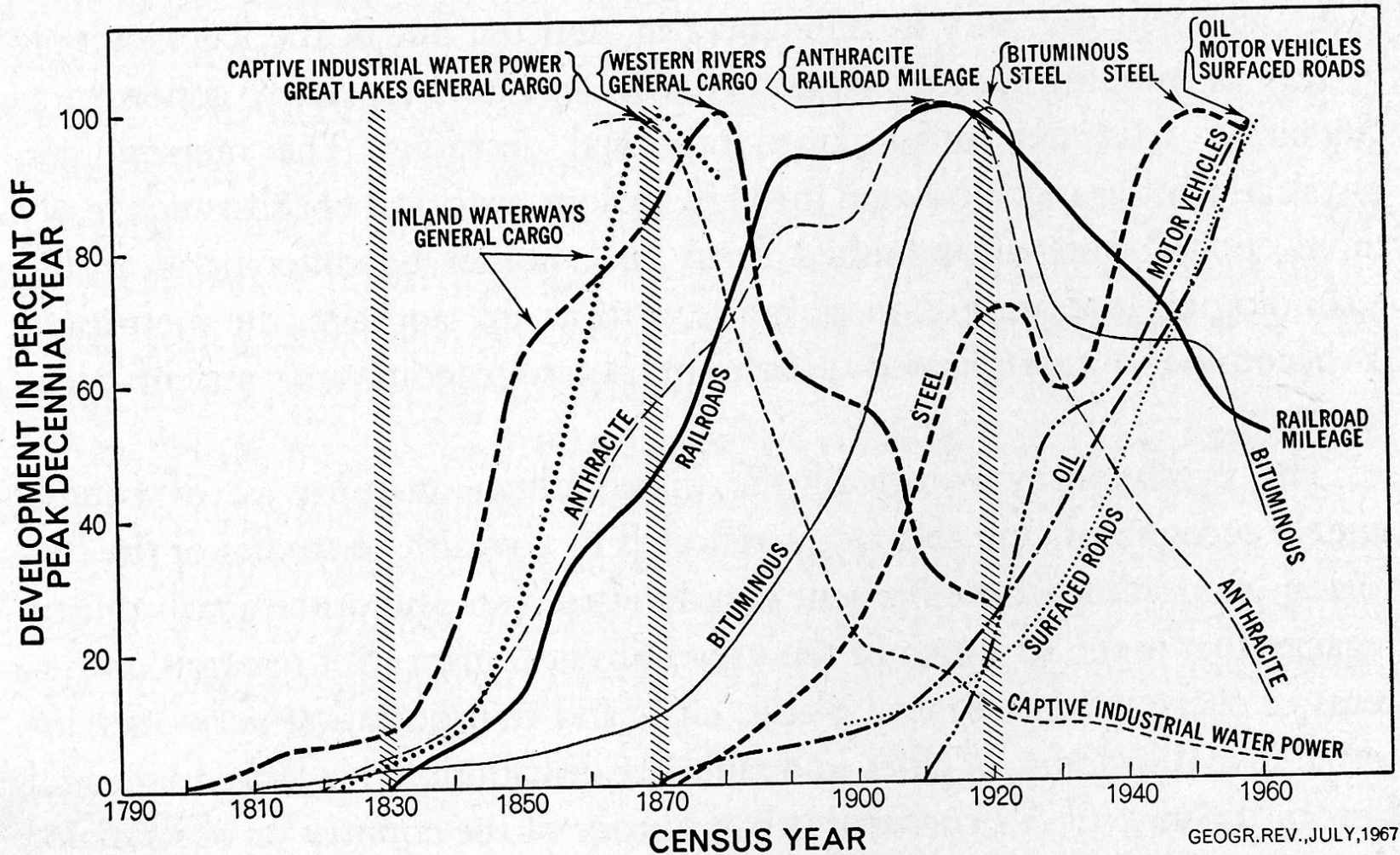


Metropolitan Evolution



GEOGR. REV., JULY, 1967

FIG. 1—Rise and decline of ten indicators of the technology of transport and industrial energy. Peak values of past years concentrate around 1870 and 1920. Sources: "Historical Statistics of the United States," pp. 416-417, 427-429, 446, and 458; *Statistical Abstract of the United States 1965*, pp. 561, 569, 718, 729, and 811 (see text footnote 24 for both); and "A Compendium of the Ninth Census" (U. S. Bureau of the Census, 1872), p. 706.

Size Rank Curve for USA 1960

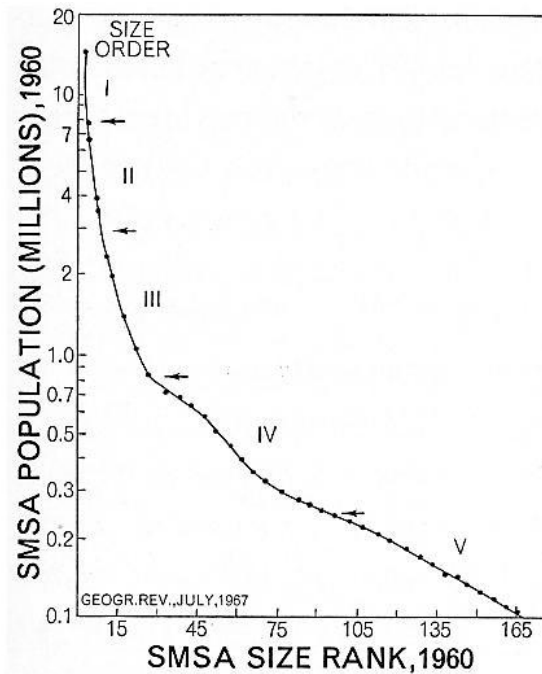


FIG. 3—Population rank-size distribution and size-order limits for SMSA's in 1960. Except for the three largest metropolitan areas, dots represent only every fifth place in the sequence. The basis for this graph and for subsequent maps is a list of all 1960 SMSA's, with populations for the same counties or groups of counties for 1790, 1830, 1870, 1920, and 1960. The 212 census SMSA's on the list have been reduced to 178 by dropping areas with fewer than 80,000 inhabitants in 1960 and combining certain others, mainly in New England and several large multicentered urban complexes. Where SMSA's on the list differ in definition from those in the census, the differences are specified. Copies of the list are available from the author.

Function and Population Correlation

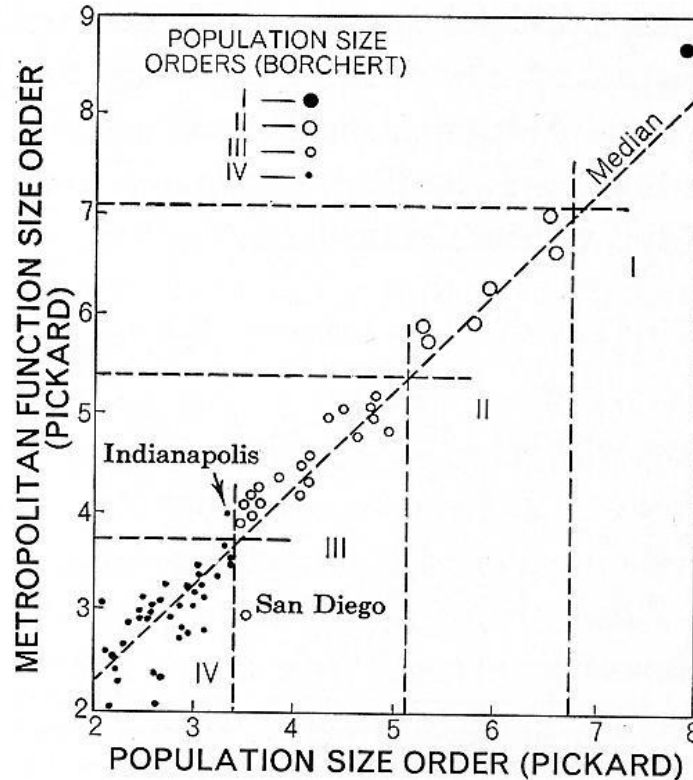


FIG. 4—The 26 SMSA's defined as I, II, or III order in Figure 3 shown in their positions on Pickard's combined population and metropolitan-function scales. With only two exceptions, places that fall within the top three population size orders in Figure 3 also form discrete groups on the basis of metropolitan functions. "Metropolitan functions" in this case include measures of bank deposits, wholesale trade, Sunday newspaper circulation, federal-government employment, and manufacturing employment. The exceptions are San Diego, a third-order city based on population but weak in its metropolitan functions, and Indianapolis, a fourth-order city in Figure 3 (1960 SMSA definition of the Indianapolis SMSA) but with exceptional metropolitan strength. Graph modified from Pickard, *Metropolitanization of the United States* (see text footnote 18 for reference), Fig. 21.



FIG. 6—Distribution of major towns and neighboring county populations by size order, 1790. Source of the population data for Figures 5–8, “A Compendium of the Ninth Census” (1872). Population-density isopleths generalized from Clifford L. Lord and Elizabeth H. Lord; Historical Atlas of the United States (New York 1953), p. 46. Base map in Figures 6–9 is A. K. Lobeck’s “Physiographic Diagram of the United States” (courtesy C. S. Hammond & Co.).

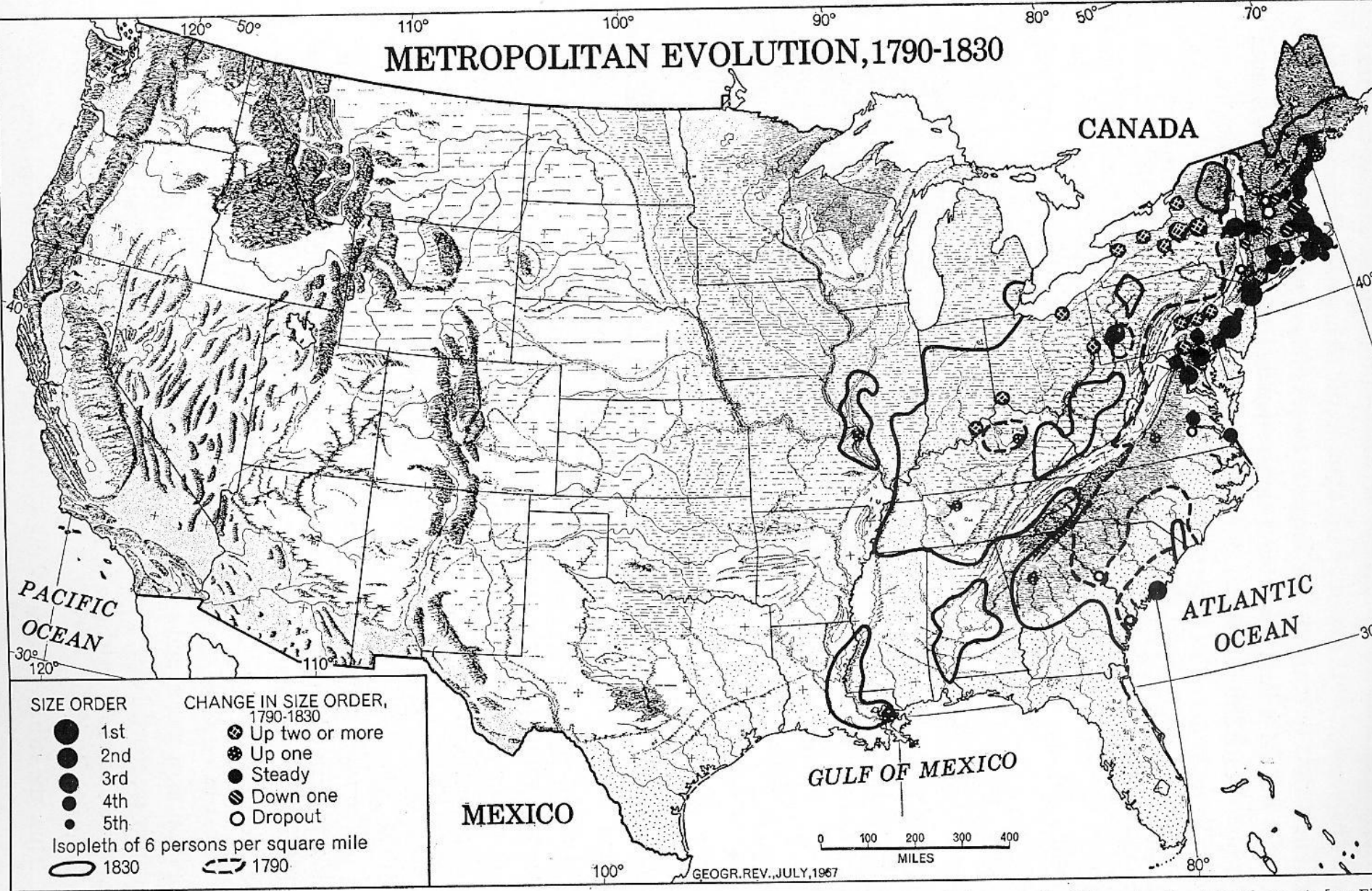


FIG. 7—Changes in size order, major towns and neighboring counties, 1790–1830. Population-density isopleths generalized from Lord and Lord, *op. cit.* [see Fig. 6], pp. 46 and 49.

METROPOLITAN EVOLUTION, 1830-1870

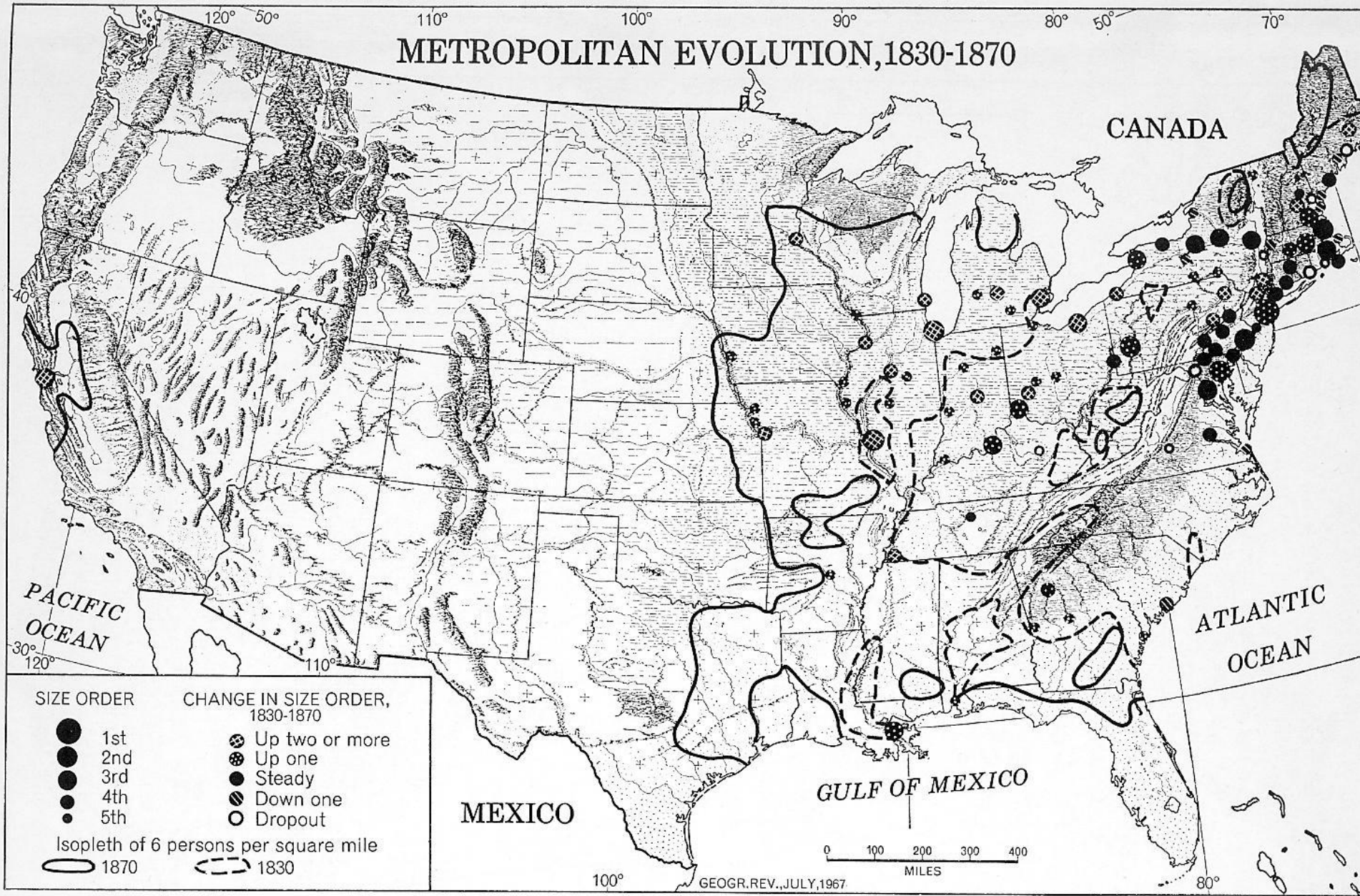


FIG. 8—Changes in size order, major towns and neighboring counties, 1830–1870. Population-density isopleths generalized from Lord and Lord, *op. cit.*, pp. 9 and 104.

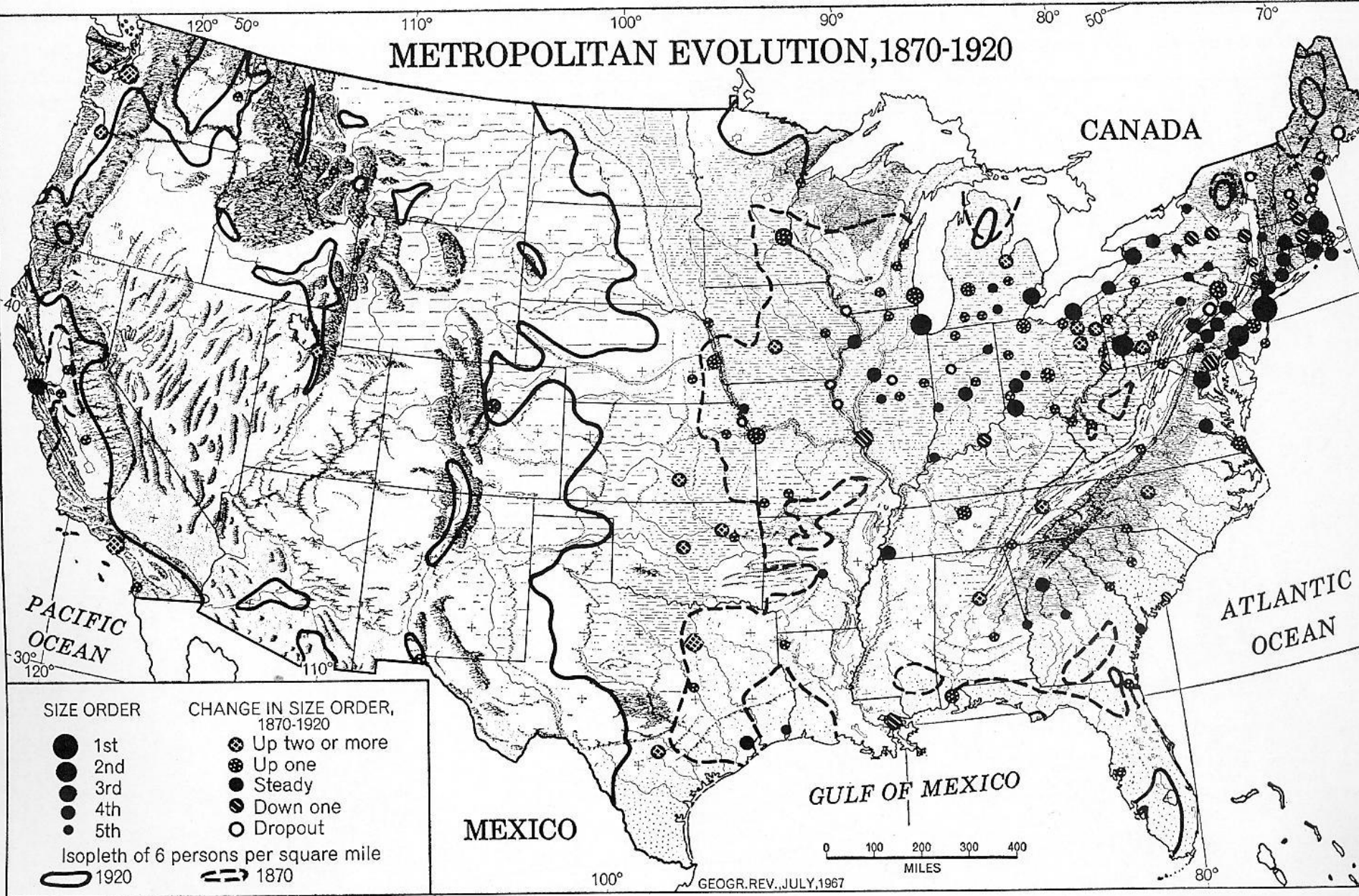


FIG. 9—Emerging metropolitan areas in the Steel-Rail Epoch. Changes in size order of major cities, including neighboring county populations, 1870–1920. Population-density isopleths generalized from Lord and Lord, *op. cit.*, pp. 104 and 107–108. Sources of population data: “A Compendium of the Ninth Census” (1870); “Abstract of the Fifteenth Census of the United States” (1933).

METROPOLITAN EVOLUTION, 1920-1960

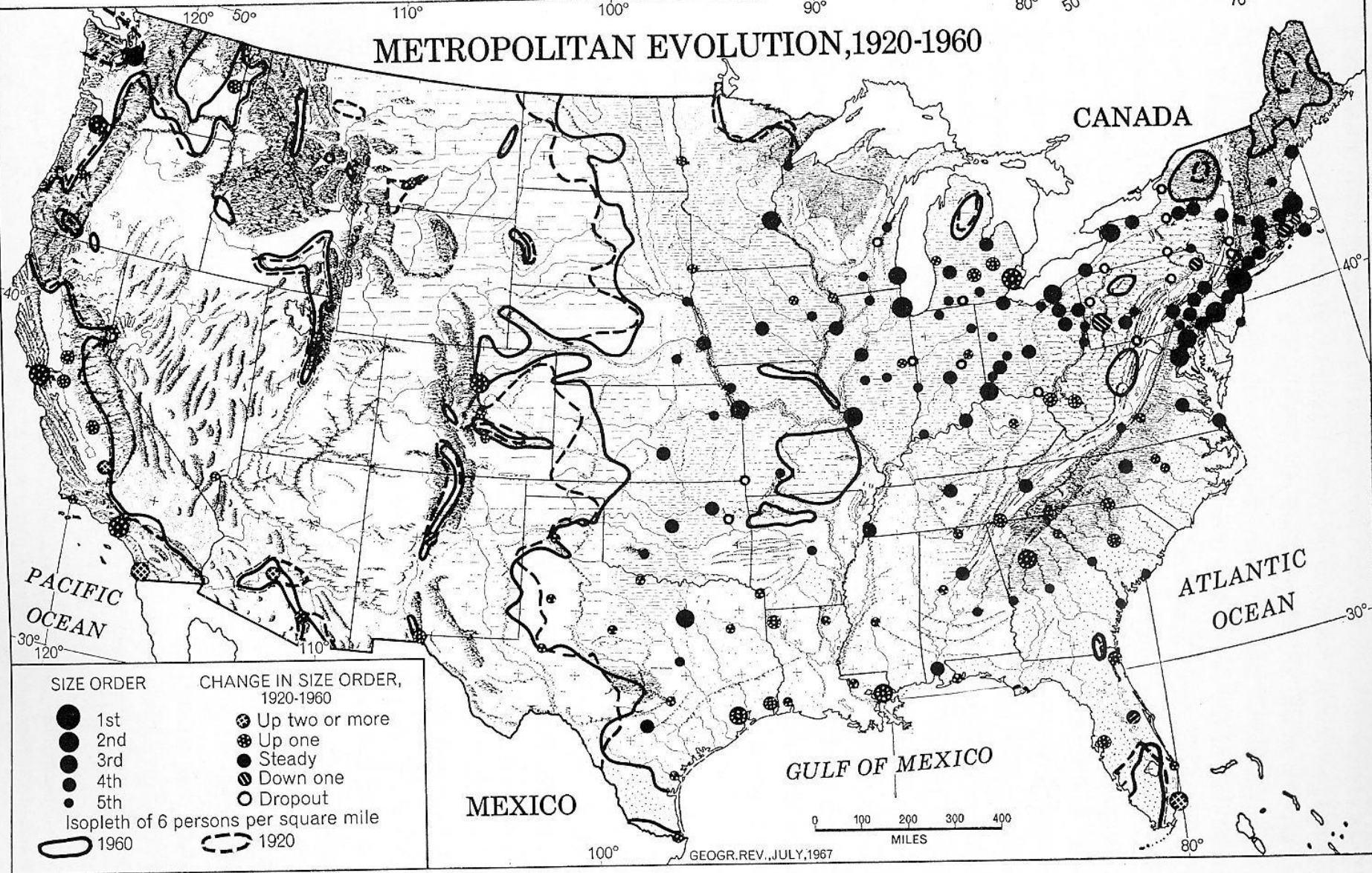


FIG. 10—Changes in metropolitan-area size and distribution in the Auto-Air-Amentiy Epoch, 1920-1960. Population-data source: *County and City Data Book*, 1962, U. S. Bureau of the Census. Population-density isopleths have been generalized from "Goode's World Atlas," 12th edit., 1964, p. 58.

Increase in number of cities

TABLE II—NUMBER OF CENTERS AND TOTAL POPULATION IN EACH SIZE ORDER

SIZE ORDER	1790	1830	1870	1920	1960
	NUMBER OF CENTERS				
First	0	0	1	1	1
Second	3	3	6	4	6
Third	8	8	14	16	19
Fourth	20	29	33	51	70
Fifth	8	12	37	75	82
Total	39	52	91	147	178
	TOTAL POPULATION (<i>thousands</i>)				
First	—	—	2,171	8,490	14,760
Second	514	1,120	3,301	10,364	28,826
Third	499	784	3,627	13,918	26,493
Fourth	530	1,812	2,533	12,829	30,473
Fifth	95	300	1,826	6,972	12,647
“SMSA” total	1,638	4,016	13,458	52,573	113,199
U.S. total	3,929	12,866	39,818	105,711	179,323

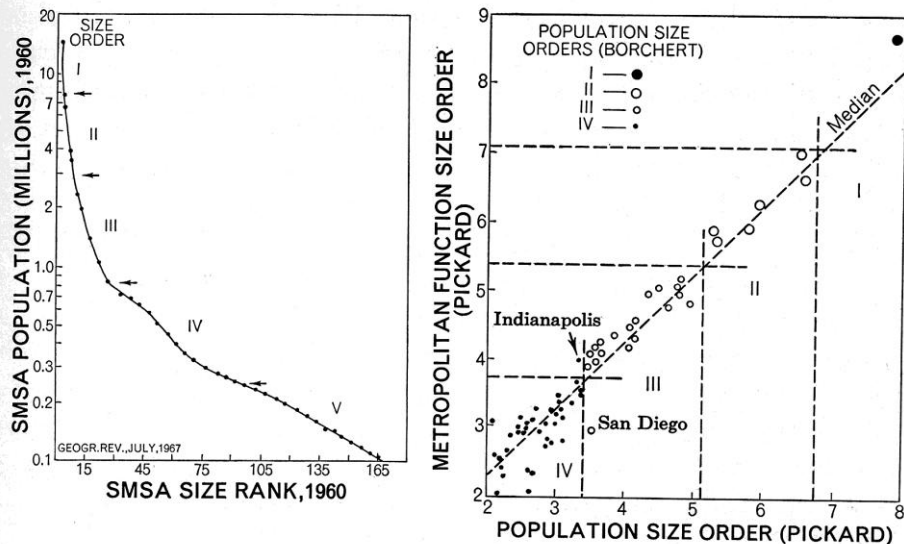


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