



Metropolitan Areas

Classification of Metropolitan Areas

The general concept of a metropolitan area (MA)¹ is that of a core area containing a large population nucleus, together with adjacent communities that have a high degree of economic and social integration with that core. The Federal Office of Management and Budget (OMB)² designates and defines MAs following a set of official standards. (The MA standards for the 1990s were published in the *Federal Register* on March 30, 1990—Vol. 55, No. 62, pp. 12154-12160.) The MA classification is provided for use by Federal agencies in the production, analysis, and publication of data.

An interagency committee—the Federal Executive Committee on Metropolitan Areas (FECMA)—advises the OMB on the development of the MA standards with the aim of producing definitions that will be as consistent as possible for all MAs nationwide. Also, the Bureau of the Census plays a key technical role by providing virtually all data used in the MA definition process, mostly from the decennial census.

Included among MAs are metropolitan statistical areas (MSAs), consolidated metropolitan statistical areas (CMSAs), and primary metropolitan statistical areas (PMSAs). In addition, New England county metropolitan areas (NECMAs) are an alternative set of areas defined for the six New England States.

Metropolitan Statistical Areas

An MSA consists of one or more counties that contain a city of 50,000 or more inhabitants, *or* contain a Census Bureau-defined urbanized area (UA) and have a total population of at least 100,000 (75,000 in New England). Counties containing the principal concentration of population—the largest city and surrounding densely settled area—are components of the MSA. Additional counties qualify to be included by meeting a specified level of commuting to the counties containing the population concentration and by meeting certain other requirements of metropolitan character, such as a specified minimum population density or percentage of the population

that is urban. MSAs in New England are defined in terms of cities and towns, following rules concerning commuting and population density.

Consolidated Metropolitan Statistical Areas

An area that meets the requirements to qualify as an MSA and also has a population of one million or more becomes a CMSA if component parts of the area are recognized as PMSAs.

Primary Metropolitan Statistical Areas

Subareas may be defined within an area that meets the requirements to qualify as an MSA and also has a population of one million or more. The definition of these subareas, called PMSAs, requires meeting specified statistical criteria and having the support of local opinion. A PMSA consists of a large urbanized county or a cluster of counties (cities and towns in New England) that demonstrate strong internal economic and social links in addition to close ties with the central core of the larger area.

Upon the recognition of PMSAs, the entire area of which they are parts becomes a CMSA. All territory within a CMSA is also within some PMSA.

New England County Metropolitan Areas

NECMAs are county-based alternatives to the city- and town-based MSAs and CMSAs in the six New England States. The county composition of a NECMA reflects the geographic extent of the corresponding MSA(s) or CMSA(s). NECMAs are not defined for individual PMSAs.

Background

Metropolitan Districts, Forerunners of MAs

Interest in developing a consistent definition of *metropolitan* dates back more than a century. The metropolitan concept arose from the common observation that the physical extent of a large urban concentration often overflows the official limits of any single city.³ The existence of suburban territory outside the limits of important cities was noted in statistical

publications well before the Civil War. For example, in 1846, *The New England Gazetteer's* entry on Boston stated the following:

“Owing to the almost insular situation of Boston, and its limited extent, its population appears small. But it must be considered that the neighboring towns of Quincy, Dorchester, Milton, Roxbury, Brookline, Brighton, Watertown, Cambridge, Charlestown, Medford, Malden, and Chelsea, although not included in the city charter, are component parts of the city, and are as much associated with it in all its commercial, manufacturing, literary, and social relations and feelings, as Greenwich, Manhattanville, and Harlem are with the city of New York; or Southwark and the Northern Liberties with Philadelphia.”⁴

The first extensive attempt by the Census Bureau to define areas based on the metropolitan concept was the identification of *industrial districts* for the Census of Manufactures of 1905, which showed such districts for New York, Chicago, Boston, and St. Louis. The Census Bureau gave official recognition to the metropolitan concept for decennial census purposes when it defined *metropolitan districts* for the 1910 census. These metropolitan districts were defined on a nationwide basis for cities having populations of at least 100,000. The Census Bureau defined metropolitan districts again for the 1920 census, applying the same criteria that had been used in 1910. Metropolitan districts again were defined for the 1930 and 1940 censuses, but the criteria were modified for these censuses so that metropolitan districts for cities with minimum populations of 50,000 would be recognized. There were 96 metropolitan districts for the 1930 census, and 140 metropolitan districts for the 1940 census.

Throughout the period 1910 through 1940, the Census Bureau defined metropolitan districts in terms of minor civil divisions (MCDs)—county subdivisions such as townships or election districts—and determined their boundaries primarily based on population density.⁵ The use of MCDs proved suitable for census data presentation. However, few agencies or organizations outside the Census Bureau compiled data for MCDs. As a result, Federal, State, local, and private statistical groups could not readily prepare data and conduct socioeconomic analyses using the metropolitan district as a statistical base. By World War II, some of these groups developed alternative metropolitan definitions in terms of whole counties that

did not coincide with the Census Bureau's metropolitan districts or the metropolitan definitions devised by other agencies or groups.

Development of County-Based MAs From 1950 to the Present

Limited acceptance of the MCD-based metropolitan districts and the proliferation of alternative approaches led the Federal Bureau of the Budget (later renamed the OMB) to conclude that a new approach was needed; the agency reached this conclusion as part of an evaluation of the needs of data users at the Federal and State level for metropolitan data. There also were concerns about the Census Bureau's urban and rural classifications. As a result, two new statistical measures were adopted. First, the Bureau of the Budget, in cooperation with other Federal agencies, including the Census Bureau, established the standard metropolitan area (SMA) to define the metropolitan extent around large cities. Second, the Census Bureau developed the urbanized area (UA) definition to define the densely settled agglomerations around large cities (see Chapter 12, "The Urban and Rural Classifications"). The SMA provided a means of delimiting a functional zone of economic and social integration around a central place or places. The UA, in contrast, represented a measure of the extent of an urban agglomeration, including the built-up portion of a core place and the densely settled surrounding area. The Census Bureau implemented the programs that provided for defining SMAs and UAs for the 1950 census.

To maximize the range of statistical data that could be made available, the Bureau of the Budget decided to define SMAs in terms of whole counties. An exception was made for New England, where the subcounty units—the cities and towns—have always had local importance and a wide range of statistics available.

Since the new SMAs were to be used by all Federal statistical agencies, and not just for census purposes, the Bureau of the Budget assumed the task of defining them,⁶ acting with the advice of a newly formed interagency committee, currently known as the FECMA. The criteria used for defining MAs gradually evolved over the decades. In recent practice, the standards by which MAs are established and defined receive a comprehensive review

by the OMB and the FECMA every ten years, culminating in the publication of revised standards before the decennial census.

Most of the changes in the standards have been minor and have not reflected significant deviations from the concepts underlying the standards used for the 1950 census. Several modifications have been made in the rules for determining how large a city must be to have an MA defined. Until 1958, the standards always required a city of at least 50,000, but subsequent changes have relaxed this rule somewhat, permitting the definition of areas around smaller cities when certain specified conditions were met. Changing national conditions also have resulted in standards changes. For example, counties qualifying for inclusion in SMAs defined for the 1950 census were required to have less than 25 percent of their workforce engaged in agriculture. This requirement was dropped in the 1980 standards because it no longer affected many counties.

The availability of new statistical data has affected the development of the standards. For example, although the 1950 standards specified commuting as the main measure of integration between outlying and central counties, there were no national data available on the subject at that time. Most of the commuting data used to define SMAs in the 1950s were derived from surveys by State and local employment agencies, which were not entirely comparable with one another in their coverage and approach. The inclusion of a question about place of work in the 1960 census made available a national set of data on commuting, thus improving the accuracy and consistency of areas defined as metropolitan. Also, the standards now make greater use of commuting data. Some of the most important changes in the standards were announced before the 1980 census (and implemented in 1983). Chief among these were the provision for qualification of MAs on the basis of the Census Bureau's UAs, and the introduction of PMSAs as components of CMSAs.

The standards for the 1990s went into effect in December 1992 and June 1993, when OMB issued redefinitions of MAs based on commuting and

other data from the 1990 census. Effective June 30, 1993, these revised MA definitions for the Nation included 250 MSAs, 18 CMSAs (consisting of 73 PMSAs), and 12 NECMAs (plus 3 MSAs and 1 CMSA with 3 PMSAs in Puerto Rico).⁷

The current MA standards, which will be in effect through the 2000 census, changed only slightly from those used for the previous decade. The most important changes were an expansion in the role of UAs in the qualification of outlying counties for inclusion in MAs, and certain alterations in the rules for titles. In addition, the current standards introduced the collective term *MA*.

Defining and Titling MAs

Defining MAs

The MA standards specify the step-by-step definition process by which the concept of a densely settled core area plus its suburbs becomes realized as individual MSAs, CMSAs, PMSAs, and NECMAs. Qualification of an MSA requires the presence of a city of 50,000 or more inhabitants, *or* a Census Bureau-defined UA (of at least 50,000 inhabitants) and a total population of at least 100,000 (75,000 in New England). The county or counties including the largest city in the core area of population become *central counties* of the MSA; so does any adjacent county that has at least 50 percent of its population in the UA surrounding the largest city. (In New England, the basic geographic unit for defining MSAs is the city or town rather than the county.)

Additional *outlying counties* are included in the MSA if they meet specified requirements of commuting to the central counties as well as other requirements of metropolitan character. The minimum level of commuting to central counties required to make a county eligible for consideration as an outlying county is 15 percent. In general, the lower the percentage of a county's resident workers commuting to the central counties, the more demanding the other requirements of metropolitan character the county must meet in order to qualify for inclusion. The measures of metropolitan

character specified in the standards include required levels for the county's (1) population density; (2) percentage of population that is classified as urban; (3) percentage growth in population between the previous two decennial censuses; and (4) percentage of, or absolute number of, inhabitants within the UA that qualifies the MSA. Qualification of outlying cities and towns in New England is based on commuting and population density.

An area that meets the requirements for recognition as an MSA and also has a population of one million or more may be recognized as a CMSA if (1) separate component areas can be identified within the entire area by their meeting population and commuting criteria specified in the standards, and (2) local opinion indicates there is support for the component areas. If recognized, the component areas are designated PMSAs (and the entire area becomes a CMSA). If no PMSAs are recognized, the entire area is designated an MSA. (PMSAs, like the CMSAs that contain them, are composed of counties outside New England and cities and towns within New England.)

NECMAs are county-based alternatives to the city- and town-based MAs in New England. The NECMA for an MSA or CMSA includes (1) the county containing the first-named city in that MSA/CMSA (this county in some cases includes the first-named cities of other MSA(s)/CMSA(s) as well), and (2) each additional county having at least half its population in the MSA(s)/CMSA(s). NECMAs are not defined for individual PMSAs.

MSAs, PMSAs, and NECMAs are categorized in one of the following levels based on total population:

Level A	Areas of 1 million or more
Level B	Areas of 250,000 to 999,999
Level C	Areas of 100,000 to 249,999
Level D	Areas of less than 100,000

CMSAs, by definition, have populations of 1 million or more.

Central Cities and MA Titles

The OMB designates the largest city in each MSA or CMSA as a *central city*, and additional cities qualify for this designation if specified requirements are met concerning population size and commuting patterns. The central cities of a NECMA are those cities in the NECMA that qualify as central cities of an MSA or a CMSA.

The title of each MSA consists of the names of up to three of its central cities and the name of each State into which the MSA extends. However, a central city is not included in an MSA title unless it has at least one-third the population of the area's largest city or local opinion supports its inclusion. Typically, titles of PMSAs also are based on central city names, but in certain cases consist of county names. Generally, titles of CMSAs are based on the titles of their component PMSAs, although CMSA titles may include suitable regional designations. NECMA titles are derived from the names of central cities. As is the case for MSAs, a CMSA, PMSA, or NECMA title always includes the names of all States into which the area extends.

Intercensal MA Changes

In the period between decennial censuses, the OMB may define new MSAs and make certain other types of changes specified in the MA standards. Intercensal MA changes result from population counts or estimates from the Census Bureau. During the 1990s, research is under way to produce a new approach for defining areas using data from the 2000 census.

Qualification and Designation of New MSAs

An area can qualify for intercensal designation as an MSA in three ways: (1) a city reaches the 50,000 population threshold according to a Census Bureau special census count or estimate; (2) a nonmetropolitan county (or group of counties) containing a UA from the most recent decennial census reaches the 100,000 population threshold according to a special census count or estimate (or, in New England, the cities and towns qualifying for the potential MSA reach the 75,000 threshold); or (3) the Census Bureau defines a new UA based on a special census, and the potential MSA containing this UA meets the above population requirements. If

the MSA qualifies based on an intercensal population estimate by the Census Bureau, the qualification must be confirmed by the next decennial census or the area is disqualified.

Research on Metropolitan Area and Related Concepts

The OMB and the Census Bureau currently are examining alternative approaches for identifying the geographic entities of the metropolitan/nonmetropolitan settlement system. The Metropolitan Concepts and Statistics Project has as its primary objective the development of a new scheme for classifying metropolitan and nonmetropolitan areas. Work on this project will continue into the late 1990s. The results of the project will be fully reviewed and evaluated before the OMB makes any changes to the current MA standards.⁸

Data Products for MAs

The OMB first applied the MA standards cited in this chapter to define MAs in December 1992 and June 1993, after a large share of the 1990 census products had been released. The MAs reported in nearly all 1990 census products—printed reports, computer tapes, CD-ROM discs—are those that existed as of June 30, 1990. This arrangement stems from the fact that MAs could not be redefined until place-of-work data from the 1990 census sample questionnaire had been processed. An exception to this situation is the 1990 Census of Population and Housing Supplementary Report (CPH-S-1-1) *Metropolitan Areas as Defined by the Office of Management and Budget, June 30, 1993*, which provides both sample and complete-count 1990 census data for the MAs as defined on June 30, 1993. Also, the Census Bureau has produced a wall map of the 1993 MSAs, CMSAs, and PMSAs as of June 30, 1993; it is available from the Government Printing Office (telephone number 202-783-3238, stock number 003-024-08740-5). A list of the MAs defined as of June 30, 1993 is available from the National Technical Information Service (telephone number 703-487-4650, document accession number PB 93-192-664).

The Census Bureau's paper and electronic products for the decennial and economic censuses include a wide variety of data for MAs. These

products provide a convenient compilation of data that typically are also available for counties or other MA components. The Census Bureau reports some data from the economic census or from surveys only for (large) MAs or their central cities. The Census Bureau will incorporate the new metropolitan areas (based on the 1990 standards) into the Current Population Survey sampling framework beginning in 1995.

Notes and References

- ¹ The collective term used for Federal metropolitan areas has varied over time, beginning with *standard metropolitan area (SMA)* in 1950, changing to *standard metropolitan statistical area (SMSA)* in 1959, to *metropolitan statistical area (MSA)* in 1983, and to *metropolitan area (MA)* in 1990.
- ² The OMB, which earlier was called the Bureau of the Budget, has been responsible for official metropolitan areas since they were first defined for the 1950 census, except for the period 1977 to 1981. During those years, the then Office of Federal Statistical Policy and Standards in the Department of Commerce had responsibility for Federal statistical policy, including the definition of MAs.
- ³ For a more detailed history of the metropolitan concept, consult two articles by the Federal Committee on Standard Metropolitan Statistical Areas: “The Metropolitan Statistical Area Classification/Final Standards for Establishing Metropolitan Statistical Areas Following the 1980 Census,” *Statistical Reporter*, December 1979, pp. 33-45, and “Documents Relating to the Metropolitan Statistical Area Classification for the 1980s/Background and Rationale for the Official Standards,” *Statistical Reporter*, August 1980, pp. 335-384.
- ⁴ John Hayward, *The New England Gazetteer*, 48th edition; Boston: John Hayward, 1846.
- ⁵ The official definitions and populations of the metropolitan districts may be found in U.S. Bureau of Census, *Thirteenth Census of the United States: 1910*, Vol. I, p. 73 (Washington: Government Printing Office, 1911); *Fourteenth Census of the United States: 1920*, Vol. I, pp. 62-71 (Washington: Government Printing Office, 1921); *Fifteenth Census of the United States: 1930, Metropolitan Districts, Population and Area* (Washington: Government Printing Office, 1932); *Sixteenth Census of the United States: 1940*, Vol. I, p. 11 (Washington: Government Printing Office, 1942). For a summary, see U.S. Bureau of the Census, *The Growth of Metropolitan Districts in the United States: 1900-1940*, [by Warren S. Thompson] (Washington: Government Printing Office, 1947).
- ⁶ This assignment came with the Budget and Accounting Procedures Act of 1950, which assigned responsibility for statistical policy to the Bureau of the Budget.

⁷ OMB Bulletin No. 93-17, and its attachments “Metropolitan Areas 1993, Lists I-IV.”

⁸ The Census Bureau’s Population Division is managing the Metropolitan Concepts and Statistics Project and can provide further details about the scope and objectives of this project.