	3.7	3.2	2.6	2.0	1.4	1.2	1.0	0.6	0.5	0.3	0.2	0.1
35 or 65 .....	4.8	3.9	3.4	2.8	2.1	1.5	1.2	1.1	0.7	0.5	0.3	0.2	0.2
50 .....	5.0	4.1	3.5	2.9	2.2	1.6	1.3	1.1	0.7	0.5	0.4	0.2	0.2

<sup>1</sup>For a percentage and/or base of percentage not shown in the table, the formula given below may be used to calculate the standard error. This table should only be used for proportions, that is, where the numerator is a subset of the denominator.

$$SE(\hat{p}) = \sqrt{\frac{5\hat{p}}{B}(100 - \hat{p})}$$

B = Base of estimated percentage

$\hat{p}$  = Estimated percentage

# APPENDIX D.

## Collection and Processing Procedures

### CONTENTS

Data Collection Procedures .....	D-2
Enumeration and Residence Rules .....	D-1
Processing Procedures .....	D-5

### ENUMERATION AND RESIDENCE RULES

In accordance with census practice dating back to the first United States census in 1790, each person was to be enumerated as an inhabitant of his or her "usual residence" in the 1990 census. Usual residence is the place where the person lives and sleeps most of the time or considers to be his or her usual residence. This place is not necessarily the same as the person's legal residence or voting residence. In the vast majority of cases, however, the use of these different bases of classification would produce substantially the same statistics, although there might be appreciable differences for a few areas.

The implementation of this practice has resulted in the establishment of rules for certain categories of persons whose usual place of residence is not immediately apparent. Furthermore, this practice means that persons were not always counted as residents of the place where they happened to be staying on Census Day (April 1, 1990).

#### Enumeration Rules

Each person whose usual residence was in the United States was to be included in the census, without regard to the person's legal status or citizenship. In a departure from earlier censuses, foreign diplomatic personnel participated voluntarily in the census, regardless of their residence on or off the premises of an embassy. As in previous censuses, persons in the United States specifically excluded from the census were foreign travelers who had not established a residence.

Americans with a usual residence outside the United States were not enumerated in the 1990 census. United States military and Federal civilian employees, and their dependents overseas, are included in the population counts for States for purposes of Congressional apportionment, but are excluded from all other tabulations for States and their subdivisions. The counts of United States military and Federal civilian employees, and their dependents, were obtained from administrative records maintained by Federal departments and agencies. Other

Americans living overseas, such as employees of international agencies and private businesses and students, were not enumerated, nor were their counts obtained from administrative sources. On the other hand, Americans temporarily overseas were to be enumerated at their usual residence in the United States.

#### Residence Rules

Each person included in the census was to be counted at his or her usual residence—the place where he or she lives and sleeps most of the time or the place where the person considers to be his or her usual home. If a person had no usual residence, the person was to be counted where he or she was staying on April 1, 1990.

Persons temporarily away from their usual residence, whether in the United States or overseas, on a vacation or on a business trip, were counted at their usual residence. Persons who occupied more than one residence during the year were counted at the one they considered to be their usual residence. Persons who moved on or near Census Day were counted at the place they considered to be their usual residence.

**Persons in the Armed Forces**—Members of the Armed Forces were counted as residents of the area in which the installation was located, either on the installation or in the surrounding community. Family members of Armed Forces personnel were counted where they were living on Census Day (for example, with the Armed Forces person or at another location).

Each Navy ship not deployed to the 6th or 7th Fleet was attributed to the municipality that the Department of the Navy designated as its homeport. If the homeport included more than one municipality, ships berthed there on Census Day were assigned by the Bureau of the Census to the municipality in which the land immediately adjacent to the dock or pier was actually located. Ships attributed to the homeport, but not physically present and not deployed to the 6th or 7th Fleet, were assigned to the municipality named on the Department of the Navy's homeport list. These rules also apply to Coast Guard vessels.

Personnel assigned to each Navy and Coast Guard ship were given the opportunity to report a residence off the ship. Those who did report an off-ship residence in the communities surrounding the homeport were counted there; those who did not were counted as residents of

the ship. Personnel on Navy ships deployed to the 6th or 7th Fleet on Census Day were considered to be part of the overseas population.

**Persons on Maritime Ships**—Persons aboard maritime ships who reported an off-ship residence were counted at that residence. Those who did not were counted as residents of the ship, and were attributed as follows:

1. The port where the ship was docked on Census Day, if that port was in the United States or its territories.
2. The port of departure if the ship was at sea, provided the port was in the United States or its territories.
3. The port of destination in the United States or its territories, if the port of departure of a ship at sea was a foreign port.
4. The overseas population if the ship was docked at a foreign port or at sea between foreign ports. (These persons were not included in the overseas population for apportionment purposes.)

**Persons Away at School**—College students were counted as residents of the area in which they were living while attending college, as they have been since the 1950 census. Children in boarding schools below the college level were counted at their parental home.

**Persons in Institutions**—Persons under formally authorized, supervised care or custody, such as in Federal or State prisons; local jails; Federal detention centers; juvenile institutions; nursing, convalescent, and rest homes for the aged and dependent; or homes, schools, hospitals, or wards for the physically handicapped, mentally retarded, or mentally ill, were counted at these places.

**Persons Away From Their Usual Residence on Census Day**—Migrant agricultural workers who did not report a usual residence elsewhere were counted as residents of the place where they were on Census Day. Persons in worker camps who did not report a usual residence elsewhere were counted as residents of the camp where they were on Census Day.

In some parts of the country, natural disasters displaced significant numbers of households from their usual place of residence. If these persons reported a destroyed or damaged residence as their usual residence, they were counted at that location.

Persons away from their usual residence were counted by means of interviews with other members of their families, resident managers, or neighbors.

## DATA COLLECTION PROCEDURES

The 1990 census was conducted primarily through self-enumeration. The questionnaire packet included general information about the 1990 census and an

instruction guide explaining how to complete the questionnaire. Spanish-language questionnaires and instruction guides were available on request. Instruction guides also were available in 32 other languages.

## Enumeration of Housing Units

Each housing unit in the country received one of two versions of the census questionnaire:

1. A short-form questionnaire that contained a limited number of basic population and housing questions; these questions were asked of all persons and housing units and are often referred to as 100-percent questions.
2. A long-form questionnaire that contained the 100-percent items and a number of additional questions; a sampling procedure was used to determine those housing units that were to receive the long-form questionnaire.

Three sampling rates were employed. For slightly more than one-half of the country, one in every six housing units (about 17 percent) received the long-form or sample questionnaire. In functioning local governmental units (counties and incorporated places, and in some parts of the country, towns and townships) estimated to have fewer than 2,500 inhabitants, every other housing unit (50 percent) received the sample questionnaire in order to enhance the reliability of the sample data for these small areas. For census tracts and block numbering areas having more than 2,000 housing units in the Census Bureau's address files, one in every eight housing units (about 13 percent) received a sample questionnaire, providing reliable statistics for these areas while permitting the Census Bureau to stay within a limit of 17.7 million sample questionnaires, or a one-in-six sample, nationwide.

The mail-out/ mail-back procedure was used mainly in cities, suburban areas, towns, and rural areas where mailing addresses consisted of a house number and street name. In these areas, the Census Bureau developed mailing lists that included about 88.4 million addresses. The questionnaires were delivered through the mail and respondents were to return them by mail. Census questionnaires were delivered 1 week before Census Day (April 1, 1990).

The update/ leave/ mail-back method was used mainly in densely populated rural areas where it was difficult to develop mailing lists because mailing addresses did *not* use house number and street name. The Census Bureau compiled lists of housing units in advance of the census. Enumerators delivered the questionnaires, asked respondents to return them by mail, and added housing units not on the mailing lists. This method was used mainly in the South and Midwest, and also included some high-rise, low-income urban areas. A variation of this method

was used in urban areas having large numbers of boarded-up buildings. About 11 million housing units were enumerated using this method.

The list/enumerate method (formerly called conventional or door-to-door enumeration) was used mainly in very remote and sparsely-settled areas. The United States Postal Service delivered unaddressed short-form questionnaires before Census Day. Starting a week before Census Day, enumerators canvassed these areas, checked that all housing units received a questionnaire, created a list of all housing units, completed long-form questionnaires, and picked up the completed short-form questionnaires. This method was used mainly in the West and Northeast to enumerate an estimated 6.5 million housing units.

## Followup

**Nonresponse Followup**—In areas where respondents were to mail back their questionnaires, an enumerator visited each address from which a questionnaire was not received.

**Coverage and Edit-Failure Followup**—In the mail-back areas, some households returned a questionnaire that did not meet specific quality standards because of incomplete or inconsistent information, or the respondent had indicated difficulty in deciding who was to be listed on the questionnaire. These households were contacted by telephone or by personal visit to obtain the missing information or to clarify who was to be enumerated in the household. In areas where an enumerator picked up the questionnaires, the enumerator checked the respondent-filled questionnaire for completeness and consistency.

## Special Enumeration Procedures

Special procedures and questionnaires were used for the enumeration of persons in group quarters, such as college dormitories, nursing homes, prisons, military barracks, and ships. The questionnaires (Individual Census Reports, Military Census Reports, and Shipboard Census Reports) included the 100-percent population questions but did not include any housing questions. In all group quarters, all persons were asked the basic population questions; in most group quarters, additional questions were asked of a sample (one-in-six) of persons.

## Shelter and Street Night (S-Night)

The Census Bureau collected data for various components of the homeless population at different stages in the 1990 census. "Shelter and Street Night" (S-Night) was a special census operation to count the population in four types of locations where homeless people are

found. On the evening of March 20, 1990, and during the early morning hours of March 21, 1990, enumerators counted persons in pre-identified locations:

1. Emergency shelters for the homeless population (public and private; permanent and temporary).
2. Shelters with temporary lodging for runaway youths.
3. Shelters for abused women and their children.
4. Open locations in streets or other places not intended for habitation.

Emergency shelters include all hotels and motels costing \$12 or less (excluding taxes) per night regardless of whether persons living there considered themselves to be homeless, hotels and motels (regardless of cost) used entirely to shelter homeless persons, and pre-identified rooms in hotels and motels used for homeless persons and families. Enumeration in shelters usually occurred from 6 p.m. to midnight; street enumeration, from 2 a.m. to 4 a.m.; abandoned and boarded-up buildings from 4 a.m. to 8 a.m.; and shelters for abused women, from 6 p.m. on March 20 to noon on March 21.

Other components, which some consider as part of the homeless population, were enumerated as part of regular census operations. These include persons doubled up with other families, as well as persons with no other usual home living in transient sites, such as commercial campgrounds, maternity homes for unwed mothers, and drug/alcohol abuse detoxification centers. In institutions, such as local jails and mental hospitals, the Census Bureau does not know who has a usual home elsewhere; therefore, even though some are literally homeless, these persons cannot be identified separately as a component of the homeless population.

There is no generally agreed-upon definition of "the homeless," and there are limitations in the census count that prevent obtaining a total count of the homeless population under any definition. As such, the Census Bureau does not have a definition and will not provide a total count of "the homeless." Rather, the Census Bureau will provide counts and characteristics of persons found at the time of the census in *selected* types of living arrangements. These selected components can be used as building blocks to construct a count of homeless persons appropriate to particular purposes as long as the data limitations are taken into account.

In preparation for "Shelter-and-Street-Night" enumeration, the regional census centers (RCC's) mailed a certified letter (Form D-33 (L)) to the highest elected official of each active functioning government of the United States (more than 39,000) requesting them to identify:

1. All shelters with sleeping facilities (permanent and temporary, such as church basements, armories, public buildings, and so forth, that could be open on March 20).

2. Hotels and motels used to house homeless persons and families.
3. A list of outdoor locations where homeless persons tend to be at night.
4. Places such as bus or train stations, subway stations, airports, hospital emergency rooms, and so forth, where homeless persons seek shelter at night.
5. The specific addresses of abandoned or boarded-up buildings where homeless persons were thought to stay at night.

The letter from the RCC's to the governmental units emphasized the importance of listing night-time congregating sites. The list of shelters was expanded using information from administrative records and informed local sources. The street sites were limited to the list provided by the jurisdictions. All governmental units were eligible for "Shelter and Street Night." For cities with 50,000 or more persons, the Census Bureau took additional steps to update the list of shelter and street locations if the local jurisdiction did not respond to the certified letter. Smaller cities and rural areas participated if the local jurisdiction provided the Census Bureau a list of shelters or open public places to visit or if shelters were identified through our inventory development, local knowledge update, or during the Special Place Prelist operation.

The Census Bureau encouraged persons familiar with homeless persons and the homeless themselves to apply as enumerators. This recruiting effort was particularly successful in larger cities.

For shelters, both long- and short-form Individual Census Reports (ICR's) were distributed. For street enumeration, only short-form ICR's were used. Persons in shelters and at street locations were asked the basic population questions. Additional questions about social and economic characteristics were asked of a sample of persons in shelters only.

Enumerators were instructed *not* to ask who was homeless; rather, they were told to count all persons (including children) staying overnight at the shelters, and everyone they saw on the street except the police, other persons in uniform, and persons engaged in employment or obvious money-making activities other than begging and panhandling.

At both shelter and street sites, persons found sleeping were not awakened to answer questions. Rather, the enumerator answered the sex and race questions by observation and estimated the person's age to the best of his or her ability. In shelters, administrative records and information from the shelter operator were used, when available, for persons who were already asleep.

Less than 1 percent of shelters refused to participate in the census count at first. By the end of the census period, most of those eventually cooperated and the

number of refusals had been reduced to a few. For the final refusals, head counts and population characteristics were obtained by enumerators standing outside such shelters and counting people as they left in the morning.

The "street" count was restricted to persons who were visible when the enumerator came to the open, public locations that had been identified by local jurisdictions. Homeless persons who were well hidden, moving about, or in locations other than those identified by the local governments were likely missed. The number missed will never be known and there is no basis to make an estimate of the number missed from census data. The count of persons in open, public places was affected by many factors, including the extra efforts made to encourage people to go to shelters for "Shelter and Street Night," the weather (which was unusually cold in many parts of the country), the presence of the media, and distrust of the census. Expectations of the number of homeless persons on the street cannot be based on the number seen during the day because the night-time situation is normally very different as more homeless persons are in shelters or very well hidden.

For both "Shelter-and-Street-Night" locations, the Census Bureau assumed that the usual home of those enumerated was in the block where they were found (shelter or street).

The "Shelter-and-Street-Night" operation replaced and expanded the 1980 Mission Night (M-Night) and Casual Count operations. These two operations were aimed at counting the population who reported having no usual residence. M-Night was conducted a week after Census Day, in April 1980. Enumerators visited hotels, motels, and similar places costing \$4 or less each night; missions, flophouses, local jails and similar places at which the average length of stay was 30 days or less; and nonshelter locations, such as bus depots, train stations, and all night movie theaters. Questions were asked of everyone, regardless of age. Enumerators conducted M-Night up to midnight on April 8, 1980, and returned the next morning to collect any forms completed after midnight.

The Casual Count operation was conducted in May 1980 at additional nonshelter locations, such as street corners, pool halls, welfare and employment offices. This operation lasted for approximately 2 weeks. Casual Count was conducted during the day only in selected large central cities. Only persons who appeared to be at least 15 years of age were asked if they had been previously enumerated. Casual Count was actually a coverage-improvement operation. It was not specifically an operation to count homeless persons living in the streets. Persons were excluded if they said they had a usual home outside the city because it was not cost effective to check through individual questionnaires in another city to try to find the person.

## PROCESSING PROCEDURES

Respondents returned many census questionnaires by mail to 1 of over 344 census district offices or to one of six processing offices. In these offices, the questionnaires were "checked in" and edited for completeness and consistency of the responses. After this initial processing had been performed, all questionnaires were sent to the processing offices.

In the processing offices, the household questionnaires were microfilmed and processed by the Film Optical Sensing Device for Input to Computers (FOSDIC). For most items on the questionnaire, the information supplied by the respondent was indicated by filling circles in predesignated positions. FOSDIC electronically "read" these filled circles from the microfilm copy of the questionnaire and transferred the information to computer tape. The computer tape did not include individual names, addresses, or handwritten responses.

The data processing was performed in several stages. All questionnaires were microfilmed, "read" by FOSDIC,

and transferred to computer disk. Selected written entries in the race question on both the short and long forms were keyed from the microfilm and coded using the data base developed from the 1980 census and subsequent content and operational tests. Keying of other written entries on the long forms occurred in the seven processing offices.

The information (for example, income dollar amounts or homeowner shelter costs) on these keyed files was merged with the FOSDIC data or processed further through one of three automated coding programs. The codes for industry, occupation, place-of-birth, migration, place-of-work, ancestry, language, relationship, race, and Hispanic origin were merged with the FOSDIC data for editing, weighting, and tabulating operations at Census Bureau headquarters. All responses to the questions on Individual Census Reports (ICR's), Military Census Reports (MCR's), and Shipboard Census Reports (SCR's) were keyed, not processed by microfilm or FOSDIC.



## APPENDIX E.

### Facsimiles of Respondent Instructions and Questionnaire Pages

# Your Guide for the 1990 U.S. Census Form

This guide gives helpful information on filling out your census form. If you need more help, call the local U.S. census office. **The telephone number is on the cover of the questionnaire.** After you have filled out your form, please return it in the **envelope** we have provided.

On the inside	Page
<b>How</b> to fill out your census form	<b>2</b>
<b>Example</b>	<b>2</b>
<b>Your</b> answers are confidential	<b>2</b>
<b>Instructions</b> for the census questions	<b>3 – 11</b>
<b>What</b> the census is about	<b>12</b>
<b>Why</b> the census asks certain questions	<b>12</b>

CENSUS '90



U.S. DEPARTMENT OF COMMERCE  
BUREAU OF THE CENSUS

D4



## How to Fill Out Your Census Form

Please use a black lead pencil only. Black lead pencil is better to use than ballpoint or other pens. Most questions ask you to fill in the circle, or to print the information. See **Example** below.

Make sure you print answers for everyone in this household. If someone in the household, such as a roomer or boarder, does not want to give you all the information for the form, print at least the person's name and answer questions 2 and 3. A census taker will call to get the other information directly from the person.

There may be a question you cannot answer exactly. For example, you might not know the age of an elderly person or the price for which your house would sell. Ask someone else in your household; if no one knows, give your best estimate.

Instructions for individual questions begin on page 3 of this guide. They will help you to understand the questions and answer them correctly.

If you have a question about filling out the census form or need assistance, call the local U.S. census office. The telephone number is given on the cover of the questionnaire.

If you do not mail back your census form, a census taker will be sent out to assist you. But it saves time and your taxpayer dollars if you fill out the form yourself and mail it back.

### Example

a. Age	b. Year of birth	a. Age	b. Year of birth
<input checked="" type="radio"/> 41	<input checked="" type="radio"/> 1949	<input checked="" type="radio"/> 09	<input checked="" type="radio"/> 1981
<input type="radio"/> 00 <input type="radio"/> 00 <input type="radio"/> 00 <input type="radio"/> 00	<input type="radio"/> 18 <input type="radio"/> 00 <input type="radio"/> 00 <input type="radio"/> 00	<input type="radio"/> 00 <input type="radio"/> 00 <input type="radio"/> 00 <input type="radio"/> 00	<input type="radio"/> 18 <input type="radio"/> 00 <input type="radio"/> 00 <input type="radio"/> 00
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## Your Answers Are Confidential

The law authorizing the census (Title 13, U.S. Code) also provides that your answers are confidential. No one except census workers may see your completed form and they can be fined and/or imprisoned for any disclosure of your answers. Only after 72 years can your individual census form become available to other government agencies (whether federal, state, county, or local). Until then, no other person or business can see your individual report.

The same law that protects the confidentiality of your answers requires that you provide the information asked in this census to the best of your knowledge.

Information collected from the decennial census is used for a variety of statistical purposes. Census information is used to find out where funding is most needed for schools, health centers, highways, and other services. Census results are used by members of public and private groups—including community organizations—and by businesses and industries, as well as by agencies at all levels of government.

## Instructions for Questions 1a through 7

**1a.** List everyone who lives at this address in question 1a. If you are not sure if you should list a person, see the rules on page 1 of the census form. If you are still not sure, answer as best you can and fill in "Yes" for question H1a or H1b, as appropriate.

If there are more than seven people in your household, please list all the persons in question 1a, complete the form for seven people, and mail it back in the enclosed envelope. A census taker will call to obtain the information for the additional persons.

**b.** If everyone listed in question 1a usually lives at another address(es), print the address(es) in 1b.

**2.** Fill one circle to show how each person is related to the person in column 1.

If **Other relative** of the person in column 1, print the exact relationship such as son-in-law, daughter-in-law, grandparent, nephew, niece, mother-in-law, father-in-law, cousin, and so on.

If the **Stepson/stepdaughter** of the person in column 1 also has been legally adopted by the person in column 1, mark **Stepson/stepdaughter** but do not mark **Natural-born or adopted son/daughter**. In other words, **Stepson/stepdaughter** takes precedence over **Adopted son/daughter**.

**4.** Fill ONE circle for the race each person considers himself/herself to be.

If you fill the **Indian (Amer.)** circle, print the name of the tribe or tribes in which the person is enrolled. If the person is not enrolled in a tribe, print the name of the principal tribe(s).

If you fill the **Other API** circle [under **Asian or Pacific Islander (API)**], only print the name of the group to which the person belongs. For example, the **Other API** category includes persons who identify as Burmese, Fijian, Hmong, Indonesian, Laotian, Bangladeshi, Pakistani, Tongan, Thai, Cambodian, Sri Lankan, and so on.

If you fill the **Other race** circle, be sure to print the name of the race.

If the person considers himself/herself to be **White, Black or Negro, Eskimo or Aleut**, fill one circle only. Please do not print the race in the boxes.

The **Black or Negro** category also includes persons who identify as African-American, Afro-American, Haitian, Jamaican, West Indian, Nigerian, and so on.

All persons, regardless of citizenship status, should answer this question.

**5.** Print age at last birthday in the space provided (print "00" for babies less than 1 year old). Fill in the matching circle below each box. Also, print year of birth in the space provided. Then fill in the matching circle below each box. For an illustration of how to complete question 5, see the **Example** on page 2 of this guide.

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

**7.** A person is of Spanish/Hispanic origin if the person's origin (ancestry) is Mexican, Mexican-Am., Chicano, Puerto Rican, Cuban, Argentinean, Colombian, Costa Rican, Dominican, Ecuadoran, Guatemalan, Honduran, Nicaraguan, Peruvian, Salvadoran, from other Spanish-speaking countries of the Caribbean or Central or South America, or from Spain.

If you fill the **Yes, other Spanish/Hispanic** circle, print one group.

A person who is not of Spanish/Hispanic origin should answer this question by filling the **No (not Spanish/Hispanic)** circle. Note that the term "**Mexican-Am.**" refers only to persons of Mexican origin or ancestry.

All persons, regardless of citizenship status, should answer this question.

## Instructions for Question H1a through H1b

**H1a.** Refer to the list of persons you entered in question 1a on page 1. If you left anyone out of your list because you were not sure if the person(s) should be listed, answer question H1a as **Yes**. Then enter the name(s) and reason(s) why you did not list the person(s) on the lines provided. Otherwise, answer question H1a as **No**.

**b.** If you included anyone on your list even though you were not sure that you should list the person(s), answer question H1b as **Yes**. Then enter the name(s) and reason(s) why you listed the person(s) on the lines provided. Otherwise, answer question H1b as **No**.

## Instructions for Questions H2 through H7b

### H2. Fill only one circle.

Count all occupied and vacant apartments in the house or building. Do not count stores or office space.

*Detached* means there is open space on all sides, or the house is joined only to a shed or garage. *Attached* means that the house is joined to another house or building by at least one wall that goes from ground to roof. An example of **A one-family house attached to one or more houses** is a house in a row of houses attached to one another.

A mobile home or trailer that has had one or more rooms added or built onto it should be counted as a *one-family detached house*; a porch or shed is not considered a room.

### H3. Count only whole rooms in your house, apartment, or mobile home used for living purposes, such as living rooms, dining rooms, kitchens, bedrooms, finished recreation rooms, family rooms, etc. Do not count bathrooms, kitchenettes, strip or pullman kitchens, utility rooms, foyers, halls, half-rooms, porches, balconies, unfinished attics, unfinished basements, or other unfinished space used for storage.

### H4. Housing is owned if the owner or co-owner lives in it. Mark **Owned by you or someone in this household with a mortgage or loan** if the house, apartment, or mobile home is mortgaged or there is a contract to purchase. Mark **Owned by you or someone in this household free and clear (without a mortgage)** if there is no mortgage or other debt. If the house, apartment, or mobile home is owned but the land is rented, mark this question to show the status of the house, apartment, or mobile home.

Mark **Rented for cash rent** if any money rent is paid, even if the rent is paid by persons who are not members of your household, or by a federal, state, or local government agency.

Mark **Occupied without payment of cash rent** if the unit is not owned or being bought by the occupants and if money rent is not paid or contracted. The unit may be owned by friends or relatives who live elsewhere and who allow occupancy without charge. A house or apartment may be provided as part of wages or salary. Examples are: caretaker's or janitor's house or apartment; parsonages; tenant farmer or sharecropper houses for which the occupants do not pay cash rent; or military housing.

### H5a. Answer H5a and H5b if you live in a one-family house or a mobile home; include only land that you own or rent.

### b. A business is easily recognized from the outside; for example, a grocery store or barber shop. A medical office is a doctor's or dentist's office regularly visited by patients.

### H6. If this is a house, include the value of the house, the land it is on, and any other structures on the same property. If the house is owned but the land is rented, estimate the combined value of the house and the land. If this is a condominium unit, estimate the value for your house or apartment including your share of the common elements. If this is a mobile home, include the value of the mobile home and the value of the land. If you rent the land, estimate the value of the rented land and add it to the value of the mobile home.

### H7a. Report the rent agreed to or contracted for, even if the rent for your house, apartment, or mobile home is unpaid or paid by someone else.

If rent is paid:	Multiply rent by:	If rent is paid:	Divide rent by:
By the day . . . . .	30	4 times a year . . . . .	3
By the week . . . . .	4	2 times a year . . . . .	6
Every other week . . . .	2	Once a year . . . . .	12

### b. Answer **Yes** if meals are included in the monthly rent payment, or you must contract for meals or a meal plan in order to live in this building.

## Instructions for Questions H8 through H19b

### H8. The person listed in column 1 refers to the person listed in the first column on page 2. This person should be the household member (or one of the members) in whose name the house, apartment, or mobile home is owned, being bought, or rented. If there is no such person, any adult household member can be the person in column 1. Mark when this person last moved into this house, apartment, or mobile home.

### H9. Include all rooms intended to be used as bedrooms in this house, apartment, or mobile home, even if they are currently being used for other purposes.

### H10. Mark **Yes**, have all three facilities if you have all the facilities mentioned; all facilities must be in your house, apartment, or mobile home, but not necessarily in the same room. Consider that you have hot water even if you have it only part of the time. Mark **No** if any of the three facilities is not present.

### H11. The kitchen sink, stove, and refrigerator must be located in the building but do not have to be in the same room. Portable cooking equipment is not considered as a range or cookstove.

### H12. Answer **Yes** only if the telephone is located in your house, apartment, or mobile home.

### H13. Count company cars (including police cars and taxicabs) and company trucks of one-ton capacity or less that are regularly kept at home and used by household members for nonbusiness purposes. Do not count cars or trucks permanently out of working order.

### H14. Fill the circle for the fuel used most to heat your house, apartment, or mobile home. In buildings containing more than one apartment you may obtain this information from the owner, manager, or janitor.

**Solar energy** is provided by a system that collects, stores, and distributes heat from the sun. **Other fuel** includes any fuel not separately listed; for example, purchased steam, fuel briquettes, waste material, etc.

### H15. If a well provides water for five or more houses, apartments, or mobile homes, mark **A public system**. If a well provides water for four or fewer houses, apartments, or mobile homes, fill one of the circles for **Individual well**.

**Drilled wells**, or small diameter wells, are usually less than 1½ feet in diameter. **Dug wells** are generally hand dug and are larger than 1½ feet wide.

### H16. A **public sewer** may be operated by a government body or private organization. A **septic tank** or **cesspool** is an underground tank or pit used for disposal of sewage.

### H17. Fill the circle corresponding to the period in which the original construction was completed, *not* the time of any later remodeling, additions, or conversions. In buildings containing more than one apartment, the owner, manager, or janitor may be of help in determining when the building was built.

If you live in a houseboat or a trailer or mobile home, fill the circle corresponding to the model year in which it was manufactured.

If you do not know the period when the building was first constructed, fill the circle for **Don't know**.

### H18. A **condominium** is a type of ownership in which the apartments, houses, or mobile homes in a building or development are individually owned, but the common areas, such as lobbies, halls, etc., are jointly owned. Cooperative occupants should mark **No**.

### H19a. Answer H19a and H19b if you live in a one-family house or mobile home.

### b. This property is the acreage on which the house is located; it includes adjoining land you rent for your use. Report sales made in 1989 from this property by you or previous occupants.

## Instructions for Questions H20 through H26

**H20.** If your house or apartment is rented, enter the costs for utilities and fuels **only if you pay for them in addition to the rent entered in H7a.**

If you live in a condominium, enter the costs for utilities and fuels **only if you pay for them in addition to your condominium fee.**

If your fuel and utility costs are already included in your rent or condominium fee, fill the **Included in rent or in condominium fee** circle. Do not enter any dollar amounts.

The amounts to be reported should be the total amount for the past 12 months. Estimate as closely as possible when exact costs are not known. If you have lived in this house or apartment less than 1 year, estimate the yearly cost.

Report amounts even if your bills are unpaid or paid by someone else. If the bills include utilities or fuel used also by another apartment or a business establishment, estimate the amounts for your own house or apartment. If gas and electricity are billed together, enter the combined amount on the electricity line and bracket [ ] the two utilities.

**H21.** Report taxes for all taxing jurisdictions (city or town, county, state, school district, etc.) even if they are included in your mortgage payment, not yet paid or paid by someone else, or are delinquent. Do not include taxes past due from previous years.

**H22.** When premiums are paid on other than a yearly basis, convert to a yearly basis. Enter the yearly amount even if no payment was made during the past 12 months.

**H23a.** The word *mortgage* is used as a general term to indicate all types of loans that are secured by real estate.

**b.** Enter a monthly amount even if it is unpaid or paid by someone else. If the amount is paid on some other periodic basis, see the instructions for H7a to change it to a monthly amount. Include payments on first mortgages and contracts to purchase only. Payments for second or junior mortgages and home equity loans should be reported in H24b.

**H24a.** A second or junior mortgage or home equity loan is secured by real estate.

**b.** Enter a monthly amount even if it is unpaid or paid by someone else. If the amount is paid on some other periodic basis, see instructions for H7a and change it to a monthly amount. Include payments on all second or junior mortgages or home equity loans.

**H25.** A *condominium fee* is normally assessed by the condominium owners' association for the purpose of improving and maintaining the common areas. Enter a monthly amount even if it is unpaid or paid by someone else. If the amount is paid on some other periodic basis, see the instructions for H7a on how to change it to a monthly amount.

**H26.** Report amount even if your bills are unpaid or paid by someone else. Include payments for personal property taxes, land or site rent, registration fees and license fees. Do not include real estate taxes already reported in H21. The amount to be reported should be the total amount for an entire 12-month billing period even if made in two or more installments. Estimate as closely as possible when exact costs are not known.

## Instructions for Question 8

**8.** For persons born in the United States:

Print the name of the State in which this person was born. If the person was born in Washington, D.C., print District of Columbia. If the person was born in a U.S. territory or commonwealth, print Puerto Rico, U.S. Virgin Islands, Guam, American Samoa, or Northern Marianas.

For persons born outside the United States:

Print the name of the foreign country or area where the person was born. Use current boundaries, not boundaries at the time of the person's birth. Specify whether Northern Ireland or the Republic of Ireland (Eire); East or West Germany; North or South Korea; England, Scotland, or Wales (not Great Britain or United Kingdom). Specify the particular country or island in the Caribbean (not, for example, West Indies).

## Instructions for Questions 9 through 13

**9.** A person should fill the **Yes, U.S. citizen by naturalization** circle only if he/she has completed the naturalization process and is now a United States citizen. If the person was born in Puerto Rico, Guam, the U.S. Virgin Islands, or Northern Marianas, he/she should fill the **Yes, born in Puerto Rico, Guam, the U.S. Virgin Islands, or Northern Marianas** circle. If the person was born outside the United States (or at sea) and has at least one American parent, he/she should fill the **Yes, born abroad of American parent or parents** circle.

**10.** If the person has entered the United States (that is, the 50 states and the District of Columbia) more than once, fill the circle for the latest year he/she came to stay.

**11.** Do not include enrollment in a trade or business school, company training, or tutoring unless the course would be accepted for credit at a regular elementary school, high school, or college.

A *public school* is any school or college that is controlled and supported primarily by a local, county, State, or Federal Government. Schools are private if supported and controlled primarily by religious organizations or other private groups.

**12.** Mark the category for the highest grade or level of schooling the person has **successfully completed** or the **highest degree** the person received. If the person is enrolled in school, mark the category containing the highest grade completed (the grade previous to the grade in which enrolled). Schooling completed in foreign or ungraded schools should be reported as the equivalent level of schooling in the regular American school system.

Persons who completed high school by passing an equivalency test, such as the General Educational Development (GED) examination, and did not attend college, should fill the circle for high school graduate.

Do not include vocational certificates or diplomas from vocational, trade, or business schools or colleges unless they were college level associate degrees or higher.

Some examples of *professional school degrees* include medicine, dentistry, chiropractic, optometry, osteopathic medicine, pharmacy, podiatry, veterinary medicine, law, and theology. Do not include barber school, cosmetology, or other training for a specific trade.

Do not include honorary degrees awarded by colleges and universities to individuals for their accomplishments. Include only "earned" degrees.

**13.** Print the ancestry group. Ancestry refers to the person's ethnic origin or descent, "roots," or heritage. Ancestry also may refer to the country of birth of the person or the person's parents or ancestors before their arrival in the United States. All persons, regardless of citizenship status, should answer this question.

Persons who have more than one origin and cannot identify with a single ancestry group may report two ancestry groups (for example, German-Irish).

Be specific. For example, print whether West Indian, Asian Indian, or American Indian. West Indian includes persons whose ancestors came from Jamaica, Trinidad, Haiti, etc. Distinguish Cape Verdean from Portuguese; French Canadian from Canadian; and Dominican Republic from Dominica Island.

A religious group should not be reported as a person's ancestry.

## Instructions for Questions 14a through 19

- 14a.** Mark **Yes** if this person lived in this same house or apartment on April 1, 1985, even if he/she moved away and came back since then. Mark **No** if this person lived in the same building but in a different apartment (or in the same mobile home or trailer but on a different lot or trailer site).
- b.** If this person lived in a different house or apartment on April 1, 1985, give the location of this person's usual home at that time.

### Part (1)

If the person lived in the United States on April 1, 1985, print the name of the State (or District of Columbia) where he or she lived. Continue with parts (2) through (4).

If the person lived in a U.S. territory or commonwealth, print the name of the territory or commonwealth, such as Puerto Rico, U.S. Virgin Islands, Guam, American Samoa, or Northern Marianas. Then go to question 15a.

If the person lived outside the United States, print the name of the foreign country or area where he or she lived. Specify whether Northern Ireland or the Republic of Ireland (Eire); East or West Germany; North or South Korea; England, Scotland or Wales (not Great Britain or United Kingdom). Specify the particular country or island in the Caribbean (not, for example, West Indies). Then go to question 15a.

### Part (2)

If the person lived in Louisiana, print the parish name. If the person lived in Alaska, print the borough name. If the person lived in New York city and the county name is not known, print the borough name. If the person lived in an independent city (not in any county) or in Washington, D.C., leave blank and enter the city name in part (3).

### Part (3)

If the person lived in New England, print the name of the town rather than the village name, unless the name of the town is not known. If the person lived outside the limits or boundaries of any city or town, print the name of the post office or the nearest town and mark **No**, **lived outside the city/town limits** in part (4).

### Part (4)

Mark **Yes** if the location is now inside the city/town limits even if it was not inside the limits on April 1, 1985; that is, if the area was annexed by the city/town since that time.

- 15.** Mark **Yes** if the person sometimes or always speaks a language other than English at home.
- Do not mark **Yes** for a language spoken only at school or if speaking is limited to a few expressions or slang.
- Print the name of the language spoken at home. If this person speaks more than one non-English language and cannot determine which is spoken more often, report the first language the person learned to speak.
- 17a.** For a person with service in the National Guard or a military reserve unit, fill one of the two **Yes**, **active duty** circles if and only if the person has ever been called up for active duty other than training; otherwise, mark **Yes**, **service in Reserves or National Guard only**. For a person whose only service was as a civilian employee or volunteer for the Red Cross, USO, Public Health Service, or War or Defense Department, mark **No**. Count World War II Merchant Marine Seaman service as active duty; do not count other Merchant Marine service as active duty.
- 18.** Mark **Yes** to part (a) if a health condition substantially limits this person in his or her choice of occupation or if the condition limits the amount of work that can be accomplished in a given period of time. Mark **Yes** to part (b) if the health condition prevents this person from holding any significant employment.
- 19.** Consider a person to have difficulty with these activities if any of the following situations apply: (1) it takes extra time or extra effort for the person to perform one or more of the activities, (2) there are times when the person cannot perform one or more of the activities, or (3) the person is completely unable to perform one or more of the activities.

## Instructions for Questions 20 through 23b

- 20.** Count all children born alive, including any who have died (even shortly after birth) or who no longer live with you. Do not include miscarriages or stillborn children or any adopted, foster, or stepchildren.

### 21a. Count as work — Mark **Yes**:

- Work for someone else for wages, salary, piece rate, commission, tips, or payments "in kind" (for example, food, lodging received as payment for work performed).
- Work in own business, professional practice, or farm.
- Any work in a family business or farm, paid or not.
- Any part-time work including babysitting, paper routes, etc.
- Active duty in Armed Forces.

### Do not count as work — Mark **No**:

- Housework or yard work at home.
- Unpaid volunteer work.
- School work.
- Work done as a resident of an institution.

- 22a.** Include the street type (for example, St., Road, Ave.) and the street direction (if a direction such as "North" is part of the address). For example, print 1239 N. Main St. or 1239 Main St., N.W. not just 1239 Main.

If the only known address is a post office box, give a description of the work location. For example, print the name of the building or shopping center where the person works, the nearest intersection, the nearest street where the workplace is located, etc. **DO NOT GIVE A POST OFFICE BOX NUMBER.**

If the person worked at a military installation or military base that has no street address, report the name of the military installation or base.

If the person worked at several locations, but reported to the same location each day to begin work, print the address of the location where he or she reported. If the person did not report to the same location each day to begin work, print the address of the location where he or she worked most last week.

If the person's employer operates in more than one location (such as a grocery store chain or public school system), print the exact address of the location or branch where the person worked. If the exact address of a school is not known, print the name of the school.

If the person worked on a college or university campus and the exact address of the workplace is not known, print the name of the building where he or she worked.

- d.** If the person worked in New York city and the county is not known, print the name of the borough where the person worked.

If the person worked in Louisiana, print the name of the parish where the person worked.

If the person worked in Alaska, print the name of the borough where the person worked.

- e.** If the person worked in a foreign country or Puerto Rico, Guam, etc., print the name of the country in 22e and leave the other parts of question 22 blank.

- 23a.** If the person usually used more than one type of transportation to get to work (for example, rode the bus and transferred to the subway), fill the circle of the one method of transportation that he/she used for most of the distance during the trip.

- b.** If the person was driven to work by someone who then drove back home or to a nonwork destination, fill the circle for **Drove alone**.

**DO NOT** include persons who rode to school or some other nonwork destination in the count of persons who rode in the vehicle.

## Instructions for Questions 24a through 30

- 24a.** Give the time of day the person usually *left home to go to work*. DO NOT give the time that the person usually began his or her work.  
If the person usually left home to go to work sometime *between 12:00 o'clock midnight and 12:00 o'clock noon*, fill the **a.m.** circle.  
If the person usually left home to go to work sometime *between 12:00 o'clock noon and 12:00 o'clock midnight*, fill the **p.m.** circle.
- b.** Travel time is from door to door. Include time taken waiting for public transportation or picking up passengers in a carpool.
- 25.** If the person works only during certain seasons or on a day-by-day basis when work is available, mark **No**.
- 26a.** Mark **Yes** if the person tried to get a job or to start a business or professional practice at any time in the last 4 weeks; for example, registered at an employment office, went to a job interview, placed or answered ads, or did anything toward starting a business or professional practice.
- b.** Mark **No, already has a job** if the person was on layoff or was expecting to report to a job within 30 days.  
Mark **No, temporarily ill** if the person expects to be able to work within 30 days.  
Mark **No, other reasons** if the person could not have taken a job because he or she was going to school, taking care of children, etc.
- 27.** Look at the instructions for question 21a to see what to count as work. Mark **Never worked** if the person: (1) never worked at any kind of job or business, either full or part time, (2) never did any work, with or without pay, in a family business or farm, and (3) never served in the Armed Forces.
- 28a.** If the person worked for a company, business, or government agency, print the name of the company, not the name of the person's supervisor. If the person worked for an individual or a business that had no company name, print the name of the individual worked for. If the person worked in his/her own business, print "self-employed."
- b.** Print two or more words to tell what the business, industry, or individual employer named in 28a did. If there is more than one activity, describe only the major activity at the place where the person worked. Enter what is made, what is sold, or what service is given.  
Some examples of what to enter:
- |  |                        |
|--|------------------------|
| <b>Enter a description like the following --</b> | <b>Do not enter --</b> |
| Metal furniture manufacturing                    | Furniture company      |
| Retail grocery store                             | Grocery store          |
| Petroleum refining                               | Oil company            |
| Cattle ranch                                     | Ranch                  |
- 29.** Print two or more words to describe the kind of work the person did. If the person was a trainee, apprentice, or helper, include that in the description.  
Some examples of what to enter:
- |  |                        |
|--|------------------------|
| <b>Enter a description like the following --</b> | <b>Do not enter --</b> |
| Production clerk                                 | Clerk                  |
| Carpenter's helper                               | Helper                 |
| Auto engine mechanic                             | Mechanic               |
| Registered nurse                                 | Nurse                  |
- 30.** Mark **Employee of a PRIVATE NOT-FOR-PROFIT . . . organization** if the person worked for a cooperative, credit union, mutual insurance company, or similar organization.  
Employees of foreign governments, the United Nations, and other international organizations should mark **PRIVATE NOT-FOR-PROFIT . . . organization**.  
For persons who worked at a public school, college or university, mark the appropriate *government* category; for example, mark **State GOVERNMENT employee** for a state university, or mark **Local GOVERNMENT employee** for a county-run community college or a city-run public school.

## Instructions for Questions 31a through 32h

- 31a.** Look at the instructions for question 21a to see what to count as work.
- b.** Count every week in which the person did any work at all, even for an hour.
- 32.** Fill the **Yes** or **No** circle for each part and enter the amount received during 1989.  
If income from any source was received jointly by household members, report, if possible, the appropriate share for each person; otherwise, report the whole amount for only one person and fill the **No** circle for the other person.
- a.** Include wages and salaries from *all jobs before deductions*. Be sure to include any tips, commissions, or bonuses. Owners of *incorporated* businesses should enter their salary here. Military personnel should include base pay plus cash housing and/or subsistence allowance, flight pay, uniform allotments, reenlistment bonuses, etc.
- b.** Include **NONFARM** profit (or loss) from self-employment in sole proprietorships and partnerships. *Exclude* profit (or loss) of incorporated businesses you own.
- c.** Include **FARM** profit (or loss) from self-employment in sole proprietorships and partnerships. *Exclude* profit (or loss) of incorporated farm businesses you own. Also *exclude* amounts from land rented for cash but include amounts from land rented for shares.
- d.** Include interest received or credited to checking and savings accounts, money market funds, certificates of deposit (CDs), IRAs, KEOGHs, and government bonds.  
Include dividends received, credited, or reinvested from ownership of stocks or mutual funds.  
Include profit (or loss) from royalties and the rental of land, buildings or real estate, or from roomers or boarders. Income received by self-employed persons whose *primary* source of income is from renting property or from royalties should be included in questions 32b or 32c above. Include regular payments from an estate or trust fund.
- e.** Include Social Security (and/or Railroad Retirement) payments to retired persons, to dependents of deceased insured workers, and to disabled workers before Medicare deductions.
- f.** Include Supplemental Security Income received by aged, blind, or disabled persons, Aid to Families with Dependent Children, or income from other government programs such as general or emergency assistance. Do not include assistance received from private charities. *Exclude* assistance to pay for heating (cooling) costs.
- g.** Include retirement, disability, or survivor benefits received from companies and unions; Federal, State, and local governments, and the U.S. military. Include regular income from annuities and IRA or KEOGH retirement plans.
- h.** Include Veterans' (VA) disability compensation and educational assistance payments (VEAP), unemployment compensation, child support or alimony, and all other regular payments such as Armed Forces transfer payments; assistance from private charities; regular contributions from persons not living in the household, etc.  
*Do not include the following as income in any item:*
- Refunds or rebates of any kind
  - Withdrawals from savings of any kind
  - Capital gains or losses from the sale of homes, shares of stock, etc.
  - Inheritances or insurance settlements
  - Any type of loan
  - Pay in-kind such as food, free rent, etc.

## **What the Census Is About — Some Questions and Answers**

### **Why are we taking a census?**

The most important reason for taking a decennial census is to determine how many representatives each state will have in Congress.

### **What does the Census Bureau do with the information you provide?**

The individual information collected in the census is grouped together into statistical totals. Information such as the number of persons in a given area, their ages, educational background, the characteristics of their housing, etc., enable government, business, and industry to plan more effectively.

### **How long have we been taking the census?**

The first census was taken in 1790 in accordance with the requirement in the first article of the constitution. A census has been taken every 10 years since. The 1990 Decennial Census marks the 200th anniversary of the census.

### **How are you being counted?**

Census forms are delivered to all households a few days before census day. Households are requested to fill out the form and mail it back to the census office.

## **Why the Census Asks Certain Questions**

**Here are a few reasons for asking some of the questions.**

*It is as important to get information about people and their houses as it is to count them.*

### **Name?**

Names help make sure that everyone in a household is counted, but that no one is counted twice.

### **Value or rent?**

Government and planning agencies use answers to these questions in combination with other information to develop housing programs to meet the needs of people at different economic levels.

### **Complete plumbing?**

This question gives information on the quality of housing. The data are used with other statistics to show how the "level of living" compares in various areas and how it has changed over time.

### **Place of birth?**

This question provides information used to study long-term trends as to where people move and to study migration patterns and differences in growth patterns.

### **Job?**

Answers to the questions about the jobs people hold provide information on the extent and types of employment in different areas of the country. From this information, training programs can be developed and the need for new industries can be determined.

### **Income?**

Income, more than anything else, determines how families or persons live. Income information makes it possible to compare the economic levels of different areas.

CENSUS '90

# OFFICIAL 1990 U.S. CENSUS FORM



Thank you for taking time to complete and return this census questionnaire. It's important to you, your community, and the Nation.

**The law requires answers but guarantees privacy.**

By law (Title 13, U.S. Code), you're required to answer the census questions to the best of your knowledge. However, the same law guarantees that your census form remains confidential. For 72 years—or until the year 2062—only Census Bureau employees can see your form. No one else—no other government body, no police department, no court system or welfare agency—is permitted to see this confidential information under any circumstances.

**How to get started—and get help.**

Start by listing on the next page the names of all the people who live in your home. Please answer all questions with a black lead pencil. You'll find detailed instructions for answering the census in the enclosed guide. If you need additional help, call the toll-free telephone number to the left, near your address.

**Please answer and return your form promptly.**

Complete your form and return it by April 1, 1990 in the postage-paid envelope provided. Avoid the inconvenience of having a census taker visit your home.

Again, thank you for answering the 1990 Census.  
**Remember: Return the completed form by April 1, 1990.**

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**Para personas de habla hispana –**  
(For Spanish-speaking persons)

Si usted desea un cuestionario del censo en español, llame sin cargo alguno al siguiente número: **1-800-CUENTAN**  
(o sea 1-800-283-6826)

U.S. Department of Commerce  
BUREAU OF THE CENSUS  
FORM D-2

OMB No. 0607-0628  
Approval Expires 07/31/91

The 1990 census must count every person at his or her "usual residence." This means the place where the person lives and sleeps most of the time.

**1a. List on the numbered lines below the name of each person living here on Sunday, April 1, including all persons staying here who have no other home. If EVERYONE at this address is staying here temporarily and usually lives somewhere else, follow the instructions given in question 1b below.**

**Include**

- Everyone who usually lives here such as family members, housemates and roommates, foster children, roomers, boarders, and live-in employees
- Persons who are temporarily away on a business trip, on vacation, or in a general hospital
- College students who stay here while attending college
- Persons in the Armed Forces who live here
- Newborn babies still in the hospital
- Children in boarding schools below the college level
- Persons who stay here most of the week while working even if they have a home somewhere else
- Persons with no other home who are staying here on April 1

**Do NOT include**

- Persons who usually live somewhere else
- Persons who are away in an institution such as a prison, mental hospital, or a nursing home
- College students who live somewhere else while attending college
- Persons in the Armed Forces who live somewhere else
- Persons who stay somewhere else most of the week while working

Print last name, first name, and middle initial for each person. Begin on line 1 with the household member (or one of the household members) in whose name this house or apartment is owned, being bought, or rented. If there is no such person, start on line 1 with any adult household member.

LAST	FIRST	INITIAL	LAST	FIRST	INITIAL
1			7		
2			8		
3			9		
4			10		
5			11		
6			12		

**1b. If EVERYONE is staying here only temporarily and usually lives somewhere else, list the name of each person on the numbered lines above, fill this circle ☐ and print their usual address below. DO NOT PRINT THE ADDRESS LISTED ON THE FRONT COVER.**

House number	Street or road/Rural route and box number	Apartment number
City	State	ZIP Code
County or foreign country	Names of nearest intersecting streets or roads	

**NOW PLEASE OPEN THE FLAP TO PAGE 2 AND ANSWER ALL QUESTIONS FOR THE FIRST 7 PEOPLE LISTED. USE A BLACK LEAD PENCIL ONLY.**



Please fill one column → for each person listed in Question 1a on page 1.	PERSON 1		PERSON 2	
	Last name  First name Middle initial	Last name  First name Middle initial		
<b>2. How is this person related to PERSON 1?</b> Fill ONE circle for each person.  If Other relative of person in column 1, fill circle and print exact relationship, such as mother-in-law, grandparent, son-in-law, niece, cousin, and so on.	START in this column with the household member (or one of the members) in whose name the home is owned, being bought, or rented.  If there is no such person, start in this column with any adult household member.		If a RELATIVE of Person 1: <input type="radio"/> Husband/wife <input type="radio"/> Brother/sister <input type="radio"/> Natural-born or adopted son/daughter <input type="radio"/> Father/mother <input type="radio"/> Stepson/stepdaughter <input type="radio"/> Grandchild <input type="radio"/> Other relative If NOT RELATED to Person 1: <input type="radio"/> Roomer, boarder, or foster child <input type="radio"/> Unmarried partner <input type="radio"/> Housemate, roommate <input type="radio"/> Other nonrelative	
<b>3. Sex</b> Fill ONE circle for each person.	<input type="radio"/> Male <input type="radio"/> Female		<input type="radio"/> Male <input type="radio"/> Female	
<b>4. Race</b> Fill ONE circle for the race that the person considers himself/herself to be.  If Indian (Amer.), print the name of the enrolled or principal tribe.  If Other Asian or Pacific Islander (API), print one group, for example: Hmong, Fijian, Laotian, Thai, Tongan, Pakistani, Cambodian, and so on.  If Other race, print race.	<input type="radio"/> White <input type="radio"/> Black or Negro <input type="radio"/> Indian (Amer.) (Print the name of the enrolled or principal tribe.) <input type="radio"/> Eskimo <input type="radio"/> Aleut <input type="radio"/> Asian or Pacific Islander (API) <input type="radio"/> Chinese <input type="radio"/> Japanese <input type="radio"/> Filipino <input type="radio"/> Asian Indian <input type="radio"/> Hawaiian <input type="radio"/> Samoan <input type="radio"/> Korean <input type="radio"/> Guamanian <input type="radio"/> Vietnamese <input type="radio"/> Other API <input type="radio"/> Other race (Print race)		<input type="radio"/> White <input type="radio"/> Black or Negro <input type="radio"/> Indian (Amer.) (Print the name of the enrolled or principal tribe.) <input type="radio"/> Eskimo <input type="radio"/> Aleut <input type="radio"/> Asian or Pacific Islander (API) <input type="radio"/> Chinese <input type="radio"/> Japanese <input type="radio"/> Filipino <input type="radio"/> Asian Indian <input type="radio"/> Hawaiian <input type="radio"/> Samoan <input type="radio"/> Korean <input type="radio"/> Guamanian <input type="radio"/> Vietnamese <input type="radio"/> Other API <input type="radio"/> Other race (Print race)	
<b>5. Age and year of birth</b> a. Print each person's age at last birthday. Fill in the matching circle below each box.  b. Print each person's year of birth and fill the matching circle below each box.	a. Age 0 0 0 0 0 1 0 1 0 1 2 0 2 0 3 0 3 0 4 0 4 0 5 0 5 0 6 0 6 0 7 0 7 0 8 0 8 0 9 0 9 0 b. Year of birth 1 8 0 0 0 0 9 0 1 0 1 0 2 0 2 0 3 0 3 0 4 0 4 0 5 0 5 0 6 0 6 0 7 0 7 0 8 0 8 0 9 0 9 0		a. Age 0 0 0 0 0 1 0 1 0 1 2 0 2 0 3 0 3 0 4 0 4 0 5 0 5 0 6 0 6 0 7 0 7 0 8 0 8 0 9 0 9 0 b. Year of birth 1 8 0 0 0 0 9 0 1 0 1 0 2 0 2 0 3 0 3 0 4 0 4 0 5 0 5 0 6 0 6 0 7 0 7 0 8 0 8 0 9 0 9 0	
<b>6. Marital status</b> Fill ONE circle for each person.	<input type="radio"/> Now married <input type="radio"/> Separated <input type="radio"/> Widowed <input type="radio"/> Never married <input type="radio"/> Divorced		<input type="radio"/> Now married <input type="radio"/> Separated <input type="radio"/> Widowed <input type="radio"/> Never married <input type="radio"/> Divorced	
<b>7. Is this person of Spanish/Hispanic origin?</b> Fill ONE circle for each person.  If Yes, other Spanish/Hispanic, print one group.	<input type="radio"/> No (not Spanish/Hispanic) <input type="radio"/> Yes, Mexican, Mexican-Am., Chicano <input type="radio"/> Yes, Puerto Rican <input type="radio"/> Yes, Cuban <input type="radio"/> Yes, other Spanish/Hispanic (Print one group, for example: Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on.) <input type="radio"/> Other		<input type="radio"/> No (not Spanish/Hispanic) <input type="radio"/> Yes, Mexican, Mexican-Am., Chicano <input type="radio"/> Yes, Puerto Rican <input type="radio"/> Yes, Cuban <input type="radio"/> Yes, other Spanish/Hispanic (Print one group, for example: Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on.) <input type="radio"/> Other	
<b>FOR CENSUS USE</b>	<input type="radio"/> <input type="radio"/>		<input type="radio"/> <input type="radio"/>	

PERSON 7		NOW PLEASE ANSWER QUESTIONS H1a--H26 FOR THIS HOUSEHOLD	
Last name _____			
First name _____ Middle initial _____			
<b>If a RELATIVE of Person 1:</b> <input type="radio"/> Husband/wife <input type="radio"/> Brother/sister <input type="radio"/> Natural-born or adopted son/daughter <input type="radio"/> Father/mother or Grandchild <input type="radio"/> Stepson/stepdaughter <input type="radio"/> Other relative		<b>H1a.</b> Did you leave anyone out of your list of persons for Question 1a on page 1 because you were not sure if the person should be listed — for example, someone temporarily away on a business trip or vacation, a newborn baby still in the hospital, or a person who stays here once in a while and has no other home? <input type="radio"/> Yes, please print the name(s) and reason(s). _____ <input type="radio"/> No	
<b>If NOT RELATED to Person 1:</b> <input type="radio"/> Roomer, boarder, or foster child <input type="radio"/> Unmarried partner <input type="radio"/> Housemate, roommate <input type="radio"/> Other nonrelative		<b>b.</b> Did you include anyone in your list of persons for Question 1a on page 1 even though you were not sure that the person should be listed — for example, a visitor who is staying here temporarily or a person who usually lives somewhere else? <input type="radio"/> Yes, please print the name(s) and reason(s). _____ <input type="radio"/> No	
<input type="radio"/> Male <input type="radio"/> Female  <input type="radio"/> White <input type="radio"/> Black or Negro <input type="radio"/> Indian (Amer.) (Print the name of the enrolled or principal tribe.) _____ <input type="radio"/> Eskimo <input type="radio"/> Aleut <input type="radio"/> Asian or Pacific Islander (API) <input type="radio"/> Chinese <input type="radio"/> Japanese <input type="radio"/> Filipino <input type="radio"/> Asian Indian <input type="radio"/> Hawaiian <input type="radio"/> Samoan <input type="radio"/> Korean <input type="radio"/> Guamanian <input type="radio"/> Vietnamese <input type="radio"/> Other API <input type="radio"/> Other race (Print race)		<b>H2.</b> Which best describes this building? Include all apartments, flats, etc., even if vacant. <input type="radio"/> A mobile home or trailer <input type="radio"/> A one-family house detached from any other house <input type="radio"/> A one-family house attached to one or more houses <input type="radio"/> A building with 2 apartments <input type="radio"/> A building with 3 or 4 apartments <input type="radio"/> A building with 5 to 9 apartments <input type="radio"/> A building with 10 to 19 apartments <input type="radio"/> A building with 20 to 49 apartments <input type="radio"/> A building with 50 or more apartments <input type="radio"/> Other	
<b>a.</b> Age 0 0 0 0 0 0 1 0 1 0 1 0 2 0 2 0 3 0 3 0 4 0 4 0 5 0 5 0 6 0 6 0 7 0 7 0 8 0 8 0 9 0 9 0		<b>b.</b> Year of birth 1 8 0 0 0 0 9 0 1 0 1 0 2 0 2 0 3 0 3 0 4 0 4 0 5 0 5 0 6 0 6 0 7 0 7 0 8 0 8 0 9 0 9 0	
<input type="radio"/> Now married <input type="radio"/> Separated <input type="radio"/> Widowed <input type="radio"/> Never married <input type="radio"/> Divorced		<b>H3.</b> How many rooms do you have in this house or apartment? Do NOT count bathrooms, porches, balconies, foyers, halls, or half-rooms. <input type="radio"/> 1 room <input type="radio"/> 4 rooms <input type="radio"/> 7 rooms <input type="radio"/> 2 rooms <input type="radio"/> 5 rooms <input type="radio"/> 8 rooms <input type="radio"/> 3 rooms <input type="radio"/> 6 rooms <input type="radio"/> 9 or more rooms	
<input type="radio"/> No (not Spanish/Hispanic) <input type="radio"/> Yes, Mexican, Mexican-Am., Chicano <input type="radio"/> Yes, Puerto Rican <input type="radio"/> Yes, Cuban <input type="radio"/> Yes, other Spanish/Hispanic (Print one group, for example: Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on.)		<b>H4.</b> Is this house or apartment — <input type="radio"/> Owned by you or someone in this household with a mortgage or loan? <input type="radio"/> Owned by you or someone in this household free and clear (without a mortgage)? <input type="radio"/> Rented for cash rent? <input type="radio"/> Occupied without payment of cash rent?	
		<b>H5a.</b> Is this house on ten or more acres? <input type="radio"/> Yes <input type="radio"/> No  <b>b.</b> Is there a business (such as a store or barber shop) or a medical office on this property? <input type="radio"/> Yes <input type="radio"/> No	
		<b>H6.</b> What is the value of this property; that is, how much do you think this house and lot or condominium unit would sell for if it were for sale? <input type="radio"/> Less than \$10,000 <input type="radio"/> \$70,000 to \$74,999 <input type="radio"/> \$10,000 to \$14,999 <input type="radio"/> \$75,000 to \$79,999 <input type="radio"/> \$15,000 to \$19,999 <input type="radio"/> \$80,000 to \$89,999 <input type="radio"/> \$20,000 to \$24,999 <input type="radio"/> \$90,000 to \$99,999 <input type="radio"/> \$25,000 to \$29,999 <input type="radio"/> \$100,000 to \$124,999 <input type="radio"/> \$30,000 to \$34,999 <input type="radio"/> \$125,000 to \$149,999 <input type="radio"/> \$35,000 to \$39,999 <input type="radio"/> \$150,000 to \$174,999 <input type="radio"/> \$40,000 to \$44,999 <input type="radio"/> \$175,000 to \$199,999 <input type="radio"/> \$45,000 to \$49,999 <input type="radio"/> \$200,000 to \$249,999 <input type="radio"/> \$50,000 to \$54,999 <input type="radio"/> \$250,000 to \$299,999 <input type="radio"/> \$55,000 to \$59,999 <input type="radio"/> \$300,000 to \$399,999 <input type="radio"/> \$60,000 to \$64,999 <input type="radio"/> \$400,000 to \$499,999 <input type="radio"/> \$65,000 to \$69,999 <input type="radio"/> \$500,000 or more	
		<b>H7a.</b> What is the monthly rent? <input type="radio"/> Less than \$80 <input type="radio"/> \$375 to \$399 <input type="radio"/> \$80 to \$99 <input type="radio"/> \$400 to \$424 <input type="radio"/> \$100 to \$124 <input type="radio"/> \$425 to \$449 <input type="radio"/> \$125 to \$149 <input type="radio"/> \$450 to \$474 <input type="radio"/> \$150 to \$174 <input type="radio"/> \$475 to \$499 <input type="radio"/> \$175 to \$199 <input type="radio"/> \$500 to \$524 <input type="radio"/> \$200 to \$224 <input type="radio"/> \$525 to \$549 <input type="radio"/> \$225 to \$249 <input type="radio"/> \$550 to \$599 <input type="radio"/> \$250 to \$274 <input type="radio"/> \$600 to \$649 <input type="radio"/> \$275 to \$299 <input type="radio"/> \$650 to \$699 <input type="radio"/> \$300 to \$324 <input type="radio"/> \$700 to \$749 <input type="radio"/> \$325 to \$349 <input type="radio"/> \$750 to \$999 <input type="radio"/> \$350 to \$374 <input type="radio"/> \$1,000 or more	
		<b>b.</b> Does the monthly rent include any meals? <input type="radio"/> Yes <input type="radio"/> No	
FOR CENSUS USE			
<b>A.</b> Total persons 0 0 1 1 2 2 3 3 4 4 5 5 6 6 7 7 8 8 9 9		<b>B.</b> Type of unit Occupied    Vacant <input type="radio"/> First form <input type="radio"/> Regular <input type="radio"/> Cont'n <input type="radio"/> Usual home elsewhere  <b>C1.</b> Vacancy status <input type="radio"/> For rent <input type="radio"/> For seas/rec/occ <input type="radio"/> For sale only <input type="radio"/> For migrant workers <input type="radio"/> Rented or sold, not occupied <input type="radio"/> Other vacant  <b>C2.</b> Is this unit boarded up? <input type="radio"/> Yes <input type="radio"/> No	
		<b>D.</b> Months vacant <input type="radio"/> Less than 1 <input type="radio"/> 6 up to 12 <input type="radio"/> 1 up to 2 <input type="radio"/> 12 up to 24 <input type="radio"/> 2 up to 6 <input type="radio"/> 24 or more  <b>E.</b> Complete after <input type="radio"/> LR <input type="radio"/> TC <input type="radio"/> QA <input type="radio"/> JIC 1 <input type="radio"/> P/F <input type="radio"/> RE <input type="radio"/> I/T <input type="radio"/> <input type="radio"/> NV <input type="radio"/> ED <input type="radio"/> EN <input type="radio"/> P0 <input type="radio"/> P3 <input type="radio"/> P6 <input type="radio"/> JIC 2 <input type="radio"/> P1 <input type="radio"/> P4 <input type="radio"/> IA <input type="radio"/> <input type="radio"/> P2 <input type="radio"/> P5 <input type="radio"/> SM <input type="radio"/>  <b>F.</b> Cov. <input type="radio"/> 1b <input type="radio"/> 1a <input type="radio"/> 7 <input type="radio"/> H1	
		<b>G.</b> DO <b>ID</b> 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4 4 5 5 5 5 5 5 5 5 5 5 5 5 6 6 6 6 6 6 6 6 6 6 6 6 7 7 7 7 7 7 7 7 7 7 7 7 8 8 8 8 8 8 8 8 8 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9	

<p><b>H8.</b> When did the person listed in column 1 on page 2 move into this house or apartment?</p> <p> <input type="radio"/> 1989 or 1990  <input type="radio"/> 1985 to 1988  <input type="radio"/> 1980 to 1984  <input type="radio"/> 1970 to 1979  <input type="radio"/> 1960 to 1969  <input type="radio"/> 1959 or earlier         </p>	<p><b>H14.</b> Which FUEL is used MOST for heating this house or apartment?</p> <p> <input type="radio"/> Gas: from underground pipes serving the neighborhood  <input type="radio"/> Gas: bottled, tank, or LP  <input type="radio"/> Electricity  <input type="radio"/> Fuel oil, kerosene, etc.  <input type="radio"/> Coal or coke  <input type="radio"/> Wood  <input type="radio"/> Solar energy  <input type="radio"/> Other fuel  <input type="radio"/> No fuel used         </p>	<p><b>H20.</b> What are the yearly costs of utilities and fuels for this house or apartment? If you have lived here less than 1 year, estimate the yearly cost.</p> <p><b>a. Electricity</b></p> <p> <input type="text"/> \$ <input type="text"/> .00          Yearly cost — Dollars       </p> <p>OR</p> <p> <input type="radio"/> Included in rent or in condominium fee  <input type="radio"/> No charge or electricity not used       </p>
<p><b>H9.</b> How many bedrooms do you have; that is, how many bedrooms would you list if this house or apartment were on the market for sale or rent?</p> <p> <input type="radio"/> No bedroom  <input type="radio"/> 1 bedroom  <input type="radio"/> 2 bedrooms  <input type="radio"/> 3 bedrooms  <input type="radio"/> 4 bedrooms  <input type="radio"/> 5 or more bedrooms         </p>	<p><b>H15.</b> Do you get water from —</p> <p> <input type="radio"/> A public system such as a city water department, or private company?  <input type="radio"/> An individual drilled well?  <input type="radio"/> An individual dug well?  <input type="radio"/> Some other source such as a spring, creek, river, cistern, etc.?         </p>	<p><b>b. Gas</b></p> <p> <input type="text"/> \$ <input type="text"/> .00          Yearly cost — Dollars       </p> <p>OR</p> <p> <input type="radio"/> Included in rent or in condominium fee  <input type="radio"/> No charge or gas not used       </p>
<p><b>H10.</b> Do you have COMPLETE plumbing facilities in this house or apartment; that is, 1) hot and cold piped water, 2) a flush toilet, and 3) a bathtub or shower?</p> <p> <input type="radio"/> Yes, have all three facilities  <input type="radio"/> No         </p>	<p><b>H16.</b> Is this building connected to a public sewer?</p> <p> <input type="radio"/> Yes, connected to public sewer  <input type="radio"/> No, connected to septic tank or cesspool  <input type="radio"/> No, use other means         </p>	<p><b>c. Water</b></p> <p> <input type="text"/> \$ <input type="text"/> .00          Yearly cost — Dollars       </p> <p>OR</p> <p> <input type="radio"/> Included in rent or in condominium fee  <input type="radio"/> No charge       </p>
<p><b>H11.</b> Do you have COMPLETE kitchen facilities; that is, 1) a sink with piped water, 2) a range or cookstove, and 3) a refrigerator?</p> <p> <input type="radio"/> Yes  <input type="radio"/> No         </p>	<p><b>H17.</b> About when was this building first built?</p> <p> <input type="radio"/> 1989 or 1990  <input type="radio"/> 1985 to 1988  <input type="radio"/> 1980 to 1984  <input type="radio"/> 1970 to 1979  <input type="radio"/> 1960 to 1969  <input type="radio"/> 1950 to 1959  <input type="radio"/> 1940 to 1949  <input type="radio"/> 1939 or earlier  <input type="radio"/> Don't know         </p>	<p><b>d. Oil, coal, kerosene, wood, etc.</b></p> <p> <input type="text"/> \$ <input type="text"/> .00          Yearly cost — Dollars       </p> <p>OR</p> <p> <input type="radio"/> Included in rent or in condominium fee  <input type="radio"/> No charge or these fuels not used       </p>
<p><b>H12.</b> Do you have a telephone in this house or apartment?</p> <p> <input type="radio"/> Yes  <input type="radio"/> No         </p>	<p><b>H18.</b> Is this house or apartment part of a condominium?</p> <p> <input type="radio"/> Yes  <input type="radio"/> No         </p>	
<p><b>H13.</b> How many automobiles, vans, and trucks of one-ton capacity or less are kept at home for use by members of your household?</p> <p> <input type="radio"/> None  <input type="radio"/> 1  <input type="radio"/> 2  <input type="radio"/> 3  <input type="radio"/> 4  <input type="radio"/> 5  <input type="radio"/> 6  <input type="radio"/> 7 or more         </p>	<p><i>If you live in an apartment building, skip to H20.</i></p> <p><b>H19a.</b> Is this house on less than 1 acre?</p> <p> <input type="radio"/> Yes — Skip to H20  <input type="radio"/> No         </p> <p><b>b.</b> In 1989, what were the actual sales of all agricultural products from this property?</p> <p> <input type="radio"/> None  <input type="radio"/> \$1 to \$999  <input type="radio"/> \$1,000 to \$2,499  <input type="radio"/> \$2,500 to \$4,999  <input type="radio"/> \$5,000 to \$9,999  <input type="radio"/> \$10,000 or more         </p>	

**INSTRUCTION:**

Answer questions H21 TO H26, if this is a one-family house, a condominium, or a mobile home that someone in this household OWNS OR IS BUYING; otherwise, go to page 6.

**H21. What were the real estate taxes on THIS property last year?**

\$  .00  
Yearly amount — Dollars

OR

☐ None

**H22. What was the annual payment for fire, hazard, and flood insurance on THIS property?**

\$  .00  
Yearly amount — Dollars

OR

☐ None

**H23a. Do you have a mortgage, deed of trust, contract to purchase, or similar debt on THIS property?**

- ☐ Yes, mortgage, deed of trust, or similar debt
- ☐ Yes, contract to purchase
- ☐ No — Skip to H24a

Go to H23b

**b. How much is your regular monthly mortgage payment on THIS property? Include payment only on first mortgage or contract to purchase.**

\$  .00  
Monthly amount — Dollars

OR

☐ No regular payment required — Skip to H24a

**c. Does your regular monthly mortgage payment include payments for real estate taxes on THIS property?**

- ☐ Yes, taxes included in payment
- ☐ No, taxes paid separately or taxes not required

**d. Does your regular monthly mortgage payment include payments for fire, hazard, or flood insurance on THIS property?**

- ☐ Yes, insurance included in payment
- ☐ No, insurance paid separately or no insurance

**H24a. Do you have a second or junior mortgage or a home equity loan on THIS property?**

- ☐ Yes
- ☐ No — Skip to H25

**b. How much is your regular monthly payment on all second or junior mortgages and all home equity loans?**

\$  .00  
Monthly amount — Dollars

OR

☐ No regular payment required

Answer ONLY if this is a CONDOMINIUM —

**H25. What is the monthly condominium fee?**

\$  .00  
Monthly amount — Dollars

Answer ONLY if this is a MOBILE HOME —

**H26. What was the total cost for personal property taxes, site rent, registration fees, and license fees on this mobile home and its site last year? Exclude real estate taxes.**

\$  .00  
Yearly amount — Dollars

Please turn to page 6. ➔

9  
8  
7  
6  
5  
4  
3  
2  
1  
0

PERSON 1		
Last name	First name	Middle initial
8. In what U.S. State or foreign country was this person born? <u>7</u>		
(Name of State or foreign country; or Puerto Rico, Guam, etc.)		
9. Is this person a CITIZEN of the United States?		
<input type="radio"/> Yes, born in the United States — Skip to 11 <input type="radio"/> Yes, born in Puerto Rico, Guam, the U.S. Virgin Islands, or Northern Marianas <input type="radio"/> Yes, born abroad of American parent or parents <input type="radio"/> Yes, U.S. citizen by naturalization <input type="radio"/> No, not a citizen of the United States		
10. When did this person come to the United States to stay?		
<input type="radio"/> 1987 to 1990 <input type="radio"/> 1970 to 1974 <input type="radio"/> 1985 or 1986 <input type="radio"/> 1965 to 1969 <input type="radio"/> 1982 to 1984 <input type="radio"/> 1960 to 1964 <input type="radio"/> 1980 or 1981 <input type="radio"/> 1950 to 1959 <input type="radio"/> 1975 to 1979 <input type="radio"/> Before 1950		
11. At any time since February 1, 1990, has this person attended regular school or college? Include only nursery school, kindergarten, elementary school, and schooling which leads to a high school diploma or a college degree.		
<input type="radio"/> No, has not attended since February 1 <input type="radio"/> Yes, public school, public college <input type="radio"/> Yes, private school, private college		
12. How much school has this person COMPLETED?		
Fill ONE circle for the highest level COMPLETED or degree RECEIVED. If currently enrolled, mark the level of previous grade attended or highest degree received.		
<input type="radio"/> No school completed <input type="radio"/> Nursery school <input type="radio"/> Kindergarten <input type="radio"/> 1st, 2nd, 3rd, or 4th grade <input type="radio"/> 5th, 6th, 7th, or 8th grade <input type="radio"/> 9th grade <input type="radio"/> 10th grade <input type="radio"/> 11th grade <input type="radio"/> 12th grade, NO DIPLOMA <input type="radio"/> HIGH SCHOOL GRADUATE - high school DIPLOMA or the equivalent (For example: GED) <input type="radio"/> Some college but no degree <input type="radio"/> Associate degree in college - Occupational program <input type="radio"/> Associate degree in college - Academic program <input type="radio"/> Bachelor's degree (For example: BA, AB, BS) <input type="radio"/> Master's degree (For example: MA, MS, MEd, MEd, MSW, MBA) <input type="radio"/> Professional school degree (For example: MD, DDS, DVM, LLB, JD) <input type="radio"/> Doctorate degree (For example: PhD, EdD)		
13. What is this person's ancestry or ethnic origin? (See instruction guide for further information.)		
(For example: German, Italian, Afro-Amer., Croatian, Cape Verdean, Dominican, Ecuadorian, Haitian, Cajun, French Canadian, Jamaican, Korean, Lebanese, Mexican, Nigerian, Irish, Polish, Slovak, Taiwanese, Thai, Ukrainian, etc.)		
14a. Did this person live in this house or apartment 5 years ago (on April 1, 1985)?		
<input type="radio"/> Born after April 1, 1985 — Go to questions for the next person <input type="radio"/> Yes — Skip to 15a <input type="radio"/> No		
b. Where did this person live 5 years ago (on April 1, 1985)?		
(1) Name of U.S. State or foreign country <u>7</u>		
(If outside U.S., print answer above and skip to 15a.)		
(2) Name of county in the U.S. <u>7</u>		
(3) Name of city or town in the U.S. <u>7</u>		
(4) Did this person live inside the city or town limits?		
<input type="radio"/> Yes <input type="radio"/> No, lived outside the city/town limits		
15a. Does this person speak a language other than English at home?		
<input type="radio"/> Yes <input type="radio"/> No — Skip to 16		
b. What is this language? <u>7</u>		
(For example: Chinese, Italian, Spanish, Vietnamese)		
c. How well does this person speak English?		
<input type="radio"/> Very well <input type="radio"/> Not well <input type="radio"/> Well <input type="radio"/> Not at all		
16. When was this person born?		
<input type="radio"/> Born before April 1, 1975 — Go to 17a <input type="radio"/> Born April 1, 1975 or later — Go to questions for the next person		
17a. Has this person ever been on active-duty military service in the Armed Forces of the United States or ever been in the United States military Reserves or the National Guard? If service was in Reserves or National Guard only, see instruction guide.		
<input type="radio"/> Yes, now on active duty <input type="radio"/> Yes, on active duty in past, but not now <input type="radio"/> Yes, service in Reserves or National Guard only — Skip to 18 <input type="radio"/> No — Skip to 18		
b. Was active-duty military service during — Fill a circle for each period in which this person served.		
<input type="radio"/> September 1980 or later <input type="radio"/> May 1975 to August 1980 <input type="radio"/> Vietnam era (August 1964—April 1975) <input type="radio"/> February 1955—July 1964 <input type="radio"/> Korean conflict (June 1950—January 1955) <input type="radio"/> World War II (September 1940—July 1947) <input type="radio"/> World War I (April 1917—November 1918) <input type="radio"/> Any other time		
c. In total, how many years of active-duty military service has this person had? <u>      </u> Years		
18. Does this person have a physical, mental, or other health condition that has lasted for 6 or more months and which —		
a. Limits the kind or amount of work this person can do at a job?		
<input type="radio"/> Yes <input type="radio"/> No		
b. Prevents this person from working at a job?		
<input type="radio"/> Yes <input type="radio"/> No		
19. Because of a health condition that has lasted for 6 or more months, does this person have any difficulty —		
a. Going outside the home alone, for example, to shop or visit a doctor's office?		
<input type="radio"/> Yes <input type="radio"/> No		
b. Taking care of his or her own personal needs, such as bathing, dressing, or getting around inside the home?		
<input type="radio"/> Yes <input type="radio"/> No		
If this person is a female —		
20. How many babies has she ever had, not counting stillbirths? Do not count her stepchildren or children she has adopted.		
None 1 2 3 4 5 6 7 8 9 10 11 12 or more		
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>		
21a. Did this person work at any time LAST WEEK?		
<input type="radio"/> Yes — Fill this circle if this person worked full time or part time. (Count part-time work such as delivering papers, or helping without pay in a family business or farm. Also count active duty in the Armed Forces.) <input type="radio"/> No — Fill this circle if this person did not work, or did only own housework, school work, or volunteer work. — Skip to 25		
b. How many hours did this person work LAST WEEK (at all jobs)? Subtract any time off; add overtime or extra hours worked. <u>      </u> Hours		
22. At what location did this person work LAST WEEK?		
If this person worked at more than one location, print where he or she worked most last week.		
a. Address (Number and street) <u>7</u>		
(If the exact address is not known, give a description of the location such as the building name or the nearest street or intersection.)		
b. Name of city, town, or post office <u>7</u>		
c. Is the work location inside the limits of that city or town?		
<input type="radio"/> Yes <input type="radio"/> No, outside the city/town limits		
d. County <u>7</u>		
e. State <u>7</u>		
f. ZIP Code <u>7</u>		

<p><b>23a. How did this person usually get to work LAST WEEK?</b> If this person usually used more than one method of transportation during the trip, fill the circle of the one used for most of the distance.</p> <p> <input type="radio"/> Car, truck, or van      <input type="radio"/> Motorcycle  <input type="radio"/> Bus or trolley bus      <input type="radio"/> Bicycle  <input type="radio"/> Streetcar or trolley car      <input type="radio"/> Walked  <input type="radio"/> Subway or elevated      <input type="radio"/> Worked at home  <input type="radio"/> Railroad      <input type="radio"/> Skip to 28  <input type="radio"/> Ferryboat      <input type="radio"/> Other method  <input type="radio"/> Taxicab         </p> <p>If "car, truck, or van" is marked in 23a, go to 23b. Otherwise, skip to 24a.</p> <p><b>b. How many people, including this person, usually rode to work in the car, truck, or van LAST WEEK?</b></p> <p> <input type="radio"/> Drove alone      <input type="radio"/> 5 people  <input type="radio"/> 2 people      <input type="radio"/> 6 people  <input type="radio"/> 3 people      <input type="radio"/> 7 to 9 people  <input type="radio"/> 4 people      <input type="radio"/> 10 or more people         </p>	<p><b>28. Industry or Employer</b></p> <p><b>a. For whom did this person work?</b> If now on active duty in the Armed Forces, fill this circle <input type="radio"/> and print the branch of the Armed Forces.</p> <p>_____ (Name of company, business, or other employer)</p> <p><b>b. What kind of business or industry was this?</b> Describe the activity at location where employed.</p> <p>_____ (For example: hospital, newspaper publishing, mail order house, auto engine manufacturing, retail bakery)</p> <p><b>c. In this mainly — Fill ONE circle</b></p> <p> <input type="radio"/> Manufacturing      <input type="radio"/> Other (agriculture, construction, service, government, etc.)  <input type="radio"/> Wholesale trade  <input type="radio"/> Retail trade         </p>	<p><b>32. INCOME IN 1989 —</b> Fill the "Yes" circle below for each income source received during 1989. Otherwise, fill the "No" circle. If "Yes," enter the total amount received during 1989. For income received jointly, see instruction guide. If exact amount is not known, please give best estimate. If net income was a loss, write "Loss" above the dollar amount.</p> <p><b>a. Wages, salary, commissions, bonuses, or tips from all jobs — Report amount before deductions for taxes, bonds, dues, or other items.</b></p> <p> <input type="radio"/> Yes      \$ _____  <input type="radio"/> No      \$ _____          Annual amount — Dollars       </p> <p><b>b. Self-employment income from own nonfarm business, including proprietorship and partnership — Report NET income after business expenses.</b></p> <p> <input type="radio"/> Yes      \$ _____  <input type="radio"/> No      \$ _____          Annual amount — Dollars       </p>
<p><b>24a. What time did this person usually leave home to go to work LAST WEEK?</b></p> <p> <input type="radio"/> a.m.  <input type="radio"/> p.m.       </p> <p><b>b. How many minutes did it usually take this person to get from home to work LAST WEEK?</b></p> <p>_____ Minutes — Skip to 28</p>	<p><b>29. Occupation</b></p> <p><b>a. What kind of work was this person doing?</b></p> <p>_____ (For example: registered nurse, personnel manager, supervisor of order department, gasoline engine assembler, cake icer)</p> <p><b>b. What were this person's most important activities or duties?</b></p> <p>_____ (For example: patient care, directing hiring policies, supervising order clerks, assembling engines, icing cakes)</p>	<p><b>c. Farm self-employment income — Report NET income after operating expenses. Include earnings as a tenant farmer or sharecropper.</b></p> <p> <input type="radio"/> Yes      \$ _____  <input type="radio"/> No      \$ _____          Annual amount — Dollars       </p> <p><b>d. Interest, dividends, net rental income or royalty income, or income from estates and trusts — Report even small amounts credited to an account.</b></p> <p> <input type="radio"/> Yes      \$ _____  <input type="radio"/> No      \$ _____          Annual amount — Dollars       </p>
<p><b>25. Was this person TEMPORARILY absent or on layoff from a job or business LAST WEEK?</b></p> <p> <input type="radio"/> Yes, on layoff  <input type="radio"/> Yes, on vacation, temporary illness, labor dispute, etc.  <input type="radio"/> No       </p>	<p><b>30. Was this person — Fill ONE circle</b></p> <p> <input type="radio"/> Employee of a PRIVATE FOR PROFIT company or business or of an individual, for wages, salary, or commissions  <input type="radio"/> Employee of a PRIVATE NOT-FOR-PROFIT, tax-exempt, or charitable organization  <input type="radio"/> Local GOVERNMENT employee (city, county, etc.)  <input type="radio"/> State GOVERNMENT employee  <input type="radio"/> Federal GOVERNMENT employee  <input type="radio"/> SELF-EMPLOYED in own NOT INCORPORATED business, professional practice, or farm  <input type="radio"/> SELF-EMPLOYED in own INCORPORATED business, professional practice, or farm  <input type="radio"/> Working WITHOUT PAY in family business or farm       </p>	<p><b>e. Social Security or Railroad Retirement</b></p> <p> <input type="radio"/> Yes      \$ _____  <input type="radio"/> No      \$ _____          Annual amount — Dollars       </p> <p><b>f. Supplemental Security Income (SSI). Aid to Families with Dependent Children (AFDC), or other public assistance or public welfare payments.</b></p> <p> <input type="radio"/> Yes      \$ _____  <input type="radio"/> No      \$ _____          Annual amount — Dollars       </p>
<p><b>26a. Has this person been looking for work during the last 4 weeks?</b></p> <p> <input type="radio"/> Yes  <input type="radio"/> No — Skip to 27       </p> <p><b>b. Could this person have taken a job LAST WEEK if one had been offered?</b></p> <p> <input type="radio"/> No, already has a job  <input type="radio"/> No, temporarily ill  <input type="radio"/> No, other reasons (in school, etc.)  <input type="radio"/> Yes, could have taken a job       </p>	<p><b>31a. Last year (1989), did this person work, even for a few days, at a paid job or in a business or farm?</b></p> <p> <input type="radio"/> Yes  <input type="radio"/> No — Skip to 32       </p> <p><b>b. How many weeks did this person work in 1989?</b> Count paid vacation, paid sick leave, and military service.</p> <p>_____ Weeks</p>	<p><b>g. Retirement, survivor, or disability pensions — Do NOT include Social Security.</b></p> <p> <input type="radio"/> Yes      \$ _____  <input type="radio"/> No      \$ _____          Annual amount — Dollars       </p> <p><b>h. Any other sources of income received regularly such as Veterans' (VA) payments, unemployment compensation, child support, or alimony — Do NOT include lump-sum payments such as money from an inheritance or the sale of a home.</b></p> <p> <input type="radio"/> Yes      \$ _____  <input type="radio"/> No      \$ _____          Annual amount — Dollars       </p>
<p><b>27. When did this person last work, even for a few days?</b></p> <p> <input type="radio"/> 1990      <input type="radio"/> 1980 to 1984  <input type="radio"/> 1989      <input type="radio"/> 1979 or earlier  <input type="radio"/> 1988      <input type="radio"/> Never worked  <input type="radio"/> 1985 to 1987       </p> <p>Go to 28</p> <p><b>28-30. CURRENT OR MOST RECENT JOB ACTIVITY.</b> Describe clearly this person's chief job activity or business last week. If this person had more than one job, describe the one at which this person worked the most hours. If this person had no job or business last week, give information for his/her last job or business since 1985.</p> <p>_____ Hours</p>	<p><b>c. During the weeks WORKED in 1989, how many hours did this person usually work each week?</b></p> <p>_____ Hours</p>	<p><b>33. What was this person's total income in 1989?</b> Add entries in questions 32a through 32h; subtract any losses. If total amount was a loss, write "Loss" above amount.</p> <p> <input type="radio"/> None      OR      \$ _____          Annual amount — Dollars       </p>

Please turn the page and answer questions for Person 2 listed on page 1. If this is the last person listed in question 1a on page 1, go to the back of the form.

## APPENDIX F.

# Data Products and User Assistance

### CONTENTS

Data Products .....	F-1
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The 1990 census data products, being released during 1991-93, are available in a variety of new and traditional media. The Census Bureau has increased the product options available to data users in an effort to meet a variety of requirements and maximize the usefulness of the data. For example, laser discs, called CD-ROM (compact disc—read-only memory), are a new data delivery medium.

The Census Bureau also has expanded services and sources of assistance available to data users. For example, the State Data Center Program has been expanded to include over 1,400 organizations to provide data and services to the public.

This appendix provides a detailed introduction to the 1990 census data products and related materials, such as maps and reference publications. It concludes by describing sources of assistance and other Census Bureau data available to the public.

### DATA PRODUCTS

Printed reports and computer tape files traditionally are the most widely used products. The Census Bureau also offers data on microfiche, on CD-ROM laser discs, and through its online service, CENDATA™. These various products are described below. For information about prices and how to order, write or call Customer Services. (See the "Sources of Assistance" section for the address and phone number.)

The data products present statistics about the subjects covered in the 1990 census questionnaires. These subjects are listed in figure 1, page F-8. As the figure shows, there are 100-percent subjects (those covered in questions asked of everyone or about every housing unit) and sample subjects (those covered in questions asked at about one out of every six housing units). Generally, a data product presents either 100-percent data prepared by tabulating the responses to the 100-percent questions from all questionnaires, or sample data prepared by tabulating only the responses to the 100-percent and sample questions from the "long-form" questionnaires. Two report series, 1990 CPH-3 and 1990 CPH-4 (see figure 2, page F-9), present both 100-percent and sample data.

### Printed Reports

Printed reports are the most convenient and readily available source of data for most census users. The Census Bureau releases the reports in several series (see figure 2) that are grouped under three broad titles: *1990 Census of Population and Housing* (1990 CPH), *1990 Census of Population* (1990 CP), and *1990 Census of Housing* (1990 CH). There also are reports, not reflected in figure 2, for the outlying areas of the Pacific. The reports are sold by the Superintendent of Documents, U.S. Government Printing Office. (See the "Sources of Assistance" section for the address and phone number.)

In several series, there are separate reports for each State. The geographic coverage of the State reports is listed in figure 2. The United States summaries for these report series contain, for the most part, data for the United States, regions, divisions, States, metropolitan areas (MA's), urbanized areas (UA's), counties, American Indian and Alaska Native areas, places with 10,000 or more persons, and other large substate areas (for example, county subdivisions, such as towns and townships, with 10,000 or more persons in selected States).

Report series that present data for small areas, such as census tracts, contain limited subject-matter detail (for example, counts of people by age ranges—under 5 years, 5 to 9 years, etc.—rather than by single years). Report series that include greater amounts of subject-matter detail include less geographic detail.

### Computer Tape Files

The Census Bureau provides more data on tape and other machine-readable products than in printed reports. These products are sold by the Census Bureau's Customer Services. There are several general types of data files released on computer tape (available on both reels and cartridges). They are introduced below, and more information is presented in figures 3 and 4, pages F-12 through F-14.

**Public Law 94-171 Data**—This data file presents the counts designed and formatted for use in legislative redistricting. These counts also are available on CD-ROM and paper listings. Excerpts are available on CENDATA™. The counts, for areas as small as blocks, census tracts, and voting districts, include totals for population, race groups, persons of Hispanic origin, population 18 years and over, and housing units. (See figure 4.)

**Summary Tape Files (STF's)**— These computer tape files provide statistics with greater subject-matter detail than printed reports. They also present statistics for some types of areas, such as block groups and blocks, that are not included in the reports. (See figure 3.)

Here are some important features of STF's:

- Each STF presents a particular set of data tables for specific types of geographic areas.
- Each STF has three or more file types (indicated by a letter suffix attached to the STF number) that differ in the geographic levels reported, but contain the same data detail.
- STF's 1 and 2 contain 100-percent data, and STF's 3 and 4 offer sample data.
- STF's 1 and 3 report on smaller areas and offer less data detail than STF's 2 and 4.
- STF's 1 through 4 offer greater data detail than the 1980 STF's 1 through 4.

**Subject Summary Tape Files (SSTF's)**—These files are the source of the subject reports and provide greater subject-matter detail than the STF's. They present data for the United States, regions, and divisions, and, in some cases, also for States, counties, and large cities. (See figure 4.)

**Public Use Microdata Sample (PUMS) Files**—These computer tape files (see figure 4) contain data from samples of long-form housing-unit records ("microdata") for large geographic areas. Each sample housing-unit record includes essentially all the 1990 census data collected about each person in a sample household and the characteristics of the housing unit. Information that could be used to identify an individual or a housing unit is not included in the file.

Microdata files enable users to prepare customized tabulations and cross-tabulations of most items on the census questionnaire. There are two standard PUMS files:

- A file presenting a 5-percent sample of housing units in which each household record includes codes to let the user know in what area, such as a group of counties, a single county, or a place, the household is located. Each area identified must have a population of at least 100,000 and boundaries that do not cross State lines.
- A file presenting a 1-percent sample of housing units. Its household records include codes associating them with MA's and other large areas, the boundaries of which may cross State lines. (For the 1980 census, there were two files with 1-percent samples. The 1-percent sample showing data for selected urbanized areas and other large areas will not be produced for the 1990 census.)

There also is a special 3-percent "elderly" file with the same geography as the 5-percent sample. Included are households with at least one person age 60 or more and all members of those households.

**Other Special Computer Tape Files**—Other files include the Census/Equal Employment Opportunity (EEO) File and the County-to-County Migration File. (See figure 4.) The Census Bureau may prepare additional special files.

## Microfiche

All printed reports are offered on microfiche from Customer Services soon after they are published. Plans to prepare microfiche versions of selected other products were canceled, so that more products could be produced on CD-ROM.

## Compact Disc—Read-Only Memory (CD-ROM)

For the 1990 census, the Public Law (P.L.) 94-171 file; an extract of STF 1B that presents selected statistics for blocks; and STF's 1A, 1C, 3A, 3B, and 3C are available on CD-ROM. The Census Bureau also offers on CD-ROM: PUMS Files, SSTF's, Census EEO File, and County-to-County Migration File. (One 4 3/4-inch CD-ROM, a type of optical or laser disc, can hold the contents of approximately 1,600 flexible diskettes, or three or four high-density computer tapes.)

## Online Information Systems

The Census Bureau began CENDATA, its online information service, in 1984. CENDATA is accessible through two information vendors, CompuServe and DIALOG. A number of Census Bureau reports, in whole or in part, are offered online. For the 1990 census, CENDATA provides up-to-date information about the availability of data products and carries selections of State, county, MA, and place data from the P.L. 94-171 tape file and STF's 1 and 3. CENDATA also offers the entire Census EEO File.

## Custom Data Products

These products are for users who require unique tabulations that are not included in standard products; for example, information for locally defined geographic areas. Users also can order special microdata files.

The cost of preparing custom products must be paid by the users who request them. Any data that the Census Bureau provides in these products are subject to the same standards applied to other data to ensure that confidential individual information is not revealed.



**User-Defined Areas Program (UDAP) Tabulations—**UDAP can provide a set of predefined data tables for locally defined areas that do not correspond to standard 1990 census geographic areas. Users identify the geographic areas of interest to them by delineating boundaries around groupings of census blocks on 1990 census County Block Maps or by electronically submitting the geographic components of their area of interest. (A contact for more information is given in the "Sources of Assistance" section.)

**Special Tabulations—**The Census Bureau can prepare special data tabulations for any specific geographic or subject-matter area. Users should rely on standard reports, tapes, microfiche, or user-defined area tabulations whenever possible, since special tabulations tend to be substantially more expensive and take time to arrange and produce. (Contacts for more information are given in the "Sources of Assistance" section.)

## GEOGRAPHIC PRODUCTS

### Maps

Census Bureau maps are necessary for virtually all uses of small-area 1990 census data. They are needed to locate the specific geographic areas for which the census provides data and to study the spatial relationship of the data for analytic purposes. The Census Bureau prepares a variety of 1990 census maps. Among the most useful are these four series:

**County Block Maps—**These maps show census blocks and their numbers; boundaries for statistical and governmental entities, such as census tracts and places; and physical features. The P.L. 94-171 version of these maps also shows voting district boundaries in those States that furnished them. The maps are prepared on electrostatic plotters by county (or equivalent entity) with one or more map sheets each, depending on the size and shape of the area and the density of the block pattern. An average county requires 20 map sheets. The maps may be purchased from Customer Services.

**County Subdivision Outline Maps—**Maps in this State-based series present the boundaries of the counties, county subdivisions, places, American Indian and Alaska Native areas (including off-reservation trust lands), tribal designated statistical areas, and tribal jurisdiction statistical areas. Electrostatic-plotter copies are available for purchase from Customer Services. Also, they appear on multiple page-size sheets in the State reports of these series: 1990 CPH-1, 1990 CPH-2, 1990 CPH-5, 1990 CP-1, 1990 CP-2, 1990 CH-1, and 1990 CH-2.

**Census Tract/Block Numbering Area (BNA) Outline Maps—**Maps in this county-based series depict census tract or BNA boundaries and numbers, and the features

underlying the boundaries. They also show governmental units in relation to the census tracts/BNA's. The Superintendent of Documents sells printed copies.

**Voting District Outline Maps—**Maps in this county-based series depict voting district boundaries (for those counties for which States furnished boundary information) and the features underlying the boundaries. They also show governmental unit boundaries in relation to the voting districts. They are prepared on electrostatic plotters and sold by Customer Services.

### Geographic Publications

The *Geographic Identification Code Scheme* report in the 1990 CPH-R series shows the 1990 census geographic area codes and Federal information processing standards (FIPS) codes, as appropriate, for States, metropolitan areas, counties, county subdivisions, places, American Indian and Alaska Native areas, and other entities, along with some descriptive information about the codes. The code scheme also is offered on computer tape.

### Machine-Readable Geographic Files

All 1990 census summary tape files include 1990 census geographic area codes, FIPS codes, certain area names, land and inland water area in square kilometers, geographic coordinates for an internal point for each entity, and other geographic information.

The Census Bureau developed an automated geographic data base, known as the TIGER (Topologically Integrated Geographic Encoding and Referencing) System, to produce the geographic products for the 1990 census. TIGER provides coordinate-based digital map information for the entire United States, Puerto Rico, the U.S. Virgin Islands, and the Pacific territories over which the United States has jurisdiction.

The TIGER System has significantly improved the utility of 1990 census maps and geographic reference products. Extract files generated from the TIGER System permit users, with appropriate software, to perform such tasks as linking the statistical data in the P.L. 94-171 file or the STF's and displaying selected characteristics on maps or a video display screen at different scales and with whatever boundaries they select for any geographic area of the country. For example, a map for a particular county could show the distribution of the voting age population by city block.

The first extract of selected geographic and cartographic information intended for computer applications, such as plotting maps and building geographic information systems, is called the TIGER/Line™ files. TIGER/Line™ files contain attributes for the segments of each boundary and feature (for example, roads, railroads, and rivers), including 1990 census geographic codes for

adjacent areas, latitude/longitude coordinates of segment end points and the curvature of segments, the name and type of the feature, and the relevant census feature class code identifying the feature segment by category. TIGER/Line™ files also furnish address ranges and associated ZIP Codes for each side of street segments in major urban areas; provide the names of landmarks, such as lakes and golf courses; and include other information.

TIGER/Line™ files and other TIGER System extracts, such as TIGER/Boundary™ and TIGER/DataBase™, are released on computer tape and, in some cases, CD-ROM. For information on TIGER extract files, contact Customer Services.

## REFERENCE MATERIALS

The Census Bureau issues several reference publications for data users. Some are sold by the Superintendent of Documents; others are distributed free by Customer Services. Addresses and phone numbers for the Superintendent of Documents and Customer Services are given in the following section.

- *1990 Census of Population and Housing, Guide.* This guide, in the 1990 CPH-R report series, provides detailed information about all aspects of the census and a comprehensive glossary of census terms. Sold by the Superintendent of Documents, U.S. Government Printing Office.
- *1990 Census of Population and Housing Tabulation and Publication Program.* A free report describing 1990 census products, comparing 1990 products with those of 1980, and more. Request from Customer Services.
- *Census '90 Basics.* A free booklet covering how the 1990 census data were collected and processed, the full range of data products, the maps and geographic files, and more, but with less detail than the Guide (above). Request from Customer Services.
- *Census ABC's—Applications in Business and Community.* A free booklet that highlights key information about the 1990 census and illustrates a variety of ways the data can be used. Request from Customer Services.
- *Strength in Numbers.* A free, tabloid-size booklet designed to assist people in using 1990 census data in redistricting. Among other features, it includes illustrations of maps and Public Law 94-171 counts. Request from Customer Services.
- *TIGER: The Coast-to-Coast Digital Map Data Base.* A free booklet describing the structure and uses of the Census Bureau's TIGER System. Request from Customer Services.

- *Census and You.* The Census Bureau's monthly newsletter for data users. It reports on the latest 1990 census developments, selected new publications and computer tape files, other censuses and surveys, developments in services to users, and upcoming conferences and training courses. Subscriptions are sold by the Superintendent of Documents, U.S. Government Printing Office.

- *Monthly Product Announcement.* A free monthly listing of all new Census Bureau publications; microfiche; maps; data files on tape, diskettes, or CD-ROM; and technical documentation. To subscribe, contact Customer Services.

- *Census Catalog and Guide.* A comprehensive annual description of data products, statistical programs, and services of the Census Bureau. It provides abstracts of the publications, data files, microfiche, maps, and items online. In addition, the Catalog/Guide offers such features as information about censuses and surveys and telephone contact lists of data specialists at the Census Bureau, the State Data Centers, and other data processing service centers. It is sold by the Superintendent of Documents, U.S. Government Printing Office.

Users also can get listings of new Census Bureau products, updated daily, by subscribing to the *Daily List*. This information and selected statistics are available online through CENDATA™, the Census Bureau's online information service. For more information, contact Customer Services.

## SOURCES OF ASSISTANCE

### U.S. Bureau of the Census

The Census Bureau's Customer Services sells most of the machine-readable data products, microfiche, and maps described earlier. (The 1990 census printed reports are sold by the Superintendent of Documents, as noted below.) Also, users may consult with specialists at the Census Bureau's Washington headquarters and its 12 regional offices. From time to time, the specialists also conduct workshops, seminars, and training courses.

**Washington, DC, Contacts**—To order products, for a telephone contacts list of Census Bureau specialists, and for general information: Customer Services, U.S. Bureau of the Census, Washington, DC 20233, telephone 301-763-4100 (FAX number, 301-763-4794).

For User-Defined Areas Program (UDAP) information: UDAP Staff, Decennial Planning Division, U.S. Bureau of the Census, Washington, DC 20233, telephone 301-763-4282.

For special tabulation information: Population—Rosemarie Cowan, Population Division, U.S. Bureau of the Census, Washington, DC 20233, telephone 301-763-5476; Housing—William Downs, Housing and Household Economic Statistics, U.S. Bureau of the Census, Washington, DC 20233, telephone 301-763-8553.

#### **Regional Office Contacts—**

Atlanta, GA	404-730-3833
Boston, MA	617-565-7078
Charlotte, NC	704-344-6144
Chicago, IL	312-353-0980
Dallas, TX	214-767-7105
Denver, CO	303-969-7750
Detroit, MI	313-354-4654
Kansas City, KS	913-236-3711
Los Angeles, CA	818-904-6339
New York, NY	212-264-4730
Philadelphia, PA	215-597-8313
Seattle, WA	206-728-5314

#### **Superintendent of Documents, U.S. Government Printing Office**

The Superintendent of Documents handles the sale of most of the Federal Government's publications, including 1990 census reports. To order reports and for information: Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, telephone 202-783-3238.

#### **Other Sources of Products and Services**

**State Data Centers**—The Census Bureau furnishes data products, training in data access and use, technical assistance, and consultation to all States, the District of Columbia, Guam, Puerto Rico, and the U.S. Virgin Islands. State Data Centers, in turn, offer publications for reference, printouts from computer tape, specially prepared reports, maps, and other products and assistance to data users. For a list of the State Data Centers, see the *Census Catalog and Guide* or contact Customer Services. The list also notes organizations in States participating in the Census Bureau's Business/ Industry Data Center (BIDC) Program. The BIDC's help business people, economic development planners, and other data users obtain and use data.

**Census Information Center (CIC)**—The CIC program provides data-related services for nationally based nonprofit organizations that represent minorities or other segments of the population who have been historically undercounted in decennial censuses. The participants include social service, business, professional, civil rights, educational, and religious groups. Through the project, five nonprofit groups now offer their clientele reports, computer tape printouts, and other information from the

Census Bureau. To learn more about the program, write to the Census Information Center Branch, Data User Services Division, Bureau of the Census, Washington, DC 20233, or call 301-763-1384.

**National Clearinghouse**—The National Clearinghouse for Census Data Services is a listing of private companies and other organizations that offer assistance in obtaining and using data released by the Census Bureau. For a list of participants in the National Clearinghouse, see the *Census Catalog and Guide* or contact Customer Services.

**Depository Libraries**—There are 1,400 libraries that receive (from the Government Printing Office) Federal publications that they think their patrons will need. Often some of these publications are Census Bureau reports. The Census Bureau provides free reports to an additional 120 census depository libraries. Also, many libraries purchase census reports and maps for their areas. The *Census Catalog and Guide* includes a list of all depository libraries.

#### **OTHER CENSUS BUREAU RESOURCES**

The Census Bureau has more to offer than just the results of the census of population and housing. Through other censuses, surveys, and estimates programs, it compiles and issues (in reports, computer tape, and other media) data on subjects as diverse as appliance sales, neighborhood conditions, and exports to other countries. Here are examples of the information published about—

- **People:** Age, race, sex, income, poverty, child care, child support, fertility, noncash benefits, education, commuting habits, pension coverage, unemployment, ancestry.
- **Business and industry:** Number of employees, total payroll, sales and receipts, products manufactured or sold.
- **Housing and construction:** Value of new construction, numbers of owners and renters, property value or rent paid, housing starts, fuels used, mortgage costs.
- **Farms:** Number, acreage, livestock, crop sales.
- **Governments:** Revenues and expenditures, taxes, employment, pension funds.
- **Foreign trade:** Exports and imports, origin and destination, units shipped.
- **Other nations:** Population, birth rates, death rates, literacy, fertility.

The other censuses, such as agriculture, retail trade, manufactures, and governments, are collected for years ending in "2" and "7." Surveys and estimates programs generate results as often as every month.

Many of the monthly "economic indicators" that measure how the Nation is doing come directly or indirectly from the Census Bureau. Examples: employment and unemployment; housing starts; wholesale and retail trade; manufacturers' shipments, inventories, and orders; export and import trade; and sales of single-family homes.

The other statistical activities of the Census Bureau are described below. Data users will find more information about them and descriptions of their data products in the annual *Census Catalog and Guide*. Also, special guides and brochures are prepared for most of them. Contact the Census Bureau's Customer Services for more information.

### **Current Demographic and Housing Programs**

Two types of current programs complement the 10-year census: population estimates and surveys. The total population of the United States is estimated monthly; the population of States, counties, and metropolitan areas is estimated annually; and the population of places and other governmental units is estimated every 2 years. Projections of future population are made at the national and State levels.

The Census Bureau's many household surveys update population and housing characteristics at the national level and sometimes for States and metropolitan areas, as well. These surveys also obtain many characteristics not included in the 10-year census. The Current Population Survey is taken monthly; the American Housing Survey national sample is taken biennially; the American Housing Survey metropolitan sample is taken in 44 areas, 11 per year in a 4-year cycle; most other surveys are annual or less frequent.

### **Economic Censuses and Surveys**

The economic censuses provide statistics about business establishments once every 5 years, covering years ending in "2" and "7." The 1987 Economic Censuses include the censuses of retail trade, wholesale trade, service industries, transportation, manufactures, mineral industries, and construction industries. Also included are related programs, such as statistics on minority- and women-owned businesses, enterprise statistics, and censuses of economic activity in Puerto Rico and some of the outlying areas under U.S. jurisdiction.

Several key statistics are tabulated for all industries covered in the censuses. They are number of establishments, number of employees, payroll, and measure of output (sales or receipts, and value of shipments or of work done). Other items vary from sector to sector.

The Census Bureau also has programs that provide current statistics on such measures as total sales of particular kinds of businesses or production of particular products. These programs include monthly, quarterly, and annual surveys, the results of which appear in publication series such as *Current Business Reports* and *Current Industrial Reports*. The County Business Patterns program offers annual statistics based on data compiled primarily from administrative records.

### **Agriculture Census and Surveys**

The agriculture census is conducted concurrently with the economic censuses. It is the only source of uniform agriculture data at the county level. It provides data on such subjects as the number and size of farms; land use and ownership; livestock, poultry, and crops; and value of products sold.

Results of three surveys—the 1988 Farm and Ranch Irrigation Survey, 1988 Census of Horticulture Specialties, and 1988 Agricultural Economics and Land Ownership Survey—are published in conjunction with the 1987 Census of Agriculture. Also, the Census Bureau regularly issues reports from a survey on cotton ginnings.

### **Governments Census and Surveys**

The census of governments, also for years ending in "2" and "7," covers all types of governments: Federal, State, county, municipal (place), township (county subdivision), school district, and special district. It provides data on such subjects as number of public employees, payrolls, revenue, and expenditures.

Annual and quarterly surveys cover the same principal subjects but generate data only for States and the largest local governments.

### **Foreign Trade Statistics**

Monthly U.S. merchandise trade data compiled by the Census Bureau summarize export and import transactions and are based on the official documents filed by shippers and receivers. These figures reflect the flow of merchandise but not intangibles like services and financial commitments. The trade figures trace commodity movements out of and into the U.S. Customs jurisdiction, which includes Puerto Rico and the U.S. Virgin Islands as well as the 50 States and the District of Columbia. Data are published separately on trade between the United States and Puerto Rico, the U.S. Virgin Islands, and other U.S. possessions.

### **Other Statistical Activities**

The Census Bureau also offers international data. It maintains an international data base which is available to the public on computer tape and is used to produce

the biennial *World Population Profile* report. It prepares studies dealing with the demographic and economic characteristics of other countries and world regions.

Statistical compendia are another important data product. These publications (sometimes also offered in machine-readable form) draw data from many sources

and reorganize them for convenient use. The most widely used compendia are the annual *Statistical Abstract of the United States*, the *County and City Data Book* (published every 5 years), and the *State and Metropolitan Area Data Book* (published approximately every 4 years).

Figure 1. 1990 Census Content

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**100-PERCENT COMPONENT**

**Population**

Household relationship  
Sex  
Race  
Age  
Marital status  
Hispanic origin

**Housing**

Number of units in structure  
Number of rooms in unit  
Tenure—owned or rented  
Value of home or monthly rent  
Congregate housing (meals included in rent)  
Vacancy characteristics

---

**SAMPLE COMPONENT**

**Population**

*Social characteristics:*

Education—enrollment and attainment  
Place of birth, citizenship, and year of entry into U.S.  
Ancestry  
Language spoken at home  
Migration (residence in 1985)  
Disability  
Fertility  
Veteran status

*Economic characteristics:*

Labor force  
Occupation, industry, and class of worker  
Place of work and journey to work  
Work experience in 1989  
Income in 1989  
Year last worked

**Housing**

Year moved into residence  
Number of bedrooms  
Plumbing and kitchen facilities  
Telephone in unit  
Vehicles available  
Heating fuel  
Source of water and method of sewage disposal  
Year structure built  
Condominium status  
Farm residence  
Shelter costs, including utilities

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NOTE: Questions dealing with the subjects covered in the 100-percent component were asked of all persons and housing units. Those covered by the sample component were asked of a sample of the population and housing units.

Figure 2. 1990 Census Printed Reports

Series	Title	Report(s) issued for	Description	Geographic areas
<b>1990 CENSUS OF POPULATION AND HOUSING (1990 CPH)</b>				
<b>100-Percent Data</b>				
1990 CPH-1	<b>Summary Population and Housing Characteristics</b>	U.S., States, DC, Puerto Rico, and U.S. Virgin Islands	Population and housing unit counts, and summary statistics on age, sex, race, Hispanic origin, household relationship, units in structure, value and rent, number of rooms, tenure, and vacancy characteristics	Local governmental units (i.e., counties, places, and towns and townships), other county subdivisions, and American Indian and Alaska Native areas
1990 CPH-2	<b>Population and Housing Unit Counts</b>	U.S., States, DC, Puerto Rico, and U.S. Virgin Islands	Total population and housing unit counts for 1990 and previous censuses	States, counties, county subdivisions, places, State component parts of metropolitan areas (MA's) and urbanized areas (UA's), and summary geographic areas (for example, urban and rural)
<b>100-Percent and Sample Data</b>				
1990 CPH-3	<b>Population and Housing Characteristics for Census Tracts and Block Numbering Areas</b>	MA's, and the nonmetropolitan balance of each State, Puerto Rico, and U.S. Virgin Islands	Statistics on 100-percent and sample population and housing subjects	In MA's: census tracts/ block numbering areas (BNA's), places of 10,000 or more inhabitants, and counties. In the remainder of each State: census tracts/ BNA's, places of 10,000 or more, and counties
1990 CPH-4	<b>Population and Housing Characteristics for Congressional Districts of the 103rd Congress</b>	States and DC	Statistics on 100-percent and sample population and housing subjects	Congressional districts (CD's) and, within CD's, counties, places of 10,000 or more inhabitants, county subdivisions of 10,000 or more inhabitants in selected States, and American Indian and Alaska Native areas
<b>Sample Data</b>				
1990 CPH-5	<b>Summary Social, Economic, and Housing Characteristics</b>	U.S., States, DC, Puerto Rico, and U.S. Virgin Islands	Statistics generally on sample population and housing subjects	Local governmental units (i.e., counties, places, and towns and townships), other county subdivisions, and American Indian and Alaska Native areas
<b>1990 CENSUS OF POPULATION (1990 CP)</b>				
<b>100-Percent Data</b>				
1990	<b>General Population</b>	U.S., States, DC, U.S. Virgin Islands	Detailed statistics on age, marital status, and household relationship characteristics	States, counties, places of county subdivisions of 1,000 or more inhabitants in selected States, State parts of American Indian areas, Alaska Native areas, and summary geographic areas such as urban and rural

Figure 2. 1990 Census Printed Reports—Con.

Series	Title	Report(s) issued for	Description	Geographic areas
<b>1990 CENSUS OF POPULATION (1990 CP)—Con.</b>				
<b>100-Percent Data—Con.</b>				
1990 CP-1-1A	<b>General Population Characteristics for American Indian and Alaska Native Areas</b>	U.S.	Detailed statistics on age, sex, race, Hispanic origin, marital status, and household relationship characteristics	American Indian and Alaska Native areas; i.e., American Indian reservations, off-reservation trust lands, tribal jurisdiction statistical areas (Oklahoma), tribal designated statistical areas, Alaska Native village statistical areas, and Alaska Native Regional Corporations
1990 CP-1-1B	<b>General Population Characteristics for Metropolitan Areas</b>	U.S.	Detailed statistics on age, sex, race, Hispanic origin, marital status, and household relationship characteristics	Individual MA's. For MA's split by State boundaries, summaries are provided both for the parts and for the whole MA
1990 CP-1-1C	<b>General Population Characteristics for Urbanized Areas</b>	U.S.	Detailed statistics on age, sex, race, Hispanic origin, marital status, and household relationship characteristics	Individual UA's. For UA's split by State boundaries, summaries are provided both for the parts and for the whole UA
<b>Sample Data</b>				
1990 CP-2	<b>Social and Economic Characteristics</b>	U.S., States, DC, Puerto Rico, and U.S. Virgin Islands	Statistics generally on sample population subjects	States (including summaries such as urban and rural), counties, places of 2,500 or more inhabitants, county subdivisions of 2,500 or more inhabitants in selected States, Alaska Native areas, and the State portion of American Indian areas
1990 CP-2-1A	<b>Social and Economic Characteristics for American Indian and Alaska Native Areas</b>	U.S.	Statistics generally on sample population subjects	American Indian and Alaska Native areas, as for CP-1-1A
1990 CP-2-1B	<b>Social and Economic Characteristics for Metropolitan Areas</b>	U.S.	Statistics generally on sample population subjects	Individual MA's, as for CP-1-1B
1990 CP-2-1C	<b>Social and Economic Characteristics for Urbanized Areas</b>	U.S.	Statistics generally on sample population subjects	Individual UA's, as for CP-1-1C
1990 CP-3	<b>Population Subject Reports</b>	Selected subjects	Approximately 30 reports on population census subjects such as migration, education, income, the older population, and racial and ethnic groups	Generally limited to the U.S., regions, and divisions; for some reports, other highly populated areas such as States, MA's, counties, and large places



Figure 2. 1990 Census Printed Reports—Con.

Series	Title	Report(s) issued for	Description	Geographic areas
<b>1990 CENSUS OF HOUSING (1990 CH)</b>				
<b>100-Percent Data</b>				
1990 CH-1	<b>General Housing Characteristics</b>	U.S., States, DC, Puerto Rico, and U.S. Virgin Islands	Detailed statistics on units in structure, value and rent, number of rooms, tenure, and vacancy characteristics	States, counties, places of 1,000 or more inhabitants, county subdivisions of 1,000 or more inhabitants in selected States, State parts of American Indian areas, Alaska Native areas, and summary geographic areas such as urban and rural
1990 CH-1-1A	<b>General Housing Characteristics for American Indian and Alaska Native Areas</b>	U.S.	Detailed statistics on units in structure, value and rent, number of rooms, tenure, and vacancy characteristics	American Indian and Alaska Native areas; i.e., American Indian reservations, trust lands, tribal jurisdiction statistical areas (Oklahoma), tribal designated statistical areas, Alaska Native village statistical areas, and Alaska Native Regional Corporations
1990 CH-1-1B	<b>General Housing Characteristics for Metropolitan Areas</b>	U.S.	Detailed statistics on units in structure, value and rent, number of rooms, tenure, and vacancy characteristics	Individual MA's. For MA's split by State boundaries, summaries are provided both for the parts and for the whole MA
1990 CH-1-1C	<b>General Housing Characteristics for Urbanized Areas</b>	U.S.	Detailed statistics on units in structure, value and rent, number of rooms, tenure, and vacancy characteristics	Individual UA's. For UA's split by State boundaries, summaries are provided both for the parts and for the whole UA
<b>Sample Data</b>				
1990 CH-2	<b>Detailed Housing Characteristics</b>	U.S., States, DC, Puerto Rico, and U.S. Virgin Islands	Statistics generally on sample housing subjects	States (including summaries such as urban and rural), counties, places of 2,500 or more inhabitants, county subdivisions of 2,500 or more inhabitants in selected States, Alaska Native areas, and State parts of American Indian areas
1990 CH-2-1A	<b>Detailed Housing Characteristics for American Indian and Alaska Native Areas</b>	U.S.	Statistics generally on sample housing subjects	American Indian and Alaska Native areas, as in 1990 CH-1-1A
1990 CH-2-1B	<b>Detailed Housing Characteristics for Metropolitan Areas</b>	U.S.	Statistics generally on sample housing subjects	Individual MA's, as in 1990 CH-1-1B
1990 CH-2-1C	<b>Detailed Housing Characteristics for Urbanized Areas</b>	U.S.	Statistics generally on sample housing subjects	Individual UA's, as in 1990 CH-1-1C
1990 CH-3	<b>Housing Subject Reports</b>	Selected subjects	Approximately 10 reports on housing census subjects such as structural characteristics and space utilization	Generally limited to U.S., regions, and divisions; for some reports, other highly populated areas such as States, MA's, counties, and large places

**Figure 3. 1990 Census Summary Tape Files**

**Summary Tape File  
(STF 1A, 1B, etc.)  
and data type  
(100 percent or  
sample)<sup>1</sup>**

		<b>Geographic areas</b>	<b>Description</b>
STF 1 (100 percent)	A <sup>2</sup>	States, counties, county subdivisions, places, census tracts/block numbering areas (BNA's), block groups (BG's). Also Alaska Native areas and State parts of American Indian areas	Over 900 cells/items of 100-percent population and housing counts and characteristics for each geographic area
	B <sup>2</sup>	States, counties, county subdivisions, places, census tracts/BNA's, BG's, blocks. Also Alaska Native areas and State parts of American Indian areas	
	C <sup>2</sup>	U.S., regions, divisions, States (including summaries such as urban and rural), counties, places of 10,000 or more inhabitants, county subdivisions of 10,000 or more inhabitants in selected States, metropolitan areas (MA's), urbanized areas (UA's), American Indian and Alaska Native areas	
	D	Congressional districts (CD's) of the 103rd Congress by State; and within each CD: counties, places of 10,000 or more inhabitants, county subdivisions of 10,000 or more inhabitants in selected States, Alaska Native areas, and American Indian areas	
STF 2 (100 percent)	A	In MA's: counties, places of 10,000 or more inhabitants, and census tracts/BNA's. In the remainder of each State: counties, places of 10,000 or more inhabitants, and census tracts/BNA's	Over 2,100 cells/items of 100-percent population and housing counts and characteristics for each geographic area. Each of the STF 2 files will include a set of tabulations for the total population and separate presentations of tabulations by race and Hispanic origin
	B	States (including summaries such as urban and rural), counties, places of 1,000 or more inhabitants, county subdivisions, State parts of American Indian areas, and Alaska Native areas	
	C	U.S., regions, divisions, States (including summaries such as urban and rural), counties, places of 10,000 or more inhabitants, county subdivisions of 10,000 or more inhabitants in selected States, all county subdivisions in New England MA's, American Indian and Alaska Native areas, MA's, UA's	
STF 3 (Sample)	A <sup>2</sup>	States, counties, county subdivisions, places, census tracts/BNA's, BG's. Also Alaska Native areas and State parts of American Indian areas	Over 3,300 cells/items of sample population and housing characteristics for each geographic area
	B <sup>2</sup>	Five-digit ZIP Codes within each State	
	C <sup>2</sup>	U.S., regions, divisions, States, counties, places of 10,000 or more inhabitants, county subdivisions of 10,000 or more inhabitants in selected States, American Indian and Alaska Native areas, MA's, UA's	
	D	CD's of the 103rd Congress by State; and within each CD: counties, places of 10,000 or more inhabitants, county subdivisions of 10,000 or more inhabitants in selected States	

Figure 3. 1990 Census Summary Tape Files—Con.

Summary Tape File  
(STF 1A, 1B, etc.)  
and data type  
(100 percent or  
sample)<sup>1</sup>

	Geographic areas	Description
STF 4 (Sample)	A In MA's: counties, places of 10,000 or more inhabitants, and census tracts/ BNA's. In the remainder of each State: counties, places of 10,000 or more inhabitants, and census tracts/ BNA's	Over 8,500 cells/ items of sample population and housing characteristics for each geographic area. Each of the STF 4 files will include a set of tabulations for the total population and separate presentations of tabulations by race and Hispanic origin.
	B State (including summaries such as urban and rural), counties, places of 2,500 or more inhabitants, county subdivisions of 2,500 or more inhabitants in selected States, all county subdivisions in New England MA's, State parts of American Indian areas, and Alaska Native areas	
	C U.S., regions, divisions, States (including urban and rural and metropolitan and nonmetropolitan components), counties, places of 10,000 or more inhabitants, county subdivisions of 10,000 or more inhabitants in selected States, all county subdivisions in New England MA's, American Indian and Alaska Native areas, MA's, UA's	

**Note: STF 420 Place of Work 20 Destinations File.** This is a new file for 1990. Comparable data were included as part of STF 4 in 1980, but for 1990 this is a separate file and must be ordered and purchased separately from STF 4. The file contains 20 place of work destinations for each county or county equivalent, minor civil division, place of 10,000 or more persons, and census tract or block numbering area. Data are also provided for each major race and for workers of Hispanic origin cross-classified by race. The geographic level of the destinations varies. A destination may be a place, county, balance of county, metropolitan area, or balance of metropolitan area.

<sup>1</sup>Similar STF's will be prepared for Puerto Rico and the U.S. Virgin Islands.

<sup>2</sup>Also available on laser disc (CD-ROM). STF 1B CD-ROM presents only part of the data for blocks and other areas in the tape file.

**Figure 4. Other 1990 Census Data Products**

<b>Title</b>	<b>Description</b>	<b>Geographic areas</b>
Subject Summary Tape Files	About 20 computer tape files used to produce the subject reports (1990 CP-3 and 1990 CH-3 series). On the average, a file is the source of two subject reports	U.S., regions, divisions, States, metropolitan areas (MA's), and large counties and places
Public Law 94-171 Data File (redistricting data)	Counts by total, race, and Hispanic origin for the total population and population 18 years old and over, and counts of housing units. Available on tape, CD-ROM, and paper listings	States, counties, county subdivisions, places, census tracts/ block numbering areas (BNA's), block groups (BG's), and blocks; voting districts where States have identified them for the Census Bureau; and American Indian and Alaska Native areas
Census/ Equal Employment Opportunity (EEO) Special File	Sample tabulations showing detailed occupations and educational attainment data by age; cross tabulated by sex, Hispanic origin, and race	Counties, MA's, places of 50,000 or more inhabitants
County-to-County Migration File	Summary statistics for all intra-state county-to-county migration streams and significant inter-state county-to-county migration streams. Each record will include codes for the geographic area of destination, and selected characteristics of the persons who made up the migration stream	States, counties
Public Use Microdata Sample (PUMS) Files	Machine-readable files containing a sample of individual long-form census records showing most population and housing characteristics but with identifying information removed	
5 Percent—County Based		County groups, counties, county subdivisions, and places with 100,000 or more inhabitants
1 Percent—Metropolitan Areas (1990)		MA's and other large areas with 100,000 or more inhabitants
3 Percent—Elderly	As above, but includes only households with at least one person age 60 or more	Same as for 5-percent sample
User-Defined Areas Tabulations	A set of standard tabulations provided on printouts, tapes, or other products with maps and narrative (if requested)	User-defined areas created by aggregating census blocks
Special Tabulations	User-defined tabulations for specified geographic areas provided on printouts, tapes, or other products	User-defined areas or standard areas

# APPENDIX G. Maps

## CONTENTS

### Census Tract/Block Numbering Area

Outline Map Sample .....	G-4
County Block Map Sample .....	G-3
County Subdivision Map Sample .....	G-5
Legend .....	G-2
Map Descriptions .....	G-1
Terminology .....	G-1

There are three map series that relate to the geographic entities for which the Census Bureau provides statistics in the STF 4 data tapes. Copies of county block maps and county subdivision maps will be reproduced on electrostatic plotters in response to orders received by Customer Services, Data User Services Division, Bureau of the Census, Washington, DC 20233 (301) 763-4100. Census tract/block numbering area outline maps may be ordered from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

## MAP DESCRIPTIONS

**County Block Maps**—These maps depict each county on one or more map sheets at various scales, depending on the county's areal size and the density of the block pattern. (Most counties include multiple map sheets, including inset maps for densely settled areas.) The maps display block numbers and feature identifiers as well as the boundaries, names, and codes for the legal and statistical entities in the county. Each county includes an index map sheet that shows the locations of the map sheets comprising the county set.

**Census Tract/Block Numbering Area Outline Maps**—These county-based maps depict the boundaries and codes of census tracts or block numbering areas, the features and feature names underlying the boundaries, and the boundaries and names of counties, county subdivisions, places, and American Indian/Alaska Native areas. Map scales vary to minimize the number of sheets. The maps may include one or more insets for densely settled areas.

**County Subdivision Maps**—These State-based maps depict the boundaries and names of all counties and statistically equivalent areas, county subdivisions, and places. (The Census Bureau also will publish sectionalized versions of these maps in most 1990 census reports.)

## TERMINOLOGY

Refer to appendix A for an explanation of the types of areas. Two terms used in the legend require explanation:

**Asterisk(\*)**—A symbol following a block number to indicate the block number is repeated elsewhere in the block or is shown partially on an adjacent map sheet or on an inset map.

**Fishhook(↘)**—A map symbol drawn across a physical feature (creek, brook, etc.) or boundary on census maps to show that the areas on both sides of the feature or boundary belong to the same census block.

### Legend

## LEGEND

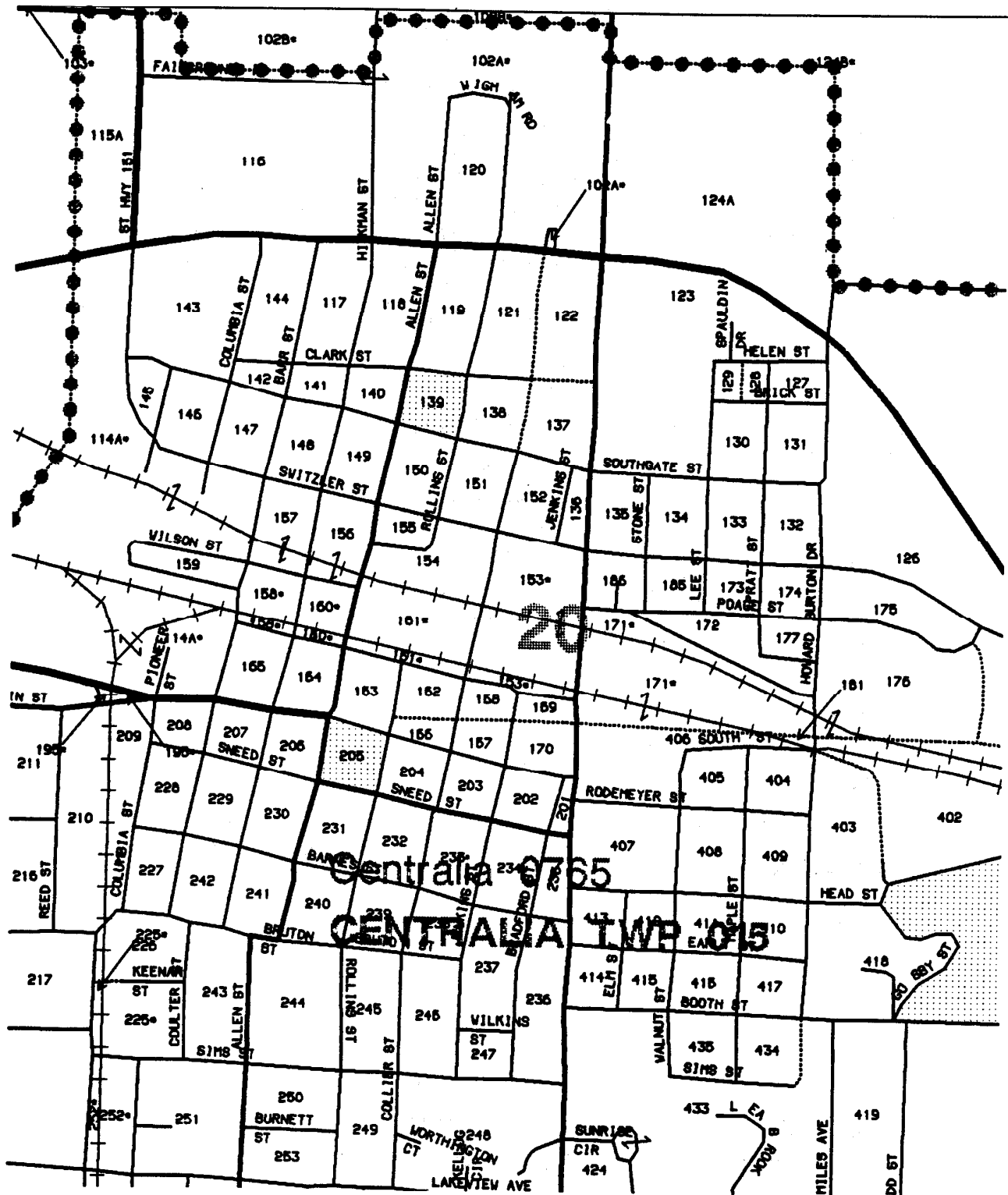
<u>SYMBOL DESCRIPTION</u>	<u>SYMBOL</u>	<u>NAME STYLE</u>	<u>FIPS CODE</u>	<u>CENSUS CODE</u>
International	*****	CANADA		
American Indian Reservation	XXXXXXXXXX	CAMPO RSVN	10522	(0450)
Trust Land	XXXXXXXXXX		10522	(0450T)
Alaska Native Regional Corporation	♦♦♦♦♦♦♦♦	ALEUT ANRC		(14)
Alaska Native Village Statistical Area, Tribal Jurisdiction Statistical Area, or Tribal Designated Statistical Area	••••••••	KAW TJSA	98870	(5340)
State <sup>1</sup>	//////////	NEW YORK	[36]	
County <sup>1</sup>	EEEEEEEEEE	ERIE COUNTY	[029]	
Minor Civil Division <sup>2</sup>	••••••••	YORK TWP	83908	(070)
Census County Division	••••••••	KULA DIV	91690	(030)
Incorporated Place	••••••••	Rome City	63418	(3120)
Census Designated Place	••••••••	Zena	84187	(4100)
Corporate Corridor	OOOOOOOO	1660		
Census Tract or Block Numbering Area	5702.01			
Block Number (With Asterisk) <sup>3</sup>	380*			
Fishhook <sup>4</sup>	←			
Crew-of-Vessel	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">             ↑ Tract ↓ Block           </div> <div style="text-align: right;">             § 2130.59 § 2012           </div> </div>			

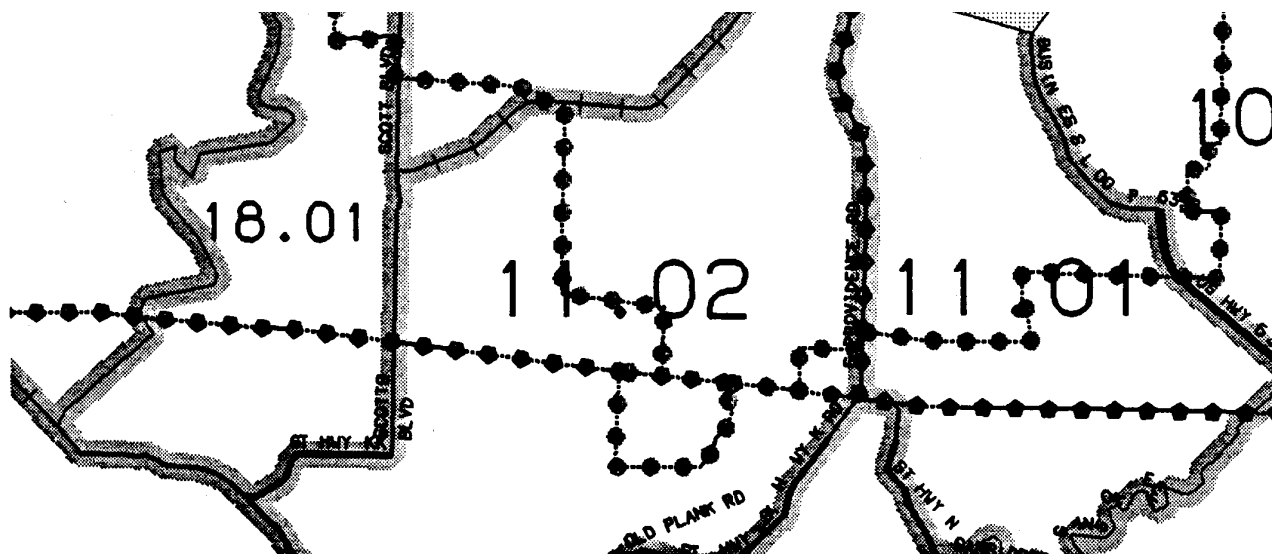
Note: An international boundary also depicts a state boundary and a county boundary; a state boundary also depicts a county boundary. The symbols for all other coincident boundaries are shown alternately, as shown in the example:  
 S.S.1 ■●●●●●●●

FEATURE	SYMBOL	NAME STYLE
Interstate Highway and Limited Access Road <sup>a</sup>		Interstate 535
Other Highway <sup>b</sup>		Rte 101
City Street, Other Connecting Road, or Dirt Road <sup>b</sup>		Marsh Ln
Jeep Trail, Walkway, or Stairway		Labella Walk
Railroad		
Ferry Crossing		
Pipeline or Power Transmission Line		
Ridge, Fence, Canyon, or Other Physical Feature		R100C
Nonvisible Boundary or Other Feature Not Elsewhere Classified		PROPERTY LINE
Perennial Stream, or Shoreline of Perennial Water Body		<i>Trunking Creek</i>
Intermittent Stream, or Shoreline of Intermittent Water Body		<i>Piney Creek</i>
Large River, Lake, or Other Water Body		<i>Pleasant Lake</i>
Military Installation		Fort Belvoir
Park (National, State, or Local)		Yosemite
Mountain Peak		<i>Pikes Peak</i>
Inset Area		

- 1 State or County; or their equivalent area for statistical purposes.
- 2 A five-spoked asterisk following a minor civil division indicates that the minor civil division is coextensive with an incorporated place and has the same name.
- 3 An asterisk following a block number indicates that the block number is repeated elsewhere in the block or is shown partially on an adjacent map sheet.
- 4 A fishhook across a map feature or boundary indicates that the areas on both sides of the feature or boundary belong to the same census block.
- 5 A X symbol indicates that there was insufficient space to plot a road name. Road names in parentheses indicate that the road has more than one name.

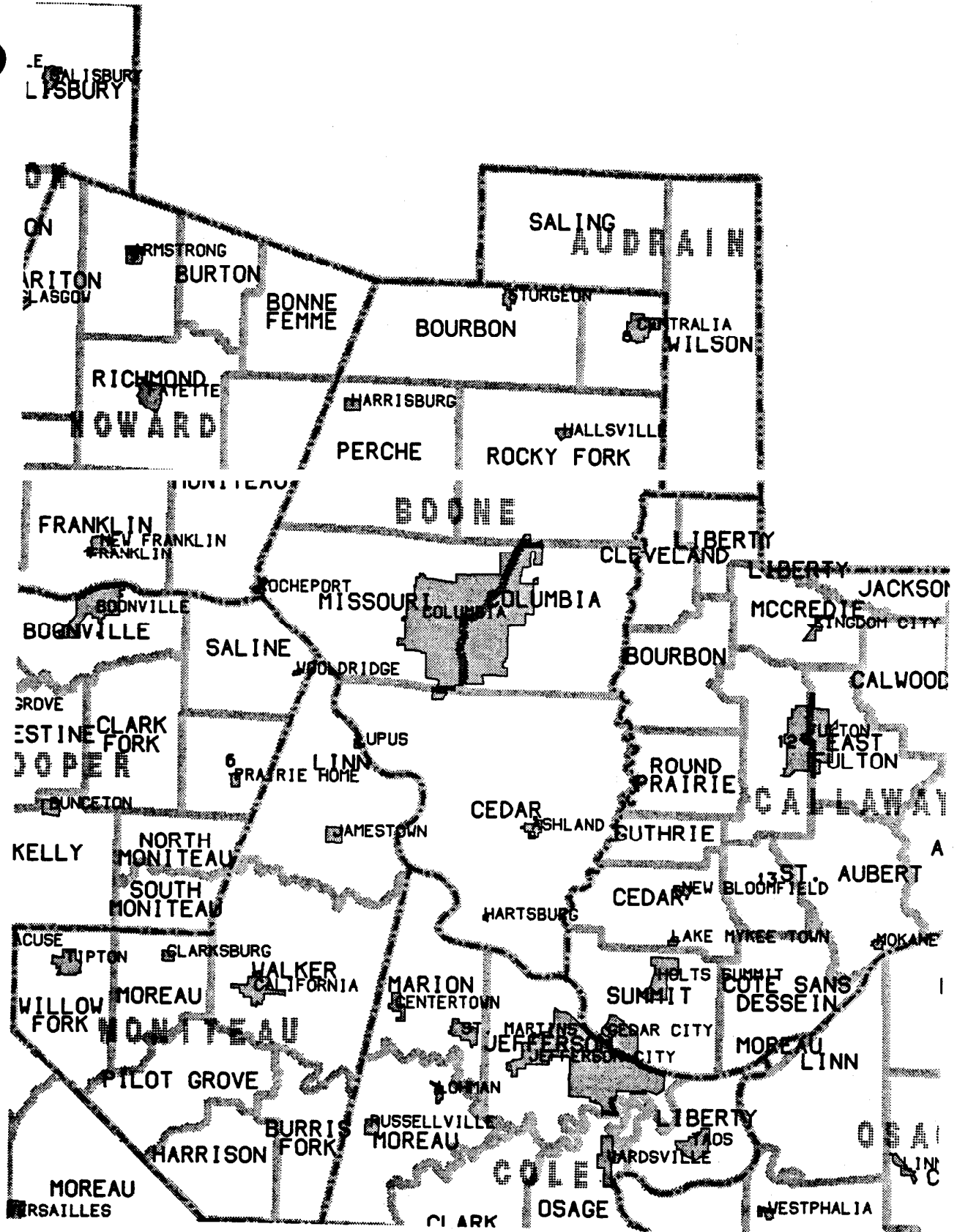
# County Block Map Sample







# County Subdivision Map Sample



# APPENDIX H. Record Layout of Machine-Readable Data Dictionary

## CONTENTS

Geographic Description.....	H-1
Table (Matrix) Description.....	H-2

This appendix provides the record layout for the machine-readable data dictionary file that accompanies each data tape. This data dictionary was developed as a "generic" dictionary that, with some programming, could be converted for use with specific software packages.

## GEOGRAPHIC DESCRIPTION

### Geographic Record 1—Field Mnemonic, Size, and Type

Position	Description
1-2	Identifier "G1" (Geographic Record 1)
3	Blank
4-11	Field mnemonic (left justified)
12	Blank
13-14	Field size (right justified)
15	Blank
16-18	Data type (left justified)
	Note: Legal entries are A, N, and A/N
19	Blank
20-24	Begin position (right justified) (Begin position in relation to the entire record)
25	Blank
26-30	Relative begin position (right justified) (Begin position in relation to the record segment)

#### Example 1

G1	FILEID	8	A/N	1	1	0
G2	1	File	Identification			

#### Example 2

G1	PSADC	2	A/N	289	289	0
G2	289	Political/Statistical	Area	Description	Code	
G3	289	01	State or State equivalent - no status is appended to the name			
G3	289	01	of the entity in census publications and related data products			
G3	289	04	Borough - county equivalent in Alaska; "Borough" is appended to			
G3	289	04	o the name of the entity in census publications and related da			
G3	289	04	ta products			
G3	289	05	Census area - county equivalent in Alaska; "Census Area" is ap			
G3	289	05	pended to the name of the entity in census publications and re			
G3	289	05	lated data products			

<sup>1</sup>Examples are for illustrative purposes and are not specific to this STF.

### Geographic Record 1—Con.

31	Blank
32	Number of implied decimals
33-80	Blank

### Geographic Record 2—Field Description

Position	Description
1-2	Identifier "G2" (Geographic Record 2)
3	Blank
4-8	Begin position (right justified) (repeat from 20-24 above)
9	Blank
10-80	Field Description (left justified)

### Geographic Record 3—Code Identification

Position	Description
1-2	Identifier "G3" (Geographic Record 3)
3	Blank
4-8	Begin position (right justified) (repeat from 20-24 in G1)
9	Blank
10-17	Codes (right justified)
18	Blank
19-80	Code Identification (left justified)

### Geographic Description Examples<sup>1</sup>

Examples of the geographic records are shown below. In example 1, there are no G3 records. G3 records will appear only for fields which have code listings in the technical documentation.

## TABLE (MATRIX) DESCRIPTION

### Table Record 1—Table Number and Characteristics

Position	Description
1-2	Identifier "T1" (Table Record 1)
3	Blank
4-9	Table (matrix) number (left justified)
10	Blank
11-17	Begin position (right justified) <sup>2</sup> (Begin position in relation to the entire record)
18	Blank
19-25	Relative begin position (right justified) <sup>2</sup> (Begin position in relation to the record segment)
26	Blank
27-28	Cell size for this table (matrix) (right justified)
29	Blank
30	Number of implied decimals for cells in this table (matrix)
31	Blank
32-38	Number of cells in this table (matrix) (right justified) <sup>2</sup>
39	Blank
40-42	Number of variables (right justified)
43-80	Blank

### Table Record 2—Table Title

Position	Description
1-2	Identifier "T2" (Table Record 2)
3	Blank
4-9	Table (matrix) number (left justified)
10	Blank
11-80	Table (matrix) title (left justified)

### Table Record 3—Universe Description

Position	Description
1-2	Identifier "T3" (Table Record 3)
3	Blank

#### Example 3

#### Sex (2) by Marital Status(5) [10]

T1 P14	4423	4423 9 0 10 2
T2 P14	SEX BY MARITAL STATUS	
T3 P14	Persons 15 years and over	
T4 P14	SEX	2
T4 P14	Male	
T4 P14	Female	
T5 P14	MARITAL STATUS	5
T5 P14	Never married	
T5 P14	Now married, except separated	
T5 P14	Separated	
T5 P14	Widowed	
T5 P14	Divorced	

### Table Record 3—Con.

4-9	Table (matrix) number (left justified)
10	Blank
11-80	Universe Description (left justified)

### Table Record 4-N—Table Variable Descriptions

Position	Description
1-2	Identifier "Tn" n = sequence number of variable in the table being described.
3	Blank
4-9	Table (matrix) number (left justified)
10	Blank
11-76	Variable name (left justified)
77	Blank
78-80	Number of categories for this variable (right justified)
Note: Subsequent "T" records with the same "n" will have the variable categories described in positions 11-80.	

### Filler Record

Position	Description
1-2	Identifier "F1" (Filler Record)
3	Blank
4-7	"FILL"
8-10	Blank
11-17	Begin Position (right justified) (Begin position in relation to the entire record) <sup>2</sup>
18	Blank
19-25	Relative Begin Position (right justified) (Begin position in relation to the record segment) <sup>2</sup>
26	Blank
27-30	Total number of "FILL" blanks
31-80	Blank

### Matrix Example<sup>1</sup>

See example 3 below.

<sup>1</sup>Examples are for illustrative purposes and are not specific to this STF.

<sup>2</sup>These positions have been increased to accommodate all record sizes. Previous products had less characters; future products (STF 3 PR, STF 3 VI, STF 4, etc.) will have the above structure.

# APPENDIX I. Code Lists

## CONTENTS

Ancestry	I-1
Group Quarters	I-17
Hispanic Origin	I-22
Industry	I-24
Language	I-30
Occupation	I-37
Place of Birth	I-50
Race	I-54

## ANCESTRY

This section contains the code list for ancestry categories. Each person enumerated in the census had the opportunity to enter two distinct ancestry identities which indicated his or her ethnic origin. Each entry received one of the unique three-digit codes listed below. All codes are listed below. However, not all ancestry entries are listed. The ancestry codes can be aggregated to create commonly recognized national groupings. For example, the code for Walloon can be collapsed with other "Belgian" entries to form a national grouping representative of an area in Europe. National groupings can also be collapsed to represent continental areas. For example, Belgium can be added to France and other European clusters to form a representation of that continent. "n.e.c." is the abbreviation for not elsewhere classified.

000-099	WESTERN EUROPE (EXCEPT SPAIN)	000-099	WESTERN EUROPE (EXCEPT SPAIN)—Con.
000-001	ALSATIAN	011-014	BRITISH
000-001	Alsace Lorraine	011	BRITISH
		011	Great Britain
002	ANDORRAN	011	United Kingdom
002	Andorra	012	BRITISH ISLES
		013	CHANNEL ISLANDER
003-004	AUSTRIAN	013	Guernsey Islander
003	AUSTRIAN	013	Jersey Islander
003	Austria	014	GIBRALTAR
004	TIROL		
004	Tirol	015	CORNISH
		015	Cornwall
005-007	BASQUE	016	CORSICAN
005	BASQUE	016	Corsica
005	Euskalduna		
005	Euzkadi	017-019	CYPRIOT
006	FRENCH BASQUE	017	CYPRIOT
007	SPANISH BASQUE	017	Cyprus
007	Vasco	018	GREEK CYPRIOTE
		019	TURKISH CYPRIOTE
008-010	BELGIAN		
008	BELGIAN	020	DANISH
008	Belgium	020	Denmark
009	FLEMISH		
009	Flanders	021	DUTCH
009	Fleming	021	Holland
009	Viamand	021	Netherlands
010	WALLOON		

**000-099 WESTERN EUROPE (EXCEPT SPAIN)—Con.**

022 ENGLISH  
022 Anglican  
022 England  
022 Mayflower

023 FAEROE ISLANDER  
023 Faeroe Islands

024-025 FINNISH  
024 FINNISH  
024 Finland  
025 KARELIAN

026-027 FRENCH  
026 FRENCH  
026 France  
026 Gascon  
026 Huguenot  
026 Normandy  
027 LORRAINE

028 BRETON  
028 Breizh  
028 Bretagne  
028 Brittany

029 FRISIAN  
029 Friesian Islands

030-031 FRIULIAN  
030 FRIULIAN  
030 Friuli  
030 Furlan  
031 LADIN

032-045 GERMAN  
032 GERMAN  
032 Germany  
033 BAVARIA  
034 BERLIN  
035 HAMBURG  
036 HANNOVER  
037 HESSIAN  
038 LUBECKER  
039 POMERANIAN  
040 PRUSSIAN  
041 SAXON  
042 SUDETENLANDER  
043 WESTPHALIAN  
044 EAST GERMAN  
045 WEST GERMAN  
045 Palatinate  
045 Rhineland

**000-099 WESTERN EUROPE (EXCEPT SPAIN)—Con.**

046-048 GREEK  
046 GREEK  
046 Greece  
047 CRETAN  
048 CYCLADES  
048 Dodecanese Islander  
048 Peloponnesian

049 ICELANDER  
049 Iceland

050 IRISH  
050 Black Irish  
050 Clare  
050 Cork  
050 Donegal  
050 Dubliner  
050 Eire  
050 Galway  
050 Ireland  
050 Irish Free State  
050 Kerry  
050 Kildare  
050 Kilkenny  
050 Laoighis  
050 Leitrim  
050 Leix  
050 Limerick  
050 Longford  
050 Louth  
050 Mayo  
050 Meath  
050 Monaghan  
050 Offaly  
050 Roscommon  
050 Sligo  
050 Tipperary  
050 Waterford  
050 Westmeath  
050 Wexford  
050 Wicklow

051-074 ITALIAN  
051 ITALIAN  
051 Istria  
051 Italy  
052 TRIESTE  
053 ABRUZZI  
054 APULIAN  
054 Apulia  
055 BASILICATA  
055 Lucania  
056 CALABRIAN  
057 AMALFIN  
057 Campania

## 000-099

WESTERN EUROPE (EXCEPT  
SPAIN)—Con.

058 EMILIA ROMAGNA  
 059 ROME  
 059 Lazio  
 059 Vatican City  
 060 LIGURIAN  
 061 LOMBARDIAN  
 062 MARCHE  
 063 MOLISE  
 064 NEAPOLITAN  
 065 PIEMONTESE  
 066 PUGLIA  
 067 SARDINIAN  
 068 SICILIAN  
 068 Sicily  
 069 TOSCANA  
 069 Tuscany  
 070 TRENTINO  
 071 UMBRIAN  
 072 VALLE DAOST  
 073 VENETIAN  
 073 Venezia Giulia  
 074 SAN MARINO  
  
 075 LAPP  
 075 Lapland  
 075 Samelat  
  
 076 LIECHTENSTEINER  
 076 Liechtenstein  
  
 077 LUXEMBURGER  
 077 Luxemburg  
  
 078 MALTESE  
 078 Gozo  
 078 Malta  
  
 079 MANX  
 079 Isle of Man  
  
 080 MONEGASQUE  
 080 Monaco  
  
 081 NORTH IRISH  
 081 Antrim  
 081 Armagh  
 081 Derry  
 081 Down  
 081 Fermanagh  
 081 Londonderry  
 081 Northern Ireland  
 081 Orangeman  
 081 Tyrone  
 081 Ulster

## 000-099

WESTERN EUROPE (EXCEPT  
SPAIN)—Con.

082 NORWEGIAN  
 082 Jan Meyen Islander  
 082 Norway  
 082 Spitsbergen  
 082 Svalbard Islander  
  
 083 OCCITAN  
 083 Provence  
  
 084-086 PORTUGUESE  
 084 PORTUGUESE  
 084 Lusitania  
 084 Luso  
 084 Portugal  
 085 AZORES ISLANDER  
 086 MADEIRA ISLANDER  
  
 087 SCOTCH-IRISH  
 087 Scot-Irish  
  
 088 SCOTTISH  
 088 Orkney Islander  
 088 Pict  
 088 Scot  
 088 Scotland  
 088 Shetland Islander  
  
 089-090 SWEDISH  
 089 SWEDISH  
 089 Sweden  
 090 ALAND ISLANDER  
  
 091-096 SWISS  
 091 SWISS  
 091 Switzerland  
 092 SUISSE  
 093 SWITZER  
 093-094 Schweiz  
 095 ROMANSCH  
 096 SUISSE ROMANE  
 096 Ticino  
  
 097 WELSH  
 097 Wales  
  
 098 SCANDINAVIAN  
 098 Nordic  
 098 Scandinavia  
  
 099 CELTIC  
 099 Celtic

100-180	EASTERN EUROPE AND SOVIET UNION
100	ALBANIAN
100	Albania
100	Arberesh
100	Gheg
100	Italo Albanian
100	Kossovo
100	Tosc
101	AZERBAIJANI
101	Adjerbaijani
101	Azerbaidzhan
101	Azeri
102	BELORUSSIAN
102	Byelorussian
103	BULGARIAN
103	Bulgaria
103	Bulgaro Macedonian
103	Eastern Rumelian
104-105	CARPATHO RUSYN
104	CARPATHO RUSYN
104	Carpatho Rus
104	Carpatho Russian
104	Carpatho Ruthenian
105	CARPATHIAN
106	RUSYN
106	Rus
106	Rusin
106	Rusnak
107	RUTHENIAN
107	Ruthenia
108	COSSACK
108	Don Cossack
108	Orenburg Cossack
108	Terek Cossack
108	Ural Cossack
109-110	CROATIAN
109	Croatia
109	Dalmatian
109-110	Zadar
111-113	CZECH
111	CZECH
112	BOHEMIAN
113	MORAVIAN
114	CZECHOSLOVAKIAN
114	Czechoslovakia
114	Tczechoslovakia

100-180	EASTERN EUROPE AND SOVIET UNION—Con.
115-116	ESTONIAN
115	ESTONIAN
115	Estonia
116	LIVONIAN
117-119	FINNO UGRIAN
117	FINNO UGRIAN
117	Komi
117	Mari
117	Udmurt
118	MORDOVIAN
119	VOYTAK
120-121	GRUZIIA
120-121	Gruzinets
122-123	GERMAN FROM RUSSIA
122	GERMAN FROM RUSSIA
123	VOLGA
123	Black Sea German
123	Volhynian German
124	ROM
124	Boyash
124	Call
124	Dom
124	Gitanos
124	Gypsy
124	Kalderash
124	Luri
124	Manouche
124	Nat
124	Romnichal
124	Senti
124	Xoraxaya
125-126	HUNGARIAN
125	HUNGARIAN
125	Hungary
125	Szekler
126	MAGYAR
127	KALMYK
127	Kalmuck
128	LATVIAN
128	Latvia
128	Lettish
129	LITHUANIAN
129	Jmoud
129	Lithuania
130	MACEDONIAN
130	Macedonia

100-180	EASTERN EUROPE AND SOVIET UNION—Con.	100-180	EASTERN EUROPE AND SOVIET UNION—Con.
130	Slavophone	152	SERBIAN
131	MONTENEGRIN	152	Serb
131	Orna Gora	153	SLOVAK
132-141	NORTH CAUCASIAN	153	Slovakian
132	NORTH CAUCASIAN	153	Slovjak
132	Abkhazian	154-155	SLOVENE
132	Adyge	154	SLOVENE
132	Avar	154	Slovinc
132	Caucasus Mountains	154	Slovenian
132	Chechen	154	Slovenski
132	Daghestan	155	SORBIAN/WEND
132	Darghinian	155	Lusatian Serb
132	Gortsy	155	Sorb
132	Ingush	155	Wend
132	Kabardinian	155	Wendish
132	Lezghian	156-163	SOVIET TURKIC
132	Tavlintsy	156	SOVIET TURKIC
133	NORTH CAUCASIAN TURKIC	156	Soviet Turk
133	Adzharian	157	BASHKIR
133	Balkar	158	CHUVASH
133	Cherkess	159	GAGAUZ
133	Circassian	160	MESKNETIAN
133	Karachay	161-162	TUVINIAN
133-139	Kumyk	163	YAKUT
140-141	OSSETIAN	164	SOVIET UNION
142-143	POLISH	164	Union of Soviet Socialist Republics
142	POLISH	165-167	TATAR
142	Gorali	165	TATAR
142	Masurian	165	Crimean Tatar
142	Poland	165	Kazan Tatar
142	Polonia	165	Nogay Tatar
142	Polska	165	Polish Tatar
143	KASHUBIAN	165	Volga Tatar
144-147	ROMANIAN	165-166	SOVIET CENTRAL ASIA
144	ROMANIAN	167	Kurile Islander
144	Romania	167	Sakhalin Islander
144	Transylvania	167	Siberian
145	BESSARABIAN	168-170	TURKESTANI
145	Dobruja	168	TURKESTANI
146	MOLDAVIAN	168	Karakalpak
147	WALLACHIAN	168	Kazak
147	Vlach	168	Kirghiz
148-151	RUSSIAN	168	Tadzhik
148	RUSSIAN	168	Turcoman
148	Black Russian	168	Turkestani
148	Great Russian	168	Turkmen
148	Red Russian	168	Turkoman
148	Rossiya	168	Uiger
148-149	Russia	168	UZBEG
150-151	MUSCOVITE	169-170	



<b>100-180</b>	<b>EASTERN EUROPE AND SOVIET UNION—Con.</b>	<b>200-299</b>	<b>HISPANIC CATEGORIES (INCLUDING SPAIN)—Con.</b>
171-174	UKRAINIAN	201	ANDALUSIAN
171	UKRANIAN	202	ASTURIAN
171	Little Russian	203	CASTILLIAN
171	Malo Russian		
171	Ukraine	204-209	CATALONIAN
172	LEMKO	204	CATALONIAN
172	Lemkian	204	Catalonia
173	BIOKO	205	BALEARIC ISLANDER
174	HUSEL	205	Mallorca
		206	GALLEGO
175	WINDISH	207	VALENCIAN
175	Prekmurje	208-209	CANARY ISLANDER
175	Windisch		
		210-218	MEXICAN
176-177	YUGOSLAVIAN	210	MEXICAN
176	YUGOSLAVIAN	211	MEXICAN AMERICAN
176	Jugoslavia	212	MEXICANO
177	HERZEGOVINIAN	213	CHICANO
177	Bosanci	214-217	LA RAZA
177	Bosnian Muslim	218	MEXICAN STATE
177	Bosnjaci	218	Aguascalientes
		218	Baja California
178-180	SLAVIC	218	Campeche
178	SLAVIC	218	Chiapas
178	Slav	218	Chihuahua
179-180	SLAVONIAN	218	Coahuila
		218	Colima
181-199	EUROPE, N.E.C.	218	Distrito Federal
181	EUROPE, N.E.C.	218	Durango
181	Central European	218	Guanajuato
181-182	Middle European	218	Guerrero
183	NORTHERN EUROPEAN	218	Hidalgo
183-184	North Europe	218	Jalisco
185	SOUTHERN EUROPEAN	218	Mexico
185-186	South Europe	218	Michoacan
187	WESTERN EUROPEAN	218	Morelos
187-189	West Europe	218	Nayarit
190	EASTERN EUROPEAN	218	Nuevo Leon
190	Byzantine	218	Oaxaca
190	East Europe	218	Puebla
191-192	BUKOVINA	218	Queretaro
193-194	SILESIAN	218	Quintana Roo
195	EUROPEAN	218	San Luis Potosi
196	GALICIAN	218	Sinaloa
196-199	Galicia	218	Sonora
		218	Tabasco
200-299	HISPANIC CATEGORIES (INCLUDING SPAIN)	218	Tamaulipas
200-203	SPANIARD	218	Tlaxcala
200	SPANIARD	218	Vera Cruz
200	Espanola	218	Yucatan
200	Iberian	218	Zacatecas
200	Spain	219-221	COSTA RICAN
		219	Costa Rica
		219-221	Costarricense

**200-299 HISPANIC CATEGORIES  
(INCLUDING SPAIN)—Con.**

222 GUATEMALAN  
222 Guatemala

223 HONDURAN  
223 Honduras

224 NICARAGUAN  
224 Nicaragua

225 PANAMANIAN  
225 Panama

226 SALVADORAN  
226 El Salvador  
226 Salvadorian

227-228 CENTRAL AMERICAN  
227-228 Central America

229-230 CANAL ZONE

231 ARGENTINEAN  
231 Argentine

232 BOLIVIAN  
232 Bolivia

233 CHILEAN  
233 Chile

234 COLOMBIAN  
234 Antiochio  
234 Colombia

235 ECUADORIAN  
235 Ecuador  
235 Galapagos Islander

236 PARAGUAYAN  
236 Paraguay

237 PERUVIAN  
237 Peru

238 URUGUAYAN  
238 Uruguay

239 VENEZUELAN  
239 Venezuela

240-248 CRIOLLO  
240-248 Criolla

249 SOUTH AMERICAN  
249 America Del Sur

**200-299 HISPANIC CATEGORIES  
(INCLUDING SPAIN)—Con.**

249 Sudamerica

250-260 LATIN AMERICAN  
250 LATIN AMERICAN  
250 America Latina  
250 Latinoamericana  
251 LATIN  
252-260 LATINO

261-270 PUERTO RICAN  
261 Boricua  
261 Borinquena  
261 New York Puerto Rican  
261 Puerto Rico  
261-270 Puertorriqueno

271-274 CUBAN  
271 Cuba  
271 Cubana  
271-274 Guajiro

275 DOMINICAN  
275 Dominican Republic  
275 Dominicana  
275 Santo Domingo

276-290 HISPANIC  
276-290 Hispano

291-299 SPANISH  
292 CALIFORNIO  
293 TEJANO  
293 Tejana  
294 NUEVO MEXICANO  
295-299 SPANISH AMERICAN

300-359 WEST INDIES (EXCEPT  
HISPANIC)

300 BAHAMIAN  
300 Bahamas

301 BARBADIAN  
301 Barbados

302 BELIZEAN  
302 Belize  
302 British Honduran

303 BERMUDAN  
303 Bermuda

304-307 CAYMAN ISLANDER

308-309 JAMAICAN  
308-309 Jamaica

**300-359 WEST INDIES (EXCEPT HISPANIC)—Con.**

310-313 DUTCH WEST INDIES  
310 DUTCH WEST INDIES  
310 Black Dutch  
310 Netherlands Antilles  
311 ARUBA ISLANDER  
311 Bonaire Islander  
311 Curacao Islander  
312-313 ST. MAARTEN ISLANDER  
312 Saba Islander  
312-313 St. Eustatius Islander

314-316 TRINIDADIAN TOBAGONIAN  
314 TRINIDADIAN TOBAGONIAN  
315 TRINIDADIAN  
316 TOBAGONIAN

317-320 U.S. VIRGIN ISLANDER  
317 U.S. VIRGIN ISLANDER  
318 ST. CROIX ISLANDER  
318 Crucian  
318 Santa Cruz  
319 ST. JOHN ISLANDER  
320 ST. THOMAS ISLANDER

321-331 BRITISH WEST INDIES  
321 BRITISH VIRGIN ISLANDER  
321 Tortolan  
321 Virgin Gorda  
321 Anegada  
321 Jost Van Dyke  
321 Peter and Norman  
322 BRITISH WEST INDIAN  
322 British West Indies  
323 TURKS AND CAICOS ISLANDER  
324 ANGUILLA ISLANDER  
325 ANTIGUA AND BARBUDA  
325 Antigua  
325 Barbuda  
325 Redonda Islander  
326 MONTSERRAT ISLANDER  
327 KITTS-NEVIS ISLANDER  
327 St. Christophher Islander  
327 Sombrero Islander  
327 St. Kitts  
327 Nevis  
328 DOMINICA ISLANDER  
329 GRENADIAN  
329 Grenada Islander  
330 VINCENT-GRENADINE ISLANDER  
330 St. Vincent Island  
330 Vincentian  
330 Grenadines Islander  
331 ST. LUCIA ISLANDER

**300-359 WEST INDIES (EXCEPT HISPANIC)—Con.**

332-334 FRENCH WEST INDIES  
332 FRENCH WEST INDIES  
332 French West Indian  
333 GUADELOUPE ISLANDER  
333 Martinicois  
333 Martinique Islander  
334 CAYENNE  
334 French Guiana  
334 French Guianese  
334 Guyane

335 WEST INDIAN  
335 West Indies  
335 Arawak  
335 Caribs  
335 Caribbean  
335 Garifuna

336-359 HAITIAN  
336-359 Haiti

**360-399 CENTRAL AND SOUTH AMERICA (EXCEPT HISPANIC)**

360-364 BRAZILIAN  
360-364 Brazil

365-369 SAN ANDRES

370-374 GUYANESE  
370 British Guiana  
370-374 Guyana

375-379 PROVIDENCIA

380-399 SURINAM  
380 Dutch Guiana  
380-399 Netherlands Guiana

**400-499 NORTH AFRICA AND SOUTHWEST ASIA**

400-401 ALGERIAN  
400-401 Algeria

402-403 EGYPTIAN  
402 Copt  
402 Egypt  
402-403 Fellahin

404-405 LIBYAN  
404-405 Libya

406-407 MOROCCAN  
406 MOROCCAN  
406 Moor  
407 IFNI

**400-499 NORTH AFRICA AND  
SOUTHWEST ASIA—Con.**

408-410 TUNISIAN  
408-410 Tunisia

411 NORTH AFRICAN

412 ALHUCEMAS  
412 Ceuta  
412 Chafarinas  
412 Melilla

413 BERBER

414 RIO DE ORO  
414 Saguia El Hamra

415 BAHRAINI  
415 Bahrain

416 IRANIAN  
416 Iran  
416 Parsi  
416 Persia

417-418 IRAQI  
417-418 Iraq

419-420 ISRAELI  
419-420 Israel

421-422 JORDANIAN  
421 JORDANIAN  
421 Hashemite  
421 Jordan  
422 TRANSJORDAN

423-424 KUWAITI  
423-424 Kuwait

425-426 LEBANESE  
425 Lebanon  
425-426 Maronite

427-428 SAUDI ARABIAN  
427-428 Saudi Arabia

429-430 SYRIAN  
429 Djebel Druze  
429 Latakia  
429-430 Syria

431-433 ARMENIAN  
431-433 Armenia

434 TURKISH  
434 Turkey

**400-499 NORTH AFRICA AND  
SOUTHWEST ASIA—Con.**

435 YEMENI  
435 Yemen Arab Republic

436-441 OMANI  
436 OMANI  
437 MUSCAT  
438 TRUCIAL STATES  
438 Trucial Oman  
439-440 QATAR  
441 BEDOUIN

442-464 KURDISH  
442-443 KURDISH  
444-464 KURIA MURIA ISLANDER

465-469 PALESTINIAN  
465 PALESTINIAN  
466 GAZA STRIP  
467-469 WEST BANK

470-479 SOUTH YEMEN  
470 SOUTH YEMEN  
470 Democratic Republic of Yemen  
471-479 ADEN

480-481 UNITED ARAB EMIRATES  
480 Abu Dhabi  
480 Ajman  
480 Dubai  
480 Fujairah  
480 Ras Al Kaimah  
480 Sharjah  
480-481 Umm Al Qaiwain

482-489 ASSYRIAN  
482 Aramean  
482 Assyria  
482 Chaldean  
482 Chaldo  
482 Jacobite  
482 Kaldany  
482 Kaldu  
482 Kasddem  
482 Kasdu  
482 Nestorian  
482-489 Telkeffee

490-494 MIDEAST  
490-494 Middle Eastern

495-499 ARAB  
495 ARAB  
495 Arabia  
496-499 ARABIC

**500-599 SUBSAHARAN AFRICA**

500-501 ANGOLAN  
500 Angola  
500-501 Cabinda

502-503 BENIN  
502 Dahomey  
502-503 Fon

504-505 BOTSWANA  
504-505 Bechuana

506-507 BURUNDIAN  
506-507 Urundi

508-509 CAMEROONIAN  
508 Cameroon  
508-509 Fako

510-511 CAPE VERDEAN  
510 Brava  
510-511 Cape Verde Islander

512 CENTRAL AFRICAN REPUBLIC  
512 Ubangi Shari

513-514 CHADIAN  
513-514 Chad

515-518 CONGOLESE  
515 CONGOLESE  
516-518 CONGO BRAZZAVILLE

519 DJIBOUTI  
519 Afars And Issas  
519 Jibuti

520-521 EQUATORIAL GUINEA  
520 EQUATORIAL GUINEA  
520 Rio Muni  
521 CORSICO ISLANDER  
521 Annobon Islander  
521 Bioko Islander  
521 Elobeis Islander  
521 Fernando Po Islander

522-524 ETHIOPIAN  
522 ETHIOPIAN  
522 Abyssinia  
522 Ethiopia  
523-524 ERITREAN

525-526 GABONESE  
525-526 Gabon

527-528 GAMBIAN  
527-528 Gambia

**500-599 SUBSAHARAN AFRICA—Con.**

529 GHANIAN  
529 Ashanti  
529 Ghana  
529 Gold Coast  
529 TWI

530 GUINEAN  
530 Guinea

531 GUINEA BISSAU

532-533 IVORY COAST

534-537 KENYAN  
534-537 Kenya

538-540 LESOTHO  
538-540 Basuto

541-542 LIBERIAN  
541-542 Liberia

543-544 MADAGASCAN  
543-544 Madagascar

545 MALAWIAN  
545 Malawi

546 MALIAN  
546 Mali

547-548 MAURITANIAN  
547-548 Mauritania

549 MOZAMBICAN  
549 Mozambique

550 NAMIBIAN  
550 Namibia

551-552 NIGER

553-560 NIGERIAN  
553 NIGERIAN  
553 Nigeria  
554 FULAH  
554 Fulani  
555 HAUSA  
556 IBO  
557 TIV  
558-560 YORUBA

561-563 RWANDAN  
561-563 Rwanda

500-599	<b>SUBSAHARAN AFRICA—Con.</b>
564-565	SENEGALESE
564	Dakar
564-565	Senegal
566-567	SIERRA LEONEAN
566-567	Sierra Leone
568	SOMALIAN
568	Somali Republic
568	Somalia
569	SWAZILAND
570-573	SOUTH AFRICAN
570	SOUTH AFRICAN
571	UNION OF SOUTH AFRICA
571	Orange Free State
571	Pretoria
571	Transkei
571	Transvaal
572	AFRIKANER
572	Boer
573	NATALIAN
574-575	ZULU
574-575	Zululand
576-581	SUDANESE
576	SUDANESE
576	Sudan
577	DINKA
578	NUER
579	FUR
579	Darfur
580-581	BAGGARA
582-585	TANZANIAN
582	TANZANIAN
582	Tanzania
583	TANGANYIKAN
584-585	ZANZIBAR ISLANDER
586-587	TOGO
586-587	Togoland
588	UGANDAN
588	Lugbara
588	Uganda
589-590	UPPER VOLTAN
589	UPPER VOLTAN
590	VOLTA
591	ZAIRIAN
591	Belgian Congo
591	Congo Kinshasa

CODE LISTS

500-599	<b>SUBSAHARAN AFRICA—Con.</b>
591	Zaire
592	ZAMBIAN
592	Zambia
593	ZIMBABWEAN
593	Rhodesia
593	Zimbabwe
594-595	AFRICA ISLANDS (EXCEPT MADAGASCAR)
594	AFRICA ISLANDS
594	Comoros Islander
594	Principe Islander
594	Reunion Islander
594	Sao Tome Islander
594	Seychelles Islander
594	St. Helena Islander
594	St. Pierre Islander
594	Tristan De Cunha Islander
595	MAURITIAN
595	Mauritius Islander
596-599	SUBSAHARAN AFRICAN, N.E.C.
596	CENTRAL AFRICAN
596	Central Africa
596	Middle Congo
597	EAST AFRICAN
597	East Africa
597	Galla
597	Kikuyu
597	Masai
598	WEST AFRICAN
598	West Africa
599	AFRICAN
599	Africa
600-699	<b>SOUTH ASIA</b>
600-602	AFGHANISTAN
600	AFGHANISTAN
601	BALUCHISTAN
602	PATHAN
603-606	BANGLADESHI
603	Bangladesh
603-606	East Pakistan
607-608	BHUTANESE
607-608	Bhotan
609-614	NEPALI
609-614	Nepal
615-679	ASIAN INDIAN
615	ASIAN INDIAN
615	Behar

**600-699**

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616-617  
618-619  
620-621  
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622-623  
624-625  
626-627  
628-629  
630-631  
632-633  
634-635  
636-637  
638-639  
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642-643  
644-645  
646-647  
648-649  
650-651  
652-653  
654-655  
656-657  
658-674  
675-679

**SOUTH ASIA—Con.**

Dravidian  
Hindu  
Indo Aryan  
Sikh  
KASHMIR  
BENGALI  
EAST INDIAN  
ANDAMAN ISLANDER  
Nocobar Islander  
ANDHRA PRADESH  
ASSAMESE  
GOANESE  
GUJARATI  
KARNATAKAN  
KERALAN  
MADHYA PRADESH  
MAHARASHTRAN  
MADRAS  
MYSORE  
NAGALAND  
ORISSA  
PONDICHERRY  
PUNJAB  
RAJASTHAN  
SIKKIM  
TAMIL NADU  
UTTAR PRADESH  
EAST INDIES

680-689  
680  
680  
680  
680-689

PAKISTANI  
Jammu  
Pakistan  
Sind  
West Pakistan

690-694  
690  
690  
690  
691  
692-694

SRI LANKAN  
SRI LANKAN  
Ceylon  
Sri Lanka  
SINGHALESE  
VEDDAH

695-699  
695  
695-699

MALDIVIAN  
Kampuchean  
Maldiv Islander

**700-799****OTHER ASIA**

700-702  
700  
700  
700  
700  
700-701  
702

BURMESE  
BURMESE  
Cachin  
Karen  
Mon  
Palaung  
SHAN

**700-799**

703-705  
703  
703  
703  
704-705

706-711  
706  
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708  
709-711

712-713  
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712-713

714-715  
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716-717  
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716-717

718-719

720-729  
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720-729

730-739  
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730  
730-731  
732-733  
734-735  
736-739

740-745  
740  
740  
740  
741

**OTHER ASIA—Con.**

CAMBODIAN  
CAMBODIAN  
Cambodia  
Kampuchea  
KHMER

CHINESE  
CHINESE  
China  
Jehol  
Sino Chinese  
Yao  
CANTONESE  
MANCHURIA  
MANDARIN

MONGOLIAN  
Buriat  
Mongolia

TIBETAN  
Tibet

HONG KONG  
Hong Kong Chinese  
Eastern Archipelago  
Riau Islander

MACAO

FILIPINO  
Cebuanos  
Philippines  
Tagalog

INDONESIAN  
INDONESIAN  
Ascension Islander  
Bangka  
Billiton  
Celebes Islander  
Dutch East Indian  
Indonesia  
Molucca Islander  
Portuguese Timor  
Spice Islander  
Sulawesi Islander  
BORNEO  
JAVA  
SUMATRA

JAPANESE  
JAPANESE  
Japan  
Nipponese  
ISSEI

**700-799****OTHER ASIA—Con.**

742  
743  
744  
745

NISEI  
SANSEI  
YONSEI  
GONSEI

746-747  
746-747

RYUKYU ISLANDER  
Northern Ryukyu Islander

748-749  
748-749

OKINAWAN  
Okinawa

750-764  
750  
750-764

KOREAN  
Chosen  
Korea

765-767  
765  
765  
765  
766-767

LAOTIAN  
LAOTIAN  
Lao  
Laos  
MEO

768-769  
768  
768  
768-769

HMONG  
Hmongtana  
Laohmong  
Mong

770  
770  
770  
770  
770

MALAYSIAN  
Malaysia  
Sakai  
Semang  
Senoi

771-773  
771  
771  
771-773

NORTH BORNEO  
Brunel  
Sabah  
Sarawak

774-775  
774-775

SINGAPOREAN  
Singapore

776-781  
776  
776  
776  
777  
777  
778-781

THAI  
THAI  
Siam  
Thailand  
BLACK THAI  
Thai Dam  
WESTERN LAO

782  
782

TAIWANESE  
Taiwan

783-784  
783-784

FORMOSAN  
Formosa

**700-799****OTHER ASIA—Con.**

785-789  
785  
785  
785  
786  
787  
788-789

VIETNAMESE  
VIETNAMESE  
Anam  
Vietnam  
KATU  
MA  
MNONG

790-791  
790-791

MONTAGNARD  
Cham

792  
792

INDO CHINESE  
Indochina

793  
793

EURASIAN  
Indoeuropean

794

AMERASIAN

795-799  
795  
795-799

ASIAN  
Asia  
Orient

**800-899****PACIFIC**

800-802  
800  
800  
800  
800  
800  
800  
801  
802

AUSTRALIAN  
AUSTRALIAN  
Australia  
New South Wales  
Northern Territory  
Queensland  
Victoria  
TASMANIAN  
AUSTRALIAN ABORIGINE

803-807  
803-807

NEW ZEALANDER  
New Zealand

808-810  
808  
808  
809  
809  
810

POLYNESIAN  
POLYNESIAN  
Norfolk Island  
KAPINGAMARANGAN  
Nukuoroan  
MAORI

811-813  
811  
811  
811-812  
813

HAWAIIAN  
HAWAIIAN  
Mixed Hawaiian  
Native Hawaiian  
PART HAWAIIAN

814, 861  
814  
814  
861

SAMOAN  
SAMOAN  
Samoa  
PART-SAMOAN



<b>800-899</b>	<b>PACIFIC—Con.</b>
815	TONGAN
815	Tonga
816	TOKELAUAN
816	Tokelau Islander
817	COOK ISLANDER
818	TAHITIAN
818	French Polynesia
818	Society Islander
819	NIUEAN
820	MICRONESIAN
820	Micronesia Islander
820	U.S. Trust Territory of the Pacific
821-822	GUAMANIAN
821	GUAMANIAN
821	Guam
822	CHAMORRO ISLANDER
823	SAIPANESE
823	Northern Marianas Islander
823	Saipan Islander
824	PALAUAN
825	MARSHALLESE
825	Marshall Islander
826	KOSRAEAN
827	PONAPEAN (POHNPEIAN)
827	Mokilese
827	Ngatikese
827	Pingelapese
828	TRUKESE (CHUUKESSE)
828	Hall Islander
828	Mortlockese
828	Namanouito
828	Pulapese
828	Pulasukese
828	Pulawatese
828	Tamatamian
828	Ulul
829	YAPESE
830	CAROLINIAN
830	Eauripikese
830	Faisian
830	Ifalukese
830	Lamotrekese

<b>800-899</b>	<b>PACIFIC—Con.</b>
830	Satawalese
830	Ulithian
830	Wolealan
831	KIRIBATESE
831	Gilbertese
832-833	NAURUAN
832	NAURUAN
833	TARAWA ISLANDER
834-839	TINIAN
840	MELANESIAN
841-842	FIJIAN
841-842	Fiji
843-844	NEW GUINEAN
843	NEW GUINEAN
844	PAPUAN
845	SOLOMON ISLANDER
845	British Solomons
846	NEW CALEDONIAN
847-849	VANUATUAN
847	New Hebrides Islander
847-849	Ni Vanuatu
850-859	PACIFIC ISLANDER
850	Campbell Islander
850	Christmas Islander
850	Kermadec Islander
850	Midway Islander
850	Phoenix Islander
850-859	Wake Islander
860	PACIFIC
860	Oceania
861	See SAMOAN (code 814)
862	CHAMOLINIAN
863-899	RESERVE CODE
864	RESERVE CODE 1
865	RESERVE CODE 2
866	RESERVE CODE 3
867	RESERVE CODE 4
868	RESERVE CODE 5
869	RESERVE CODE 6
870	RESERVE CODE 7
871	RESERVE CODE 8
872	RESERVE CODE 9

**800-899**

873	RESERVE CODE 10
874	RESERVE CODE 11
875	RESERVE CODE 12
876	RESERVE CODE 13
877	RESERVE CODE 14
878	RESERVE CODE 15
879	RESERVE CODE 16
880	RESERVE CODE 17
881	RESERVE CODE 18
882	RESERVE CODE 19
883	RESERVE CODE 20
884	RESERVE CODE 21
885	RESERVE CODE 22
886	RESERVE CODE 23
887	RESERVE CODE 24
888	RESERVE CODE 25
889	RESERVE CODE 26
890	RESERVE CODE 27
891	RESERVE CODE 28
892	RESERVE CODE 29
893	RESERVE CODE 30
894	RESERVE CODE 31
895	RESERVE CODE 32
896	RESERVE CODE 33
897	RESERVE CODE 34
898	RESERVE CODE 35
899	RESERVE CODE 36

**900-994****PACIFIC—Con.**

900-912	AFRICAN AMERICAN
900	AFRO AMERICAN
901	AFRO
902	AFRICAN AMERICAN
903	BLACK
904	NEGRO
905	NONWHITE
906	COLORED
906	Bilalian
906	Nigritian
907	CREOLE
908-912	MULATTO
913-923	NATIVE AMERICAN
913	CENTRAL AMERICAN INDIAN
914-918	SOUTH AMERICAN INDIAN
919	CHEROKEE
920	AMERICAN INDIAN
921	ALEUT
922	ESKIMO
923	INUIT
924-928	WHITE
924	WHITE
924	Caucasian

**NORTH AMERICA (EXCEPT HISPANIC)****900-994**

925	ANGLO
925	Swamp Yankee
925-926	Wasp
927	APPALACHIAN
927	Hillbilly
928	ARYAN
929	PENNSYLVANIA GERMAN
929	Amish
929	Pennsylvania Dutch
929	Mennonite
929	Hutterite
930	GREENLANDER
931-934	CANADIAN
931	CANADIAN
931	Albertan
931	British Columbia
931	Canada
931	Labrador
931	Manitoba
931	New Brunswick
931	Ontario
931	Prince Edward Islander
931	Saskatchewan
931-932	Yukon
933	NEWFOUNDLAND
934	NOVA SCOTIA
935	FRENCH CANADIAN
935	Canadien
935	Franco American
935	Quebec
935	Quebecois
936-938	ACADIAN/CAJUN
936	ACADIAN
936	Acadia
937-938	CAJUN
939	AMERICAN
940-992	UNITED STATES
940	UNITED STATES
941	ALABAMA
942	ALASKA
943	ARIZONA
944	ARKANSAS
945	CALIFORNIA
946	COLORADO
947	CONNECTICUT
948	DISTRICT OF COLUMBIA
949	DELAWARE
950	FLORIDA

**900-994****NORTH AMERICA (EXCEPT  
HISPANIC)—Con.**

951 IDAHO  
 952 ILLINOIS  
 953 INDIANA  
 954 IOWA  
 955 KANSAS  
 956 KENTUCKY  
 957 LOUISIANA  
 958 MAINE  
 959 MARYLAND  
 960 MASSACHUSETTS  
 961 MICHIGAN  
 962 MINNESOTA  
 963 MISSISSIPPI  
 964 MISSOURI  
 965 MONTANA  
 966 NEBRASKA  
 967 NEVADA  
 968 NEW HAMPSHIRE  
 969 NEW JERSEY  
 970 NEW MEXICO  
 971 NEW YORK  
 972 NORTH CAROLINA  
 973 NORTH DAKOTA  
 974-975 OHIO  
 976 OKLAHOMA  
 977 OREGON  
 978 PENNSYLVANIA  
 979 RHODE ISLAND  
 980 SOUTH CAROLINA  
 981 SOUTH DAKOTA  
 982 TENNESSEE  
 983 TEXAS  
 984 UTAH  
 985 VERMONT  
 986 VIRGINIA  
 987 WASHINGTON  
 988 WEST VIRGINIA  
 989 WISCONSIN  
 990 WYOMING  
 991-992 GEORGIA

993 SOUTHERNER

994 NORTH AMERICAN  
 994 North America

**995-999****RESIDUAL AND NO RESPONSE**

995 MIXTURE  
 996-997 UNCODABLE ENTRIES  
 998 OTHER RESPONSES  
 998 Adventist  
 998 Agnostic  
 998 Apostolic  
 998 Ashkenazim Jew  
 998 Atheist  
 998 Bahai  
 998 Baptist  
 998 Brethren  
 998 Buddhist  
 998 Catholic  
 998 Christian  
 998 Christian Scientist  
 998 Congregationalist  
 998 Episcopal  
 998 Evangelist  
 998 Hebrew  
 998 Holiness  
 998 Islam  
 998 Jain  
 998 Jehovahs Witnesses  
 998 Jewish  
 998 Latter Day Saints  
 998 Lutheran  
 998 Methodist  
 998 Mormon  
 998 Muslim  
 998 Orthodox  
 998 Pentecostal  
 998 Presbyterian  
 998 Protestant  
 998 Quaker  
 998 Roman Catholic  
 998 Salvation Army  
 998 Sephardic  
 998 Seventh Day Adventist  
 998 Shiite  
 998 Unitarian  
 998 Yiddish  
 998 Zoroastrian  
 999 NOT REPORTED

## GROUP QUARTERS

This section contains the alphabetical code list for group quarters. The group quarters code list was used by special place prelist enumerators to classify each type of group quarters. Each group quarters code is a two-digit number followed by either an "I" (institutional) or "N" (noninstitutional) suffix. The group quarters codes listed in the second column are for staff residing in group quarters.

GQ codes	Staff residents GQ codes	
87-N	--	<b>A. College Quarters Off Campus</b> (Code only if occupied by 10 or more unrelated persons. If less than 10, these are classified as a housing unit.)
		<b>B. Correctional Institutions</b>
22-I	22-N	1. <i>Federal Detention Centers</i> : Including Park Police, Bureau of Indian Affairs, Immigration and Naturalization Service (INS) centers, INS detention centers operated within local jails, and State and Federal prisons. INS detention centers also include INS Federal Alien Detention Facilities, INS Service Processing Centers, and INS Contract Detention Centers used to detain aliens under exclusion or deportation proceedings and aliens who require custodial departures.
21-I	21-N	2. <i>Federal Prisons</i> : Including criminally insane wards operated by a Federal prison within a mental or general hospital. If ward is not operated by a prison, code according to paragraph H4. For detention centers within Federal prisons, see B1 above.
23-I	23-N	3. <i>Halfway Houses</i> : Operated for correctional purposes, including probation and restitution centers, prerelease centers, and community-residential treatment centers.
27-I	27-N	4. <i>Local (County/City) Jails and Other Local Confinement Facilities</i> : Including work farms used to hold persons awaiting trial or serving time on relatively short sentences (usually of a year or less), and jails run by private businesses under contract.
95-I	95-N	5. <i>Military Stockades, Jails</i>
28-I	28-N	6. <i>Police Lockups</i> : Temporary-holding facilities or other facilities that hold persons only if they have not been formally charged in court (usually detained less than 48 hours).
24-I	24-N	7. <i>State Prisons</i> : Prisons run by private businesses (under contract); including criminally insane wards operated by a State prison within a mental or general hospital. If ward is not operated by a prison, code according to paragraph H4.
20-I	20-N	8. <i>Other Types of Correctional Institutions</i> : Including private correctional facilities and correctional facilities specifically for alcohol/drug abuse. (Use only as a last resort if no other type code applies.)
91-N	--	<b>C. Crews of Civilian Vessels</b>
		<b>D. Dormitories</b>
92-N	--	1. <i>Agriculture Workers' Dormitories on Farms</i> : Including migratory farm workers' camps on farms, bunkhouses for ranch hands, and other dormitories on farms including those on "tree farms."
87-N	--	2. <i>College Student Dormitories, and Fraternity and Sorority Houses (on campus)</i> : Including residential quarters for those in religious orders.
86-N	--	3. <i>Dormitories for Nurses and Interns in General and Military Hospitals</i>
97-N	--	4. <i>Military Quarters on Base</i> : Including barracks, bachelor officers quarters, unaccompanied officer personnel housing, unaccompanied enlisted personnel housing, and similar noninstitutional group living quarters for military personnel.
93-N	--	5. <i>Other Workers' Dormitories</i> : Including logging camps, construction workers' camps, fire-house dormitories, job-training camps, energy enclave (Alaska only), Alaskan pipeline camps, nonfarm migratory workers' camps, such as workers who lay oil and gas pipelines.
		6. <i>Runaway, Neglected, and Homeless Children</i> : Including emergency shelters/group homes which provide temporary sleeping facilities for juveniles, see paragraph F2.

GQ codes      Staff residents  
GQ codes

**E. Elderly:** Skilled nursing facilities, intermediate care facilities, long-term care rooms in wards or buildings on the grounds of hospitals, nursing, convalescent, and rest homes including soldiers', sailors', veterans', and fraternal or religious homes for the aged, with or without nursing care.

NOTE: Do not include dormitories for nurses' and interns'; see paragraph D3.

1. *Public Ownership*

- |      |      |  |
|------|------|--|
| 62-I | 62-N | a. Federal ownership: Including Veterans' Administration, domiciliary homes, and U.S. Naval homes.                   |
| 63-I | 63-N | b. State ownership   |
| 64-I | 64-N | c. County or city ownership  |
| 65-I | 65-N | d. Don't know if Federal, State, or county-city ownership (Use only as a last resort if no other type code applies.) |

2. *Private Ownership*

- |      |      |  |
|------|------|--|
| 66-I | 66-N | a. Private not-for-profit  |
| 67-I | 67-N | b. Private for profit  |
| 60-I | 60-N | c. Don't know if for profit or not (Use only as a last resort if no other type code applies.)                                  |
| 61-I | 61-N | 3. <i>Don't Know if Federal, State, Local, or Private Ownership</i> (Use only as a last resort if no other type code applies.) |

**F. Emergency Shelter/Street Night Enumeration ("S-NIGHT")**

- |      |    |  |
|------|----|--|
| 82-N | -- | 1. <i>Shelters for the Homeless with Sleeping Facilities:</i> Including emergency housing, missions and flophouses, Salvation Army shelters, hotels and motels charging \$12 or less a night (excluding taxes), hotels and motels used entirely for homeless persons, the group of rooms in hotels and motels used partially for the homeless, and similar places known to have persons with no usual home elsewhere who stay overnight. |
| 83-N | -- | 2. <i>Runaway, Neglected, and Homeless Children:</i> Including emergency shelters/group homes which provide temporary sleeping facilities for juveniles.   |
|      |    | 3. <i>Street Enumeration - Predesignated Sites</i>   |
| 84-N | -- | a. Nonstructure locations, other than commerce places: Including street corners, parks, bridges, abandoned and boarded-up buildings, noncommercial campsites ("tent cities"), and similar sites.   |
| 85-N | -- | b. Commerce places: Including railroad stations, airports, bus depots, subway stations, all-night movie theaters, all-night restaurants, emergency hospital waiting rooms, and other similar predesignated sites.  |
| 75-N | -- | 4. <i>Shelters for Abused Women</i> (Shelters against domestic violence)   |

**G. Group Homes:** Including those providing community-based care and supportive services such as halfway houses for the groups listed below. (Code only if occupied by 10 or more unrelated persons. If less than 10, these are classified as a housing unit.)

- |      |    |  |
|------|----|--|
| 76-N | -- | 1. <i>Drug/Alcohol Abuse:</i> Including group homes, detoxification centers, quarterway houses such as residential treatment facilities that work closely with an accredited hospital, halfway houses, recovery homes for ambulatory, and mentally competent recovering alcoholics who may be re-entering the work force. (Ask usual home elsewhere in these places. Include as living there only persons who have no usual home elsewhere.) |
| 29-N | -- | 2. <i>Maternity</i> (Homes for unwed mothers) (Ask usual home elsewhere in these places. Include as living there only persons who have no usual home elsewhere.)   |
|      |    | 3. <i>Mentally Ill</i>   |
| 16-N | -- | a. Federal   |
| 17-N | -- | b. State   |
| 18-N | -- | c. Private   |
| 19-N | -- | d. Don't know if public/private ownership (Use only as a last resort if no other type code applies.)   |

GQ codes	Staff residents GQ codes
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## G. Group Homes—Con.

### 4. *Mentally Retarded*

- |      |    |  |
|------|----|--|
| 56-N | -- | a. Federal   |
| 57-N | -- | b. State   |
| 58-N | -- | c. Private   |
| 59-N | -- | d. Don't know if public/private ownership (Use only as a last resort if no other type code applies.) |

### 5. *Physically Handicapped*

- |      |    |  |
|------|----|--|
| 72-N | -- | a. Public ownership  |
| 73-N | -- | b. Private ownership   |
| 74-N | -- | c. Don't know if public/private ownership (Use only as a last resort if no other type code applies.) |

6. *Runaway, Neglected, and Homeless Children:* Including emergency shelters/group homes which provide temporary sleeping facilities for juveniles, see paragraph F2.

- |      |    |  |
|------|----|--|
| 79-N | -- | 7. <i>Other Group Homes:</i> Including communes, foster care homes and job corps centers with 10 or more unrelated children. Do not include emergency housing for persons with no other home. See paragraph F1. (Use only as a last resort if no other type code applies.) |
|------|----|--|

## H. Hospitals/Schools for the Handicapped

### 1. *Dormitories for Nurses and Interns in General and Military Hospitals*

- |      |      |  |
|------|------|--|
| 86-N | --   |  |
| 70-I | 70-N | 2. <i>Drug/Alcohol Abuse:</i> Including hospitals, and hospital wards in psychiatric and general hospitals. These facilities/wards are in a medical setting equipped and designed for the diagnosis and treatment of medical or psychiatric illnesses associated with alcohol or drug abuse. Patients receive supervised medical/nursing care from a formally trained staff. For group homes, see paragraph G. |

### 3. *Hospitals for Chronically Ill*

- |      |      |  |
|------|------|--|
| 54-I | 86-N | a. Military hospitals or wards for chronically ill   |
| 55-I | 86-N | b. Other hospitals or wards for chronically ill: Including tuberculosis hospitals or wards, wards in general and Veterans' Administration hospitals for the chronically ill, neurological wards, hospices; wards for patients with Hansen's Disease (leprosy) and other incurable diseases; and other unspecified wards for the chronically ill. Do not include mental or alcohol/drug abuse hospitals or wards. |

4. *Mentally Ill (Psychiatric):* Hospitals or wards, including wards for the criminally insane not operated by a prison and psychiatric wards of general hospitals and veterans' hospitals. This is a medical setting designed for the treatment of mental illness. Patients receive supervised and medical/nursing care from a formally trained staff. Code wards for the mentally retarded according to paragraph H5. Do not include hospitals or wards for alcohol/drug abuse; see paragraph H2.

- |      |      |   |
|------|------|---|
| 46-I | 46-N | a. Federal ownership  |
| 47-I | 47-N | b. State or local ownership   |
| 48-I | 48-N | c. Private ownership  |
| 45-I | 45-N | d. Don't know if Federal, State, local, or private ownership (Use only as a last resort if no other type code applies.) |

5. *Mentally Retarded:* Schools, hospitals, wards, including wards in hospitals for the mentally ill, and intermediate care facilities for the mentally retarded. This is in a suitably-equipped setting and with supervised and medical/nursing care from a formally trained staff.

- |      |      |                             |
|------|------|-----------------------------|
| 41-I | 41-N | a. Federal ownership        |
| 43-I | 43-N | b. State or local ownership |

GQ codes	Staff residents GQ codes
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#### H. Hospitals/Schools for the Handicapped—Con.

- |      |      |  |
|------|------|--|
| 42-I | 42-N | c. Private ownership   |
| 40-I | 40-N | d. Don't know if Federal, State, local, or private ownership (Use only as a last resort if no other type code applies.)  |
|      |      | 6. <i>Physically Handicapped</i> : Including schools, hospitals, or wards in a suitably-equipped medical setting and designed primarily for the physically handicapped who receive supervised care and medical/nursing care from a formally trained staff.                         |
|      |      | a. Institutions for the deaf   |
| 38-I | 38-N | (1) Public ownership   |
| 39-I | 39-N | (2) Private ownership  |
| 37-I | 37-N | (3) Don't know if public/private ownership (Use only as a last resort if no other type code applies.)  |
|      |      | b. Institutions for the blind  |
| 35-I | 35-N | (1) Public ownership   |
| 36-I | 36-N | (2) Private ownership  |
| 34-I | 34-N | (3) Don't know if public/private ownership (Use only as a last resort if no other type code applies.)  |
|      |      | c. Orthopedic wards and institutions for physically handicapped: Including accident victims, and persons with polio, cerebral palsy, and muscular dystrophy.   |
| 32-I | 32-N | (1) Public ownership   |
| 33-I | 33-N | (2) Private ownership  |
| 31-I | 31-N | (3) Don't know if public/private ownership (Use only as a last resort if no other type code applies.)  |
| 53-I | 86-N | 7. <i>Wards in General and Military Hospitals for Patients Who Have No Usual Home Elsewhere</i> : Including maternity, neonatal, pediatric (including wards for boarder babies), military, surgical wards, and other purpose wards of hospitals and wards for infectious diseases. |
- Note: Do not include long-term care rooms for the elderly in wards or buildings on the grounds of hospitals, see paragraph E.

#### I. Hotels/Motels: "S-Night" locations, see paragraph F.

#### J. Juvenile Institutions: Including homes, schools, and hospitals.

##### 1. Long-Term Care (length of stay usually more than 30 days)

- |      |      |  |
|------|------|--|
|      |      | a. Neglected, abused, and dependent children: Including orphanages, homes, or residential care.  |
| 03-I | 03-N | (1) Public ownership   |
| 04-I | 04-N | (2) Private ownership  |
| 02-I | 02-N | (3) Don't know if public/private ownership (Use only as a last resort if no other type code applies.)  |
| 05-I | 05-N | b. Emotionally disturbed children: Including residential treatment centers (psychiatric care provided).  |
|      |      | c. Delinquent children: Placed by court, parents, or social service agency, in residential training school or home, including industrial schools, camps, or farms. |
| 12-I | 12-N | (1) Public ownership: Committed by courts.   |
| 15-I | 15-N | (2) Private ownership: Some are committed by courts, others are referred by parents or social service agencies because of delinquent behavior.                     |
| 11-I | 11-N | (3) Don't know if public/private ownership (Use only as a last resort if no other type code applies.)  |

GQ codes	Staff residents GQ codes
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**J. Juvenile Institutions:** Including homes, schools, and hospitals—Con.

**2. Short-term** (length of stay usually 30 days or less)

10-I	10-N
------	------

a. Delinquent children: Including those receiving temporary care in detention or diagnostic centers pending court disposition of case.

b. Runaway, neglected, and homeless children: Including emergency shelters/group homes which provide temporary sleeping facilities for juveniles, see paragraph F2.

01-I	01-N
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**3. Don't Know Type of Juvenile Institution:** Including homes, schools, hospitals, or wards for children. (Use only as a last resort if no other type code applies.)

**K. Military Quarters**

**1. On Base**

97-N	--
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a. Barracks, bachelor officers quarters, unaccompanied officer personnel housing, unaccompanied enlisted personnel housing, and similar noninstitutional group living quarters for military personnel

96-N	--
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b. Transient quarters (noninstitutional) for temporary residents (military or civilian)

86-N	--
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c. Dormitories for nurses and interns in general military hospitals

54-I	86-N
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d. Hospitals or wards for chronically ill

95-I	95-N
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e. Stockades and jails

98-N	--
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**2. Military Ships**

90-N	--
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**L. Natural Disaster:** Including those temporarily displaced by a natural disaster, such as "Hurricane Hugo."

89-N	--
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**M. Religious Group Quarters:** Including convents, monasteries, and rectories. Members of religious orders who live in a dormitory at a hospital or college were classified according to the type of place where they live, such as 86-N if at a general hospital, or 87-N if at a college. (Code only if occupied by 10 or more unrelated persons. If less than 10, these are classified as a housing unit.)

80-N	--
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**N. Rooming and Boarding Houses**

(Code only if occupied by 10 or more unrelated persons. If less than 10, these are classified as a housing unit.)

**O. Schools for the Handicapped:** See paragraphs H5 and H6.

**P. Shelter/Street Night Enumeration ("S-Night"):** See paragraph F.

94-N	--
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**Q. Other Nonhousehold Living Situations:** Including places not covered by other GQ codes shown herein, such as commercial or public campgrounds, campgrounds at racetracks, fairs, and carnivals, hostels, and similar transient sites. (Ask usual home elsewhere in these places. Include as living there only persons who have no usual home elsewhere.)

**R. Staff of Institutions:** Including staff personnel residing in group quarters. Code according to the appropriate type of group quarters shown under the column "Staff residents GQ codes." Staff residents are coded with an "N" suffix.

Note: Do not assign GQ codes to staff residents in group quarters where a "--" is shown.



## HISPANIC ORIGIN

This section contains the code list used to code write-in entries for the Hispanic origin question. A set of three-digit numerical codes was used to identify FOSDIC circles for the Hispanic origin categories listed in the Hispanic origin item on the questionnaire. These codes and their respective Hispanic origin categories are: Not Spanish/Hispanic-001, Mexican-002, Puerto Rican-003, Cuban-004, and Other Spanish/Hispanic-005. For sample (long-form) questionnaires, a separate set of three-digit numerical codes was used to code write-in entries provided by respondents to the "Yes, other Spanish/Hispanic" category of the Hispanic origin item. The list of origins with their associated three-digit codes is shown below. "n.e.c." is the abbreviation for not elsewhere classified.

<b>000-001, 006-199</b>	<b>NOT SPANISH/HISPANIC</b>	<b>231-249</b>	<b>SOUTH AMERICAN—Con.</b>
000-001	Not Spanish/Hispanic (FOSDIC circle)	234	Colombian
006-199	Not Spanish/Hispanic	235	Ecuadorian
		236	Paraguayan
		237	Peruvian
<b>200-209</b>	<b>SPANIARD</b>	238	Uruguayan
200	Spaniard	239	Venezuelan
201	Andalusian	240	Reserve Spanish/Hispanic 6
202	Asturian	241	Reserve Spanish/Hispanic 7
203	Castillian	242	Reserve Spanish/Hispanic 8
204	Catalonian	243	Reserve Spanish/Hispanic 9
205	Balearic Islander	244	Reserve Spanish/Hispanic 10
206	Gallego	245	Reserve Spanish/Hispanic 11
207	Valencian	246	Reserve Spanish/Hispanic 12
208	Canarian	247	South American Indian
209	Spanish Basque	248	Criollo
		249	South American
<b>002, 210-220</b>	<b>MEXICAN</b>	<b>250-260</b>	<b>LATIN AMERICAN</b>
002	Mexican (FOSDIC circle)	250	Latin American
210	Mexican	251	Latin
211	Mexican American	252	Latino
212	Mexicano	253	Reserve Spanish/Hispanic 13
213	Chicano	254	Reserve Spanish/Hispanic 14
214	La Raza	255	Reserve Spanish/Hispanic 15
215	Mexican American Indian	256	Reserve Spanish/Hispanic 16
216	Reserve Spanish/Hispanic 1	257	Reserve Spanish/Hispanic 17
217	Reserve Spanish/Hispanic 2	258	Reserve Spanish/Hispanic 18
218	Mexico	259	Reserve Spanish/Hispanic 19
219	Reserve Spanish/Hispanic 3	260	Reserve Spanish/Hispanic 20
220	Reserve Spanish/Hispanic 4		
<b>221-230</b>	<b>CENTRAL AMERICAN</b>	<b>003, 261-270</b>	<b>PUERTO RICAN</b>
221	Costa Rican	003	Puerto Rican (FOSDIC circle)
222	Guatemalan	261	Puerto Rican
223	Honduran	262	Reserve Spanish/Hispanic 21
224	Nicaraguan	263	Reserve Spanish/Hispanic 22
225	Panamanian	264	Reserve Spanish/Hispanic 23
226	Salvadoran	265	Reserve Spanish/Hispanic 24
227	Central American	266	Reserve Spanish/Hispanic 25
228	Central American Indian	267	Reserve Spanish/Hispanic 26
229	Canal Zone	268	Reserve Spanish/Hispanic 27
230	Reserve Spanish/Hispanic 5	269	Reserve Spanish/Hispanic 28
		270	Reserve Spanish/Hispanic 29
<b>231-249</b>	<b>SOUTH AMERICAN</b>		
231	Argentinean		
232	Bolivian		
233	Chilean		

**004, 271-274 CUBAN**

004 Cuban (FOSDIC circle)  
271 Cuban  
272 Reserve Spanish/Hispanic 30  
273 Reserve Spanish/Hispanic 31  
274 Reserve Spanish/Hispanic 32

**275-289 DOMINICAN**

275 Dominican  
276 Reserve Spanish/Hispanic 33  
277 Reserve Spanish/Hispanic 34  
278 Reserve Spanish/Hispanic 35  
279 Reserve Spanish/Hispanic 36  
280 Reserve Spanish/Hispanic 37  
281 Reserve Spanish/Hispanic 38  
282 Reserve Spanish/Hispanic 39  
283 Reserve Spanish/Hispanic 40  
284 Reserve Spanish/Hispanic 41  
285 Reserve Spanish/Hispanic 42

**275-289****DOMINICAN—Con.**

286 Reserve Spanish/Hispanic 43  
287 Reserve Spanish/Hispanic 44  
288 Reserve Spanish/Hispanic 45  
289 Reserve Spanish/Hispanic 46

**005, 290-999 OTHER SPANISH/HISPANIC**

005 Other Spanish/Hispanic (FOSDIC  
circle)  
290 Hispanic  
291 Spanish  
292 Californio  
293 Tejano  
294 Nuevo Mexicano  
295 Spanish American  
296 Spanish American Indian  
297 Meso American Indian  
298 Mestizo  
299-999 Other Spanish/Hispanic, n.e.c.

## INDUSTRY

The list presents the industrial classification developed for the 1990 Census of Population and Housing. There are 235 categories for the employed, with 1 additional category for the experienced unemployed, and 7 additional categories for the Armed Forces. These categories are aggregated into 13 major groups. The classification is developed from the 1987 Standard Industrial Classification. "n.e.c." is the abbreviation for not elsewhere classified.

### 000-039 AGRICULTURE, FORESTRY, AND FISHERIES

- 000-010 Agricultural production, crops (01)
- 011 Agricultural production, livestock (02)
- 012 Veterinary services (074)
- 013-020 Landscape and horticultural services (078)
- 021-030 Agricultural services, n.e.c. (071, 072, 075, 076)
- 031 Forestry (08)
- 032-039 Fishing, hunting, and trapping (09)

### 040-059 MINING

- 040 Metal mining (10)
- 041 Coal mining (12)
- 042 Oil and gas extraction (13)
- 043-059 Nonmetallic mining and quarrying, except fuel (14)

### 060-099 CONSTRUCTION (15, 16, 17)

### 100-399 MANUFACTURING

#### 100-229 Nondurable Goods

- 100-129 Food and kindred products
  - 100 Meat products (201)
  - 101 Dairy products (202)
  - 102-109 Canned, frozen and preserved fruits and vegetables (203)
  - 110 Grain mill products (204)
  - 111 Bakery products (205)
  - 112-119 Sugar and confectionery products (206)
  - 120 Beverage industries (208)
  - 121 Miscellaneous food preparations and kindred products (207, 209)
  - 122-129 Not specified food industries

#### 130-131 Tobacco manufactures (21)

#### 132-150 Textile mill products

- 132-139 Knitting mills (225)
- 140 Dyeing and finishing textiles, except wool and knit goods (226)
- 141 Carpets and rugs (227)
- 142-149 Yarn, thread, and fabric mills (221-224, 228)
- 150 Miscellaneous textile mill products (229)

#### 151-159 Apparel and other finished textile products

- 151 Apparel and accessories, except knit (231-238)
- 152-159 Miscellaneous fabricated textile products (239)

#### 160-170 Paper and allied products

- 160 Pulp, paper, and paperboard mills (261-263)
- 161 Miscellaneous paper and pulp products (267)
- 162-170 Paperboard containers and boxes (265)

**100-399****MANUFACTURING—Con.**

171-179

Printing, publishing, and allied industries

171

Newspaper publishing and printing (271)

172-179

Printing, publishing, and allied industries, except newspapers (272-279)

180-199

Chemicals and allied products

180

Plastics, synthetics, and resins (282)

181

Drugs (283)

182-189

Soaps and cosmetics (284)

190

Paints, varnishes, and related products (285)

191

Agricultural chemicals (287)

192-199

Industrial and miscellaneous chemicals (281, 286, 289)

200-209

Petroleum and coal products

200

Petroleum refining (291)

201-209

Miscellaneous petroleum and coal products (295, 299)

210-219

Rubber and miscellaneous plastics products

210

Tires and inner tubes (301)

211

Other rubber products, and plastics footwear and belting (302-306)

212-219

Miscellaneous plastics products (308)

220-229

Leather and leather products

220

Leather tanning and finishing (311)

221

Footwear, except rubber and plastic (313, 314)

222-229

Leather products, except footwear (315-317, 319)

230-399

Durable Goods

230-241

Lumber and wood products, except furniture

230

Logging (241)

231

Sawmills, planing mills, and millwork (242, 243)

232-240

Wood buildings and mobile homes (245)

241

Miscellaneous wood products (244, 249)

242-249

Furniture and fixtures (25)

250-269

Stone, clay, glass, and concrete products

250

Glass and glass products (321-323)

251

Cement, concrete, gypsum, and plaster products (324, 327)

252-260

Structural clay products (325)

261

Pottery and related products (326)

262-269

Miscellaneous nonmetallic mineral and stone products (328, 329)

270-309

Metal industries

270

Blast furnaces, steelworks, rolling and finishing mills (331)

271

Iron and steel foundries (332)

272-279

Primary aluminum industries (3334, part 334, 3353-3355, 3363, 3365)

280

Other primary metal industries (3331, 3339, part 334, 3351, 3356, 3357, 3364, 3366, 3369, 339)

281

Cutlery, handtools, and general hardware (342)

282-289

Fabricated structural metal products (344)

290

Screw machine products (345)

291

Metal forgings and stampings (346)

292-299

Ordnance (348)

300

Miscellaneous fabricated metal products (341, 343, 347, 349)

301-309

Not specified metal industries

**100-399****MANUFACTURING—Con.****310-339****Machinery and computing equipment**

310

Engines and turbines (351)

311

Farm machinery and equipment (352)

312-319

Construction and material handling machines (353)

320

Metalworking machinery (354)

321

Office and accounting machines (3578, 3579)

322-330

Computers and related equipment (3571-3577)

331

Machinery, except electrical, n.e.c. (355, 356, 358, 359)

332-339

Not specified machinery

**340-350****Electrical machinery, equipment, and supplies**

340

Household appliances (363)

341

Radio, TV, and communication equipment (365, 366)

342-349

Electrical machinery, equipment, and supplies, n.e.c. (361, 362, 364, 367, 369)

350

Not specified electrical machinery, equipment, and supplies

**351-370****Transportation equipment**

351

Motor vehicles and motor vehicle equipment (371)

352-359

Aircraft and parts (372)

360

Ship and boat building and repairing (373)

361

Railroad locomotives and equipment (374)

362-369

Guided missiles, space vehicles, and parts (376)

370

Cycles and miscellaneous transportation equipment (375, 379)

**371-389****Professional and photographic equipment, and watches**

371

Scientific and controlling instruments (381, 382 except 3827)

372-379

Medical, dental, and optical instruments and supplies (3827, 384, 385)

380

Photographic equipment and supplies (386)

381-389

Watches, clocks, and clockwork operated devices (387)

390

Toys, amusement, and sporting goods (394)

391

Miscellaneous manufacturing industries (39 except 394)

392-399

Not specified manufacturing industries

**400-499****TRANSPORTATION, COMMUNICATIONS, AND OTHER PUBLIC UTILITIES****400-439****Transportation**

400

Railroads (40)

401

Bus service and urban transit (41, except 412)

402-409

Taxicab service (412)

410

Trucking service (421, 423)

411

Warehousing and storage (422)

412-419

U.S. Postal Service (43)

420

Water transportation (44)

421

Air transportation (45)

422-431

Pipe lines, except natural gas (46)

432-439

Services incidental to transportation (47)

**440-449****Communications**

440

Radio and television broadcasting and cable (483, 484)

441

Telephone communications (481)

442-449

Telegraph and miscellaneous communications services (482, 489)

**450-499****Utilities and sanitary services**

450

Electric light and power (491)

**400-499****TRANSPORTATION, COMMUNICATIONS, AND OTHER PUBLIC UTILITIES—Con.**

- 451 Gas and steam supply systems (492, 496)
- 452-469 Electric and gas, and other combinations (493)
- 470 Water supply and irrigation (494, 497)
- 471 Sanitary services (495)
- 472-499 Not specified utilities

**500-579****WHOLESALE TRADE**

- 500-539 Durable Goods
  - 500 Motor vehicles and equipment (501)
  - 501 Furniture and home furnishings (502)
  - 502-509 Lumber and construction materials (503)
  - 510 Professional and commercial equipment and supplies (504)
  - 511 Metals and minerals, except petroleum (505)
  - 512-520 Electrical goods (506)
  - 521-529 Hardware, plumbing and heating supplies (507)
  - 530 Machinery, equipment, and supplies (508)
  - 531 Scrap and waste materials (5093)
  - 532-539 Miscellaneous wholesale, durable goods (509 except 5093)
- 540-579 Nondurable Goods
  - 540 Paper and paper products (511)
  - 541 Drugs, chemicals and allied products (512, 516)
  - 542-549 Apparel, fabrics, and notions (513)
  - 550 Groceries and related products (514)
  - 551 Farm-product raw materials (515)
  - 552-559 Petroleum products (517)
  - 560 Alcoholic beverages (518)
  - 561 Farm supplies (5191)
  - 562-570 Miscellaneous wholesale, nondurable goods (5192-5199)
  - 571-579 Not specified wholesale trade

**580-699****RETAIL TRADE**

- 580 Lumber and building material retailing (521, 523)
- 581 Hardware stores (525)
- 582-589 Retail nurseries and garden stores (526)
- 590 Mobile home dealers (527)
- 591 Department stores (531)
- 592-599 Variety stores (533)
- 600 Miscellaneous general merchandise stores (539)
- 601 Grocery stores (541)
- 602-609 Dairy products stores (545)
- 610 Retail bakeries (546)
- 611 Food stores, n.e.c. (542, 543, 544, 549)
- 612-619 Motor vehicle dealers (551, 552)
- 620 Auto and home supply stores (553)
- 621 Gasoline service stations (554)
- 622 Miscellaneous vehicle dealers (555, 556, 557, 559)
- 623-629 Apparel and accessory stores, except shoe (56, except 566)
- 630 Shoe stores (566)
- 631 Furniture and home furnishings stores (571)
- 632 Household appliance stores (572)
- 633-639 Radio, TV, and computer stores (5731, 5734)
- 640 Music stores (5735, 5736)
- 641 Eating and drinking places (58)
- 642-649 Drug stores (591)
- 650 Liquor stores (592)

**580-699****RETAIL TRADE—Con.**

- 651 Sporting goods, bicycles, and hobby stores (5941, 5945, 5946)
- 652-659 Book and stationery stores (5942, 5943)
- 660 Jewelry stores (5944)
- 661 Gift, novelty, and souvenir shops (5947)
- 662 Sewing, needlework and piece goods stores (5949)
- 663-669 Catalog and mail order houses (5961)
- 670 Vending machine operators (5962)
- 671 Direct selling establishments (5963)
- 672-680 Fuel dealers (598)
- 681 Retail florists (5992)
- 682-690 Miscellaneous retail stores (593, 5948, 5993-5995, 5999)
- 691-699 Not specified retail trade

**700-720****FINANCE, INSURANCE, AND REAL ESTATE**

- 700 Banking (60 except 603 and 606)
- 701 Savings institutions, including credit unions (603, 606)
- 702-709 Credit agencies, n.e.c. (61)
- 710 Security, commodity brokerage, and investment companies (62, 67)
- 711 Insurance (63, 64)
- 712-720 Real estate, including real estate-insurance offices (65)

**721-760****BUSINESS AND REPAIR SERVICES**

- 721 Advertising (731)
- 722-730 Services to dwellings and other buildings (734)
- 731 Personnel supply services (736)
- 732-739 Computer and data processing services (737)
- 740 Detective and protective services (7381, 7382)
- 741 Business services, n.e.c. (732, 733, 735, 7383-7389)
- 742-749 Automotive rental and leasing, without drivers (751)
- 750 Automotive parking and carwashes (752, 7542)
- 751 Automotive repair and related services (753, 7549)
- 752-759 Electrical repair shops (762, 7694)
- 760 Miscellaneous repair services (763, 764, 7692, 7699)

**761-799****PERSONAL SERVICES**

- 761 Private households (88)
- 762-769 Hotels and motels (701)
- 770 Lodging places, except hotels and motels (702, 703, 704)
- 771 Laundry, cleaning, and garment services (721 except part 7219)
- 772-779 Beauty shops (723)
- 780 Barber shops (724)
- 781 Funeral service and crematories (726)
- 782-789 Shoe repair shops (725)
- 790 Dressmaking shops (part 7219)
- 791-799 Miscellaneous personal services (722, 729)

**800-811****ENTERTAINMENT AND RECREATION SERVICES**

- 800 Theaters and motion pictures (781-783, 792)
- 801 Video tape rental (784)
- 802-809 Bowling centers (793)
- 810-811 Miscellaneous entertainment and recreation services (791, 794, 799)

**812-899****PROFESSIONAL AND RELATED SERVICES**

812-819	Offices and clinics of physicians (801, 803)
820	Offices and clinics of dentists (802)
821	Offices and clinics of chiropractors (8041)
822-829	Offices and clinics of optometrists (8042)
830	Offices and clinics of health practitioners, n.e.c. (8043, 8049)
831	Hospitals (806)
832-839	Nursing and personal care facilities (805)
840	Health services, n.e.c. (807, 808, 809)
841	Legal services (81)
842-849	Elementary and secondary schools (821)
850	Colleges and universities (822)
851	Vocational schools (824)
852-859	Libraries (823)
860	Educational services, n.e.c. (829)
861	Job training and vocational rehabilitation services (833)
862	Child day care services (part 835)
863-869	Family child care homes (part 835)
870	Residential care facilities, without nursing (836)
871	Social services, n.e.c. (832, 839)
872	Museums, art galleries, and zoos (84)
873-879	Labor unions (863)
880	Religious organizations (866)
881	Membership organizations, n.e.c. (861, 862, 864, 865, 869)
882-889	Engineering, architectural, and surveying services (871)
890	Accounting, auditing, and bookkeeping services (872)
891	Research, development, and testing services (873)
892	Management and public relations services (874)
893-899	Miscellaneous professional and related services (899)

**900-939****PUBLIC ADMINISTRATION**

900	Executive and legislative offices (911-913)
901-909	General government, n.e.c. (919)
910-920	Justice, public order, and safety (92)
921	Public finance, taxation, and monetary policy (93)
922-929	Administration of human resources programs (94)
930	Administration of environmental quality and housing programs (95)
931	Administration of economic programs (96)
932-939	National security and international affairs (97)

**940-991****ACTIVE DUTY MILITARY**

940-959	Armed Forces
940	Army
941	Air Force
942-949	Navy
950	Marines
951	Coast Guard
952-959	Armed Forces, Branch not specified
960-991	Military Reserves or National Guard

**992-999****EXPERIENCED UNEMPLOYED NOT CLASSIFIED BY INDUSTRY**

992-999	Unemployed, last worked 1984 or earlier
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## LANGUAGE

This section contains the code list of languages other than English spoken at home. Each entry was given a three-digit code. If more than one language was reported, only the first language reported was coded. The languages were coded originally into nearly 400 different language categories. The following list contains the principal name for each code. Since many languages and language groups are known by several names, additional illustrative names are shown for some languages. A complete list of all reported language names and categories into which they were coded may be obtained from the Census Bureau at the cost of reproduction.

000-600	NOT IN UNIVERSE	633	WELSH
601	JAMAICAN CREOLE	634	BRETON
602	KRIO	635	IRISH GAELIC
603	HAWAIIAN PIDGIN	636	SCOTTIC GAELIC
604	PIDGIN	637	GREEK
605	GULLAH	638	ALBANIAN
606	SARAMACCA	639	RUSSIAN
		640	BIELORUSSIAN
607	GERMAN	641	UKRAINIAN
607	Austrian	642	CZECH
607	Swiss	643	KASHUBIAN
608	PENNSYLVANIA DUTCH	644	LUSATIAN
609	YIDDISH	644	Sorbian
		644	Wendish
610	DUTCH	645	POLISH
610	Flemish	646	SLOVAK
		647	BULGARIAN
611	AFRIKAANS	648	MACEDONIAN
612	FRISIAN		
613	LUXEMBOURGIAN	649	SERBOCROATIAN
614	SWEDISH	649	Slavic
615	DANISH	649	Yugoslav
616	NORWEGIAN		
617	ICELANDIC	650	CROATIAN
618	FAROESE	651	SERBIAN
619	ITALIAN	652	SLOVENE
		653	LITHUANIAN
620	FRENCH	654	LETTISH
620	Walloon	655	ARMENIAN
621	PROVENCAL	656	PERSIAN
622	PATOIS	656	Farsi
		656	Pushto
623	FRENCH CREOLE		
623	Haitian Creole	657	PASHTO
		657	Afghan
624	CAJUN		
625	SPANISH	658	KURDISH
626	CATALONIAN	659	BALACHI
627	LADINO	660	TADZHIK
628	PACHUCO	661	OSSETE
629	PORTUGUESE	662	SANSKRIT
630	PAPIA MENTAE		
631	RUMANIAN	663	HINDI AND RELATED
		663	Hindi
632	RHAETO-ROMANIC	663	India
632	Romansch	663	Urdu

664	BENGALI	706	MUNDA
665	PANJABI	707	BURUSHASKI
666	MARATHI		
667	GUJARATHI	708	CHINESE
668	BIHARI	708	Cantonese
669	RAJASTHANI	708	Yueh
670	ORIYA	708	Min
671	BHILI		
672	ASSAMESE	709	HAKKA
673	KASHMIRI	709	Fukien
674	NEPALI	709	K'echia
675	SINDHI		
676	MALDIVIAN	710	KAN
677	SINHALESE	710	Nan Chang
678	ROMANY		
679	FINNISH	711	HSIANG
680	ESTONIAN	711	Hunan
681	LAPP		
682	HUNGARIAN	712	MANDARIN
		712	Honan
683	OTHER URALIC LANGUAGES	712	Hopel
683	Cheremis	712	Pei
683	Mordvin		
683	Samoyed	713	FUCHOW
683	Ugric	713	Min Pel
683	Yenisei		
		714	FORMOSAN
684	CHUVASH	714	Min Nan
685	KARAKALPAK		
686	KAZAKH	715	WU
687	KIRGHIZ	716	TIBETAN
688	KARACHAY	717	BURMESE
688	Tatar	717	Tonkin
689	UIGHUR	718	KAREN
689	Uzbek	719	KACHIN
690	AZERBAIJANI	720	THAI
691	TURKISH	720	Kam
692	TURKMEN	720	Lao
693	YAKUT	720	Laotian
694	MONGOLIAN	720	Tung
695	TUNGUS		
		721	MIAO-YAO
696	CAUCASIAN		
696	Avar	722	MIAO
696	Georgian	722	Hmong
697	BASQUE	723	JAPANESE
698	DRAVIDIAN	724	KOREAN
699	BRAHUI	725	AINU
700	GONDI		
701	TELUGU	726	MON-KHMER
702	KANNADA	726	Cambodian
703	MALAYALAM	726	Khmer
704	TAMIL	726	Mon
705	KURUKH		

727	SIBERIAN LANGUAGES, not elsewhere classified	768	TONGAN
728	VIETNAMESE	769	NIUEAN
729	MUONG	770	TOKELAUAN
730	BUGINESE	771	FIJIAN
731	MOLUCCAN	772	MARQUESAN
732	INDONESIAN	773	RAROTONGAN
733	ACHINESE	774	MAORI
734	BALINESE	775	NUKUORO
735	CHAM	776	HAWAIIAN
736	JAVANESE	777	ARABIC
737	MADURESE	778	HEBREW
738	MALAGASY	779	SYRIAC
739	MALAY	779	Aramaic
740	MINANGKABAU	779	Assyrian
741	SUNDANESE	779	Chaldean
742	TAGALOG	780	AMHARIC
742	Filipino	780	Tigre
743	BISAYAN	781	BERBER
743	Ilongo	782	CHADIC
744	SEBUANO	782	Hamitic
745	PANGASINAN	782	Hausa
746	ILOCANO	783	CUSHITE
746	Igorot	783	Beja
747	BIKOL	783	Somali
748	PAMPANGAN	784	SUDANIC
749	GORONTALO	784	Dinka
750	MICRONESIAN	784	Gambai
751	CAROLINIAN	784	Sudanese
752	CHAMORRO	785	NILOTIC
753	GILBERTESE	785	Acholi
754	KUSAIEAN	785	Luo
755	MARSHALLESE	785	Nuer
756	MOKILESE	786	NILO-HAMITIC
757	MORTLOCKESE	786	Bari
758	NAURUAN	786	Masai
759	PALAU	787	NUBIAN
760	PONAPEAN	788	SAHARAN
761	TRUKESE	789	NILO-SAHARAN
762	ULITHEAN	789	Fur
763	WOLEAI-ULITHI	789	Songhai
763	Eauripik	790	KHOISAN
763	Ifaluk	790	Bushman
764	YAPESE	791	SWAHILI
765	INDO-PACIFIC LANGUAGES, not elsewhere classified	792	BANTU
765	Melanesian	792	Bembe
766	POLYNESIAN		
767	SAMOAN		

792	Botswana	814	KICKAPOO
792	Chaga	815	MENOMINI
792	Fan		
792	Kikuyu	816	FRENCH CREE
792	Kongo	816	Metis
792	Luganda		
792	Naebele	817	MIAMI
792	Xhosa	818	MICMAC
792	Zulu		
793	MANDE	819	OJIBWA
793	Kpelle	819	Chippewa
793	Mandingo		
794	FULANI	820	OTTAWA
795	GUR	821	PASSAMAQUODDY
795	Dagomba	821	Malecite
796	KRU	822	PENOBSCOT
796	Damomeen	823	ABNAKI
796	Egbo	824	POTAWATOMI
796	Ibo	825	SHAWNEE
796	Nigerian	826	WIYOT
796	Yoruba	827	YUROK
		828	KUTENAI
		829	MAKAH
797	EFIK	830	KWAKIUTL
797	Ibibio	830	Quileute
798	MBUM AND RELATED	831-832	NOOTKA
799	AFRICAN, not further specified	833	LOWER CHEHALIS
800	ALEUT		
801	PACIFIC GULF YUPIK	834	UPPER CHEHALIS
801	Pacific Eskimo	834	Chehalis
		834	Satsop
802	ESKIMO	835	CLALLAM
803	INUPIK	836	COEUR D'ALENE
803	Inuit	836	Skitsamish
804	SAINT LAWRENCE ISLAND YUPIK	837	COLUMBIA
805	YUPIK	837	Chelan
806	ALGONQUIAN	837	Wenatchee
807	ARAPAHO		
		838	COWLITZ
808	ATSINA		
808	Gros Ventre	839	SALISH
		839	Flathead
809	BLACKFOOT		
810	CHEYENNE	840	NOOTSACK
811	CREE	841	OKANOGAN
812	DELAWARE	842	PUGET SOUND SALISH
812	Lenni-Lenape	842	Duwamish
		842	Nisqualli
813	FOX	842	Puyallup
813	Sac	842	Skagit

842	Snohomish	869	SOUTHERN MAIDU
842	Suquamish	869	Nisenan
843	QUINAULT	870	COAST MIWOK
843	Queets	870	Bodega
		870	Marin
844	TILLAMOOK		
845	TWANA	871	PLAINS MIWOK
846	HAIDA		
847	ATHAPASCAN	872	SIERRA MIWOK
848	AHTENA	872	Miwok
849	HAN		
850	INGALIT	873	NOMLAKI
851	KOYUKON	873	Tehama
852	KUCHIN		
853	UPPER KUSKOKWIM	874	PATWIN
854	TANAINA	874	Colouse
		874	Suisun
855	TANANA		
855	Minto	875	WINTUN
		876	FOOTHILL NORTH YOKUTS
856	TANACROSS	877	TACHI
857	UPPER TANANA	878	SANTIAM
857	Nabesna	878	Calapooya
857	Tetlin	878	Wapatu
858	TUTCHONE	879	SIUSLAW
		879	Coos
859	CHASTA COSTA	879	Lower Umpqua
859	Chetco		
859	Coquille	880	KLAMATH
859	Smith River Athapaskan	880	Modoc
860	HUPA	881	NEZ PERCE
861	OTHER ATHAPASCAN-EYAK	882	SAHAPTIAN
	LANGUAGES	882	Celilo
861	Cahto	882	Klikitat
861	Mattole	882	Palouse
861	Wallaki	882	Tenino
		882	Umatilla
862	APACHE	882	Warm Springs
863	KIOWA	882	Yakima
864	NAVAHO		
865	EYAK	883	UPPER CHINOOK
		883	Chinook
866	TLINGIT	883	Clackamas
866	Chilkat	883	Multnomah
866	Sitka	883	Wasco
866	Tongass	883	Wishram
866	Yakutat		
		884	TSIMSHIAN
867	MOUNTAIN MAIDU	885	ACHUMAWI
867	Maidu	886	ATSUGEWI
		887	KAROK
868	NORTHWEST MAIDU	888	POMO
868	Concow	889	SHASTAN

890 WASHO  
 891 UP RIVER YUMAN  
 892 COCOMARICOPA  
 893 MOHAVE  
 894 YUMA  
 895 DIEGUENO  
 896 DELTA RIVER YUMAN  
 897 UPLAND YUMAN  
 898 HAVASUPAI  
 899 WALAPAI  
 900 YAVAPAI  
 901 CHUMASH  
 902 TONKAWA  
 903 YUCHI

904 CROW  
 904 Absaroke

905 HIDATSA  
 906 MANDAN

907 DAKOTA  
 907 Brule  
 907 Lakota  
 907 Oglala  
 907 Sioux

908 CHIWERE  
 909 MINNEBAGO

924 KERES  
 925 IROQUOIS  
 926 MOHAWK  
 927 ONEIDA  
 928 ONONDAGA  
 929 CAYUGA  
 930 SENECA  
 931 TUSCARORA

932 WYANDOT  
 932 Huron

933 CHEROKEE  
 934 ARIKARA  
 935 CADDO  
 936 PAWNEE  
 937 WICHITA  
 938 COMANCHE

939 MONO  
 939 Owens Valley Paiute

940 PAIUTE

941 NORTHERN PAIUTE  
 941 Bannock  
 941 Num  
 941 Snake

910 KANSA  
 910 Kaw

911 OMAHA  
 912 OSAGE  
 913 PONCA

914 QUAPAW  
 914 Arkansas

915 ALABAMA

916 CHOCTAW  
 916 Chickasaw

943 CHEMEHUEVI  
 944 KAWAIIISU  
 945 UTE  
 946 SHOSHONI  
 947 PANAMINT  
 948 NAVAJO

949 SARICILLA  
 950 CUPENO  
 951 LUISENO  
 952 SERRANO  
 953 TUBATULABAL

954 PIMA

918 HICHITA  
 918 Apalachicola

919 KOASATI

920 MUSKOGEE  
 920 Creek  
 920 Seminole  
 921 CHETEMACHA  
 922 YUKI  
 923 WAPPO

956 AZTECAN  
 956 Mexicano  
 956 Nahua

957-958 SONORAN, not elsewhere classified  
 957 Cahita  
 957 Guasave  
 957 Huichole  
 957 Nayit  
 957-958 Tarahumara

959	PICURIS	971	Mixtec
959	Northern Tiwa	971	Otomi
959	Taos	971	Popoloc
		971	Zapoteca
960	TIWA		
960	Isleta	972	QUECHUA
960	Ysleta	973	AYMARA
961	SANDIA	974	ARAWAKIAN
		974	Araua
962	TEWA	974	Carib
962	Hano	974	Guajiro
962	Hopi-Tewa	974	Kitemoca
962	San Ildefonso	974	Tatu
962	San Juan		
962	Santa Clara	975	CHIBCHAN
		975	Boruca
963	TOWA	975	Cuna
964	ZUNI	975	Guaymi
965	CHINOOK JARGON	975	Ica
966	AMERICAN INDIAN		
		976	TUPI-GUARANI
967	MISUMALPAN	976	Guajibo
967	Matagalpa	976	Guarani
967	Miskito	976	Siriono
967	Sumu		
		977	JICARILLA
968	MAYAN LANGUAGES	977	Lipan
968	Cakchiquel		
968	Chol	978	CHIRICAHUA
968	Guastec	978	Mescalero
968	Guatemala		
968	Ixil	979	SAN CARLOS
968	Kechi	979	Cibecue
968	Mam	979	San Carlos
968	Maya	979	San Carlos Apache
968	Queche	979	White Mountain
968	Yucateca		
		980	KIOWA-APACHE
969	TARASCAN	981	KALISPEL
		982	SPOKANE
970	MAPUCHE	983-998	LANGUAGE SPECIFIED, NOT LISTED
970	Araucanian	999	NOT REPORTED
970	Chilote		
971	OTO-MANGUEN		
971	Ixatec		

## OCCUPATION

The list presents the occupational classification developed for the 1990 Census of Population and Housing. There are 500 categories for the employed with 1 additional category for the experienced unemployed and 3 additional categories for the Armed Forces. These categories are grouped into 6 summary groups and 13 major groups. The classification is developed from the 1980 Standard Occupational Classification. "n.e.c." is the abbreviation for not elsewhere classified.

### 000-202      **MANAGERIAL AND PROFESSIONAL SPECIALTY OCCUPATIONS**

#### 000-042      Executive, Administrative, and Managerial Occupations

- 000-003      Legislators (111)
- 004      Chief executives and general administrators, public administration (112)
- 005      Administrators and officials, public administration (1132-1139)
- 006      Administrators, protective services (1131)
- 007      Financial managers (122)
- 008      Personnel and labor relations managers (123)
- 009-012      Purchasing managers (124)
- 013      Managers, marketing, advertising, and public relations (125)
- 014      Administrators, education and related fields (128)
- 015      Managers, medicine and health (131)
- 016      Postmasters and mail superintendents (1344)
- 017      Managers, food serving and lodging establishments (1351)
- 018      Managers, properties and real estate (1353)
- 019-020      Funeral directors (part 1359)
- 021      Managers, service organizations, n.e.c. (127, 1352, 1354, part 1359)
- 022      Managers and administrators, n.e.c. (121, 126, 132-1343, 136-139)

#### 023-042      Management Related Occupations

- 023      Accountants and auditors (1412)
- 024      Underwriters (1414)
- 025      Other financial officers (1415, 1419)
- 026      Management analysts (142)
- 027      Personnel, training, and labor relations specialists (143)
- 028      Purchasing agents and buyers, farm products (1443)
- 029-032      Buyers, wholesale and retail trade except farm products (1442)
- 033      Purchasing agents and buyers, n.e.c. (1449)
- 034      Business and promotion agents (145)
- 035      Construction inspectors (1472)
- 036      Inspectors and compliance officers, except construction (1473)
- 037-042      Management related occupations, n.e.c. (149)

#### 043-202      Professional Specialty Occupations

- 043-063      Engineers, Architects, and Surveyors
- 043      Architects (161)
- 044-062      Engineers
- 044      Aerospace (1622)
- 045      Metallurgical and materials (1623)
- 046      Mining (1624)
- 047      Petroleum (1625)
- 048      Chemical (1626)
- 049-052      Nuclear (1627)
- 053      Civil (1628)
- 054      Agricultural (1632)
- 055      Electrical and electronic (1633, 1636)
- 056      Industrial (1634)
- 057      Mechanical (1635)



**000-202****MANAGERIAL AND PROFESSIONAL SPECIALTY OCCUPATIONS—Con.**

058	Marine and naval architects (1637)
059-062	Engineers, n.e.c. (1639)
063	Surveyors and mapping scientists (164)
064-068	Mathematical and Computer Scientists
064	Computer systems analysts and scientists (171)
065	Operations and systems researchers and analysts (172)
066	Actuaries (1732)
067	Statisticians (1733)
068	Mathematical scientists, n.e.c. (1739)
069-083	Natural Scientists
069-072	Physicists and astronomers (1842, 1843)
073	Chemists, except biochemists (1845)
074	Atmospheric and space scientists (1846)
075	Geologists and geodesists (1847)
076	Physical scientists, n.e.c. (1849)
077	Agricultural and food scientists (1853)
078	Biological and life scientists (1854)
079-082	Forestry and conservation scientists (1852)
083	Medical scientists (1855)
084-094	Health Diagnosing Occupations
084	Physicians (261)
085	Dentists (262)
086	Veterinarians (27)
087	Optometrists (281)
088	Podiatrists (283)
089-094	Health diagnosing practitioners, n.e.c. (289)
095-112	Health Assessment and Treating Occupations
095	Registered nurses (29)
096	Pharmacists (301)
097	Dietitians (302)
098-105	Therapists
098	Respiratory therapists (3031)
099-102	Occupational therapists (3032)
103	Physical therapists (3033)
104	Speech therapists (3034)
105	Therapists, n.e.c. (3039)
106-112	Physicians' assistants (304)
113-154	Teachers, Postsecondary
113	Earth, environmental, and marine science teachers (2212)
114	Biological science teachers (2213)
115	Chemistry teachers (2214)
116	Physics teachers (2215)
117	Natural science teachers, n.e.c. (2216)
118	Psychology teachers (2217)
119-122	Economics teachers (2218)
123	History teachers (2222)
124	Political science teachers (2223)
125	Sociology teachers (2224)
126	Social science teachers, n.e.c. (2225)
127	Engineering teachers (2226)
128	Mathematical science teachers (2227)

## 000-202

**MANAGERIAL AND PROFESSIONAL SPECIALTY OCCUPATIONS—Con.**

129-132	Computer science teachers (2228)
133	Medical science teachers (2231)
134	Health specialties teachers (2232)
135	Business, commerce, and marketing teachers (2233)
136	Agriculture and forestry teachers (2234)
137	Art, drama, and music teachers (2235)
138	Physical education teachers (2236)
139-142	Education teachers (2237)
143	English teachers (2238)
144	Foreign language teachers (2242)
145	Law teachers (2243)
146	Social work teachers (2244)
147	Theology teachers (2245)
148	Trade and industrial teachers (2246)
149-152	Home economics teachers (2247)
153	Teachers, postsecondary, n.e.c. (2249)
154	Postsecondary teachers, subject not specified
155-162	Teachers, Except Postsecondary
155	Teachers, prekindergarten and kindergarten (231)
156	Teachers, elementary school (232)
157	Teachers, secondary school (233)
158	Teachers, special education (235)
159-162	Teachers, n.e.c. (236, 239)
163	Counselors, Educational and Vocational (24)
164-165	Librarians, Archivists, and Curators
164	Librarians (251)
165	Archivists and curators (252)
166-173	Social Scientists and Urban Planners
166	Economists (1912)
167	Psychologists (1915)
168	Sociologists (1916)
169-172	Social scientists, n.e.c. (1913, 1914, 1919)
173	Urban planners (192)
174-177	Social, Recreation, and Religious Workers
174	Social workers (2032)
175	Recreation workers (2033)
176	Clergy (2042)
177	Religious workers, n.e.c. (2049)
178-182	Lawyers and Judges
178	Lawyers (211)
179-182	Judges (212)
183-202	Writers, Artists, Entertainers, and Athletes
183	Authors (321)
184	Technical writers (398)
185	Designers (322)
186	Musicians and composers (323)
187	Actors and directors (324)
188	Painters, sculptors, craft-artists, and artist printmakers (325)
189-192	Photographers (326)

**000-202      MANAGERIAL AND PROFESSIONAL SPECIALTY OCCUPATIONS—Con.**

193              Dancers (327)  
194              Artists, performers, and related workers, n.e.c. (328, 329)  
195-196        Editors and reporters (331)  
197              Public relations specialists (332)  
198              Announcers (333)  
199-202        Athletes (34)

**203-402      TECHNICAL, SALES, AND ADMINISTRATIVE SUPPORT OCCUPATIONS**

**203-242      Technicians and Related Support Occupations**

203-212        Health Technologists and Technicians  
203              Clinical laboratory technologists and technicians (362)  
204              Dental hygienists (363)  
205              Health record technologists and technicians (364)  
206              Radiologic technicians (365)  
207              Licensed practical nurses (366)  
208-212        Health technologists and technicians, n.e.c. (369)

213-242        Technologists and Technicians, Except Health  
213-222        Engineering and Related Technologists and Technicians  
213              Electrical and electronic technicians (3711)  
214              Industrial engineering technicians (3712)  
215              Mechanical engineering technicians (3713)  
216              Engineering technicians, n.e.c. (3719)  
217              Drafting occupations (372)  
218-222        Surveying and mapping technicians (373)

223-225        Science Technicians  
223              Biological technicians (382)  
224              Chemical technicians (3831)  
225              Science technicians, n.e.c. (3832, 3833, 384, 389)

226-242        Technicians, Except Health, Engineering, and Science  
226              Airplane pilots and navigators (825)  
227              Air traffic controllers (392)  
228              Broadcast equipment operators (393)  
229-232        Computer programmers (3971, 3972)  
233              Tool programmers, numerical control (3974)  
234              Legal assistants (396)  
235-242        Technicians, n.e.c. (399)

**243-302      Sales Occupations**

243-252        Supervisors and Proprietors, Sales Occupations (40)  
253-257        Sales Representatives, Finance and Business Services  
253              Insurance sales occupations (4122)  
254              Real estate sales occupations (4123)  
255              Securities and financial services sales occupations (4124)  
256              Advertising and related sales occupations (4153)  
257              Sales occupations, other business services (4152)

258-262        Sales Representatives, Commodities, Except Retail  
258              Sales engineers (421)  
259-262        Sales representatives, mining, manufacturing, and wholesale (423, 424)

**203-402****TECHNICAL, SALES, AND ADMINISTRATIVE SUPPORT OCCUPATIONS—Con.****263-282****Sales Workers, Retail and Personal Services****263**

Sales workers, motor vehicles and boats (4342, 4344)

**264**

Sales workers, apparel (4346)

**265**

Sales workers, shoes (4351)

**266**

Sales workers, furniture and home furnishings (4348)

**267**

Sales workers, radio, TV, hi-fi, and appliances (4343, 4352)

**268**

Sales workers, hardware and building supplies (4353)

**269-273**

Sales workers, parts (4367)

**274**

Sales workers, other commodities (4345, 4347, 4354, 4356, 4359, 4362, 4369)

**275**

Sales counter clerks (4363)

**276**

Cashiers (4364)

**277**

Street and door-to-door sales workers (4366)

**278-282**

News vendors (4365)

**283-302****Sales Related Occupations****283**

Demonstrators, promoters and models, sales (445)

**284**

Auctioneers (447)

**285-302**

Sales support occupations, n.e.c. (444, 446, 449)

**303-402****Administrative Support Occupations, Including Clerical****303-307****Supervisors, Administrative Support Occupations****303**

Supervisors, general office (4511, 4513, 4514, 4516, 4519, 4529)

**304**

Supervisors, computer equipment operators (4512)

**305**

Supervisors, financial records processing (4521)

**306**

Chief communications operators (4523)

**307**

Supervisors, distribution, scheduling, and adjusting clerks (4522, 4524-4528)

**308-312****Computer Equipment Operators****308**

Computer operators (4612)

**309-312**

Peripheral equipment operators (4613)

**313-315****Secretaries, Stenographers, and Typists****313**

Secretaries (4622)

**314**

Stenographers (4623)

**315**

Typists (4624)

**316-324****Information Clerks****316**

Interviewers (4642)

**317**

Hotel clerks (4643)

**318**

Transportation ticket and reservation agents (4644)

**319-322**

Receptionists (4645)

**323-324**

Information clerks, n.e.c. (4649)

**325-336****Records Processing Occupations, Except Financial****325**

Classified-ad clerks (4662)

**326**

Correspondence clerks (4663)

**327**

Order clerks (4664)

**328**

Personnel clerks, except payroll and timekeeping (4692)

**329-334**

Library clerks (4694)

**335**

File clerks (4696)

**336**

Records clerks (4699)

**337-344****Financial Records Processing Occupations****337**

Bookkeepers, accounting, and auditing clerks (4712)

**338**

Payroll and timekeeping clerks (4713)

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**203-402****TECHNICAL, SALES, AND ADMINISTRATIVE SUPPORT OCCUPATIONS—Con.**

339-342	Billing clerks (4715)
343	Cost and rate clerks (4716)
344	Billing, posting, and calculating machine operators (4718)
345-347	Duplicating, Mail and Other Office Machine Operators
345	Duplicating machine operators (4722)
346	Mail preparing and paper handling machine operators (4723)
347	Office machine operators, n.e.c. (4729)
348-353	Communications Equipment Operators
348-352	Telephone operators (4732)
353	Communications equipment operators, n.e.c. (4733, 4739)
354-358	Mail and Message Distributing Occupations
354	Postal clerks, except mail carriers (4742)
355	Mail carriers, postal service (4743)
356	Mail clerks, except postal service (4744)
357-358	Messengers (4745)
359-374	Material Recording, Scheduling, and Distributing Clerks
359-362	Dispatchers (4751)
363	Production coordinators (4752)
364	Traffic, shipping, and receiving clerks (4753)
365	Stock and inventory clerks (4754)
366	Meter readers (4755)
368-372	Weighers, measurers, checkers, and samplers (4756, 4757)
373	Expeditors (4758)
374	Material recording, scheduling, and distributing clerks, n.e.c. (4759)
375-378	Adjusters and Investigators
375	Insurance adjusters, examiners, and investigators (4782)
376	Investigators and adjusters, except insurance (4783)
377	Eligibility clerks, social welfare (4784)
378	Bill and account collectors (4786)
379-402	Miscellaneous Administrative Support Occupations
379-382	General office clerks (463)
383	Bank tellers (4791)
384	Proofreaders (4792)
385	Data-entry keyers (4793)
386	Statistical clerks (4794)
387-388	Teachers' aides (4795)
389-402	Administrative support occupations, n.e.c. (4787, 4799)

**403-472****SERVICE OCCUPATIONS**

403-412	Private Household Occupations
403	Launderers and ironers (503)
404	Cooks, private household (504)
405	Housekeepers and butlers (505)
406	Child care workers, private household (506)
407-412	Private household cleaners and servants (502, 507, 509)
413-432	Protective Service Occupations
413-415	Supervisors, Protective Service Occupations
413	Supervisors, firefighting and fire prevention occupations (5111)

**403-472****SERVICE OCCUPATIONS—Con.**

- 414 Supervisors, police and detectives (5112)
- 415 Supervisors, guards (5113)
- 416-417 Firefighting and Fire Prevention Occupations
- 416 Fire inspection and fire prevention occupations (5122)
- 417 Firefighting occupations (5123)
- 418-424 Police and Detectives
- 418-422 Police and detectives, public service (5132)
- 423 Sheriffs, bailiffs, and other law enforcement officers (5134)
- 424 Correctional institution officers (5133)
- 425-432 Guards
- 425 Crossing guards (5142)
- 426 Guards and police, except public service (5144)
- 427-432 Protective service occupations, n.e.c. (5149)

**433-472****Service Occupations, Except Protective and Household**

- 433-444 Food Preparation and Service Occupations
- 433 Supervisors, food preparation and service occupations (5211)
- 434 Bartenders (5212)
- 435 Waiters and waitresses (5213)
- 436-437 Cooks (5214, 5215)
- 438 Food counter, fountain and related occupations (5216)
- 439-442 Kitchen workers, food preparation (5217)
- 443 Waiters' /waitresses' assistants (5218)
- 444 Miscellaneous food preparation occupations (5219)

**445-447****Health Service Occupations**

- 445 Dental assistants (5232)
- 446 Health aides, except nursing (5233)
- 447 Nursing aides, orderlies, and attendants (5236)

**448-455****Cleaning and Building Service Occupations, Except Household**

- 448 Supervisors, cleaning and building service workers (5241)
- 449-452 Maids and housemen (5242, 5249)
- 453 Janitors and cleaners (5244)
- 454 Elevator operators (5245)
- 455 Pest control occupations (5246)

**456-472****Personal Service Occupations**

- 456 Supervisors, personal service occupations (5251)
- 457 Barbers (5252)
- 458 Hairdressers and cosmetologists (5253)
- 459-460 Attendants, amusement and recreation facilities (5254)
- 461 Guides (5255)
- 462 Ushers (5256)
- 463 Public transportation attendants (5257)
- 464 Baggage porters and bellhops (5262)
- 465 Welfare service aides (5263)
- 466 Family child care providers (part 5264)
- 467 Early childhood teacher's assistants (part 5264)
- 468 Child care workers, n.e.c. (part 5264)
- 469-472 Personal service occupations, n.e.c. (5258, 5269)

**473-502****FARMING, FORESTRY, AND FISHING OCCUPATIONS**

473-476

**Farm Operators and Managers**

473

Farmers, except horticultural (5512-5514)

474

Horticultural specialty farmers (5515)

475

Managers, farms, except horticultural (5522-5524)

476

Managers, horticultural specialty farms (5525)

477-493

**Other Agricultural and Related Occupations**

477-484

**Farm Occupations, Except Managerial**

477-478

Supervisors, farm workers (5611)

479-482

Farm workers (5612-5617)

483

Marine life cultivation workers (5618)

484

Nursery workers (5619)

485-493

**Related Agricultural Occupations**

485

Supervisors, related agricultural occupations (5621)

486

Groundskeepers and gardeners, except farm (5622)

487

Animal caretakers, except farm (5624)

488

Graders and sorters, agricultural products (5625)

489-493

Inspectors, agricultural products (5627)

494-496

**Forestry and Logging Occupations**

494

Supervisors, forestry and logging workers (571)

495

Forestry workers, except logging (572)

496

Timber cutting and logging occupations (573, 579)

497-502

**Fishers, Hunters, and Trappers**

497

Captains and other officers, fishing vessels (part 8241)

498

Fishers (583)

499-502

Hunters and trappers (584)

**503-702****PRECISION PRODUCTION, CRAFT, AND REPAIR OCCUPATIONS**

503-552

**Mechanics and Repairers**

503-504

Supervisors, mechanics and repairers (60)

505-552

**Mechanics and Repairers, Except Supervisors**

505-517

**Vehicle and Mobile Equipment Mechanics and Repairers**

505-506

Automobile mechanics (part 6111)

506

Automobile mechanic apprentices (part 6111)

507

Bus, truck, and stationary engine mechanics (6112)

508

Aircraft engine mechanics (6113)

509-513

Small engine repairers (6114)

514

Automobile body and related repairers (6115)

515

Aircraft mechanics, except engine (6116)

516

Heavy equipment mechanics (6117)

517

Farm equipment mechanics (6118)

518

Industrial machinery repairers (613)

519-522

Machinery maintenance occupations (614)

523-533

**Electrical and Electronic Equipment Repairers**

523-524

Electronic repairers, communications and industrial equipment (6151, 6153, 6155)

525

Data processing equipment repairers (6154)

526

Household appliance and power tool repairers (6156)

527-528

Telephone line installers and repairers (6157)

529-532

Telephone installers and repairers (6158)

533

Miscellaneous electrical and electronic equipment repairers (6152, 6159)

534

Heating, air conditioning, and refrigeration mechanics (616)

**503-702****PRECISION PRODUCTION, CRAFT, AND REPAIR OCCUPATIONS—Con.**

535-552

**Miscellaneous Mechanics and Repairers**

535

Camera, watch, and musical instrument repairers (6171, 6172)

536-537

Locksmiths and safe repairers (6173)

538

Office machine repairers (6174)

539-542

Mechanical controls and valve repairers (6175)

543

Elevator installers and repairers (6176)

544-546

Millwrights (6178)

547-548

Specified mechanics and repairers, n.e.c. (6177, 6179)

549-552

Not specified mechanics and repairers

553-612

**Construction Trades**

553-562

**Supervisors, Construction Occupations**

553

Supervisors, brickmasons, stonemasons, and tile setters (6312)

554

Supervisors, carpenters and related workers (6313)

555

Supervisors, electricians and power transmission installers (6314)

556

Supervisors, painters, paperhangers, and plasterers (6315)

557

Supervisors, plumbers, pipefitters, and steamfitters (6316)

558-562

Supervisors, construction, n.e.c. (6311, 6318)

563-612

**Construction Trades, Except Supervisors**

563-564

Brickmasons and stonemasons (part 6412, part 6413)

564

Brickmason and stonemason apprentices (part 6412, part 6413)

565

Tile setters, hard and soft (part 6414, part 6462)

566

Carpet installers (part 6462)

567-572

Carpenters (part 6422)

569-572

Carpenter apprentices (part 6422)

573-574

Drywall installers (6424)

575-576

Electricians (part 6432)

576

Electrician apprentices (part 6432)

577-578

Electrical power installers and repairers (6433)

579-582

Painters, construction and maintenance (6442)

583

Paperhangers (6443)

584

Plasterers (6444)

585-587

Plumbers, pipefitters, and steamfitters (part 645)

587

Plumber, pipefitter, and steamfitter apprentices (part 645)

588

Concrete and terrazzo finishers (6463)

589-592

Glaziers (6464)

593

Insulation workers (6465)

594

Paving, surfacing, and tamping equipment operators (6466)

595

Roofers (6468)

596

Sheetmetal duct installers (6472)

597

Structural metal workers (6473)

598

Drillers, earth (6474)

599-612

Construction trades, n.e.c. (6467, 6475, 6476, 6479)

613-627

**Extractive Occupations**

613

Supervisors, extractive occupations (632)

614

Drillers, oil well (652)

615

Explosives workers (653)

616

Mining machine operators (654)

617-627

Mining occupations, n.e.c. (656)

628-702

**Precision Production Occupations**

628-633

Supervisors, production occupations (67, 71)

634-655

Precision Metal Working Occupations



**503-702****PRECISION PRODUCTION, CRAFT, AND REPAIR OCCUPATIONS—Con.**

634-635	Tool and die makers (part 6811)
635	Tool and die maker apprentices (part 6811)
636	Precision assemblers, metal (6812)
637-642	Machinists (part 6813)
639-642	Machinist apprentices (part 6813)
643	Boilermakers (6814)
644	Precision grinders, filers, and tool sharpeners (6816)
645	Patternmakers and model makers, metal (6817)
646	Lay-out workers (6821)
647-648	Precious stones and metals workers (Jewelers) (6822, 6866)
649-652	Engravers, metal (6823)
653-654	Sheet metal workers (part 6824)
654	Sheet metal worker apprentices (part 6824)
655	Miscellaneous precision metal workers (6829)
656-665	Precision Woodworking Occupations
656	Patternmakers and model makers, wood (6831)
657	Cabinet makers and bench carpenters (6832)
658	Furniture and wood finishers (6835)
659-665	Miscellaneous precision woodworkers (6839)
666-674	Precision Textile, Apparel, and Furnishings Machine Workers
666	Dressmakers (part 6852, part 7752)
667	Tailors (part 6852)
668	Upholsterers (6853)
669-673	Shoe repairers (6854)
674	Miscellaneous precision apparel and fabric workers (6856, 6859, part 7752)
675-685	Precision Workers, Assorted Materials
675	Hand molders and shapers, except jewelers (6861)
676	Patternmakers, lay-out workers, and cutters (6862)
677	Optical goods workers (6864, part 7477, part 7677)
678	Dental laboratory and medical appliance technicians (6865)
679-682	Bookbinders (6844)
683	Electrical and electronic equipment assemblers (6867)
684-685	Miscellaneous precision workers, n.e.c. (6869)
686-688	Precision Food Production Occupations
686	Butchers and meat cutters (6871)
687	Bakers (6872)
688	Food batchmakers (6873, 6879)
689-693	Precision Inspectors, Testers, and Related Workers
689-692	Inspectors, testers, and graders (6881, 828)
693	Adjusters and calibrators (6882)
694-702	Plant and System Operators
694	Water and sewage treatment plant operators (691)
695	Power plant operators (part 693)
696-698	Stationary engineers (part 693, 7668)
699-702	Miscellaneous plant and system operators (692, 694, 695, 696)

**703-902****OPERATORS, FABRICATORS, AND LABORERS****703-802****Machine Operators, Assemblers, and Inspectors****703-782****Machine Operators and Tenders, Except Precision****703-716****Metal Working and Plastic Working Machine Operators****703**

Lathe and turning machine set-up operators (7312)

**704**

Lathe and turning machine operators (7512)

**705**

Milling and planing machine operators (7313, 7513)

**706**

Punching and stamping press machine operators (7314, 7317, 7514, 7517)

**703-902****OPERATORS, FABRICATORS, AND LABORERS—Con.**

707	Rolling machine operators (7316, 7516)
708	Drilling and boring machine operators (7318, 7518)
709-712	Grinding, abrading, buffing, and polishing machine operators (7322, 7324, 7522)
713	Forging machine operators (7319, 7519)
714	Numerical control machine operators (7326)
715-716	Miscellaneous metal, plastic, stone, and glass working machine operators (7329, 7529)
717-718	Fabricating machine operators, n.e.c. (7339, 7539)
719-725	Metal and Plastic Processing Machine Operators
719-722	Molding and casting machine operators (7315, 7342, 7515, 7542)
723	Metal plating machine operators (7343, 7543)
724	Heat treating equipment operators (7344, 7544)
725	Miscellaneous metal and plastic processing machine operators (7349, 7549)
726-733	Woodworking Machine Operators
726	Wood lathe, routing, and planing machine operators (7431, 7432, 7631, 7632)
727	Sawing machine operators (7433, 7633)
728	Shaping and joining machine operators (7435, 7635)
729-732	Nailing and tacking machine operators (7636)
733	Miscellaneous woodworking machine operators (7434, 7439, 7634, 7639)
734-737	Printing Machine Operators
734	Printing press operators (7443, 7643)
735	Photoengravers and lithographers (6842, 7444, 7644)
736	Typesetters and compositors (6841, 7642)
737	Miscellaneous printing machine operators (6849, 7449, 7649)
738-752	Textile, Apparel, and Furnishings Machine Operators
738	Winding and twisting machine operators (7451, 7651)
739-742	Knitting, looping, taping, and weaving machine operators (7452, 7652)
743	Textile cutting machine operators (7654)
744	Textile sewing machine operators (7655)
745-746	Shoe machine operators (7656)
747	Pressing machine operators (7657)
748	Laundering and dry cleaning machine operators (6855, 7658)
749-752	Miscellaneous textile machine operators (7459, 7659)
753-782	Machine Operators, Assorted Materials
753	Cementing and gluing machine operators (7661)
754	Packaging and filling machine operators (7462, 7662)
755	Extruding and forming machine operators (7463, 7663)
756	Mixing and blending machine operators (7664)
757	Separating, filtering, and clarifying machine operators (7476, 7666, 7676)
758	Compressing and compacting machine operators (7467, 7667)
759-762	Painting and paint spraying machine operators (7669)
763	Roasting and baking machine operators, food (7472, 7672)
764	Washing, cleaning, and pickling machine operators (7673)
765	Folding machine operators (7474, 7674)
766-767	Furnace, kiln, and oven operators, except food (7675)
768	Crushing and grinding machine operators (part 7477, part 7677)
769-772	Slicing and cutting machine operators (7478, 7678)
773	Motion picture projectionists (part 7479)
774-776	Photographic process machine operators (6863, 6868, 7671)
777-778	Miscellaneous machine operators, n.e.c. (part 7479, 7665, 7679)
779-782	Machine operators, not specified

**703-902****OPERATORS, FABRICATORS, AND LABORERS—Con.**

783-795      Fabricators, Assemblers, and Hand Working Occupations  
783          Welders and cutters (7332, 7532, 7714)  
784          Solderers and brazers (7333, 7533, 7717)  
785          Assemblers (772, 774)  
786          Hand cutting and trimming occupations (7753)  
787-788      Hand molding, casting, and forming occupations (7754, 7755)  
789-792      Hand painting, coating, and decorating occupations (7756)  
793-794      Hand engraving and printing occupations (7757)  
795          Miscellaneous hand working occupations (7758, 7759)  
796-802      Production Inspectors, Testers, Samplers, and Weighers  
796          Production inspectors, checkers, and examiners (782, 787)  
797          Production testers (783)  
798          Production samplers and weighers (784)  
799-802      Graders and sorters, except agricultural (785)

**803-863****Transportation and Material Moving Occupations**

803-822      Motor Vehicle Operators  
803          Supervisors, motor vehicle operators (8111)  
804-805      Truck drivers (8212-8214)  
806-807      Driver-sales workers (8218)  
808          Bus drivers (8215)  
809-812      Taxicab drivers and chauffeurs (8216)  
813          Parking lot attendants (874)  
814-822      Motor transportation occupations, n.e.c. (8219)

**823-842****Transportation Occupations, Except Motor Vehicles**

823-827      Rail Transportation Occupations  
823          Railroad conductors and yardmasters (8113)  
824          Locomotive operating occupations (8232)  
825          Railroad brake, signal, and switch operators (8233)  
826-827      Rail vehicle operators, n.e.c. (8239)  
828-842      Water Transportation Occupations  
828          Ship captains and mates, except fishing boats (part 8241, 8242)  
829-832      Sailors and deckhands (8243)  
833          Marine engineers (8244)  
834-842      Bridge, lock, and lighthouse tenders (8245)

**843-863****Material Moving Equipment Operators**

843          Supervisors, material moving equipment operators (812)  
844          Operating engineers (8312)  
845-847      Longshore equipment operators (8313)  
848          Hoist and winch operators (8314)  
849-852      Crane and tower operators (8315)  
853-854      Excavating and loading machine operators (8316)  
855          Grader, dozer, and scraper operators (8317)  
856-858      Industrial truck and tractor equipment operators (8318)  
859-863      Miscellaneous material moving equipment operators (8319)

**864-902****Handlers, Equipment Cleaners, Helpers, and Laborers**

864          Supervisors, handlers, equipment cleaners, and laborers, n.e.c. (85)  
865          Helpers, mechanics, and repairers (863)  
866-868      Helpers, Construction, and Extractive Occupations  
866          Helpers, construction trades (8641-8645, 8648)  
867          Helpers, surveyor (8646)

**703-902****OPERATORS, FABRICATORS, AND LABORERS—Con.**

868	Helpers, extractive occupations (865)
869-873	Construction laborers (871)
874	Production helpers (861, 862)
875-884	Freight, Stock, and Material Handlers
875	Garbage collectors (8722)
876	Stevedores (8723)
877	Stock handlers and baggers (8724)
878-882	Machine feeders and offbearers (8725)
883-884	Freight, stock, and material handlers, n.e.c. (8726)
885-886	Garage and service station related occupations (873)
887	Vehicle washers and equipment cleaners (875)
888	Hand packers and packagers (8761)
889-902	Laborers, except construction (8769)

**903-908****MILITARY OCCUPATIONS (Includes only uniquely military occupations.  
Other Armed Forces members are coded to civilian occupations.)**

903	Commissioned officers and warrant officers
904	Non-commissioned officers and other enlisted personnel
905-908	Military occupation, rank not specified

**909-999****EXPERIENCED UNEMPLOYED NOT CLASSIFIED BY OCCUPATION**

909-999	Unemployed, last worked 1984 or earlier
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## PLACE OF BIRTH

This section contains the code list for place of birth. An alphabetical list of U.S. States and territories, foreign countries, and other areas was used to assign a three-digit code to the birthplace reported by each person. The alphabetical list used in coding included abbreviations and alternate names, including some historical names for countries and names of States, provinces, counties, or other subdivisions of countries.

The following list does not include any of these alternate names, but does include continent and area names used as defaults if a specific country was not named but a broader region or area of birth was reported. The names for foreign countries shown on this list and in the publications reflect the most commonly used names in this country, not their official or legal names. Each entry shown on the following list has a unique code.

The U.S. States and territories were assigned their Federal Information Processing Standards (FIPS) code preceded by a zero. For foreign countries, codes were generally assigned by listing the countries or areas in alphabetical order (followed by default codes) within eight broad continent or regional areas: (1) Europe, (2) Asia, (3) North America, (4) Central America, (5) Caribbean, (6) South America, (7) Africa, and (8) Oceania. The entries for the USSR and the Baltic States are listed following the other entries for Europe for convenience in combining with either Europe or Asia. The entries for Germany also do not follow strict alphabetical order; codes 110-114 can be combined to tabulate an overall figure including Germany (not specified), East Germany, West Germany, and Berlin. The entries for the United Kingdom also do not follow strict alphabetical order; codes 138-145 can be combined to tabulate an overall figure including United Kingdom (not specified), England, Scotland, Wales, Northern Ireland, Guernsey, Jersey, and the Isle of Man. The codes for Asia also include a code for Korea (not specified) since it is often reported in that fashion.

001-059	United States	001-059	United States—Con.
001	Alabama	041	Oregon
002-003	Alaska	042-043	Pennsylvania
004	Arizona	044	Rhode Island
005	Arkansas	045	South Carolina
006-007	California	046	South Dakota
008	Colorado	047	Tennessee
009	Connecticut	048	Texas
010	Delaware	049	Utah
011	District of Columbia	050	Vermont
012	Florida	051-052	Virginia
013-014	Georgia	053	Washington
015	Hawaii	054	West Virginia
016	Idaho	055	Wisconsin
017	Illinois	056-059	Wyoming
018	Indiana		
019	Iowa	060-099	U.S. Outlying Areas and Puerto Rico
020	Kansas	060-065	American Samoa
021	Kentucky	066	Guam
022	Louisiana	067-068	Johnston Atoll
023	Maine	069-070	Northern Mariana Islands
024	Maryland	071	Midway Islands
025	Massachusetts	072-075	Puerto Rico
026	Michigan	076-077	Navassa Island
027	Minnesota	078	U.S. Virgin Islands
028	Mississippi	079-080	Wake Island
029	Missouri	081-083	Baker Island
030	Montana	084-085	Howland Island
031	Nebraska	086-088	Jarvis Island
032	Nevada	089-094	Kingman Reef
033	New Hampshire	095	Palmyra Atoll
034	New Jersey	096-099	U.S. territory, not specified
035	New Mexico		
036	New York	100-199	Europe
037	North Carolina	100	Albania
038	North Dakota	101	Andorra
039	Ohio	102	Austria
040	Oklahoma		

100-199	Europe—Con.
103	Belgium
104	Bulgaria
105	Czechoslovakia
106	Denmark
107	Faroe Islands
108	Finland
109	France
110	Germany, not specified
111	West Germany
112	West Berlin
113	East Berlin
114	East Germany
115	Gibraltar
116	Greece
117	Hungary
118	Iceland
119	Ireland
120	Italy
121	Jan Mayen
122	Liechtenstein
123	Luxembourg
124	Malta
125	Monaco
126	Netherlands
127	Norway
128	Poland
129	Portugal
130	Azores Islands
131	Madeira Islands
132	Romania
133	San Marino
134	Spain
135	Svalbard
136	Sweden
137	Switzerland
138	United Kingdom, not specified
139	England
140	Scotland
141	Wales
142	Northern Ireland
143	Guernsey
144	Jersey
145	Isle of Man
146	Vatican City
147	Yugoslavia
148	Europe, not specified
149	Central Europe, not specified
150	Eastern Europe, not specified
151	Lapland, not specified
152	Northern Europe, not specified
153	Southern Europe, not specified
154-179	Western Europe, not specified
180	Union of Soviet Socialist Republics (USSR)
181	Baltic States, not specified
182	Estonia

100-199	Europe—Con.
183	Latvia
184-199	Lithuania
200-299	Asia
200	Afghanistan
201	Bahrain
202	Bangladesh
203	Bhutan
204	Brunei
205	Burma
206	Cambodia
207	China
208	Cyprus
209	Hong Kong
210	India
211	Indonesia
212	Iran
213	Iraq
214	Israel
215	Japan
216	Jordan
217	Korea, not specified
218	South Korea
219	North Korea
220	Kuwait
221	Laos
222	Lebanon
223	Macau
224	Malaysia
225	Maldives
226	Mongolia
227	Nepal
228	Oman
229	Pakistan
230	Paracel Islands
231	Philippines
232	Qatar
233	Saudi Arabia
234	Singapore
235	Spratley Islands
236	Sri Lanka
237	Syria
238	Taiwan
239	Thailand
240	Turkey
241	United Arab Emirates
242	Vietnam
243	Yemen, People's Democratic Republic
244	Yemen Arab Republic
245	Asia, not specified
246	Asia Minor, not specified
247	East Asia, not specified
248	Gaza Strip
249	Indochina, not specified
250	Iraq-Saudi Arabia Neutral Zone
251	Mesopotamia, not specified

<b>200-299</b>	<b>Asia—Con.</b>
252	Middle East, not specified
253	Palestine, not specified
254	Persian Gulf States, not specified
255	Southeast Asia, not specified
256-299	West Bank
<b>300-399</b>	<b>America</b>
<b>300-309</b>	<b>North America</b>
300	Bermuda
301	Canada
302	Greenland
303	St. Pierre and Miquelon
304-309	North America, not specified
<b>310-329</b>	<b>Central America</b>
310	Belize
311	Costa Rica
312	El Salvador
313	Guatemala
314	Honduras
315	Mexico
316	Nicaragua
317	Panama
318-329	Central America, not specified
<b>330-374</b>	<b>Caribbean</b>
330	Anguilla
331	Antigua and Barbuda
332	Aruba
333	Bahamas
334	Barbados
335	British Virgin Islands
336	Cayman Islands
337	Cuba
338	Dominica
339	Dominican Republic
340	Grenada
341	Guadeloupe
342	Haiti
343	Jamaica
344	Martinique
345	Montserrat
346	Netherlands Antilles
347	St. Barthelemy
348	St. Kitts-Nevis
349	St. Lucia
350	St. Vincent and the Grenadines
351	Trinidad and Tobago
352	Turks and Caicos Islands
353	Caribbean, not specified
354	Antilles, not specified
355	British West Indies, not specified
356	Latin America, not specified

<b>330-374</b>	<b>Caribbean—Con.</b>
357	Leeward Islands, not specified
358	West Indies, not specified
359-374	Windward Islands, not specified
<b>375-399</b>	<b>South America</b>
375	Argentina
376	Bolivia
377	Brazil
378	Chile
379	Colombia
380	Ecuador
381	Falkland Islands
382	French Guiana
383	Guyana
384	Paraguay
385	Peru
386	Suriname
387	Uruguay
388	Venezuela
389-399	South America, not specified
<b>400-499</b>	<b>Africa</b>
400	Algeria
401	Angola
402	Bassas da India
403	Benin
404	Botswana
405	British Indian Ocean Territory
406	Burkina Faso
407	Burundi
408	Cameroon
409	Cape Verde
410	Central African Republic
411	Chad
412	Comoros
413	Congo
414	Djibouti
415	Egypt
416	Equatorial Guinea
417	Ethiopia
418	Europa Island
419	Gabon
420	Gambia
421	Ghana
422	Glorioso Islands
423	Guinea
424	Guinea-Bissau
425	Ivory Coast
426	Juan de Nova Island
427	Kenya
428	Lesotho
429	Liberia
430	Libya
431	Madagascar
432	Malawi
433	Mali

<b>400-499</b>	<b>Africa—Con.</b>	<b>500-553</b>	<b>Oceania</b>
434	Mauritania	500	Ashmore and Cartier Islands
435	Mayotte	501	Australia
436	Morocco	502	Christmas Island, Indian Ocean
437	Mozambique	503	Clipperton Island
438	Namibia	504	Cocos Islands
439	Niger	505	Cook Islands
440	Nigeria	506	Coral Sea Islands
441	Reunion	507	Fiji
442	Rwanda	508	French Polynesia
443	Sao Tome and Principe	509	Kiribati
444	Senegal	510	Marshall Islands
445	Mauritius	511	Micronesia
446	Seychelles	512	Nauru
447	Sierra Leone	513	New Caledonia
448	Somalia	514	New Zealand
449	South Africa	515	Niue
450	St. Helena	516	Norfolk Island
451	Sudan	517	Palau
452	Swaziland	518	Papua New Guinea
453	Tanzania	519	Pitcairn Islands
454	Togo	520	Solomon Islands
455	Tromelin Island	521	Tokelau
456	Tunisia	522	Tonga
457	Uganda	523	Tuvalu
458	Western Sahara	524	Vanuatu
459	Zaire	525	Wallis and Futuna Islands
460	Zambia	526	Western Samoa
461	Zimbabwe	527	Oceania, not specified
462	Africa, not specified	528	Polynesia, not specified
463	Central Africa, not specified	529-549	Melanesia, not specified
464	Eastern Africa, not specified	550	Antarctica
465	Equatorial Africa, not specified	551	Bouvet Island
466	French Equatorial Africa, not specified	552	French Southern and Antarctic Lands
467	French West Africa, not specified	553	Heard and McDonald Islands
468	North Africa, not specified		
469	Western Africa, not specified	<b>554-999</b>	<b>At Sea/Abroad, Not Specified</b>
470-499	Southern Africa, not specified	554	At sea
		555-999	Abroad, not specified



## RACE

This section contains the alphabetical code list for race and American Indian tribes. The list of race groups and American Indian tribes with their associated 3-digit numerical code was used to code the Asian or Pacific Islander, American Indian, Eskimo, or Aleut, and the Other race write-in entries. A separate set of 3-digit numerical codes were used to identify FOSDIC circles for the race categories listed in the race item on the questionnaire. These codes and their respective race categories are: White-971, Black or Negro-972, Indian (Amer.)-973, Eskimo-974, Aleut-975, Chinese-976, Filipino-977, Hawaiian-978, Korean-979, Vietnamese-980, Japanese-981, Asian Indian-982, Samoan-983, Guamanian-984, Other Asian or Pacific Islander-985, and Other race-986.

### 000-599, 973 American Indian

000-001	Ahtna
002	Biorka
003	Reserve American Indian 1
004-005	Bristol Bay
006	Chanellak
007	Chugach
008	Tanalna
009	Doyon
010	Kodiak
011	Reserve American Indian 2
012	Sealaska
013	Umpqua
014	Alaskan Athabaskan
015	Alaska Native
016	Haida
017	Tlingit
018	Tsimshian
019	Alaska Indian
020	Chehalis
021	Chemakum
022	Klallam
023	Jamestown
024	Lower Elwha
025	Port Gamble Klallam
026	Coquilles
027	Cowlitz
028	Lummi
029	Nooksack
030	Puget Sound Salish
031	Duwamish
032	Kikiallus
033	Lower Skagit
034	Muckleshoot
035	Nisqually
036	Puyallup
037	Samish
038	Sauk-Suiattle
039	Upper Skagit
040	Skykomish
041	Snohomish
042	Snoqualmie
043	Squaxin Island
044	Stellacoom
045	Stillaguamish
046	Suquamish
047	Swinomish
048	Tulalip

### 000-599, 973 American Indian—Con.

049	Port Madison
050	Quinault
051	Quileute
052	Hoh
053	Makah
054	Talakamish
055	Chinook
056	Clatsop
057	Kathlamet
058	Columbia River Chinook
059	Upper Chinook
060	Wakiakum Chinook
061	Willapa Chinook
062	Alsea
063	Cayuse
064	Cello
065	Coos
066	Kalapuya
067	Klamath
068	Molala
069	Oregon Athabaskan
070	Siuslaw
071	Takelma
072	Tenino
073	Tillamook
074	Tygh
075	Umatilla
076	Walla-Walla
077	Yahooskin
078	Yakima
079	Skokomish
080	Agua Caliente Cahuilla
081	Augustine
082	Cabazon
083	Cahto
084	Cahuilla
085	Campo
086	Capitan Grande
087	Chemehuevi
088	Chimariko
089	Chumash
090	Costanoan
091	Cupeno
092	Cuyapaipe
093	Diegueno
094	Digger
095	Gabrieleno
096	Hoopla
097	Inaja Cosmit

**000-599, 973 American Indian—Con.**

098	Karok
099	Kawailisu
100	La Jolla
101	Lassik
102	La Posta
103	Luiseno
104	Maidu
105	Manzanita
106	Mesa Grande
107	Mountain Maidu
108	Nishinam
109	Konkow
110	Mattole
111	Miwok
112	Coast Miwok
113	Modoc
114	Mono
115	Nomalaki
116	Pala
117	Pechanga
118	Pauma
119	Pit River
120	Pomo
121	Dry Creek
122	Northern Pomo
123	Kashaya
124	Central Pomo
125	Stonyford
126	Eastern Pomo
127	Sulphur Bank
128	Salinan
129	San Manual
130	San Pascual
131	Santa Rosa Cahuilla
132	Santa Ynez
133	Santa Ysabel
134	Serrano
135	Shasta
136	Soboba
137	Sycuan
138	Tolowa
139	Torres-Martinez
140	Kern River
141	Tule River
142	Twenty-Nine Palms
143	Wailaki
144	Wappo
145	Whilkut
146	Wintu
147	Wiyot
148	Yana
149	Yokuts
150	Tachi
151	Chukchansi
152	Yuki
153	Yurok

**000-599, 973 American Indian—Con.**

154	Reserve American Indian 3
155	Columbia
156	Kalispel
157	Salish
158	Coeur D'Alene
159	Colville
160	Spokane
161	Nez Perce
162	Washo
163	Alpine
164	Carson
165	Dresslerville
166	Stewart
167	Wishram
168	Hoop Extension
169	Trinity
170	Ute
171	Allen Canyon
172	Uintah Ute
173	Ute Mountain Ute
174	Shoshone Paiute
175	Paiute
176	Northern Paiute
177	Cedarville
178	Pyramid Lake
179	Fort Bidwell
180	Las Vegas
181	Lovelock
182	Utu Utu Gwaitu Paiute
183	Fort Independence
184	Bridgeport
185	Burns Paiute
186	Yerington Paiute
187	Walker River
188	Southern Paiute
189	Kaibab
190	Moapa
191	Owens Valley
192	Summit Lake
193	Aroostook
194	Reserve American Indian 5
195	Shoshone
196	Battle Mountain
197	Duck Water
198	Elko
199	Ely
200	Goshute
201	Panamint
202	Ruby Valley
203	South Fork Shoshone
204	Washakie
205	Yomba
206	Te-Moak Western Shoshone
207	Bannock
208	Kootenai
209-210	Havasupai
211	Hualapai

**000-599, 973 American Indian—Con.**

212	Yavapai
213	Maricopa
214	Quechan
215	Cocopah
216	Mohave
217	Pima
218	Tohono O'Odham
219	Gila Bend
220	Ak-Chin
221	San Xavier
222	Sells
223	Yaqui
224	Pascua Yaqui
225	Barrio Libre
226	Mississippi Choctaw
227	Reserve American Indian 6
228	Jena Choctaw
229	Pueblo
230	Tigua
231	Taos
232	Picuris
233	Sandia
234	Isleta
235	Keres
236	Acoma
237	Cochiti
238	Laguna
239	San Felipe
240	Santa Ana
241	Santo Domingo
242	Zia
243	Tewa
244	Nambe
245	Pojoaque
246	San Ildefonso
247	San Juan Pueblo
248	Santa Clara
249	Tesuque
250	Arizona Tewa
251	Jemez
252	Hopi
253	Zuni
254	San Juan de
255	Apache
256	Oklahoma Apache
257	Jicarilla Apache
258	Lipan Apache
259	Mescalero Apache
260	Chiricahua
261	Fort Sill Apache
262	San Carlos Apache
263	Payson Apache
264	White Mountain Apache
265	Reserve American Indian 7
266	Reserve American Indian 8
267	Reserve American Indian 9

**000-599, 973 American Indian—Con.**

268	Reserve American Indian 10
269	Reserve American Indian 11
270	Reserve American Indian 12
271	Reserve American Indian 13
272	Reserve American Indian 14
273	Reserve American Indian 15
274	Reserve American Indian 16
275	Navajo
276	Kiowa
277	Tonkawa
278	Oklahoma Caddo
279	Arikara
280	Oklahoma Pawnee
281	Wichita
282	Sioux
283	Cheyenne River Sioux
284	Crow Creek Sioux
285	Devils Lake Sioux
286	Flandreau Santee
287	Fort Peck
288	Standing Rock Sioux
289	Lake Traverse Sioux
290	Lower Sioux
291	Pine Ridge Sioux
292	Pipestone Sioux
293	Prairie Island Sioux
294	Prior Lake
295	Rosebud Sioux
296	Upper Sioux
297	Sisseton-Wahpeton Sioux
298	Teton Sioux
299	Brule Sioux
300	Lower Brule Sioux
301	Sans Arc Sioux
302	Two Kettle Sioux
303	Blackfoot Sioux
304	Oglala Sioux
305	Miniconjou
306	Yanktonai Sioux
307	Yankton Sioux
308	Santee Sioux
309	Sisseton Sioux
310	Mdewakanton Sioux
311	Wahpekute Sioux
312	Wahpeton Sioux
313	Assiniboine
314	Iowa
315	Otoe-Missouria
316	Winnebago
317	Kaw
318	Omaha
319	Ponca
320	Osage
321	Quapaw
322	Crow
323	Hidatsa
324	Mandan

**000-599, 973 American Indian—Con.**

325	Comanche
326	Dakota Sioux
327	Wazhaza Sioux
328	Nebraska Winnebago
329	Wisconsin Winnebago
330	Chippewa
331	Bay Mills Chippewa
332	Sault Ste. Marie Chippewa
333	Saginaw Chippewa
334	Keweenaw
335	Lac Vieux Desert Chippewa
336	Ontonagon
337	Leelanau
338	Minnesota Chippewa
339	Boise Forte
340	Grand Portage
341	Fond Du Lac
342	Leech Lake
343	Mille Lac
344	White Earth
345	Red Lake Chippewa
346	Lake Superior
347	Bad River
348	Lac Courte Oreilles
349	Lac Du Flambeau
350	Red Cliff Chippewa
351	St. Croix Chippewa
352	Sokoagon Chippewa
353	Turtle Mountain
354	Rocky Boy's Cree
355	Burt Lake Chippewa
356	Burt Lake Band
357	Reserve American Indian 19
358	Reserve American Indian 20
359	Burt Lake Ottawa
360	Blackfoot
361	Cheyenne
362	Northern Cheyenne
363	Southern Cheyenne
364	Arapaho
365	Atsina
366	Menominee
367	Potawatomi
368	Citizen Band Potawatomi
369	Forest County
370	Hannahville
371	Huron Potawatomi
372	Pogagon Potawatomi
373	Prairie Band
374	Wisconsin Potawatomi
375	Ottawa
376	Miami
377	Sac and Fox
378	Peoria
379	Sac and Fox-Mesquakie
380	Kickapoo

**000-599, 973 American Indian—Con.**

381	Shawnee
382	Algonquian
383	Micmac
384	Mailseet
385	Passamaquoddy
386	Pleasant Point Passamaquoddy
387	Indian Township
388	Penobscot
389	Abenaki
390	Wampanoag
391	Nipmuc
392	Narragansett
393	Pequot
394	Mohegan
395	Paugussett
396	Schaghticoke
397	Brotherton
398	Shinnecock
399	Stockbridge
400	Munsee
401	Delaware
402	Sand Hill
403	Absentee Shawnee
404	Clifton Choctaw
405	Iroquois
406	Seneca
407	Seneca Nation
408	Tonawanda Seneca
409	Seneca-Cayuga
410	Cayuga
411	Onondaga
412	Oneida
413	Mohawk
414	Tuscarora
415	Wyandotte
416	Cherokee
417	Eastern Cherokee
418	Western Cherokee
419	Etowah Cherokee
420	United Keetoowah Band
421	Tuscola
422	Northern Cherokee
423	Eastern Muskogee
424	Agua Caliente
425	Creek
426	Thlopthlocco
427	Yuchi
428	Hitchiti
429	Eastern Creek
430	Principal Creek Indian Nation
431	Poarch Band
432	Lower Muskogee
433	Alabama Coushatta
434	Choctaw
435	Houma
436	Chickasaw
437	Miccosukee

**000-599, 973 American Indian—Con.**

438	Seminole
439	Oklahoma Seminole
440	Florida Seminole
441	Big Cypress
442	Brighton
443	Hollywood Seminole
444	Natchez
445	Matinecock
446	Montauk
447	Poospatuck
448	Setauket
449	Tuckabachee
450	Nanticoke
451	Piscataway
452	Nansemond
453	Chickahominy
454	Pamunkey
455	Mattaponi
456	Rappahannock
457	Attacapa
458	Biloxi
459	Catawba
460	Chitimacha
461	Coharie
462	Croatan
463	Haliwa
464	Lumbee
465	Moor
466	Powhatan
467	Tunica
468	Wesort
469	Southeastern Indians
470	Cajun
471	Coushatta
472	Reserve American Indian 23
473	Reserve American Indian 24
474	Reserve American Indian 25
475	Reserve American Indian 26
476	Colorado River
477	Duck Valley
478	Fallon
479	Fort Belknap
480	Fort Berthold
481	Fort Hall
482	Fort McDermitt
483	Fort McDowell
484	Cow Creek Umpqua
485	Gila River
486	Grand Ronde
487	Los Coyotes
488	Mission Indians
489	Morongo
490	Reno-Sparks
491	Round Valley
492	Shoalwater
493	Siletz
494	Skull Valley

**000-599, 973 American Indian—Con.**

495	Susanville
496	Table Bluff
497	Wascopum
498	Wind River
499	Winnemucca
500	Yavapai Apache
501	Reserve American Indian 27
502	Gros Ventres
503	Scott Valley
504	Warm Springs
505	Santa Rosa
506	San Juan
507	Red Wood
508	Salish and Kootenai
509	Georgetown
510	Clear Lake
511	Yakima Cowlitz
512	Scotts Valley
513	Cheyenne-Arapaho
514	Northern Arapaho
515	Southern Arapaho
516	Mashpee Wampanoag
517	Gay Head Wampanoag
518	Timbi-Sha Shoshone
519	Juaneno
520	Oklahoma Choctaw
521	Oklahoma Modoc
522	Oklahoma Kiowa
523	Oklahoma Comanche
524	Oklahoma Iowa
525	Canadian Indian
526	Oklahoma Ponca
527	Oklahoma Ottawa
528	Oklahoma Miami
529	Oklahoma Peoria
530	Oklahoma Sac and Fox
531	Oklahoma Kickapoo
532	Oklahoma Delaware
533	Caddo
534	Pawnee
535	Michigan Ottawa
536	Indiana Miami
537	Missouri Sac and Fox
538	Eastern Shawnee
539	Cherokee Shawnee
540	Kialegee
541	Alabama Quassarte
542	Malheur Paiute
543	Wenatchee
544	Little Shell Chippewa
545	Illinois
546	Rampough Mountain
547	Lenni-Lenape
548	Amerind White
549	Amerind Black
550	Mexican American Indian
551	Central American Indian

**000-599, 973 American Indian—Con.**

552	South American Indian
553	French American Indian
554	Spanish American Indian
555	Cherokees of Southeast Alabama
556	Cherokees of Northeast Alabama
557	Echota Cherokee
558	MaChis Lower Creek Indian
559	MOWA Band of Choctaw
560	Star Clan of Muskogee Creeks
561	Eastern Delaware
562	Cherokee Alabama
563	Reserve American Indian 36
564	Reserve American Indian 37
565	Mexican Indian Cherokee
566	Eastern Chickahominy
567	Western Chickahominy
568	Waccamaw-Siouan
569	Nausu Waiwash
570	Pocomoke Acohonock
571	Susquehanock
572	Wicomico
573	Piro
574	Illinois Miami
575	Tunica Biloxi
576-597	American Indian
598	Tribal response, not elsewhere classified
599	Reserve American Indian 38
973	American Indian (FOSDIC circle)

**600-699, 976-985 Asian or Pacific Islander****600-652, 976, 977, 979-982, 985 Asian**

600	Asian Indian
601	Bangladeshi
602	Bhutanese
603	Burmese
604	Cambodian (Kampuchean)
605	Chinese
606	Taiwanese
607	Formosan
608	Filipino
609	Hmong
610	Indonesian
611	Japanese
612	Korean
613	Laotian
614	Malayan
615	Okinawan
616	Pakistani
617	Sri Lankan
618	Thai
619	Vietnamese
620	Amerasian
621	Asian
622	Asiatic

**600-652, 976, 977, 979-982, 985 Asian—Con.**

623	Eurasian
624	Mongolian
625	Oriental
626	Whello
627	Yellow
628	Borneo
629	Celebesian
630	Ceram
631	Indo-Chinese
632	Iwo Jiman
633	Javanese
634	Maldivian
635	Nepali
636	Sikkim
637	Singaporean
638	Sumatran
639	Madagascar
640	Reserve Asian 2
641	Reserve Asian 3
642	Reserve Asian 4
643	Reserve Asian 5
644	Reserve Asian 6
645	Reserve Asian 7
646	Reserve Asian 8
647	Reserve Asian 9
648	Reserve Asian 10
649	Reserve Asian 11
650	Reserve Asian 12
651	Reserve Asian 13
652	Reserve Asian 14
976	Chinese (FOSDIC circle)
977	Filipino (FOSDIC circle)
979	Korean (FOSDIC circle)
980	Vietnamese (FOSDIC circle)
981	Japanese (FOSDIC circle)
982	Asian Indian (FOSDIC circle)
985	Other Asian or Pacific Islander (FOSDIC circle)

**653-699, 978, 983, 984 Pacific Islander****653-659, 978, 983 Polynesian**

653	Hawaiian
654	Part Hawaiian
655	Samoa
656	Tahitian
657	Tongan
658	Polynesian
659	Tokelauan
978	Hawaiian (FOSDIC circle)
983	Samoa (FOSDIC circle)

**660-675, 984 Micronesian**

660	Guamanian
661	Mariana Islander
662	Marshallese

**660-675, 984 Micronesian—Con.**

663	Palauan
664	Bikinian
665	Carolinian
666	Eniwetok
667	Kosraean
668	Kwajalein
669	Micronesian
670	Ponapean (Pohnpeian)
671	Salpanese
672	Tarawa Islander
673	Tinian
674	Trukese (Chuukese)
675	Yapese
984	Guamanian (FOSDIC circle)

**676-680 Melanesian**

676	Fijian
677	Melanesian
678	Papua New Guinean
679	Solomon Islander
680	New Hebrides

**681-699 Other Pacific Islander**

681	Pacific Islander
682	Reserve Pacific Islander 1
683	Reserve Pacific Islander 2
684	Reserve Pacific Islander 3
685	Reserve Pacific Islander 4
686	Reserve Pacific Islander 5
687	Reserve Pacific Islander 6
688	Reserve Pacific Islander 7
689	Reserve Pacific Islander 8
690	Reserve Pacific Islander 9
691	Reserve Pacific Islander 10
692	Reserve Pacific Islander 11
693	Reserve Pacific Islander 12
694	Reserve Pacific Islander 13
695	Reserve Pacific Islander 14
696	Asian or Pacific Islander
697	Reserve Asian or Pacific Islander 1
698	Reserve Asian or Pacific Islander 2
699	Reserve Asian or Pacific Islander 3

**700-799, 986, 987-999 Other Race****700-748 Hispanic Origin**

700	Argentinian
701	Bolivian
702	Boricua
703	Californio
704	Central American
705	Chicano
706	Chilean
707	Colombian
708	Costa Rican
709	Cuban
710	Dominican
711	Ecuadorian (Ecuadorian)

**700-748 Hispanic Origin—Con.**

712	Salvadoran
713-714	Galapagos
715	Guajiro
716	Guatemalan
717	Hispanic
718	Honduran
719	La Raza
720	Latin American
721	Mestizo
722	Mexican
723	Nicaraguan
724	Panamanian
725	Paraguayo
726	Peruvian
727	Puerto Rican
728	Morena
729	South American
730	Spanish
731	Spanish-American
732	Spanish-Mexican
733	Sudamericano
734	Uruguayan
735	Venezuelan
736	Reserve Hispanic 2
737	Reserve Hispanic 3
738	Reserve Hispanic 4
739	Reserve Hispanic 5
740	Reserve Hispanic 6
741	Reserve Hispanic 7
742	Reserve Hispanic 8
743	Reserve Hispanic 9
744	Reserve Hispanic 10
745	Reserve Hispanic 11
746	Reserve Hispanic 12
747	Reserve Hispanic 13
748	Reserve Hispanic 14

**749-799, 986, 987-999 Not of Hispanic Origin**

749-750	Brava
751	Brazil
752	Brown
753	Bushwacker
754	Cajun
755	Cape Verdean
756	Chocolate
757	Coe Clan
758	Coffee
759	Cosmopolitan
760	Issues
761	Jackson White
762	Lapp
763	Melungeon
764	Mixed
765	Ramp
766	Tunica
767	Wesort

**749-799, 986, 987-999 Not of Hispanic Origin—Con.**

768	Mulatto
769	Moor
770	Biracial/Interracial
771	Creole
772	Indian
773	Turk
774	Half-Breed
775	Rainbow
776	Octoroon
777	Quadroon
778	Reserve Non-Hispanic 3
779	Reserve Non-Hispanic 4
780	Reserve Non-Hispanic 5
781	Reserve Non-Hispanic 6
782	Reserve Non-Hispanic 7
783	Reserve Non-Hispanic 8
784	Reserve Non-Hispanic 9
785	Reserve Non-Hispanic 10
786	Reserve Non-Hispanic 11
787	Reserve Non-Hispanic 12
788	Reserve Non-Hispanic 13
789	Reserve Non-Hispanic 14
790	Reserve Non-Hispanic 15
791	Reserve Non-Hispanic 16
792	Reserve Non-Hispanic 17
793	Reserve Non-Hispanic 18
794	Reserve Non-Hispanic 19
795	Reserve Non-Hispanic 20
796	Reserve Non-Hispanic 21
797	Reserve Non-Hispanic 22
798	Trinidad
799	Other race, not elsewhere classified
986	Other race (FOSDIC circle)
987-999	Reserve Other race

**800-869, 971 White**

800	White
801	Arab
802	English
803	French
804	German
805	Irish
806	Italian
807	Near Easterner
808	Polish
809	Scottish
810	White and Black
811	White Amerind
812	White Chinese
813	White Formosan/Taiwanese
814	White Filipino
815	White Hawaiian
816	White Korean
817	White Vietnamese
818	White Japanese

**800-869, 971 White—Con.**

819	White Asian Indian
820	White Samoan
821	White Guamanian
822	White Bangladeshi
823	White Burmese
824	White Cambodian (Kampuchean)
825	White Hmong
826	White Indonesian
827	White Laotian
828	White Malayan
829	White Okinawan
830	White Pakistani
831	White Sri Lankan
832	White Thai
833	White Fijian
834	White Palauan
835	White Tahitian
836	White Tongan
837	White Other Asian or Pacific Islander
838	White Eskimo
839	White Aleut
840	Reserve White 3
841	Reserve White 4
842	Reserve White 5
843	Reserve White 6
844	Reserve White 7
845	Reserve White 8
846	Reserve White 9
847	Reserve White 10
848	Reserve White 11
849	Reserve White 12
850	Reserve White 13
851	Reserve White 14
852	Reserve White 15
853	Reserve White 16
854	Reserve White 17
855	Reserve White 18
856	Reserve White 19
857	Reserve White 20
858	Reserve White 21
859	Reserve White 22
860	Reserve White 23
861	Reserve White 24
862	Reserve White 25
863	Reserve White 26
864	Reserve White 27
865	Reserve White 28
866	Reserve White 29
867	Reserve White 30
868	Reserve White 31
869	White Cherokee
971	White (FOSDIC circle)

**870-934, 972 Black or Negro**

870	Black
871	African



**870-934, 972 Black or Negro—Con.**

872	African American
873	Afro-American
874	Nigritian
875	Black and White
876	Black Amerind
877	Black Chinese
878	Black Formosan/Taiwanese
879	Black Filipino
880	Black Hawaiian
881	Black Korean
882	Black Vietnamese
883	Black Japanese
884	Black Asian Indian
885	Black Samoan
886	Black Guamanian
887	Black Bangladeshi
888	Black Burmese
889	Black Cambodian (Kampuchean)
890	Black Hmong
891	Black Indonesian
892	Black Laotian
893	Black Malayan
894	Black Okinawan
895	Black Pakistani
896	Black Sri Lankan
897	Black Thai
898	Black Fijian
899	Black Palauan
900	Black Tahitian
901	Black Tongan
902	Black Other Asian or Pacific Islander
903	Black Eskimo
904	Black Aleut
905	Reserve Black 3
906	Reserve Black 4
907	Reserve Black 5
908	Reserve Black 6
909	Reserve Black 7
910	Reserve Black 8
911	Reserve Black 9
912	Reserve Black 10
913	Reserve Black 11
914	Reserve Black 12
915	Reserve Black 13
916	Reserve Black 14
917	Reserve Black 15
918	Reserve Black 16
919	Reserve Black 17
920	Reserve Black 18
921	Reserve Black 19
922	Reserve Black 20
923	Reserve Black 21

**870-934, 972 Black or Negro—Con.**

924	Reserve Black 22
925	Reserve Black 23
926	Reserve Black 24
927	Reserve Black 25
928	Reserve Black 26
929	Reserve Black 27
930	Reserve Black 28
931	Reserve Black 29
932	Reserve Black 30
933	Reserve Black 31
934	Black Cherokee
972	Black or Negro (FOSDIC circle)

**935-940, 974 Eskimo**

935	Eskimo
936	Reserve Eskimo 1
937	Reserve Eskimo 2
938	Reserve Eskimo 3
939	Reserve Eskimo 4
940	Wales
974	Eskimo (FOSDIC circle)

**941-970, 975 Aleut**

941	Aleut
942	Reserve Aleut 1
943	Reserve Aleut 2
944	Reserve Aleut 3
945	Reserve Aleut 4
946-970	Reserve Aleut 5
975	Aleut (FOSDIC circle)

**971-986 FOSDIC Circle Codes**

971	See White
972	See Black or Negro
973	See American Indian
974	See Eskimo
975	See Aleut
976	See Asian
977	See Asian
978	See Pacific Islander
979	See Asian
980	See Asian
981	See Asian
982	See Asian
983	See Pacific Islander
984	See Pacific Islander
985	See Asian
986	See Other race

**987-999 Reserve Other Race**



**UNITED STATES DEPARTMENT OF COMMERCE**  
**Bureau of the Census**  
Washington, DC 20233-0001

**CENSUS OF POPULATION AND HOUSING, 1990:  
SUMMARY TAPE FILE 4 DATA**

**TECHNICAL NOTE 1**

**(Clarification of Coordinate Values)**

The 1990 census data files provide latitude/longitude coordinates for internal points; the TIGER™ files, for 1-cells and shape points. These points are based on North American Datum (NAD) 27; that is, the standard for latitude/longitude set in 1927. The standard was revised in 1983, but the TIGER data base does not reflect the new coordinates. We ask that you document this information for the public by issuing the following information:

The latitude/longitude coordinates in the 1990 census files and TIGER/Line™ files are based on North American Datum (NAD) 27.

November 1992



UNITED STATES DEPARTMENT OF COMMERCE  
Bureau of the Census  
Washington, DC 20233-0001

## CENSUS OF POPULATION AND HOUSING, 1990: SUMMARY TAPE FILE 4 DATA

### TECHNICAL NOTE 2

(Selected States)

We have found three additional code errors in the 1990 census records. Bold type identifies the correct code.

#### Arkansas (05)

In the records for Cherokee Village-Hidden Valley CDP (place: census code 0383), the FIPS code should be shown as **13465** (it is shown incorrectly as 13450).

#### Delaware (10)

In the records for Dover Base Housing CDP (place: census code 0076), the FIPS 55 code should be shown as **21387** (it is shown incorrectly as 21355).

#### Nebraska (31)

In the records for **Offutt AFB** CDP (place: census code 1814), the FIPS 55 code should be shown as **35875** (the name and FIPS 55 code are shown incorrectly as Offutt AFB West and 35945, respectively).

We previously reported other corrections for all three of these, including the name error for Offutt AFB. Also, we have determined that we should not have made a correction for Laurel Bay CDP, South Carolina, please disregard this entry.

November 1992



**UNITED STATES DEPARTMENT OF COMMERCE**  
**Bureau of the Census**  
Washington, DC 20233-0001

## **CENSUS OF POPULATION AND HOUSING, 1990: SUMMARY TAPE FILE 4 DATA**

### **TECHNICAL NOTE 3**

**(Selected States)**

We have found five additional code errors in the 1990 census records. Please document the following corrections (bold type identifies the correct code):

#### **Alaska (02)**

In the records for Aleutians East census subarea (county subdivision in Aleutians East borough (013): census code 025), the FIPS code should be **01598** (it is shown incorrectly as 15600).

In the records for Aleutians West census subarea (county subdivision in Aleutians West census area (016): census code 025), the FIPS code should be **01615** (it is shown incorrectly as 15610).

#### **Illinois (17)**

In the records for Berwyn township (county subdivision in Cook County (031): census code 010), the FIPS class code should be **T5** (it is shown incorrectly as T1).

In the records for Markham precinct (county subdivision in Morgan County (137): census code 050), the FIPS code should be **92034** (it is shown incorrectly as 92043).

#### **New York (36)**

In the records for Carmel Hamlet CDP (place: census code 0525), the FIPS code should be **12532** (it is shown incorrectly as 12518).

November 1992



**UNITED STATES DEPARTMENT OF COMMERCE**  
**Bureau of the Census**  
Washington, DC 20233-0001

## **CENSUS OF POPULATION AND HOUSING, 1990: SUMMARY TAPE FILE 4**

### **TECHNICAL NOTE 4 (Selected States)**

**Hawaii (15):** Two census designated places (CDP's)—Allamānu (census code: 0007; FIPS place code: 01925) and Fort Shafter (census code: 0034; FIPS place code: 08350)—that we reported separately for the 1990 census of Honolulu County (003) should have been reported as part of Honolulu CDP (census code: 0110; FIPS place code: 17000). The corrected 1990 census population, housing unit count, land area, and population density for Honolulu CDP are as follows:

Population: 377,059

Housing units: 149,066

Land area:

Square kilometers: 222.1

Square miles: 85.7

Persons per:

Square kilometer: 1,697.7

Square mile: 4,399.8

**Pennsylvania (42):** Incorporated places in Pennsylvania are independent of any township, and therefore should not appear as part of a township. In Northampton County (095), two incorporated places—West Easton borough (census code: 8732; FIPS place code: 82832) and Wilson borough (census code: 8936; FIPS place code: 85592)—are shown partially in Palmer township (census code: 120; FIPS county subdivision code: 57672). The portions of the boroughs erroneously assigned to Palmer township have no population or housing, and only a small area (West Easton: .002 square kilometer of water; Wilson: .032 square kilometer of land, .016 square kilometer of water). These records should be deleted from the hierarchical tables of the published materials, and they should be transferred to the correct county subdivision records associated with West Easton (census code: 175) and Wilson (census code: 185) in data files and TIGER/Line files. For TIGER/Line Census Files, 1990, county 42 095, the Type A Records should have the data in field FMCD blanked for those records with CENID of 42095 and POLYIDs of 5673, 5660, 5662, 5667, and 5672; users should be sure to blank the appropriate fields on Record Types 1 and 3 that bound these polygons.

December 1992



UNITED STATES DEPARTMENT OF COMMERCE  
Bureau of the Census  
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## CENSUS OF POPULATION AND HOUSING, 1990: SUMMARY TAPE FILE 4

### TECHNICAL NOTE 5 (Alaska)

We have found several additional code errors and one name error in the 1990 census records for Alaska (02). Please document the following corrections (bold type identifies the correct information):

#### Alaska (02)

In the records for Allakaket ANVSA (Alaska Native area: census code 6110; FIPS code 01870), the FIPS class code should be **E6** (it is shown incorrectly as E1).

In the records for Angoon ANVSA (Alaska Native area: census code 6150; FIPS code 03445), the FIPS class code should be **E6** (it is shown incorrectly as E1).

In the records for Belkofski ANVSA (Alaska Native area: census code 6290; FIPS code 05980), the FIPS class code should be **E1** (it is shown incorrectly as E2).

In the records for **Clark's Point** city (place: census code 0740; FIPS code 15450), the name is shown incorrectly as Clarks Point city.

In the records for Council ANVSA (Alaska Native area: census code 6650; FIPS code 17640), the FIPS class code should be **E1** (it is shown incorrectly as E2).

In the records for Diomedé city (place: census code 0890; FIPS code 19060), the FIPS class code should be **C6** (it is shown incorrectly as C1).

In the records for Evansville ANVSA (Alaska Native area: census code 6830; FIPS code 23795), the FIPS class code should be **E2** (it is shown incorrectly as E1).

In the records for Evansville CDP (place: census code 1070; FIPS code 23790), the FIPS class code should be **U9** (it is shown incorrectly as U6).

In the records for Georgetown ANVSA (Alaska Native area: census code 6930; FIPS code 28350), the FIPS class code should be **E1** (it is shown incorrectly as E2).

In the records for Harding Lake CDP (place: census code 1310; FIPS code 31820), the FIPS class code should be **U1** (it is shown incorrectly as U6).

In the records for Inalik ANVSA (Alaska Native area: census code 7120; FIPS code 35170), the FIPS class code should be **E6** (it is shown incorrectly as E1).

In the records for Kalskag ANVSA (Alaska Native area: census code 7180; FIPS code 37320), the FIPS class code should be **E6** (it is shown incorrectly as E1).

In the records for Kodiak Station CDP (place: census code 1755), the FIPS code should be **41210** (it is shown incorrectly as 41770).

In the records for Northway CDP (place: census code 2430), the FIPS code should be **56220** (it is shown incorrectly as 56240).

In the records for Pilot Point ANVSA (Alaska Native area: census code 8035), the FIPS code should be **60645** (it is shown incorrectly as 60530).

In the records for Portage Creek ANVSA (Alaska Native area: census code 8120; FIPS code 62290), the FIPS class code should be **E1** (it is shown incorrectly as E2).

In the records for Tazlina ANVSA (Alaska Native area: census code 8650; FIPS code 75490), the FIPS class code should be **E1** (it is shown incorrectly as E2).

In the records for Upper Kalskag city (place: census code 3440; FIPS code 81320), the FIPS class code should be **C6** (it is shown incorrectly as C1).

January 1993



**UNITED STATES DEPARTMENT OF COMMERCE**  
**Bureau of the Census**  
Washington, DC 20233-0001

**March, 1993**

**To: Census of Population and Housing, 1990: Summary Tape File 4  
Data Users**

**From: Data User Services Division  
Bureau of the Census**

**Attached is User Note 6 for the Summary Tape File 4 data. Please file this user note in the technical documentation as directed. User Notes 1-5 were included in the technical documentation.**

**These notes are sent automatically without charge to Census Bureau tape purchasers. They are available to others on a subscription basis at a cost of \$40 annually. To subscribe, contact Customer Services, Data User Services Division, Bureau of the Census, Washington, DC 20233.**

**Both user notes and technical notes are available upon release from the State and Regional Programs electronic bulletin board. The bulletin board can be accessed on 301-763-7554.**





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**CENSUS OF POPULATION AND HOUSING, 1990:  
SUMMARY TAPE FILE 4**

**USER NOTE 6**

Please insert the attached Table C. Standard Error  
Design Factors for each State, the District of Columbia,

and the United States in appendix C of your technical  
documentation following page C-10.

March 1993

**Table C. Standard Error Design Factors—United States**

[Percent of persons or housing units in sample]

Characteristic	Less than 15 percent	15 to 30 percent	30 to 45 percent	45 percent or more
<b>POPULATION</b>				
Age .....	1.2	1.0	0.6	0.5
Sex .....	1.2	1.0	0.6	0.5
Race .....	1.2	1.0	0.6	0.5
Hispanic origin (of any race) .....	1.2	1.0	0.6	0.5
Marital status .....	1.2	0.9	0.5	0.4
Household type and relationship .....	1.3	1.1	0.6	0.5
Children ever born .....	2.6	2.3	1.5	1.2
Work disability and mobility limitation status .....	1.2	1.0	0.6	0.5
Ancestry .....	2.1	1.7	1.0	0.8
Place of birth .....	2.2	2.1	1.2	1.1
Citizenship .....	1.8	1.5	0.9	0.7
Residence in 1985 .....	2.1	1.9	1.1	0.9
Year of entry .....	1.5	1.2	0.6	0.5
Language spoken at home and ability to speak English .....	1.7	1.4	0.8	0.7
Educational attainment .....	1.3	1.1	0.6	0.5
School enrollment .....	1.8	1.5	0.9	0.7
Type of residence (urban/ rural) .....	2.2	2.2	1.4	1.1
Household type .....	1.3	1.1	0.6	0.5
Family type .....	1.2	1.0	0.6	0.5
Group quarters .....	1.0	0.9	0.8	0.8
Subfamily type and presence of children .....	1.2	1.0	0.5	0.5
Employment status .....	1.2	1.0	0.6	0.5
Industry .....	1.3	1.1	0.6	0.5
Occupation .....	1.2	1.0	0.6	0.5
Class of worker .....	1.5	1.2	0.7	0.6
Hours per week and weeks worked in 1989 .....	1.2	1.0	0.6	0.5
Number of workers in family .....	1.3	1.1	0.6	0.5
Place of work .....	1.5	1.2	0.7	0.6
Means of transportation to work .....	1.5	1.2	0.7	0.6
Travel time to work .....	1.3	1.1	0.6	0.5
Private vehicle occupancy .....	1.5	1.2	0.7	0.6
Time leaving home to go to work .....	1.3	1.1	0.6	0.5
Type of income in 1989 .....	1.4	1.2	0.6	0.5
Household income in 1989 .....	1.2	1.0	0.5	0.5
Family income in 1989 .....	1.2	1.0	0.6	0.5
Poverty status in 1989 (persons) .....	1.6	1.4	0.8	0.7
Poverty status in 1989 (families) .....	1.2	1.0	0.5	0.5
Armed Forces and veteran status .....	1.5	1.2	0.7	0.5
<b>HOUSING</b>				
Age of householder .....	1.2	1.0	0.6	0.5
Race of householder .....	1.2	1.0	0.6	0.5
Hispanic origin of householder .....	1.2	1.0	0.6	0.5
Type of residence (urban/ rural) .....	1.1	1.0	0.6	0.5
Condominium status .....	1.2	1.0	0.5	0.5
Units in structure .....	1.2	1.0	0.6	0.5
Tenure .....	1.2	1.0	0.6	0.5
Occupancy status .....	1.2	1.0	0.6	0.5
Value .....	1.2	1.0	0.5	0.5
Gross rent .....	1.2	1.0	0.5	0.5
Household income in 1989 .....	1.2	1.0	0.6	0.5
Year structure built .....	1.2	1.0	0.5	0.5
Rooms, bedrooms .....	1.2	1.1	0.5	0.5
Kitchen facilities .....	1.3	1.1	0.6	0.5
Source of water, plumbing facilities .....	1.3	1.1	0.6	0.5
Sewage disposal .....	1.2	1.0	0.5	0.4
House heating fuel .....	1.3	1.1	0.6	0.5
Telephone in housing unit .....	1.2	1.1	0.6	0.5
Vehicles available .....	1.3	1.1	0.6	0.5
Year householder moved into structure .....	1.2	1.0	0.6	0.5
Mortgage status and monthly mortgage costs .....	1.2	1.0	0.5	0.5
Mortgage status and selected monthly owner costs .....	1.2	1.0	0.5	0.5
Gross rent as a percentage of household income in 1989 .....	1.3	1.1	0.6	0.5
Household income in 1989 by selected monthly owner costs as a percentage of income .....	1.2	1.0	0.5	0.5

**Table C. Standard Error Design Factors—Alabama**

[Percent of persons or housing units in sample]

Characteristic	Less than 15 percent	15 to 30 percent	30 to 45 percent	45 percent or more
<b>POPULATION</b>				
Age.....	1.2	1.0	0.6	0.5
Sex.....	1.2	1.0	0.6	0.5
Race.....	1.2	1.0	0.6	0.5
Hispanic origin (of any race).....	1.2	1.0	0.6	0.5
Marital status.....	1.1	0.9	0.5	0.4
Household type and relationship.....	1.3	1.1	0.6	0.5
Children ever born.....	2.7	2.6	1.5	1.3
Work disability and mobility limitation status.....	1.2	1.0	0.6	0.5
Ancestry.....	2.4	2.1	1.2	1.0
Place of birth.....	2.6	2.3	1.4	1.0
Citizenship.....	1.8	1.6	0.9	0.7
Residence in 1985.....	2.1	1.9	1.1	0.9
Year of entry.....	1.3	1.1	0.6	0.5
Language spoken at home and ability to speak English.....	1.7	1.5	0.8	0.7
Educational attainment.....	1.3	1.1	0.6	0.5
School enrollment.....	1.7	1.5	0.8	0.7
Type of residence (urban/rural).....	2.1	2.1	1.2	0.9
Household type.....	1.3	1.1	0.6	0.5
Family type.....	1.2	1.1	0.6	0.5
Group quarters.....	1.0	0.9	0.8	0.7
Subfamily type and presence of children.....	1.2	1.0	0.6	0.5
Employment status.....	1.2	1.0	0.6	0.5
Industry.....	1.3	1.1	0.6	0.5
Occupation.....	1.2	1.0	0.6	0.5
Class of worker.....	1.4	1.2	0.7	0.6
Hours per week and weeks worked in 1989.....	1.2	1.0	0.6	0.5
Number of workers in family.....	1.3	1.1	0.6	0.5
Place of work.....	1.5	1.2	0.7	0.6
Means of transportation to work.....	1.4	1.3	0.7	0.6
Travel time to work.....	1.3	1.1	0.6	0.5
Private vehicle occupancy.....	1.4	1.3	0.7	0.6
Time leaving home to go to work.....	1.3	1.1	0.6	0.5
Type of income in 1989.....	1.4	1.2	0.7	0.5
Household income in 1989.....	1.2	1.0	0.6	0.5
Family income in 1989.....	1.2	1.0	0.6	0.5
Poverty status in 1989 (persons).....	1.7	1.5	0.8	0.7
Poverty status in 1989 (families).....	1.2	1.0	0.6	0.5
Armed Forces and veteran status.....	1.4	1.3	0.7	0.6
<b>HOUSING</b>				
Age of householder.....	1.2	1.0	0.6	0.5
Race of householder.....	1.2	1.0	0.6	0.5
Hispanic origin of householder.....	1.2	1.0	0.6	0.5
Type of residence (urban/rural).....	1.2	1.1	0.6	0.5
Condominium status.....	1.2	1.1	0.5	0.5
Units in structure.....	1.2	1.1	0.6	0.5
Tenure.....	1.2	1.0	0.6	0.5
Occupancy status.....	1.2	1.0	0.6	0.5
Value.....	1.2	1.0	0.6	0.5
Gross rent.....	1.2	1.1	0.6	0.5
Household income in 1989.....	1.2	1.0	0.6	0.5
Year structure built.....	1.2	1.0	0.5	0.5
Rooms, bedrooms.....	1.2	1.1	0.6	0.5
Kitchen facilities.....	1.3	1.3	0.5	0.5
Source of water, plumbing facilities.....	1.3	1.1	0.6	0.5
Sewage disposal.....	1.2	1.1	0.5	0.5
House heating fuel.....	1.2	1.1	0.6	0.5
Telephone in housing unit.....	1.2	1.1	0.6	0.5
Vehicles available.....	1.3	1.1	0.6	0.5
Year householder moved into structure.....	1.2	1.1	0.6	0.5
Mortgage status and monthly mortgage costs.....	1.2	1.0	0.5	0.5
Mortgage status and selected monthly owner costs.....	1.2	1.0	0.5	0.5
Gross rent as a percentage of household income in 1989.....	1.3	1.1	0.6	0.5
Household income in 1989 by selected monthly owner costs as a percentage of income.....	1.2	1.0	0.5	0.5

Table C. Standard Error Design Factors—Alaska

[Percent of persons or housing units in sample]

Characteristic	Less than 15 percent	15 to 30 percent	30 to 45 percent	45 percent or more
<b>POPULATION</b>				
Age.....	1.2	1.0	0.6	0.5
Sex.....	1.2	1.0	0.6	0.5
Race.....	1.2	1.0	0.6	0.5
Hispanic origin (of any race).....	1.2	1.0	0.6	0.5
Marital status.....	1.1	0.9	0.6	0.5
Household type and relationship.....	1.3	1.1	0.7	0.6
Children ever born.....	2.4	2.0	1.4	1.4
Work disability and mobility limitation status.....	1.2	1.0	0.6	0.5
Ancestry.....	2.0	1.8	1.2	1.2
Place of birth.....	1.6	1.5	1.0	0.9
Citizenship.....	1.7	1.5	1.0	0.8
Residence in 1985.....	2.0	1.8	1.1	1.0
Year of entry.....	1.4	1.1	0.7	0.5
Language spoken at home and ability to speak English.....	1.6	1.4	0.8	0.6
Educational attainment.....	1.3	1.1	0.7	0.5
School enrollment.....	1.7	1.4	0.9	0.7
Type of residence (urban/rural).....	2.4	2.4	1.2	1.2
Household type.....	1.3	1.1	0.7	0.6
Family type.....	1.2	1.0	0.6	0.5
Group quarters.....	1.0	1.0	0.8	0.8
Subfamily type and presence of children.....	1.1	1.0	0.5	0.5
Employment status.....	1.2	1.0	0.6	0.5
Industry.....	1.3	1.1	0.6	0.5
Occupation.....	1.2	1.0	0.6	0.5
Class of worker.....	1.3	1.2	0.7	0.5
Hours per week and weeks worked in 1989.....	1.2	1.0	0.6	0.5
Number of workers in family.....	1.4	1.2	0.7	0.5
Place of work.....	1.5	1.2	0.8	0.5
Means of transportation to work.....	1.4	1.2	0.7	0.5
Travel time to work.....	1.3	1.1	0.7	0.5
Private vehicle occupancy.....	1.4	1.2	0.7	0.6
Time leaving home to go to work.....	1.3	1.1	0.7	0.5
Type of income in 1989.....	1.4	1.2	0.6	0.5
Household income in 1989.....	1.2	1.0	0.6	0.5
Family income in 1989.....	1.2	1.0	0.6	0.5
Poverty status in 1989 (persons).....	1.6	1.4	0.8	0.7
Poverty status in 1989 (families).....	1.2	1.0	0.6	0.5
Armed Forces and veteran status.....	1.3	1.1	0.7	0.6
<b>HOUSING</b>				
Age of householder.....	1.2	1.0	0.6	0.5
Race of householder.....	1.2	1.0	0.6	0.5
Hispanic origin of householder.....	1.2	1.0	0.6	0.5
Type of residence (urban/rural).....	1.0	0.9	0.5	0.5
Condominium status.....	1.2	1.0	0.5	0.5
Units in structure.....	1.1	1.0	0.6	0.5
Tenure.....	1.2	1.0	0.6	0.5
Occupancy status.....	1.2	1.0	0.6	0.5
Value.....	1.2	1.0	0.6	0.5
Gross rent.....	1.2	1.0	0.5	0.5
Household income in 1989.....	1.2	1.0	0.6	0.5
Year structure built.....	1.2	1.0	0.5	0.5
Rooms, bedrooms.....	1.2	1.0	0.5	0.5
Kitchen facilities.....	1.3	1.0	0.5	0.5
Source of water, plumbing facilities.....	1.3	1.1	0.5	0.5
Sewage disposal.....	1.1	1.0	0.5	0.4
House heating fuel.....	1.3	1.1	0.6	0.5
Telephone in housing unit.....	1.3	1.1	0.6	0.5
Vehicles available.....	1.3	1.1	0.6	0.5
Year householder moved into structure.....	1.2	1.0	0.6	0.5
Mortgage status and monthly mortgage costs.....	1.1	1.0	0.6	0.5
Mortgage status and selected monthly owner costs.....	1.1	1.0	0.6	0.5
Gross rent as a percentage of household income in 1989.....	1.2	1.0	0.6	0.5
Household income in 1989 by selected monthly owner costs as a percentage of income.....	1.1	1.0	0.6	0.5

**Table C. Standard Error Design Factors—Arkansas**

[Percent of persons or housing units in sample]

Characteristic	Less than 15 percent	15 to 30 percent	30 to 45 percent	45 percent or more
<b>POPULATION</b>				
Age.....	1.2	1.0	0.6	0.5
Sex.....	1.2	1.0	0.6	0.5
Race.....	1.2	1.0	0.6	0.5
Hispanic origin (of any race).....	1.2	1.0	0.6	0.5
Marital status.....	1.1	0.9	0.5	0.4
Household type and relationship.....	1.3	1.1	0.6	0.5
Children ever born.....	2.8	2.6	1.7	1.4
Work disability and mobility limitation status.....	1.2	1.0	0.5	0.5
Ancestry.....	2.2	1.9	1.1	0.9
Place of birth.....	2.3	1.9	1.2	0.9
Citizenship.....	1.8	1.6	0.9	0.7
Residence in 1985.....	2.1	1.9	1.0	0.8
Year of entry.....	1.3	1.1	0.6	0.5
Language spoken at home and ability to speak English.....	1.7	1.5	0.8	0.7
Educational attainment.....	1.3	1.1	0.6	0.5
School enrollment.....	1.7	1.6	0.8	0.7
Type of residence (urban/ rural).....	2.7	2.7	1.2	0.7
Household type.....	1.3	1.1	0.6	0.5
Family type.....	1.2	1.1	0.5	0.5
Group quarters.....	1.1	1.0	0.8	0.8
Subfamily type and presence of children.....	1.2	1.0	0.6	0.5
Employment status.....	1.2	1.0	0.5	0.5
Industry.....	1.3	1.1	0.6	0.5
Occupation.....	1.2	1.0	0.5	0.5
Class of worker.....	1.4	1.2	0.6	0.6
Hours per week and weeks worked in 1989.....	1.2	1.0	0.5	0.5
Number of workers in family.....	1.3	1.1	0.6	0.5
Place of work.....	1.5	1.3	0.7	0.6
Means of transportation to work.....	1.4	1.3	0.7	0.6
Travel time to work.....	1.3	1.1	0.6	0.5
Private vehicle occupancy.....	1.4	1.3	0.7	0.6
Time leaving home to go to work.....	1.3	1.1	0.6	0.5
Type of income in 1989.....	1.4	1.2	0.6	0.5
Household income in 1989.....	1.2	1.0	0.5	0.5
Family income in 1989.....	1.2	1.0	0.5	0.5
Poverty status in 1989 (persons).....	1.7	1.4	0.8	0.7
Poverty status in 1989 (families).....	1.2	1.0	0.5	0.5
Armed Forces and veteran status.....	1.4	1.2	0.7	0.6
<b>HOUSING</b>				
Age of householder.....	1.2	1.0	0.6	0.5
Race of householder.....	1.2	1.0	0.6	0.5
Hispanic origin of householder.....	1.2	1.0	0.6	0.5
Type of residence (urban/ rural).....	1.1	1.1	0.5	0.5
Condominium status.....	1.2	1.1	0.5	0.5
Units in structure.....	1.2	1.1	0.6	0.5
Tenure.....	1.2	1.0	0.6	0.5
Occupancy status.....	1.2	1.0	0.6	0.5
Value.....	1.2	1.0	0.5	0.5
Gross rent.....	1.2	1.0	0.5	0.5
Household income in 1989.....	1.2	1.0	0.5	0.5
Year structure built.....	1.2	1.0	0.5	0.5
Rooms, bedrooms.....	1.2	1.0	0.5	0.5
Kitchen facilities.....	1.2	1.2	0.5	0.5
Source of water, plumbing facilities.....	1.3	1.1	0.6	0.5
Sewage disposal.....	1.2	1.1	0.5	0.4
House heating fuel.....	1.2	1.0	0.5	0.5
Telephone in housing unit.....	1.2	1.1	0.6	0.5
Vehicles available.....	1.3	1.1	0.5	0.5
Year householder moved into structure.....	1.2	1.0	0.5	0.5
Mortgage status and monthly mortgage costs.....	1.2	1.0	0.5	0.5
Mortgage status and selected monthly owner costs.....	1.2	1.0	0.5	0.5
Gross rent as a percentage of household income in 1989.....	1.2	1.0	0.5	0.5
Household income in 1989 by selected monthly owner costs as a percentage of income.....	1.2	1.0	0.5	0.5

Table C. Standard Error Design Factors—Arizona

[Percent of persons or housing units in sample]

Characteristic	Less than 15 percent	15 to 30 percent	30 to 45 percent	45 percent or more
<b>POPULATION</b>				
Age.....	1.2	1.0	0.6	0.5
Sex.....	1.2	1.0	0.6	0.5
Race.....	1.2	1.0	0.6	0.5
Hispanic origin (of any race).....	1.2	1.0	0.6	0.5
Marital status.....	1.2	0.9	0.6	0.5
Household type and relationship.....	1.4	1.1	0.7	0.6
Children ever born.....	2.7	2.3	1.6	1.4
Work disability and mobility limitation status.....	1.3	1.1	0.6	0.5
Ancestry.....	2.1	1.8	1.1	1.0
Place of birth.....	1.8	1.5	1.0	0.8
Citizenship.....	1.9	1.5	1.0	0.8
Residence in 1985.....	2.1	1.8	1.1	0.9
Year of entry.....	1.5	1.2	0.6	0.6
Language spoken at home and ability to speak English.....	1.7	1.4	0.8	0.7
Educational attainment.....	1.4	1.1	0.7	0.5
School enrollment.....	1.9	1.5	1.0	0.8
Type of residence (urban/rural).....	2.4	2.1	0.9	0.7
Household type.....	1.4	1.1	0.7	0.6
Family type.....	1.3	1.0	0.6	0.5
Group quarters.....	1.1	1.0	1.0	1.0
Subfamily type and presence of children.....	1.2	1.0	0.6	0.5
Employment status.....	1.3	1.0	0.6	0.5
Industry.....	1.3	1.1	0.6	0.5
Occupation.....	1.3	1.0	0.6	0.5
Class of worker.....	1.5	1.2	0.7	0.5
Hours per week and weeks worked in 1989.....	1.2	1.0	0.6	0.5
Number of workers in family.....	1.4	1.1	0.7	0.5
Place of work.....	1.6	1.2	0.8	0.5
Means of transportation to work.....	1.5	1.2	0.7	0.5
Travel time to work.....	1.4	1.1	0.6	0.5
Private vehicle occupancy.....	1.5	1.2	0.8	0.5
Time leaving home to go to work.....	1.3	1.1	0.6	0.5
Type of income in 1989.....	1.4	1.2	0.7	0.6
Household income in 1989.....	1.3	1.1	0.6	0.5
Family income in 1989.....	1.3	1.0	0.6	0.5
Poverty status in 1989 (persons).....	1.7	1.4	0.8	0.7
Poverty status in 1989 (families).....	1.2	1.0	0.6	0.5
Armed Forces and veteran status.....	1.5	1.2	0.8	0.6
<b>HOUSING</b>				
Age of householder.....	1.2	1.0	0.6	0.5
Race of householder.....	1.2	1.0	0.6	0.5
Hispanic origin of householder.....	1.2	1.0	0.6	0.5
Type of residence (urban/rural).....	1.1	0.9	0.6	0.4
Condominium status.....	1.2	1.1	0.6	0.5
Units in structure.....	1.2	1.0	0.5	0.5
Tenure.....	1.2	1.0	0.6	0.5
Occupancy status.....	1.2	1.0	0.6	0.5
Value.....	1.2	1.0	0.6	0.5
Gross rent.....	1.3	1.0	0.6	0.5
Household income in 1989.....	1.3	1.0	0.6	0.5
Year structure built.....	1.2	1.0	0.6	0.5
Rooms, bedrooms.....	1.2	1.0	0.6	0.5
Kitchen facilities.....	1.3	1.1	0.5	0.4
Source of water, plumbing facilities.....	1.4	1.2	0.6	0.6
Sewage disposal.....	1.2	1.0	0.6	0.6
House heating fuel.....	1.3	1.1	0.6	0.5
Telephone in housing unit.....	1.2	1.1	0.6	0.5
Vehicles available.....	1.3	1.1	0.6	0.6
Year householder moved into structure.....	1.2	1.1	0.6	0.5
Mortgage status and monthly mortgage costs.....	1.2	1.0	0.6	0.5
Mortgage status and selected monthly owner costs.....	1.2	1.0	0.6	0.5
Gross rent as a percentage of household income in 1989.....	1.3	1.1	0.6	0.5
Household income in 1989 by selected monthly owner costs as a percentage of income.....	1.2	1.0	0.6	0.5

**Table C. Standard Error Design Factors—California**

[Percent of persons or housing units in sample]

Characteristic	Less than 15 percent	15 to 30 percent	30 to 45 percent	45 percent or more
<b>POPULATION</b>				
Age.....	1.2	1.0	0.6	0.5
Sex.....	1.2	1.0	0.6	0.5
Race.....	1.2	1.0	0.6	0.5
Hispanic origin (of any race).....	1.2	1.0	0.6	0.5
Marital status.....	1.2	1.0	0.6	0.4
Household type and relationship.....	1.4	1.1	0.7	0.5
Children ever born.....	2.6	2.3	1.4	1.1
Work disability and mobility limitation status.....	1.3	1.1	0.6	0.5
Ancestry.....	2.3	1.9	1.1	0.7
Place of birth.....	1.9	1.6	1.0	0.7
Citizenship.....	1.8	1.5	1.0	0.7
Residence in 1985.....	2.1	1.8	1.1	0.8
Year of entry.....	1.7	1.4	0.7	0.6
Language spoken at home and ability to speak English.....	1.6	1.4	0.8	0.6
Educational attainment.....	1.4	1.2	0.7	0.5
School enrollment.....	1.8	1.5	1.0	0.7
Type of residence (urban/ rural).....	2.5	2.2	1.7	0.8
Household type.....	1.4	1.1	0.7	0.5
Family type.....	1.2	1.1	0.6	0.5
Group quarters.....	1.2	1.2	1.2	0.8
Subfamily type and presence of children.....	1.3	1.1	0.6	0.4
Employment status.....	1.3	1.1	0.6	0.5
Industry.....	1.3	1.2	0.7	0.5
Occupation.....	1.3	1.1	0.6	0.5
Class of worker.....	1.5	1.3	0.7	0.6
Hours per week and weeks worked in 1989.....	1.3	1.1	0.6	0.5
Travel time to work.....	1.4	1.2	0.7	0.5
Private vehicle occupancy.....	1.5	1.3	0.7	0.5
Time leaving home to go to work.....	1.4	1.1	0.7	0.5
Family income in 1989.....	1.2	1.1	0.6	0.5
Poverty status in 1989 (persons).....	1.7	1.4	0.8	0.7
Poverty status in 1989 (families).....	1.2	1.0	0.6	0.5
Armed Forces and veteran status.....	1.6	1.3	0.7	0.5
<b>HOUSING</b>				
Age of householder.....	1.2	1.0	0.6	0.5
Race of householder.....	1.2	1.0	0.6	0.5
Hispanic origin of householder.....	1.2	1.0	0.6	0.5
Type of residence (urban/ rural).....	1.1	1.0	0.7	0.5
Condominium status.....	1.2	1.1	0.6	0.5
Units in structure.....	1.2	1.1	0.6	0.5
Tenure.....	1.2	1.0	0.6	0.5
Occupancy status.....	1.2	1.0	0.6	0.5
Value.....	1.2	1.1	0.6	0.5
Gross rent.....	1.2	1.1	0.6	0.5
Household income in 1989.....	1.2	1.1	0.6	0.5
Year structure built.....	1.2	1.1	0.6	0.5
Rooms, bedrooms.....	1.2	1.1	0.6	0.5
Kitchen facilities.....	1.4	1.1	0.6	0.4
Source of water, plumbing facilities.....	1.4	1.2	0.6	0.6
Sewage disposal.....	1.2	1.1	0.6	0.5
House heating fuel.....	1.4	1.2	0.6	0.5
Telephone in housing unit.....	1.3	1.1	0.6	0.5
Vehicles available.....	1.3	1.1	0.6	0.5
Year householder moved into structure.....	1.2	1.1	0.6	0.5
Mortgage status and monthly mortgage costs.....	1.2	1.0	0.6	0.5
Mortgage status and selected monthly owner costs.....	1.2	1.0	0.6	0.5
Gross rent as a percentage of household income in 1989.....	1.3	1.1	0.6	0.5
Household income in 1989 by selected monthly owner costs as a percentage of income.....	1.2	1.0	0.6	0.5

**Table C. Standard Error Design Factors—Colorado**  
[Percent of persons or housing units in sample]

Characteristic	Less than 15 percent	15 to 30 percent	30 to 45 percent	45 percent or more
<b>POPULATION</b>				
Age.....	1.2	1.0	0.8	0.5
Sex.....	1.2	1.0	0.8	0.5
Race.....	1.2	1.0	0.8	0.5
Hispanic origin (of any race).....	1.2	1.0	0.8	0.5
Marital status.....	1.1	0.9	0.6	0.4
Household type and relationship.....	1.3	1.1	0.7	0.5
Children ever born.....	2.5	2.2	1.4	1.4
Work disability and mobility limitation status.....	1.2	1.0	0.6	0.5
Ancestry.....	1.9	1.6	1.1	0.8
Place of birth.....	1.8	1.6	1.0	0.8
Citizenship.....	1.8	1.4	1.0	0.7
Residence in 1985.....	1.9	1.7	1.1	0.8
Year of entry.....	1.4	1.2	0.8	0.5
Language spoken at home and ability to speak English.....	1.6	1.4	0.9	0.6
Educational attainment.....	1.3	1.1	0.7	0.5
School enrollment.....	1.7	1.4	1.0	0.7
Type of residence (urban/rural).....	2.1	2.1	1.8	1.2
Household type.....	1.3	1.1	0.7	0.5
Family type.....	1.2	1.0	0.6	0.5
Group quarters.....	1.0	0.9	0.9	0.7
Subfamily type and presence of children.....	1.2	1.0	0.6	0.5
Employment status.....	1.2	1.0	0.6	0.5
Industry.....	1.3	1.1	0.7	0.5
Occupation.....	1.2	1.0	0.6	0.5
Class of worker.....	1.4	1.2	0.8	0.6
Hours per week and weeks worked in 1989.....	1.2	1.0	0.6	0.5
Number of workers in family.....	1.4	1.2	0.7	0.6
Place of work.....	1.4	1.2	0.8	0.6
Means of transportation to work.....	1.4	1.2	0.8	0.6
Travel time to work.....	1.3	1.1	0.7	0.5
Private vehicle occupancy.....	1.4	1.2	0.8	0.6
Time leaving home to go to work.....	1.3	1.1	0.7	0.5
Type of income in 1989.....	1.4	1.2	0.7	0.5
Household income in 1989.....	1.2	1.0	0.6	0.5
Family income in 1989.....	1.2	1.0	0.6	0.5
Poverty status in 1989 (persons).....	1.6	1.3	0.8	0.7
Poverty status in 1989 (families).....	1.2	1.0	0.6	0.5
Armed Forces and veteran status.....	1.4	1.1	0.8	0.5
<b>HOUSING</b>				
Age of householder.....	1.2	1.0	0.6	0.5
Race of householder.....	1.2	1.0	0.6	0.5
Hispanic origin of householder.....	1.2	1.0	0.6	0.5
Type of residence (urban/rural).....	1.1	0.9	0.6	0.5
Condominium status.....	1.2	1.0	0.6	0.5
Units in structure.....	1.1	1.0	0.6	0.5
Tenure.....	1.2	1.0	0.6	0.5
Occupancy status.....	1.2	1.0	0.6	0.5
Value.....	1.1	1.0	0.6	0.5
Gross rent.....	1.2	1.0	0.6	0.5
Household income in 1989.....	1.2	1.0	0.6	0.5
Year structure built.....	1.2	1.0	0.6	0.5
Rooms, bedrooms.....	1.2	1.0	0.6	0.5
Kitchen facilities.....	1.2	1.2	0.9	0.4
Source of water, plumbing facilities.....	1.4	1.1	0.6	0.5
Sewage disposal.....	1.1	0.9	0.5	0.4
House heating fuel.....	1.4	1.1	0.6	0.5
Telephone in housing unit.....	1.2	1.1	0.6	0.5
Vehicles available.....	1.3	1.1	0.7	0.5
Year householder moved into structure.....	1.2	1.0	0.6	0.5
Mortgage status and monthly mortgage costs.....	1.2	1.0	0.6	0.5
Mortgage status and selected monthly owner costs.....	1.1	1.0	0.6	0.5
Gross rent as a percentage of household income in 1989.....	1.3	1.1	0.6	0.5
Household income in 1989 by selected monthly owner costs as a percentage of income.....	1.2	1.0	0.6	0.5



**Table C. Standard Error Design Factors—Connecticut**

[Percent of persons or housing units in sample]

Characteristic	Less than 15 percent	15 to 30 percent	30 to 45 percent	45 percent or more
<b>POPULATION</b>				
Age.....	1.2	1.0	0.6	0.5
Sex.....	1.2	1.0	0.6	0.5
Race.....	1.2	1.0	0.6	0.5
Hispanic origin (of any race).....	1.2	1.0	0.6	0.5
Marital status.....	1.2	0.9	0.5	0.5
Household type and relationship.....	1.3	1.0	0.5	0.5
Children ever born.....	2.5	2.1	1.2	1.0
Work disability and mobility limitation status.....	1.2	1.1	0.5	0.5
Ancestry.....	1.9	1.6	0.8	0.7
Place of birth.....	2.0	1.7	0.9	0.8
Citizenship.....	1.8	1.5	0.9	0.7
Residence in 1985.....	2.1	1.9	1.0	0.9
Year of entry.....	1.5	1.2	0.6	0.5
Language spoken at home and ability to speak English.....	1.7	1.5	0.8	0.7
Educational attainment.....	1.3	1.1	0.6	0.5
School enrollment.....	1.8	1.4	0.8	0.7
Type of residence (urban/rural).....	2.1	1.8	1.0	0.8
Household type.....	1.3	1.0	0.5	0.5
Family type.....	1.2	1.1	0.5	0.5
Group quarters.....	1.5	1.5	1.5	1.5
Subfamily type and presence of children.....	1.2	1.0	0.5	0.5
Employment status.....	1.3	1.0	0.5	0.5
Industry.....	1.3	1.1	0.6	0.5
Occupation.....	1.3	1.1	0.5	0.5
Class of worker.....	1.5	1.3	0.6	0.6
Hours per week and weeks worked in 1989.....	1.2	1.0	0.5	0.5
Number of workers in family.....	1.4	1.1	0.6	0.6
Place of work.....	1.5	1.3	0.6	0.6
Means of transportation to work.....	1.5	1.3	0.7	0.6
Travel time to work.....	1.4	1.1	0.6	0.5
Private vehicle occupancy.....	1.5	1.3	0.7	0.6
Time leaving home to go to work.....	1.3	1.1	0.6	0.5
Type of income in 1989.....	1.4	1.2	0.6	0.5
Household income in 1989.....	1.2	1.1	0.5	0.5
Family income in 1989.....	1.2	1.1	0.5	0.5
Poverty status in 1989 (persons).....	1.6	1.3	0.7	0.6
Poverty status in 1989 (families).....	1.2	1.0	0.5	0.5
Armed Forces and veteran status.....	1.5	1.2	0.6	0.6
<b>HOUSING</b>				
Age of householder.....	1.2	1.0	0.6	0.5
Race of householder.....	1.2	1.0	0.6	0.5
Hispanic origin of householder.....	1.2	1.0	0.6	0.5
Type of residence (urban/rural).....	1.1	0.9	0.6	0.5
Condominium status.....	1.2	1.1	0.5	0.5
Units in structure.....	1.2	1.1	0.6	0.5
Tenure.....	1.2	1.0	0.6	0.5
Occupancy status.....	1.2	1.0	0.6	0.5
Value.....	1.2	1.0	0.5	0.5
Gross rent.....	1.3	1.1	0.5	0.5
Household income in 1989.....	1.2	1.1	0.5	0.5
Year structure built.....	1.2	1.0	0.5	0.5
Rooms, bedrooms.....	1.2	1.1	0.5	0.5
Kitchen facilities.....	1.2	1.1	0.5	0.5
Source of water, plumbing facilities.....	1.3	1.1	0.6	0.5
Sewage disposal.....	1.2	1.0	0.5	0.5
House heating fuel.....	1.3	1.1	0.6	0.5
Telephone in housing unit.....	1.3	1.1	0.6	0.5
Vehicles available.....	1.3	1.1	0.6	0.5
Year householder moved into structure.....	1.2	1.1	0.5	0.5
Mortgage status and monthly mortgage costs.....	1.2	1.0	0.5	0.5
Mortgage status and selected monthly owner costs.....	1.2	1.0	0.5	0.5
Gross rent as a percentage of household income in 1989.....	1.3	1.1	0.5	0.5
Household income in 1989 by selected monthly owner costs as a percentage of income.....	1.2	1.0	0.5	0.5

**Table C. Standard Error Design Factors—Delaware**

[Percent of persons or housing units in sample]

Characteristic	Less than 15 percent	15 to 30 percent	30 to 45 percent	45 percent or more
<b>POPULATION</b>				
Age.....	1.2	1.0	0.6	0.5
Sex.....	1.2	1.0	0.6	0.5
Race.....	1.2	1.0	0.6	0.5
Hispanic origin (of any race).....	1.2	1.0	0.6	0.5
Marital status.....	1.2	0.9	0.5	0.4
Household type and relationship.....	1.3	1.0	0.6	0.5
Children ever born.....	2.5	2.2	1.4	1.1
Work disability and mobility limitation status.....	1.2	1.0	0.6	0.5
Ancestry.....	2.0	1.7	1.0	0.8
Place of birth.....	1.9	1.6	1.0	0.7
Citizenship.....	1.8	1.5	1.0	0.7
Residence in 1985.....	2.0	1.8	1.0	0.8
Year of entry.....	1.4	1.1	0.7	0.5
Language spoken at home and ability to speak English.....	1.7	1.5	0.8	0.7
Educational attainment.....	1.3	1.1	0.6	0.5
School enrollment.....	1.7	1.4	1.0	0.7
Type of residence (urban/rural).....	2.4	1.9	0.9	0.7
Household type.....	1.3	1.0	0.6	0.5
Family type.....	1.2	1.0	0.5	0.5
Group quarters.....	1.0	0.8	0.8	0.7
Subfamily type and presence of children.....	1.2	1.0	0.6	0.5
Employment status.....	1.2	1.0	0.6	0.5
Industry.....	1.3	1.1	0.6	0.5
Occupation.....	1.2	1.0	0.6	0.5
Class of worker.....	1.5	1.2	0.8	0.6
Hours per week and weeks worked in 1989.....	1.2	1.0	0.6	0.5
Number of workers in family.....	1.3	1.1	0.6	0.6
Place of work.....	1.5	1.3	0.8	0.6
Means of transportation to work.....	1.5	1.3	0.7	0.6
Travel time to work.....	1.3	1.1	0.6	0.5
Private vehicle occupancy.....	1.5	1.3	0.7	0.6
Time leaving home to go to work.....	1.3	1.1	0.6	0.5
Type of income in 1989.....	1.4	1.2	0.6	0.5
Household income in 1989.....	1.2	1.0	0.6	0.5
Family income in 1989.....	1.2	1.0	0.6	0.5
Poverty status in 1989 (persons).....	1.6	1.3	0.7	0.6
Poverty status in 1989 (families).....	1.2	1.0	0.6	0.5
Armed Forces and veteran status.....	1.4	1.2	0.7	0.5
<b>HOUSING</b>				
Age of householder.....	1.2	1.0	0.6	0.5
Race of householder.....	1.2	1.0	0.6	0.5
Hispanic origin of householder.....	1.2	1.0	0.6	0.5
Type of residence (urban/rural).....	1.1	0.9	0.6	0.5
Condominium status.....	1.1	1.0	0.5	0.5
Units in structure.....	1.1	1.0	0.5	0.5
Tenure.....	1.2	1.0	0.6	0.5
Occupancy status.....	1.2	1.0	0.6	0.5
Value.....	1.1	1.0	0.5	0.5
Gross rent.....	1.2	1.0	0.5	0.5
Household income in 1989.....	1.2	1.0	0.6	0.5
Year structure built.....	1.2	1.0	0.5	0.5
Rooms, bedrooms.....	1.2	1.0	0.5	0.5
Kitchen facilities.....	1.1	1.0	0.6	0.5
Source of water, plumbing facilities.....	1.3	1.1	0.5	0.5
Sewage disposal.....	1.1	0.9	0.5	0.5
House heating fuel.....	1.2	1.0	0.6	0.5
Telephone in housing unit.....	1.2	1.1	0.6	0.5
Vehicles available.....	1.2	1.1	0.6	0.5
Year householder moved into structure.....	1.2	1.0	0.6	0.5
Mortgage status and monthly mortgage costs.....	1.1	1.0	0.5	0.5
Mortgage status and selected monthly owner costs.....	1.1	1.0	0.5	0.5
Gross rent as a percentage of household income in 1989.....	1.2	1.0	0.6	0.5
Household income in 1989 by selected monthly owner costs as a percentage of income.....	1.1	1.0	0.5	0.5

**Table C. Standard Error Design Factors—District of Columbia**

[Percent of persons or housing units in sample]

Characteristic	Less than 15 percent	15 to 30 percent	30 to 45 percent	45 percent or more
<b>POPULATION</b>				
Age.....	1.2	1.0	0.6	0.5
Sex.....	1.2	1.0	0.6	0.5
Race.....	1.2	1.0	0.6	0.5
Hispanic origin (of any race).....	1.2	1.0	0.6	0.5
Marital status.....	1.4	1.1	0.7	0.6
Household type and relationship.....	1.4	1.2	0.7	0.6
Children ever born.....	2.7	2.1	1.3	1.1
Work disability and mobility limitation status.....	1.3	1.1	0.6	0.5
Ancestry.....	2.4	1.7	1.2	1.0
Place of birth.....	1.9	1.4	0.9	0.8
Citizenship.....	2.1	1.7	1.1	0.9
Residence in 1985.....	2.1	1.8	1.0	0.9
Year of entry.....	1.5	1.3	0.7	0.6
Language spoken at home and ability to speak English.....	1.9	1.6	0.9	0.8
Educational attainment.....	1.4	1.2	0.7	0.6
School enrollment.....	2.0	1.5	1.0	0.8
Type of residence (urban/ rural).....	1.2	1.0	0.6	0.5
Household type.....	1.4	1.2	0.7	0.6
Family type.....	1.2	1.1	0.6	0.5
Group quarters.....	1.3	0.9	0.7	0.5
Subfamily type and presence of children.....	1.3	1.2	0.7	0.6
Employment status.....	1.4	1.2	0.7	0.6
Industry.....	1.3	1.2	0.7	0.6
Occupation.....	1.3	1.1	0.6	0.5
Class of worker.....	1.5	1.3	0.7	0.6
Hours per week and weeks worked in 1989.....	1.3	1.1	0.7	0.5
Number of workers in family.....	1.4	1.3	0.7	0.6
Place of work.....	1.7	1.4	0.8	0.7
Means of transportation to work.....	1.4	1.2	0.7	0.6
Travel time to work.....	1.4	1.1	0.7	0.6
Private vehicle occupancy.....	1.4	1.3	0.7	0.6
Time leaving home to go to work.....	1.4	1.2	0.7	0.6
Type of income in 1989.....	1.5	1.2	0.7	0.6
Household income in 1989.....	1.2	1.1	0.6	0.5
Family income in 1989.....	1.2	1.1	0.6	0.5
Poverty status in 1989 (persons).....	1.7	1.3	0.8	0.7
Poverty status in 1989 (families).....	1.2	1.0	0.6	0.5
Armed Forces and veteran status.....	1.8	1.4	0.9	0.8
<b>HOUSING</b>				
Age of householder.....	1.2	1.0	0.6	0.5
Race of householder.....	1.2	1.0	0.6	0.5
Hispanic origin of householder.....	1.2	1.0	0.6	0.5
Type of residence (urban/ rural).....	1.2	1.0	0.6	0.5
Condominium status.....	1.3	1.1	0.6	0.5
Units in structure.....	1.2	1.0	0.6	0.5
Tenure.....	1.2	1.0	0.6	0.5
Occupancy status.....	1.2	1.0	0.6	0.5
Value.....	1.2	1.1	0.6	0.5
Gross rent.....	1.3	1.1	0.6	0.5
Household income in 1989.....	1.2	1.1	0.6	0.5
Year structure built.....	1.2	1.1	0.6	0.5
Rooms, bedrooms.....	1.3	1.1	0.6	0.5
Kitchen facilities.....	1.2	1.1	0.6	0.5
Source of water, plumbing facilities.....	1.4	1.1	0.7	0.6
Sewage disposal.....	1.2	1.0	0.6	0.5
House heating fuel.....	1.3	1.2	0.7	0.6
Telephone in housing unit.....	1.3	1.0	0.6	0.5
Vehicles available.....	1.3	1.1	0.6	0.5
Year householder moved into structure.....	1.3	1.1	0.6	0.5
Mortgage status and monthly mortgage costs.....	1.2	1.1	0.6	0.5
Mortgage status and selected monthly owner costs.....	1.2	1.0	0.6	0.5
Gross rent as a percentage of household income in 1989.....	1.3	1.1	0.7	0.5
Household income in 1989 by selected monthly owner costs as a percentage of income.....	1.2	1.1	0.6	0.5

Table C. Standard Error Design Factors—Florida

[Percent of persons or housing units in sample]

Characteristic	Less than 15 percent	15 to 30 percent	30 to 45 percent	45 percent or more
<b>POPULATION</b>				
Age.....	1.2	1.0	0.6	0.5
Sex.....	1.2	1.0	0.6	0.5
Race.....	1.2	1.0	0.6	0.5
Hispanic origin (of any race).....	1.2	1.0	0.6	0.5
Marital status.....	1.2	1.0	0.5	0.5
Household type and relationship.....	1.3	1.1	0.6	0.5
Children ever born.....	2.8	2.4	1.5	1.5
Work disability and mobility limitation status.....	1.3	1.1	0.6	0.5
Ancestry.....	2.1	1.8	1.0	0.8
Place of birth.....	1.8	1.5	0.9	0.8
Citizenship.....	1.9	1.6	1.0	0.8
Residence in 1985.....	2.0	1.8	1.0	0.8
Year of entry.....	1.5	1.3	0.6	0.6
Language spoken at home and ability to speak English.....	1.7	1.4	0.8	0.7
Educational attainment.....	1.4	1.1	0.6	0.5
School enrollment.....	1.9	1.6	1.0	0.7
Type of residence (urban/rural).....	2.2	2.2	1.0	0.9
Household type.....	1.3	1.1	0.6	0.5
Family type.....	1.3	1.1	0.6	0.5
Group quarters.....	1.2	1.2	1.2	1.2
Subfamily type and presence of children.....	1.3	1.0	0.6	0.5
Employment status.....	1.3	1.1	0.6	0.5
Industry.....	1.4	1.1	0.6	0.5
Occupation.....	1.3	1.1	0.6	0.5
Class of worker.....	1.5	1.3	0.7	0.6
Hours per week and weeks worked in 1989.....	1.3	1.0	0.6	0.5
Number of workers in family.....	1.4	1.2	0.6	0.6
Place of work.....	1.6	1.3	0.7	0.6
Means of transportation to work.....	1.5	1.3	0.7	0.6
Travel time to work.....	1.4	1.2	0.6	0.5
Private vehicle occupancy.....	1.5	1.3	0.7	0.6
Time leaving home to go to work.....	1.4	1.1	0.6	0.5
Type of income in 1989.....	1.4	1.2	0.6	0.5
Household income in 1989.....	1.3	1.1	0.6	0.5
Family income in 1989.....	1.3	1.1	0.6	0.5
Poverty status in 1989 (persons).....	1.7	1.4	0.8	0.7
Poverty status in 1989 (families).....	1.2	1.0	0.6	0.5
Armed Forces and veteran status.....	1.5	1.3	0.7	0.6
<b>HOUSING</b>				
Age of householder.....	1.2	1.0	0.6	0.5
Race of householder.....	1.2	1.0	0.6	0.5
Hispanic origin of householder.....	1.2	1.0	0.6	0.5
Type of residence (urban/rural).....	1.0	1.0	0.7	0.6
Condominium status.....	1.2	1.0	0.5	0.5
Units in structure.....	1.2	1.0	0.5	0.4
Tenure.....	1.2	1.0	0.6	0.5
Occupancy status.....	1.2	1.0	0.6	0.5
Value.....	1.2	1.0	0.6	0.5
Gross rent.....	1.3	1.1	0.6	0.5
Household income in 1989.....	1.3	1.1	0.6	0.5
Year structure built.....	1.2	1.0	0.5	0.5
Rooms, bedrooms.....	1.2	1.1	0.6	0.5
Kitchen facilities.....	1.3	1.0	0.6	0.5
Source of water, plumbing facilities.....	1.4	1.1	0.6	0.5
Sewage disposal.....	1.2	1.0	0.6	0.5
House heating fuel.....	1.4	1.2	0.6	0.5
Telephone in housing unit.....	1.3	1.1	0.6	0.5
Vehicles available.....	1.3	1.1	0.6	0.5
Year householder moved into structure.....	1.3	1.1	0.6	0.5
Mortgage status and monthly mortgage costs.....	1.2	1.0	0.5	0.5
Mortgage status and selected monthly owner costs.....	1.2	1.0	0.5	0.5
Gross rent as a percentage of household income in 1989.....	1.3	1.1	0.6	0.5
Household income in 1989 by selected monthly owner costs as a percentage of income.....	1.2	1.0	0.5	0.5

Table C. **Standard Error Design Factors—Georgia**

[Percent of persons or housing units in sample]

Characteristic	Less than 15 percent	15 to 30 percent	30 to 45 percent	45 percent or more
<b>POPULATION</b>				
Age.....	1.2	1.0	0.6	0.5
Sex.....	1.2	1.0	0.6	0.5
Race.....	1.2	1.0	0.6	0.5
Hispanic origin (of any race).....	1.2	1.0	0.6	0.5
Marital status.....	1.2	1.0	0.5	0.5
Household type and relationship.....	1.3	1.1	0.6	0.5
Children ever born.....	2.6	2.4	1.5	1.4
Work disability and mobility limitation status.....	1.2	1.0	0.6	0.5
Ancestry.....	2.3	2.1	1.1	1.0
Place of birth.....	2.3	2.2	1.3	1.1
Citizenship.....	1.9	1.6	0.9	0.8
Residence in 1985.....	2.1	1.9	1.0	0.9
Year of entry.....	1.5	1.1	0.6	0.6
Language spoken at home and ability to speak English.....	1.7	1.5	0.8	0.7
Educational attainment.....	1.3	1.1	0.6	0.5
School enrollment.....	1.7	1.5	0.8	0.7
Type of residence (urban/rural).....	2.2	2.2	1.3	1.3
Household type.....	1.3	1.1	0.6	0.5
Family type.....	1.2	1.1	0.5	0.5
Group quarters.....	1.0	0.8	0.8	0.7
Subfamily type and presence of children.....	1.3	1.0	0.5	0.5
Employment status.....	1.2	1.0	0.6	0.5
Industry.....	1.3	1.1	0.6	0.5
Occupation.....	1.2	1.0	0.6	0.5
Class of worker.....	1.5	1.3	0.7	0.6
Hours per week and weeks worked in 1989.....	1.2	1.0	0.6	0.5
Number of workers in family.....	1.4	1.2	0.6	0.6
Place of work.....	1.5	1.3	0.7	0.6
Means of transportation to work.....	1.5	1.3	0.7	0.6
Travel time to work.....	1.3	1.1	0.6	0.5
Private vehicle occupancy.....	1.5	1.3	0.7	0.6
Time leaving home to go to work.....	1.3	1.1	0.6	0.5
Type of income in 1989.....	1.4	1.2	0.6	0.6
Household income in 1989.....	1.2	1.0	0.5	0.5
Family income in 1989.....	1.2	1.0	0.5	0.5
Poverty status in 1989 (persons).....	1.7	1.4	0.8	0.7
Poverty status in 1989 (families).....	1.2	1.0	0.5	0.5
Armed Forces and veteran status.....	1.5	1.3	0.7	0.6
<b>HOUSING</b>				
Age of householder.....	1.2	1.0	0.6	0.5
Race of householder.....	1.2	1.0	0.6	0.5
Hispanic origin of householder.....	1.2	1.0	0.6	0.5
Type of residence (urban/rural).....	1.1	1.0	0.6	0.5
Condominium status.....	1.2	1.1	0.5	0.5
Units in structure.....	1.2	1.1	0.5	0.5
Tenure.....	1.2	1.0	0.6	0.5
Occupancy status.....	1.2	1.0	0.6	0.5
Value.....	1.2	1.0	0.5	0.5
Gross rent.....	1.2	1.1	0.5	0.5
Household income in 1989.....	1.2	1.0	0.5	0.5
Year structure built.....	1.2	1.0	0.5	0.5
Rooms, bedrooms.....	1.2	1.1	0.6	0.5
Kitchen facilities.....	1.2	1.1	0.5	0.5
Source of water, plumbing facilities.....	1.3	1.1	0.6	0.5
Sewage disposal.....	1.2	1.1	0.5	0.5
House heating fuel.....	1.2	1.1	0.5	0.5
Telephone in housing unit.....	1.2	1.1	0.6	0.5
Vehicles available.....	1.3	1.1	0.5	0.5
Year householder moved into structure.....	1.2	1.1	0.5	0.5
Mortgage status and monthly mortgage costs.....	1.2	1.0	0.5	0.5
Mortgage status and selected monthly owner costs.....	1.2	1.0	0.5	0.5
Gross rent as a percentage of household income in 1989.....	1.3	1.1	0.5	0.5
Household income in 1989 by selected monthly owner costs as a percentage of income.....	1.2	1.0	0.5	0.5

**Table C. Standard Error Design Factors—Hawaii**  
[Percent of persons or housing units in sample]

Characteristic	Less than 15 percent	15 to 30 percent	30 to 45 percent	45 percent or more
<b>POPULATION</b>				
Age.....	1.2	1.0	0.6	0.5
Sex.....	1.2	1.0	0.6	0.5
Race.....	1.2	1.0	0.6	0.5
Hispanic origin (of any race).....	1.2	1.0	0.6	0.5
Marital status.....	1.1	1.0	0.6	0.5
Household type and relationship.....	1.3	1.1	0.6	0.5
Children ever born.....	2.7	2.5	1.3	1.1
Work disability and mobility limitation status.....	1.2	1.1	0.6	0.5
Ancestry.....	2.5	2.3	1.3	1.1
Place of birth.....	2.0	2.0	1.0	0.8
Citizenship.....	1.7	1.5	0.9	0.7
Residence in 1985.....	2.1	2.0	1.0	0.9
Year of entry.....	1.5	1.3	0.8	0.6
Language spoken at home and ability to speak English.....	1.6	1.4	0.8	0.7
Educational attainment.....	1.3	1.2	0.7	0.6
School enrollment.....	1.8	1.6	0.9	0.8
Type of residence (urban/ rural).....	2.4	2.4	1.2	1.0
Household type.....	1.3	1.1	0.6	0.5
Family type.....	1.2	1.1	0.6	0.5
Group quarters.....	0.9	0.9	0.5	0.4
Subfamily type and presence of children.....	1.2	1.1	0.6	0.5
Employment status.....	1.3	1.1	0.6	0.5
Industry.....	1.3	1.1	0.7	0.5
Occupation.....	1.2	1.1	0.6	0.5
Class of worker.....	1.5	1.3	0.8	0.6
Hours per week and weeks worked in 1989.....	1.2	1.1	0.6	0.5
Number of workers in family.....	1.3	1.1	0.6	0.5
Place of work.....	1.6	1.4	0.8	0.7
Means of transportation to work.....	1.4	1.3	0.7	0.6
Travel time to work.....	1.3	1.2	0.7	0.6
Private vehicle occupancy.....	1.4	1.3	0.7	0.6
Time leaving home to go to work.....	1.3	1.2	0.7	0.5
Type of income in 1989.....	1.4	1.2	0.7	0.6
Household income in 1989.....	1.2	1.1	0.6	0.5
Family income in 1989.....	1.2	1.1	0.6	0.5
Poverty status in 1989 (persons).....	1.6	1.4	0.8	0.7
Poverty status in 1989 (families).....	1.2	1.0	0.6	0.5
Armed Forces and veteran status.....	1.5	1.3	0.8	0.6
<b>HOUSING</b>				
Age of householder.....	1.2	1.0	0.6	0.5
Race of householder.....	1.2	1.0	0.6	0.5
Hispanic origin of householder.....	1.2	1.0	0.6	0.5
Type of residence (urban/ rural).....	1.1	1.1	0.5	0.4
Condominium status.....	1.2	1.1	0.6	0.5
Units in structure.....	1.2	1.1	0.6	0.5
Tenure.....	1.2	1.0	0.6	0.5
Occupancy status.....	1.2	1.0	0.6	0.5
Value.....	1.2	1.1	0.6	0.5
Gross rent.....	1.2	1.1	0.6	0.5
Household income in 1989.....	1.2	1.1	0.6	0.5
Year structure built.....	1.2	1.1	0.6	0.5
Rooms, bedrooms.....	1.2	1.1	0.6	0.5
Kitchen facilities.....	1.3	1.3	0.6	0.5
Source of water, plumbing facilities.....	1.3	1.2	0.6	0.5
Sewage disposal.....	1.2	1.1	0.6	0.5
House heating fuel.....	1.3	1.1	0.6	0.5
Telephone in housing unit.....	1.3	1.1	0.6	0.5
Vehicles available.....	1.2	1.1	0.6	0.5
Year householder moved into structure.....	1.2	1.1	0.6	0.5
Mortgage status and monthly mortgage costs.....	1.2	1.1	0.6	0.5
Mortgage status and selected monthly owner costs.....	1.2	1.0	0.6	0.5
Gross rent as a percentage of household income in 1989.....	1.2	1.1	0.6	0.5
Household income in 1989 by selected monthly owner costs as a percentage of income.....	1.2	1.1	0.6	0.5

Table C. Standard Error Design Factors—Idaho

[Percent of persons or housing units in sample]

Characteristic	Less than 15 percent	15 to 30 percent	30 to 45 percent	45 percent or more
<b>POPULATION</b>				
Age .....	1.2	1.0	0.6	0.5
Sex .....	1.2	1.0	0.6	0.5
Race .....	1.2	1.0	0.6	0.5
Hispanic origin (of any race) .....	1.2	1.0	0.6	0.5
Marital status .....	1.0	0.9	0.6	0.4
Household type and relationship .....	1.3	1.1	0.7	0.5
Children ever born .....	2.5	2.3	1.6	1.2
Work disability and mobility limitation status .....	1.2	1.0	0.6	0.5
Ancestry .....	1.9	1.7	1.1	0.8
Place of birth .....	1.8	1.6	1.1	0.8
Citizenship .....	1.6	1.4	1.0	0.7
Residence in 1985 .....	2.1	1.8	1.2	0.9
Year of entry .....	1.4	1.1	0.7	0.5
Language spoken at home and ability to speak English .....	1.6	1.4	0.9	0.7
Educational attainment .....	1.2	1.1	0.7	0.5
School enrollment .....	1.6	1.4	1.0	0.7
Type of residence (urban/ rural) .....	2.9	2.4	2.0	1.4
Household type .....	1.3	1.1	0.7	0.5
Family type .....	1.2	1.0	0.6	0.5
Group quarters .....	0.9	0.9	0.8	0.8
Subfamily type and presence of children .....	1.2	0.9	0.5	0.5
Employment status .....	1.1	1.0	0.6	0.5
Industry .....	1.3	1.1	0.7	0.5
Occupation .....	1.2	1.0	0.6	0.5
Class of worker .....	1.4	1.1	0.7	0.5
Hours per week and weeks worked in 1989 .....	1.1	1.0	0.6	0.5
Number of workers in family .....	1.3	1.1	0.7	0.5
Place of work .....	1.4	1.2	0.8	0.6
Means of transportation to work .....	1.4	1.2	0.7	0.6
Travel time to work .....	1.3	1.1	0.7	0.5
Private vehicle occupancy .....	1.4	1.2	0.7	0.6
Time leaving home to go to work .....	1.3	1.1	0.6	0.5
Type of income in 1989 .....	1.3	1.1	0.7	0.5
Household income in 1989 .....	1.2	1.0	0.6	0.5
Family income in 1989 .....	1.2	1.0	0.6	0.5
Poverty status in 1989 (persons) .....	1.6	1.4	0.9	0.7
Poverty status in 1989 (families) .....	1.2	1.0	0.6	0.5
Armed Forces and veteran status .....	1.3	1.1	0.7	0.5
<b>HOUSING</b>				
Age of householder .....	1.2	1.0	0.6	0.5
Race of householder .....	1.2	1.0	0.6	0.5
Hispanic origin of householder .....	1.2	1.0	0.6	0.5
Type of residence (urban/ rural) .....	1.1	0.9	0.6	0.5
Condominium status .....	1.2	1.0	0.6	0.5
Units in structure .....	1.2	1.0	0.6	0.5
Tenure .....	1.2	1.0	0.6	0.5
Occupancy status .....	1.2	1.0	0.6	0.5
Value .....	1.2	1.0	0.6	0.5
Gross rent .....	1.2	1.0	0.6	0.5
Household income in 1989 .....	1.2	1.0	0.6	0.5
Year structure built .....	1.1	1.0	0.6	0.5
Rooms, bedrooms .....	1.2	1.0	0.6	0.5
Kitchen facilities .....	1.1	1.1	0.6	0.5
Source of water, plumbing facilities .....	1.4	1.1	0.6	0.5
Sewage disposal .....	1.1	0.9	0.5	0.4
House heating fuel .....	1.2	1.0	0.6	0.5
Telephone in housing unit .....	1.2	1.1	0.6	0.5
Vehicles available .....	1.3	1.1	0.7	0.5
Year householder moved into structure .....	1.2	1.0	0.6	0.5
Mortgage status and monthly mortgage costs .....	1.1	1.0	0.6	0.5
Mortgage status and selected monthly owner costs .....	1.1	1.0	0.6	0.5
Gross rent as a percentage of household income in 1989 .....	1.2	1.0	0.6	0.5
Household income in 1989 by selected monthly owner costs as a percentage of income .....	1.1	1.0	0.6	0.5

**Table C. Standard Error Design Factors—Illinois**

[Percent of persons or housing units in sample]

Characteristic	Less than 15 percent	15 to 30 percent	30 to 45 percent	45 percent or more
<b>POPULATION</b>				
Age.....	1.2	1.0	0.6	0.5
Sex.....	1.2	1.0	0.6	0.5
Race.....	1.2	1.0	0.6	0.5
Hispanic origin (of any race).....	1.2	1.0	0.6	0.5
Marital status.....	1.2	0.9	0.5	0.4
Household type and relationship.....	1.3	1.1	0.6	0.5
Children ever born.....	2.6	2.3	1.3	1.2
Work disability and mobility limitation status.....	1.2	1.0	0.5	0.5
Ancestry.....	2.1	1.7	0.9	0.8
Place of birth.....	2.3	2.1	1.2	1.1
Citizenship.....	1.8	1.5	0.8	0.7
Residence in 1985.....	2.1	1.9	1.0	0.9
Year of entry.....	1.5	1.2	0.6	0.5
Language spoken at home and ability to speak English.....	1.7	1.4	0.7	0.6
Educational attainment.....	1.3	1.1	0.6	0.5
School enrollment.....	1.8	1.4	0.8	0.7
Type of residence (urban/rural).....	2.3	2.3	1.3	0.9
Household type.....	1.3	1.1	0.6	0.5
Family type.....	1.2	1.1	0.5	0.5
Group quarters.....	1.0	0.9	0.8	0.7
Subfamily type and presence of children.....	1.2	1.0	0.5	0.5
Employment status.....	1.3	1.0	0.5	0.5
Industry.....	1.3	1.1	0.6	0.5
Occupation.....	1.3	1.0	0.5	0.5
Class of worker.....	1.5	1.2	0.6	0.6
Hours per week and weeks worked in 1989.....	1.2	1.0	0.5	0.5
Number of workers in family.....	1.4	1.1	0.6	0.5
Place of work.....	1.5	1.3	0.6	0.6
Means of transportation to work.....	1.5	1.2	0.6	0.6
Travel time to work.....	1.3	1.1	0.6	0.5
Private vehicle occupancy.....	1.5	1.3	0.6	0.6
Time leaving home to go to work.....	1.3	1.1	0.6	0.5
Type of income in 1989.....	1.4	1.2	0.6	0.5
Household income in 1989.....	1.2	1.0	0.5	0.5
Family income in 1989.....	1.2	1.0	0.5	0.5
Poverty status in 1989 (persons).....	1.7	1.4	0.7	0.6
Poverty status in 1989 (families).....	1.2	1.0	0.5	0.5
Armed Forces and veteran status.....	1.6	1.2	0.6	0.6
<b>HOUSING</b>				
Age of householder.....	1.2	1.0	0.6	0.5
Race of householder.....	1.2	1.0	0.6	0.5
Hispanic origin of householder.....	1.2	1.0	0.6	0.5
Type of residence (urban/rural).....	1.1	1.0	0.6	0.5
Condominium status.....	1.2	1.1	0.5	0.5
Units in structure.....	1.2	1.1	0.5	0.5
Tenure.....	1.2	1.0	0.6	0.5
Occupancy status.....	1.2	1.0	0.6	0.5
Value.....	1.2	1.0	0.5	0.5
Gross rent.....	1.3	1.1	0.5	0.5
Household income in 1989.....	1.2	1.0	0.5	0.5
Year structure built.....	1.2	1.0	0.5	0.5
Rooms, bedrooms.....	1.2	1.1	0.5	0.5
Kitchen facilities.....	1.3	1.1	0.5	0.5
Source of water, plumbing facilities.....	1.3	1.1	0.6	0.5
Sewage disposal.....	1.2	1.0	0.5	0.4
House heating fuel.....	1.4	1.1	0.6	0.5
Telephone in housing unit.....	1.3	1.1	0.6	0.5
Vehicles available.....	1.3	1.1	0.6	0.5
Year householder moved into structure.....	1.2	1.0	0.5	0.5
Mortgage status and monthly mortgage costs.....	1.2	1.0	0.5	0.5
Mortgage status and selected monthly owner costs.....	1.2	1.0	0.5	0.5
Gross rent as a percentage of household income in 1989.....	1.3	1.1	0.5	0.5
Household income in 1989 by selected monthly owner costs as a percentage of income.....	1.2	1.0	0.5	0.5



**Table C. Standard Error Design Factors—Indiana**

[Percent of persons or housing units in sample]

Characteristic	Less than 15 percent	15 to 30 percent	30 to 45 percent	45 percent or more
<b>POPULATION</b>				
Age.....	1.2	1.0	0.6	0.5
Sex.....	1.2	1.0	0.6	0.5
Race.....	1.2	1.0	0.6	0.5
Hispanic origin (of any race).....	1.2	1.0	0.6	0.5
Marital status.....	1.1	0.9	0.5	0.4
Household type and relationship.....	1.3	1.0	0.5	0.5
Children ever born.....	2.6	2.3	1.3	1.1
Work disability and mobility limitation status.....	1.2	1.0	0.5	0.5
Ancestry.....	2.0	1.8	0.9	0.8
Place of birth.....	2.3	2.1	1.1	1.0
Citizenship.....	1.8	1.5	0.8	0.7
Residence in 1985.....	2.1	1.9	1.0	0.9
Year of entry.....	1.3	1.1	0.6	0.5
Language spoken at home and ability to speak English.....	1.7	1.4	0.7	0.7
Educational attainment.....	1.3	1.1	0.6	0.5
School enrollment.....	1.7	1.4	0.8	0.7
Type of residence (urban/rural).....	2.7	2.7	1.0	1.0
Household type.....	1.3	1.0	0.5	0.5
Family type.....	1.2	1.0	0.5	0.5
Group quarters.....	0.9	0.9	0.8	0.8
Subfamily type and presence of children.....	1.2	1.0	0.5	0.5
Employment status.....	1.2	1.0	0.5	0.5
Industry.....	1.3	1.1	0.6	0.5
Occupation.....	1.2	1.0	0.5	0.5
Class of worker.....	1.4	1.2	0.6	0.6
Hours per week and weeks worked in 1989.....	1.2	1.0	0.5	0.5
Number of workers in family.....	1.3	1.1	0.6	0.5
Place of work.....	1.4	1.2	0.6	0.6
Means of transportation to work.....	1.4	1.2	0.6	0.6
Travel time to work.....	1.3	1.1	0.6	0.5
Private vehicle occupancy.....	1.4	1.2	0.6	0.6
Time leaving home to go to work.....	1.3	1.1	0.5	0.5
Type of income in 1989.....	1.4	1.2	0.6	0.5
Household income in 1989.....	1.2	1.0	0.5	0.5
Family income in 1989.....	1.2	1.0	0.5	0.5
Poverty status in 1989 (persons).....	1.6	1.4	0.7	0.6
Poverty status in 1989 (families).....	1.2	1.0	0.5	0.5
Armed Forces and veteran status.....	1.4	1.1	0.6	0.5
<b>HOUSING</b>				
Age of householder.....	1.2	1.0	0.6	0.5
Race of householder.....	1.2	1.0	0.6	0.5
Hispanic origin of householder.....	1.2	1.0	0.6	0.5
Type of residence (urban/rural).....	1.0	1.0	0.6	0.6
Condominium status.....	1.2	1.0	0.5	0.5
Units in structure.....	1.2	1.1	0.5	0.5
Tenure.....	1.2	1.0	0.6	0.5
Occupancy status.....	1.2	1.0	0.6	0.5
Value.....	1.2	1.0	0.5	0.5
Gross rent.....	1.2	1.0	0.5	0.5
Household income in 1989.....	1.2	1.0	0.5	0.5
Year structure built.....	1.2	1.0	0.5	0.5
Rooms, bedrooms.....	1.2	1.0	0.5	0.5
Kitchen facilities.....	1.2	1.1	0.5	0.5
Source of water, plumbing facilities.....	1.3	1.1	0.6	0.5
Sewage disposal.....	1.1	1.0	0.5	0.5
House heating fuel.....	1.3	1.0	0.5	0.5
Telephone in housing unit.....	1.2	1.1	0.6	0.5
Vehicles available.....	1.2	1.1	0.6	0.5
Year householder moved into structure.....	1.2	1.0	0.5	0.5
Mortgage status and monthly mortgage costs.....	1.1	1.0	0.5	0.5
Mortgage status and selected monthly owner costs.....	1.1	1.0	0.5	0.5
Gross rent as a percentage of household income in 1989.....	1.2	1.1	0.5	0.5
Household income in 1989 by selected monthly owner costs as a percentage of income.....	1.1	1.0	0.5	0.5

**Table C. Standard Error Design Factors—Iowa**  
[Percent of persons or housing units in sample]

Characteristic	Less than 15 percent	15 to 30 percent	30 to 45 percent	45 percent or more
<b>POPULATION</b>				
Age.....	1.2	1.0	0.6	0.5
Sex.....	1.2	1.0	0.6	0.5
Race.....	1.2	1.0	0.6	0.5
Hispanic origin (of any race).....	1.2	1.0	0.6	0.5
Marital status.....	1.1	0.9	0.5	0.4
Household type and relationship.....	1.2	1.0	0.6	0.5
Children ever born.....	2.6	2.4	1.5	1.4
Work disability and mobility limitation status.....	1.2	1.0	0.5	0.5
Ancestry.....	1.9	1.6	0.8	0.8
Place of birth.....	2.3	2.2	1.1	1.1
Citizenship.....	1.7	1.4	0.7	0.7
Residence in 1985.....	2.0	1.9	0.9	0.9
Year of entry.....	1.4	1.1	0.6	0.5
Language spoken at home and ability to speak English.....	1.6	1.4	0.7	0.6
Educational attainment.....	1.3	1.1	0.6	0.5
School enrollment.....	1.6	1.4	0.7	0.7
Type of residence (urban/ rural).....	2.1	2.1	0.9	0.9
Household type.....	1.2	1.0	0.6	0.5
Family type.....	1.2	1.0	0.5	0.5
Group quarters.....	0.9	0.9	0.8	0.7
Subfamily type and presence of children.....	1.2	0.9	0.5	0.5
Employment status.....	1.2	1.0	0.5	0.5
Industry.....	1.3	1.1	0.6	0.5
Occupation.....	1.2	1.0	0.5	0.5
Class of worker.....	1.4	1.2	0.6	0.5
Hours per week and weeks worked in 1989.....	1.2	1.0	0.5	0.5
Number of workers in family.....	1.3	1.1	0.6	0.5
Place of work.....	1.5	1.2	0.6	0.6
Means of transportation to work.....	1.4	1.2	0.6	0.6
Travel time to work.....	1.3	1.1	0.6	0.5
Private vehicle occupancy.....	1.4	1.2	0.6	0.6
Time leaving home to go to work.....	1.3	1.1	0.6	0.5
Type of income in 1989.....	1.4	1.2	0.6	0.5
Household income in 1989.....	1.2	1.0	0.5	0.5
Family income in 1989.....	1.2	1.0	0.5	0.5
Poverty status in 1989 (persons).....	1.6	1.4	0.7	0.6
Poverty status in 1989 (families).....	1.2	1.0	0.5	0.5
Armed Forces and veteran status.....	1.3	1.1	0.6	0.5
<b>HOUSING</b>				
Age of householder.....	1.2	1.0	0.6	0.5
Race of householder.....	1.2	1.0	0.6	0.5
Hispanic origin of householder.....	1.2	1.0	0.6	0.5
Type of residence (urban/ rural).....	1.0	1.0	0.6	0.5
Condominium status.....	1.2	1.0	0.5	0.5
Units in structure.....	1.2	1.1	0.5	0.5
Tenure.....	1.2	1.0	0.6	0.5
Occupancy status.....	1.2	1.0	0.6	0.5
Value.....	1.2	1.0	0.5	0.5
Gross rent.....	1.2	1.0	0.5	0.5
Household income in 1989.....	1.2	1.0	0.5	0.5
Year structure built.....	1.2	1.0	0.5	0.5
Rooms, bedrooms.....	1.2	1.0	0.5	0.5
Kitchen facilities.....	1.1	1.1	0.5	0.5
Source of water, plumbing facilities.....	1.4	1.1	0.6	0.5
Sewage disposal.....	1.2	1.0	0.5	0.4
House heating fuel.....	1.3	1.1	0.5	0.5
Telephone in housing unit.....	1.2	1.1	0.5	0.5
Vehicles available.....	1.3	1.1	0.6	0.5
Year householder moved into structure.....	1.2	1.0	0.5	0.5
Mortgage status and monthly mortgage costs.....	1.2	1.0	0.5	0.5
Mortgage status and selected monthly owner costs.....	1.2	1.0	0.5	0.5
Gross rent as a percentage of household income in 1989.....	1.2	1.0	0.5	0.5
Household income in 1989 by selected monthly owner costs as a percentage of income.....	1.2	1.0	0.5	0.5

**Table C. Standard Error Design Factors—Kansas**

[Percent of persons or housing units in sample]

Characteristic	Less than 15 percent	15 to 30 percent	30 to 45 percent	45 percent or more
<b>POPULATION</b>				
Age.....	1.2	1.0	0.6	0.5
Sex.....	1.2	1.0	0.6	0.5
Race.....	1.2	1.0	0.6	0.5
Hispanic origin (of any race).....	1.2	1.0	0.6	0.5
Marital status.....	1.1	0.9	0.6	0.5
Household type and relationship.....	1.2	1.1	0.6	0.5
Children ever born.....	2.5	2.3	1.7	1.3
Work disability and mobility limitation status.....	1.2	1.0	0.6	0.5
Ancestry.....	2.0	1.7	1.0	0.8
Place of birth.....	1.9	1.9	1.2	1.0
Citizenship.....	1.7	1.5	0.9	0.7
Residence in 1985.....	2.0	1.8	1.1	0.9
Year of entry.....	1.4	1.2	0.6	0.5
Language spoken at home and ability to speak English.....	1.6	1.4	0.8	0.7
Educational attainment.....	1.3	1.1	0.7	0.5
School enrollment.....	1.6	1.4	0.9	0.7
Type of residence (urban/ rural).....	2.4	2.4	1.8	0.8
Household type.....	1.2	1.1	0.6	0.5
Family type.....	1.2	1.0	0.6	0.5
Group quarters.....	0.9	0.9	0.9	0.8
Subfamily type and presence of children.....	1.2	0.9	0.5	0.5
Employment status.....	1.2	1.0	0.6	0.5
Industry.....	1.3	1.1	0.6	0.5
Occupation.....	1.2	1.0	0.6	0.5
Class of worker.....	1.4	1.2	0.7	0.5
Hours per week and weeks worked in 1989.....	1.2	1.0	0.6	0.5
Number of workers in family.....	1.3	1.2	0.7	0.5
Place of work.....	1.4	1.3	0.7	0.6
Means of transportation to work.....	1.4	1.2	0.7	0.6
Travel time to work.....	1.3	1.1	0.6	0.5
Private vehicle occupancy.....	1.4	1.3	0.7	0.6
Time leaving home to go to work.....	1.3	1.1	0.6	0.5
Type of income in 1989.....	1.4	1.2	0.7	0.5
Household income in 1989.....	1.2	1.0	0.6	0.5
Family income in 1989.....	1.2	1.0	0.6	0.5
Poverty status in 1989 (persons).....	1.6	1.4	0.8	0.6
Poverty status in 1989 (families).....	1.2	1.0	0.6	0.5
Armed Forces and veteran status.....	1.3	1.1	0.7	0.5
<b>HOUSING</b>				
Age of householder.....	1.2	1.0	0.6	0.5
Race of householder.....	1.2	1.0	0.6	0.5
Hispanic origin of householder.....	1.2	1.0	0.6	0.5
Type of residence (urban/ rural).....	1.0	1.0	0.6	0.5
Condominium status.....	1.2	1.0	0.6	0.5
Units in structure.....	1.2	1.1	0.6	0.5
Tenure.....	1.2	1.0	0.6	0.5
Occupancy status.....	1.2	1.0	0.6	0.5
Value.....	1.2	1.0	0.6	0.5
Gross rent.....	1.2	1.0	0.6	0.5
Household income in 1989.....	1.2	1.0	0.6	0.5
Year structure built.....	1.2	1.0	0.6	0.5
Rooms, bedrooms.....	1.2	1.0	0.6	0.5
Kitchen facilities.....	1.2	1.2	0.9	0.5
Source of water, plumbing facilities.....	1.4	1.2	0.7	0.6
Sewage disposal.....	1.1	1.0	0.5	0.5
House heating fuel.....	1.3	1.1	0.6	0.5
Telephone in housing unit.....	1.2	1.1	0.6	0.5
Vehicles available.....	1.3	1.1	0.6	0.5
Year householder moved into structure.....	1.2	1.0	0.6	0.5
Mortgage status and monthly mortgage costs.....	1.1	1.0	0.5	0.5
Mortgage status and selected monthly owner costs.....	1.1	1.0	0.5	0.5
Gross rent as a percentage of household income in 1989.....	1.2	1.0	0.6	0.5
Household income in 1989 by selected monthly owner costs as a percentage of income.....	1.1	1.0	0.5	0.5

**Table C. Standard Error Design Factors—Kentucky**

[Percent of persons or housing units in sample]

Characteristic	Less than 15 percent	15 to 30 percent	30 to 45 percent	45 percent or more
<b>POPULATION</b>				
Age.....	1.2	1.0	0.6	0.5
Sex.....	1.2	1.0	0.6	0.5
Race.....	1.2	1.0	0.6	0.5
Hispanic origin (of any race).....	1.2	1.0	0.6	0.5
Marital status.....	1.1	0.9	0.5	0.4
Household type and relationship.....	1.2	1.0	0.6	0.5
Children ever born.....	2.8	2.4	1.5	1.2
Work disability and mobility limitation status.....	1.2	1.0	0.6	0.5
Ancestry.....	2.2	1.9	1.0	0.9
Place of birth.....	2.5	2.2	1.1	0.9
Citizenship.....	1.8	1.5	0.9	0.7
Residence in 1985.....	2.0	1.8	1.0	0.8
Year of entry.....	1.3	1.1	0.6	0.5
Language spoken at home and ability to speak English.....	1.6	1.4	0.8	0.6
Educational attainment.....	1.3	1.1	0.6	0.5
School enrollment.....	1.7	1.5	0.8	0.7
Type of residence (urban/rural).....	2.5	2.5	1.1	0.9
Household type.....	1.2	1.0	0.6	0.5
Family type.....	1.2	1.0	0.6	0.5
Group quarters.....	1.0	1.0	0.8	0.8
Subfamily type and presence of children.....	1.2	1.0	0.6	0.5
Employment status.....	1.2	1.0	0.6	0.5
Industry.....	1.2	1.1	0.6	0.5
Occupation.....	1.2	1.0	0.6	0.5
Class of worker.....	1.4	1.2	0.6	0.5
Hours per week and weeks worked in 1989.....	1.2	1.0	0.6	0.5
Number of workers in family.....	1.3	1.1	0.6	0.5
Place of work.....	1.4	1.2	0.7	0.6
Means of transportation to work.....	1.4	1.2	0.7	0.6
Travel time to work.....	1.3	1.1	0.6	0.5
Private vehicle occupancy.....	1.4	1.2	0.7	0.6
Time leaving home to go to work.....	1.2	1.1	0.6	0.5
Type of income in 1989.....	1.3	1.2	0.6	0.5
Household income in 1989.....	1.2	1.0	0.6	0.5
Family income in 1989.....	1.2	1.0	0.6	0.5
Poverty status in 1989 (persons).....	1.6	1.4	0.8	0.6
Poverty status in 1989 (families).....	1.2	1.0	0.5	0.5
Armed Forces and veteran status.....	1.4	1.2	0.7	0.5
<b>HOUSING</b>				
Age of householder.....	1.2	1.0	0.6	0.5
Race of householder.....	1.2	1.0	0.6	0.5
Hispanic origin of householder.....	1.2	1.0	0.6	0.5
Type of residence (urban/rural).....	1.1	1.0	0.6	0.5
Condominium status.....	1.2	1.0	0.6	0.5
Units in structure.....	1.2	1.0	0.5	0.5
Tenure.....	1.2	1.0	0.6	0.5
Occupancy status.....	1.2	1.0	0.6	0.5
Value.....	1.2	1.0	0.6	0.5
Gross rent.....	1.2	1.0	0.6	0.5
Household income in 1989.....	1.2	1.0	0.6	0.5
Year structure built.....	1.2	1.0	0.6	0.5
Rooms, bedrooms.....	1.2	1.0	0.6	0.5
Kitchen facilities.....	1.2	1.2	0.6	0.6
Source of water, plumbing facilities.....	1.3	1.2	0.7	0.6
Sewage disposal.....	1.2	1.0	0.6	0.5
House heating fuel.....	1.2	1.0	0.6	0.5
Telephone in housing unit.....	1.2	1.1	0.6	0.5
Vehicles available.....	1.2	1.1	0.6	0.5
Year householder moved into structure.....	1.2	1.0	0.6	0.5
Mortgage status and monthly mortgage costs.....	1.1	1.0	0.5	0.5
Mortgage status and selected monthly owner costs.....	1.1	1.0	0.5	0.5
Gross rent as a percentage of household income in 1989.....	1.2	1.0	0.6	0.5
Household income in 1989 by selected monthly owner costs as a percentage of income.....	1.1	1.0	0.5	0.5

Table C. Standard Error Design Factors—Louisiana

[Percent of persons or housing units in sample]

Characteristic	Less than 15 percent	15 to 30 percent	30 to 45 percent	45 percent or more
<b>POPULATION</b>				
Age.....	1.2	1.0	0.6	0.5
Sex.....	1.2	1.0	0.6	0.5
Race.....	1.2	1.0	0.6	0.5
Hispanic origin (of any race).....	1.2	1.0	0.6	0.5
Marital status.....	1.1	1.0	0.5	0.5
Household type and relationship.....	1.3	1.1	0.6	0.5
Children ever born.....	2.8	2.6	1.5	1.4
Work disability and mobility limitation status.....	1.2	1.1	0.5	0.5
Ancestry.....	2.3	2.0	1.1	1.0
Place of birth.....	2.7	2.5	1.4	1.2
Citizenship.....	1.9	1.6	0.8	0.7
Residence in 1985.....	2.2	2.0	1.1	0.9
Year of entry.....	1.4	1.1	0.6	0.6
Language spoken at home and ability to speak English.....	1.7	1.5	0.8	0.7
Educational attainment.....	1.3	1.1	0.6	0.5
School enrollment.....	1.7	1.5	0.8	0.7
Type of residence (urban/ rural).....	2.2	2.2	1.3	0.9
Household type.....	1.3	1.1	0.6	0.5
Family type.....	1.2	1.1	0.6	0.5
Group quarters.....	0.9	0.9	0.7	0.7
Subfamily type and presence of children.....	1.2	1.0	0.6	0.5
Employment status.....	1.2	1.0	0.6	0.5
Industry.....	1.3	1.1	0.6	0.5
Occupation.....	1.2	1.0	0.5	0.5
Class of worker.....	1.4	1.2	0.6	0.5
Hours per week and weeks worked in 1989.....	1.2	1.0	0.5	0.5
Number of workers in family.....	1.3	1.1	0.6	0.5
Place of work.....	1.4	1.2	0.6	0.5
Means of transportation to work.....	1.4	1.2	0.6	0.6
Travel time to work.....	1.3	1.1	0.6	0.5
Private vehicle occupancy.....	1.4	1.2	0.6	0.6
Time leaving home to go to work.....	1.3	1.1	0.6	0.5
Type of income in 1989.....	1.4	1.2	0.6	0.5
Household income in 1989.....	1.2	1.0	0.5	0.5
Family income in 1989.....	1.2	1.0	0.5	0.5
Poverty status in 1989 (persons).....	1.7	1.5	0.8	0.7
Poverty status in 1989 (families).....	1.2	1.0	0.5	0.5
Armed Forces and veteran status.....	1.5	1.3	0.7	0.6
<b>HOUSING</b>				
Age of householder.....	1.2	1.0	0.6	0.5
Race of householder.....	1.2	1.0	0.6	0.5
Hispanic origin of householder.....	1.2	1.0	0.6	0.5
Type of residence (urban/ rural).....	1.1	1.0	0.6	0.5
Condominium status.....	1.2	1.1	0.5	0.5
Units in structure.....	1.2	1.1	0.6	0.5
Tenure.....	1.2	1.0	0.6	0.5
Occupancy status.....	1.2	1.0	0.6	0.5
Value.....	1.2	1.1	0.5	0.5
Gross rent.....	1.2	1.1	0.5	0.5
Household income in 1989.....	1.2	1.0	0.5	0.5
Year structure built.....	1.2	1.0	0.5	0.5
Rooms, bedrooms.....	1.2	1.1	0.5	0.5
Kitchen facilities.....	1.2	1.2	0.5	0.5
Source of water, plumbing facilities.....	1.2	1.1	0.6	0.5
Sewage disposal.....	1.2	1.0	0.5	0.4
House heating fuel.....	1.2	1.1	0.6	0.5
Telephone in housing unit.....	1.2	1.1	0.6	0.5
Vehicles available.....	1.2	1.1	0.5	0.5
Year householder moved into structure.....	1.2	1.1	0.5	0.5
Mortgage status and monthly mortgage costs.....	1.2	1.0	0.5	0.5
Mortgage status and selected monthly owner costs.....	1.2	1.0	0.5	0.5
Gross rent as a percentage of household income in 1989.....	1.3	1.1	0.5	0.5
Household income in 1989 by selected monthly owner costs as a percentage of income.....	1.2	1.0	0.5	0.5

**Table C. Standard Error Design Factors—Maine**  
[Percent of persons or housing units in sample]

Characteristic	Less than 15 percent	15 to 30 percent	30 to 45 percent	45 percent or more
<b>POPULATION</b>				
Age.....	1.2	1.0	0.6	0.5
Sex.....	1.2	1.0	0.6	0.5
Race.....	1.2	1.0	0.6	0.5
Hispanic origin (of any race).....	1.2	1.0	0.6	0.5
Marital status.....	1.1	0.9	0.5	0.4
Household type and relationship.....	1.2	1.1	0.6	0.5
Children ever born.....	2.6	2.3	1.3	1.2
Work disability and mobility limitation status.....	1.2	1.0	0.6	0.5
Ancestry.....	1.9	1.7	1.0	0.8
Place of birth.....	2.1	2.0	1.2	1.0
Citizenship.....	1.8	1.5	0.9	0.7
Residence in 1985.....	2.0	1.8	1.0	0.9
Year of entry.....	1.3	1.1	0.6	0.5
Language spoken at home and ability to speak English.....	1.6	1.4	0.8	0.7
Educational attainment.....	1.3	1.1	0.6	0.5
School enrollment.....	1.7	1.5	0.9	0.8
Type of residence (urban/rural).....	2.2	1.9	0.9	0.8
Household type.....	1.2	1.1	0.6	0.5
Family type.....	1.2	1.0	0.6	0.5
Group quarters.....	0.9	0.9	0.7	0.7
Subfamily type and presence of children.....	1.2	1.0	0.5	0.5
Employment status.....	1.2	1.0	0.6	0.5
Industry.....	1.3	1.1	0.6	0.5
Occupation.....	1.2	1.0	0.6	0.5
Class of worker.....	1.4	1.2	0.7	0.6
Hours per week and weeks worked in 1989.....	1.2	1.0	0.6	0.5
Number of workers in family.....	1.3	1.1	0.6	0.5
Place of work.....	1.4	1.2	0.7	0.6
Means of transportation to work.....	1.5	1.3	0.7	0.6
Travel time to work.....	1.3	1.1	0.6	0.5
Private vehicle occupancy.....	1.5	1.3	0.7	0.6
Time leaving home to go to work.....	1.3	1.1	0.6	0.5
Type of income in 1989.....	1.3	1.1	0.6	0.5
Household income in 1989.....	1.2	1.0	0.5	0.5
Family income in 1989.....	1.2	1.0	0.6	0.5
Poverty status in 1989 (persons).....	1.5	1.3	0.8	0.6
Poverty status in 1989 (families).....	1.2	1.0	0.6	0.5
Armed Forces and veteran status.....	1.4	1.2	0.7	0.6
<b>HOUSING</b>				
Age of householder.....	1.2	1.0	0.6	0.5
Race of householder.....	1.2	1.0	0.6	0.5
Hispanic origin of householder.....	1.2	1.0	0.6	0.5
Type of residence (urban/rural).....	1.0	0.9	0.5	0.5
Condominium status.....	1.2	1.0	0.5	0.5
Units in structure.....	1.2	1.0	0.5	0.5
Tenure.....	1.2	1.0	0.6	0.5
Occupancy status.....	1.2	1.0	0.6	0.5
Value.....	1.2	1.0	0.6	0.5
Gross rent.....	1.2	1.0	0.5	0.5
Household income in 1989.....	1.2	1.0	0.5	0.5
Year structure built.....	1.2	1.0	0.5	0.5
Rooms, bedrooms.....	1.2	1.0	0.5	0.5
Kitchen facilities.....	1.3	1.3	0.6	0.5
Source of water, plumbing facilities.....	1.3	1.0	0.6	0.5
Sewage disposal.....	1.1	0.9	0.5	0.5
House heating fuel.....	1.2	1.1	0.6	0.5
Telephone in housing unit.....	1.2	1.1	0.6	0.5
Vehicles available.....	1.3	1.1	0.6	0.5
Year householder moved into structure.....	1.2	1.0	0.6	0.5
Mortgage status and monthly mortgage costs.....	1.2	1.0	0.5	0.5
Mortgage status and selected monthly owner costs.....	1.2	1.0	0.5	0.5
Gross rent as a percentage of household income in 1989.....	1.2	1.1	0.6	0.5
Household income in 1989 by selected monthly owner costs as a percentage of income.....	1.1	1.0	0.5	0.5

Table C. Standard Error Design Factors—Maryland

[Percent of persons or housing units in sample]

Characteristic	Less than 15 percent	15 to 30 percent	30 to 45 percent	45 percent or more
<b>POPULATION</b>				
Age.....	1.2	1.0	0.6	0.5
Sex.....	1.2	1.0	0.6	0.5
Race.....	1.2	1.0	0.6	0.5
Hispanic origin (of any race).....	1.2	1.0	0.6	0.5
Marital status.....	1.2	0.9	0.6	0.4
Household type and relationship.....	1.3	1.0	0.6	0.5
Children ever born.....	2.5	2.2	1.4	1.1
Work disability and mobility limitation status.....	1.2	1.1	0.6	0.5
Ancestry.....	2.1	1.7	1.0	0.8
Place of birth.....	2.0	1.6	1.0	0.7
Citizenship.....	1.8	1.5	0.9	0.6
Residence in 1985.....	2.0	1.8	1.0	0.8
Year of entry.....	1.5	1.3	0.7	0.6
Language spoken at home and ability to speak English.....	1.7	1.4	0.8	0.6
Educational attainment.....	1.3	1.1	0.6	0.5
School enrollment.....	1.7	1.4	0.9	0.6
Type of residence (urban/rural).....	2.1	2.1	1.1	0.8
Household type.....	1.3	1.0	0.6	0.5
Family type.....	1.2	1.1	0.6	0.5
Group quarters.....	1.0	0.9	0.8	0.6
Subfamily type and presence of children.....	1.2	1.0	0.6	0.5
Employment status.....	1.2	1.0	0.6	0.5
Industry.....	1.3	1.1	0.6	0.5
Occupation.....	1.2	1.1	0.6	0.5
Class of worker.....	1.4	1.3	0.7	0.6
Hours per week and weeks worked in 1989.....	1.2	1.0	0.6	0.5
Number of workers in family.....	1.4	1.1	0.6	0.5
Place of work.....	1.5	1.3	0.8	0.6
Means of transportation to work.....	1.4	1.3	0.7	0.6
Travel time to work.....	1.3	1.1	0.6	0.5
Private vehicle occupancy.....	1.4	1.3	0.7	0.6
Time leaving home to go to work.....	1.3	1.1	0.6	0.5
Type of income in 1989.....	1.4	1.2	0.7	0.5
Household income in 1989.....	1.2	1.0	0.6	0.5
Family income in 1989.....	1.2	1.0	0.6	0.5
Poverty status in 1989 (persons).....	1.6	1.3	0.7	0.6
Poverty status in 1989 (families).....	1.2	1.0	0.6	0.5
Armed Forces and veteran status.....	1.5	1.2	0.7	0.5
<b>HOUSING</b>				
Age of householder.....	1.2	1.0	0.6	0.5
Race of householder.....	1.2	1.0	0.6	0.5
Hispanic origin of householder.....	1.2	1.0	0.6	0.5
Type of residence (urban/rural).....	1.1	1.0	0.6	0.5
Condominium status.....	1.2	1.0	0.6	0.5
Units in structure.....	1.1	1.0	0.6	0.5
Tenure.....	1.2	1.0	0.6	0.5
Occupancy status.....	1.2	1.0	0.6	0.5
Value.....	1.2	1.0	0.6	0.5
Gross rent.....	1.2	1.1	0.6	0.5
Household income in 1989.....	1.2	1.0	0.6	0.5
Year structure built.....	1.2	1.0	0.6	0.5
Rooms, bedrooms.....	1.2	1.1	0.6	0.5
Kitchen facilities.....	1.2	1.0	0.5	0.5
Source of water, plumbing facilities.....	1.3	1.1	0.6	0.5
Sewage disposal.....	1.1	1.0	0.6	0.4
House heating fuel.....	1.2	1.0	0.6	0.5
Telephone in housing unit.....	1.2	1.1	0.6	0.5
Vehicles available.....	1.2	1.1	0.6	0.5
Year householder moved into structure.....	1.2	1.1	0.6	0.5
Mortgage status and monthly mortgage costs.....	1.2	1.0	0.6	0.5
Mortgage status and selected monthly owner costs.....	1.2	1.0	0.6	0.5
Gross rent as a percentage of household income in 1989.....	1.3	1.1	0.6	0.5
Household income in 1989 by selected monthly owner costs as a percentage of income.....	1.2	1.0	0.6	0.5