






## CENSUS GEOGRAPHY-CONCEPTS

### INTRODUCTION

It is important for anyone using census data to be aware of the geographic concepts involved in taking the census and allocating the statistics to States, counties, cities, and smaller areas down to the size of a city block. Preparing for and taking a census also results in a number of geographic tools or products that are helpful to the data user as well as to the Census Bureau, in activities such as computerized location coding, mapping, and graphic display. They also allow users to interrelate local and census statistics for a variety of planning and administrative purposes. This Factfinder explains the Census Bureau's geographic concepts and products.

Except where noted, the definitions and references below are those used for the 1980 Census of Population and Housing. Figure 10 on page 6 summarizes the geographic areas for which data are available from other Bureau censuses and surveys.

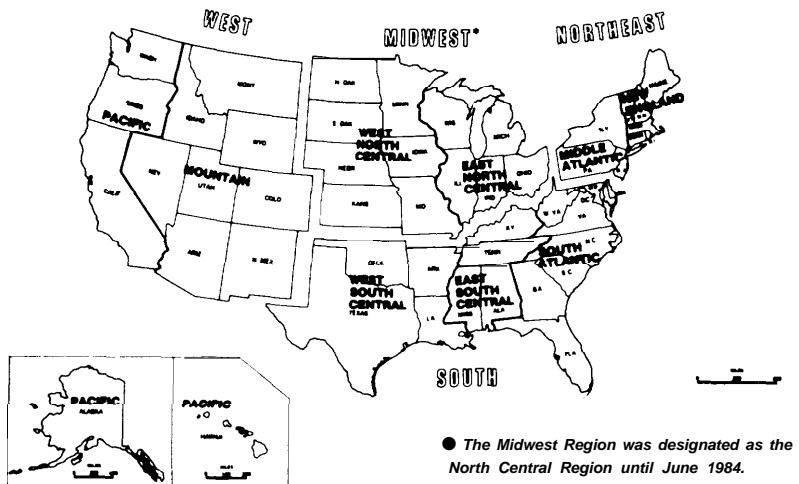
Data summaries are presented in printed reports , microfiche , and computer tapes  and flexible diskettes , based on tabulations for the geographic and statistical levels discussed below. Maps  are also available. The symbols ● and +, keyed to the legend on page 3, indicate how to obtain the items described in this brochure.

### REPORTING AREAS

There are a number of basic relationships, illustrated below, among the geographic areas the Census Bureau uses as "building blocks" in its reports. Some of the areas are governmental units, i.e., legally defined entities, while other areas are defined specifically for statistical purposes. (The statistical areas are italicized in the diagrams; all others are governmental.)

- **United States**—The 60 States and the District of Columbia. (Data also are collected separately for Puerto Rico and the outlying areas under U.S. sovereignty or jurisdiction.)
- **Regions/divisions**—There are four Census regions defined for the United States, each composed of two or more geographic divisions. The nine divi-

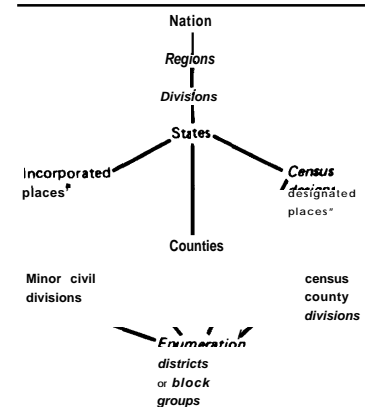
Figure 1. CENSUS REGIONS AND GEOGRAPHIC DIVISIONS OF THE UNITED STATES



sions are groupings of States. (See fig. 1.)

- **Governmental units of the Nation**—States (50) and the District of Columbia
- **Counties and their equivalents** (3,139, plus 78 in Puerto Rico)
- **Minor civil divisions (MCD's)** of counties, such as towns and townships (approximately 25,000)
- **Incorporated places** (about 19,100), e.g., cities and villages
- **census county divisions (CCD's)**—In 20 States where MCD's are not adequate for reporting subcounty census statistics, Bureau and local officials delineated 5,512 CCD's (plus 37 census subareas in Alaska) for this purpose.
- **Census designated places (CDP's)**—Formerly referred to as "unincorporated places," CDP's (about 3,500) are closely settled population centers without legally established limits, delineated with State and local assistance for statistical purposes, and generally have a population of at least 1,000.

Figure 2. NATIONAL GEOGRAPHIC RELATIONSHIPS



• Note that places (incorporated and census designated) are not shown within the county and county subdivision hierarchy, since places may cross the boundaries of these areas. A few census reports and tape series do show places within MCD or CCD within county, but in these cases data pertain only to that part of a place which is within a Particular higher-level area. Enumeration district and block-group summaries do recognize place boundaries, making ED's and BG's important as the lowest common denominator for the higher-level entities.

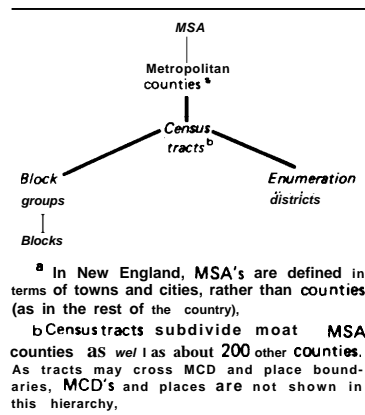
- **Census tracts**—These statistical subdivisions of counties (approximately 43,350, including 463 in Puerto Rico), average 4,000 inhabitants. They are delineated (subject to Census Bureau standards) by local committees for metropolitan areas and roughly 200 other counties.
- **Blocks**—Generally bounded by streets and other physical features, blocks (approximately 2.5 million) are identified (numbered) in and adjacent to urbanized areas, most incorporated places of 10,000 or more population, and other areas that contracted with the Census Bureau to collect data at the block level. (Fig. 8 illustrates the extent of block-statistics coverage in part of a State.) Five States are completely block-numbered.
- **Block-numbering areas (BNA's)**—Areas (approximately 3,400, including over 100 in Puerto Rico) defined for the purpose of grouping and numbering blocks where census tracts have not been established.
- **Block groups (BG's)**—Subdivisions of census tracts or BNA's, BG's (about 200,000) comprise all blocks with the same first digit in a tract or BNA. Averaging 900 population, BG's appear in areas with numbered blocks in lieu of ED's (see below) for tabulation purposes.
- **Enumeration districts (ED's)**—An ED is a Bureau administrative area assigned to one census enumerator. ED's (about 100,000 nationwide) were used for census tabulation purposes where census blocks were not numbered. ED size varies considerably, but averages 500 inhabitants.

#### Metropolitan Areas

- **Standard metropolitan statistical areas (SMSA's)**—An SMSA (defined by the Office of Management and Budget) comprised one or more counties around a central city or urbanized area with 50,000 or more inhabitants. Contiguous counties were included if they had close social and economic links with the area's population nucleus. There were 323 SMSA's, including 4 in Puerto Rico.
- **Standard consolidated statistical areas (SCSA's)**—SCSA's (17, including 1 in Puerto Rico) were composed of two or more adjacent SMSA's having a combined population of 1 million or more, and with close social and economic links.

After the relationships between central urban core(s) and adjacent counties were

Figure 3. GEOGRAPHIC RELATIONSHIPS IN AN MSA



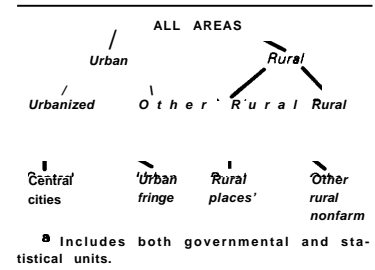
analyzed on the basis of the 1980 population census and a revised set of criteria, these areas were redefined and the word "standard" was dropped from the titles. Thus, on June 30, 1983, SMSA's and SCSA's were redesignated as

- Metropolitan statistical areas (MSA's)
- Consolidated MSA's (CMSA's) and
- Primary MSA (PMSA's)

As the 1982 Economic Censuses covered calendar year 1982, prior to the June 1983 date for adopting the changes, the 1982 SMSA and SCSA designations and nomenclature were retained for those censuses. Some data from the 1980 Census of Population and Housing were retabulated by MSA and issued in special reports, and the new definitions were used in preparing population and migration estimates and in presenting current statistics from 1983 onward.

- **Urbanized areas (UA's)**—A UA (them are 373, including 7 in Puerto Rico) consists of a central city and surrounding densely settled territory with a combined population of 50,000 or more inhabitants. (See fig. 5)
- **Metropolitan/nonmetropolitan**—"Metropolitan" includes all population within MSA's; "nonmetropolitan" comprises everyone elsewhere.
- **Urban/rural**—The urban population consists of all persons living in urbanized areas and in places of 2,500 or more inhabitants outside these areas. All other population is classified as rural. The urban and rural classification cuts across the

Figure 4. URBAN/RURAL GEOGRAPHIC RELATIONSHIPS



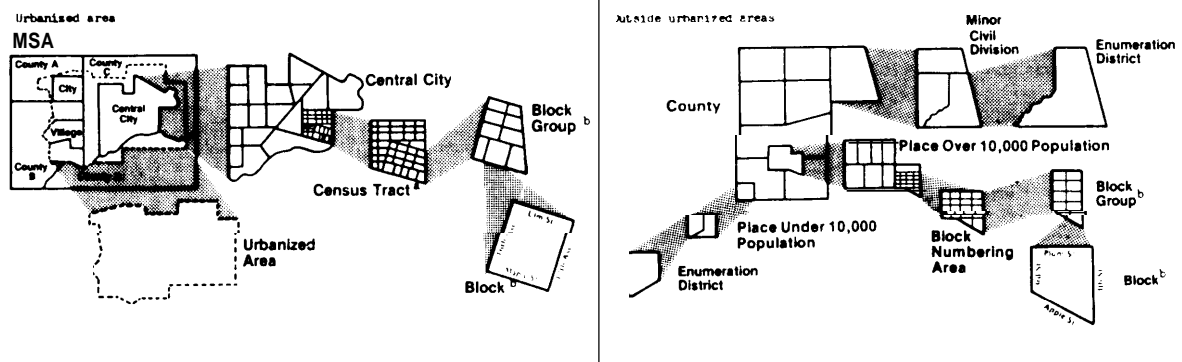
other hierarchies; there can be both urban and rural territory within metropolitan as well as nonmetropolitan areas.

There are other geographic units for which data may be obtained from the 1980 Census of Population and Housing. Some appear in regular publications and data files: American Indian reservations (278, both State and Federal, including 3 administered by or for more than one tribe), Alaska Native villages (209), congressional districts (435), and election precincts in some States. Data are prepared for neighborhoods in almost 1,300 areas and by ZIP Code areas nationwide. Data for other areas are generated in special tabulations prepared at cost, for example, school districts.

Two types of areas are defined specifically for the economic censuses:

- **central business districts (CBD's)**—CBD's are areas of high land value, traffic flow, and concentration of retail businesses, offices, theaters, hotels, and service establishments. In the 1982 Census of Retail Trade, 456 CBD's were defined in (1) any SMSA central city and (2) any other city with a population of 50,000 or more and a sufficient concentration of economic activity. CBD's also are shown in place-of-work data from the 1980 Census of Population and Housing.
- **Major retail centers (MRC's)**—MRC's are concentrations of retail stores located in SMSA's, but outside the CBD's. For 1982, 1,545 MRC's were defined areas with at least 25 retail establishments and one or more large general merchandise or department stores.

**Figure 6. GEOGRAPHIC HIERARCHY INSIDE AND OUTSIDE URBANIZED AREAS (UA's)**  
(See figures 7-10 for maps exhibiting most of these features.)



<sup>a</sup> The entire MSA is subdivided into census tracts.

<sup>b</sup> Blocks and block groups do not have symbolized boundaries as do the other areas, but are identified by number. (See discussion on page 2.)

SOURCE : U.S. Department of Commerce, Bureau of the Census, "Census and Geography-Concepts and Products," Factfinder CFF No. 8 (Rev.) Washington, DC: U.S. Government Printing Office, August 1985).

The Bureau collects and publishes data for two kinds of sub-state areas:

Governmental, such as--

- incorporated places (e.g., cities, villages) and minor civil divisions (MCDs) of counties (e.g., townships),
- congressional districts and election precincts, and
- American Indian reservations and Alaska Native villages.

Statistical, including--

- standard metropolitan statistical areas (SMSAs) and standard consolidated statistical area (SCSAs) were used in the 1980 decennial and 1982 economic censuses. In 1983, SMSAs and SCSAs were replaced by metropolitan statistical areas (MSAs), primary MSAs (PMSAs), and consolidated MSAs (CMSAs);
- census county divisions (CCDs) in States where MCD boundaries are not satisfactory for statistical purposes;
- census-designated places (formerly called "unincorporated places");
- urbanized areas;
- census tracts (subdivisions of counties, primarily in metropolitan areas) and block numbering areas (BNAs), averaging about 4,000 people each;
- census blocks--generally equivalent to city blocks in cities, but are very large in rural areas;
- enumeration districts (EDs)--census administrative areas, averaging around 700 inhabitants, used where block statistics are not available;
- block groups (BGs)--counterparts to EDs averaging 900 population, in areas with census blocks;
- neighborhoods--subareas locally defined by participants in the Bureau's Neighborhood Statistics Program; and
- ZIPCodes--Postal Service administrative areas independent of either governmental or other statistical units.

In the 1982 Census of Retail Trade, the Bureau published data for central business districts (CBDs) and major retail centers

(MRCs) outside CBDs; in the Census of Governments, for school districts and other special districts; and in foreign trade and international research, for countries and world areas.

Generally, survey data are published only for the larger areas, such as the United States, its regions, and some States, while census data are made available for smaller areas as well.

## Population and Housing

The decennial census of population and housing is the most important source of data for small communities, not only on a wide variety of subjects but in finer geographic detail than from any other statistical base. It provides a uniform set of data for inter-community comparisons as well.

Table A-1 shows the items collected in the census. The basic data, called "complete count" or "100 -percent," come from the questions asked for every person and housing unit. Other items are obtained only at a sample of households and housing units in order to keep response burden to a minimum.

The 100-percent data provide the basic population and housing counts and certain characteristics --e.g., age, sex, and race for people; and value or rent, and vacant or occupied status for housing units--for all tabulation areas, even down to census blocks. Since they are estimates rather than complete counts, the sample statistics for small communities must be used with caution.

In general, the higher the geographic or statistical level of tabulation, the greater amount of detail there is available in the census reports. With respect to small communities, more data usually are contained in the printed reports at the county level than for the county subdivisions and places. (This difference seldom occurs on summary tape files or selected microfiche). Only limited county- and subcounty-level data are available on flexible diskettes and through CENDATA.

Table A-1.--Items Collected in the 1980 Census

**100-percent population items**

Household relationship  
Sex  
Race  
Age  
Marital status  
Spanish/Hispanic origin or descent<sup>a</sup>

**Sample population items**

School enrollment  
Education attainment  
State or foreign country of birth  
Citizenship and year of immigration  
Current language and English proficiency  
Ancestry<sup>b</sup>  
Place of residence 5 years ago  
Activity 5 years ago  
Veteran status and period of service  
Presence of disability or handicap<sup>a</sup>  
Children ever born  
Marital history  
Employment status last week  
Hours worked last week  
Place of work  
Travel time to work<sup>b</sup>  
Means of transportation to work<sup>a</sup>  
Persons in carpool<sup>b</sup>  
Year last worked  
Industry  
Occupation  
Class of worker  
Amount of income by source in 1979<sup>a</sup>  
Work in 1979 and weeks looking for work in 1979<sup>a</sup>

**100-percent housing items**

Number of housing units at address  
Complete plumbing facilities  
Number of rooms in unit  
Tenure (whether the unit is owned or rented)  
Condominium identification  
Value of home (for owner-occupied units and condominiums)  
Rent (for renter-occupied units)  
Vacant for rent, for sale, etc., and period of vacancy

**Sample housing items**

Number of units in structure  
Stories in building and presence of elevator  
Year unit built  
Year moved into this house<sup>a</sup>  
Source of water  
Sewage disposal  
Heating equipment  
Fuels used for home heating, water-heating, and cooking  
Costs of utilities and fuels<sup>a</sup>  
Complete kitchen facilities  
Number of bedrooms and bathrooms  
Telephone  
Air conditioning  
Number of automobiles  
Number of light trucks and vans<sup>b</sup>  
Homeowner shelter costs for mortgage, real estate taxes, and hazard insurance<sup>b</sup>

<sup>a</sup>Changed relative to 1970.

<sup>b</sup>New item for 1980.

**Derived items (illustrative examples)**

Families	Household size
Family type and size	Persons per room ("overcrowding")
Family income	Institutions and other group quarters
Poverty status	Farm residence
Population density	

**Note:** This information pertains to the 1980 census and does not reflect changes in data presentation and availability following the 1990 census.

**SOURCE:** Adapted from "Data for Small Communities," U.S. Bureau of the Census--FACTFINDER for the Nation, CFF No. 22 (Rev.) January 1986.