

Map 1: Metropolitan Status for Counties in the United States

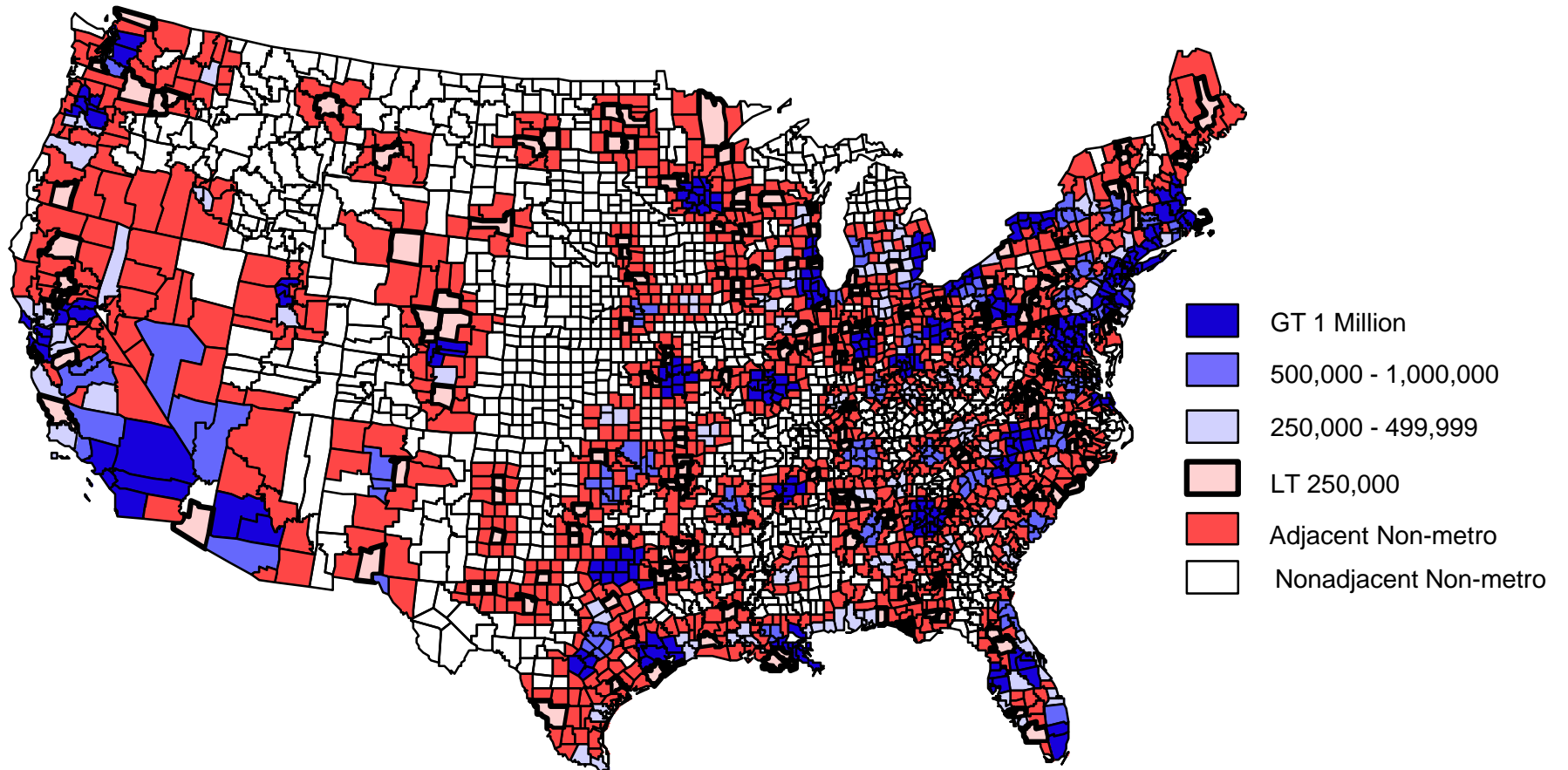
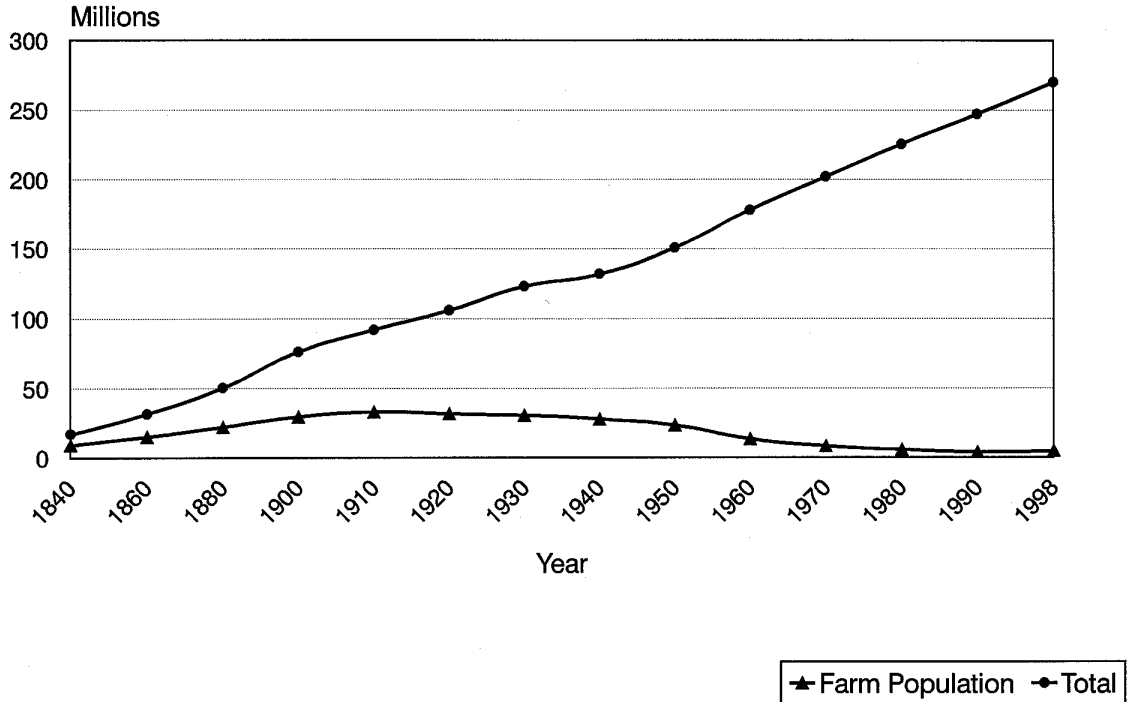
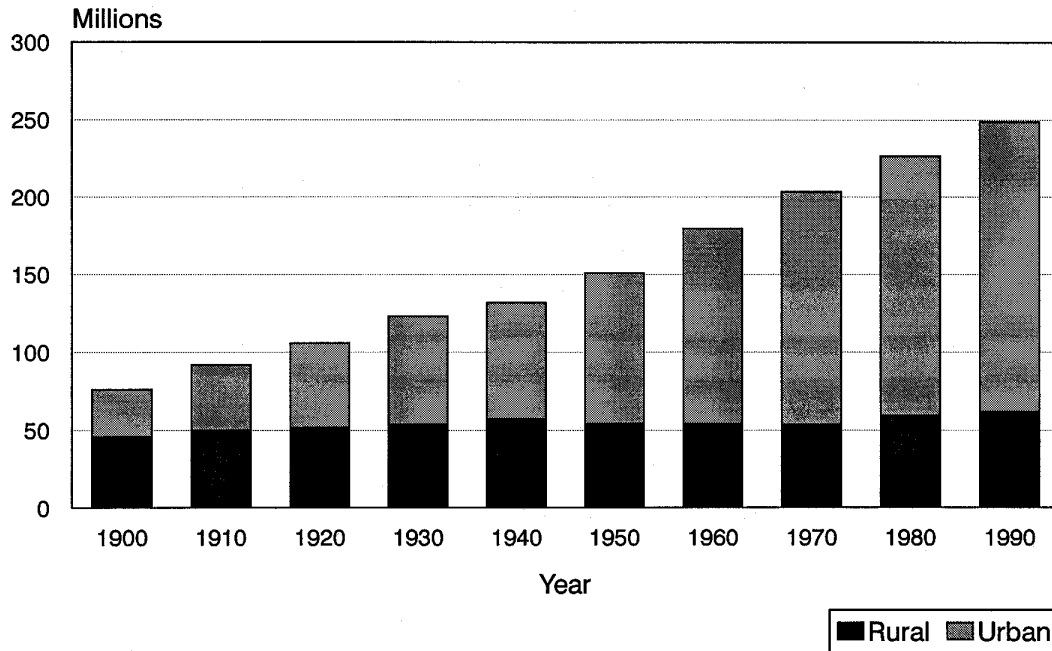


Figure 1
Total and Farm Population, United States, 1840 - 1998



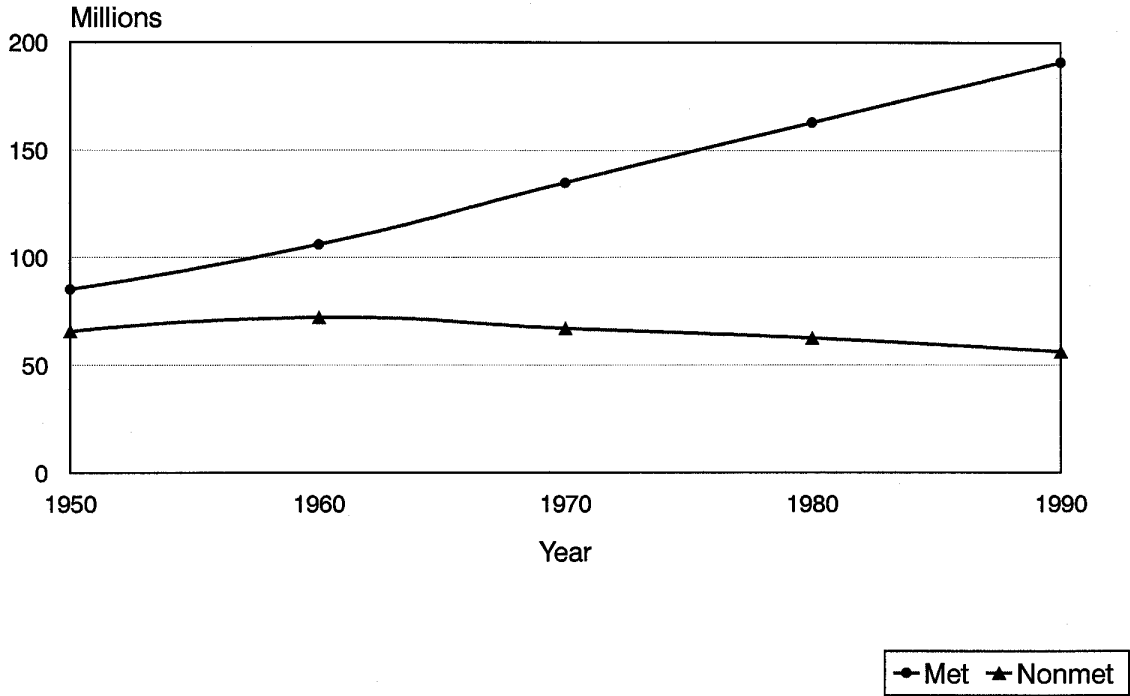
The production of food will always be a central element of the nation's economy. But how agriculture is organized has changed dramatically through U.S. history. Agricultural technology and the re-organization of the industry allow less than two percent of the nation's population to account for all domestic food production, compared with about fifty percent in the middle of the nineteenth century. While the total U.S. population has grown steadily over the past century and a half, the nation's farm population peaked in 1910 at about thirty-three million and declined to about five million by the end of the century. This trend has leveled off during the past two decades.

Figure 2
Rural and Urban Population, United States, 1900 - 1990



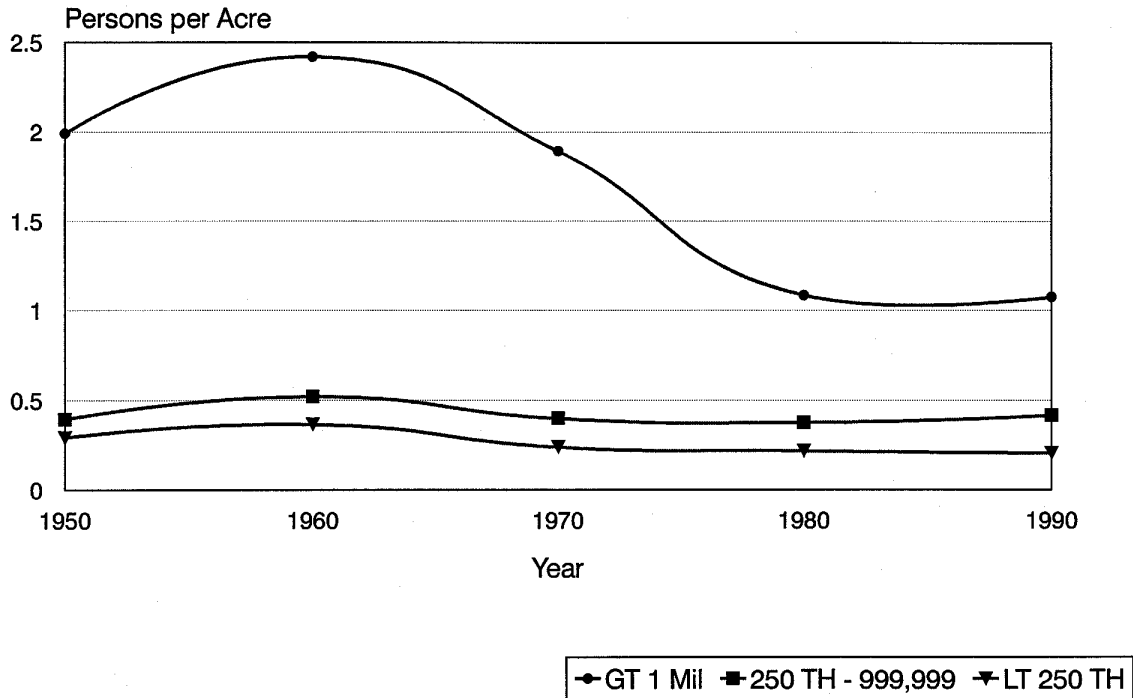
The industrialization of agriculture paralleled the urbanization of the nation's population. While at the turn of the century sixty percent of the U.S. population lived in small towns and villages with populations of 2,500 or less or in the open country, only twenty-five percent of the population lived in such places by 1990. While the rural population accounted for an ever smaller proportion of the population, its absolute numbers held steady during this time as the urban population grew.

Figure 3
Total Population in Metropolitan and Nonmetropolitan Areas, United States,
1950 - 1990



Growth of the urban population has led to the spread of urban areas across the landscape. Metropolitan areas encompass a set of towns and cities linked by a network of individuals commuting between home and work (see Technical Documentation (Appendix A) for definition of metropolitan areas). The population of persons living in areas designated metropolitan by the U.S. Census Bureau has grown steadily in the latter half of the twentieth century.

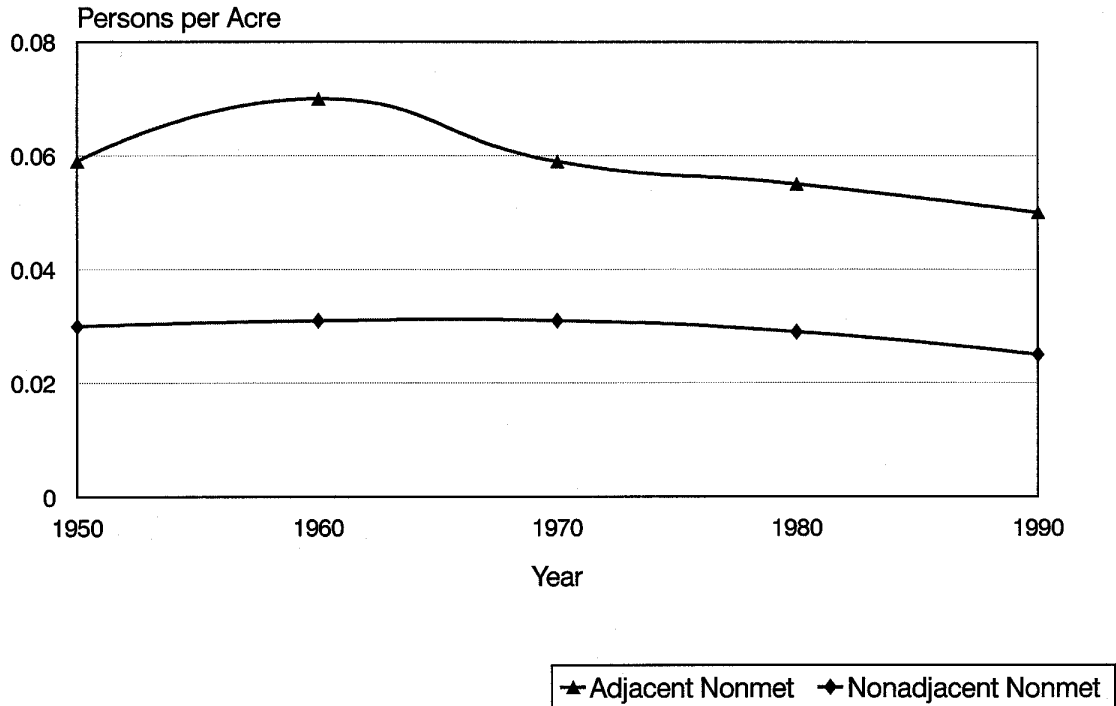
Figure 4
Population Density by Size of Metropolitan Area, United States,
1950 - 1990



Urbanization has taken different forms in U.S. history. Until about 1960, metropolitan growth was characterized by relatively dense settlement centered around a city. In the 1960s, suburban communities began to have a life of their own, allowing people to find work in the less densely settled portions of metropolitan areas. A more diffuse settlement pattern has characterized newly developing portions of metropolitan areas since 1970.

This diffusion of the population across the countryside has led to a convergence of population density in metropolitan areas of different sizes. The greatest deconcentration of population has occurred in metropolitan areas with population of more than one million. The population density of these areas dropped by more than one-half between 1960 and 1990, while the densities of small metropolitan areas remained constant.

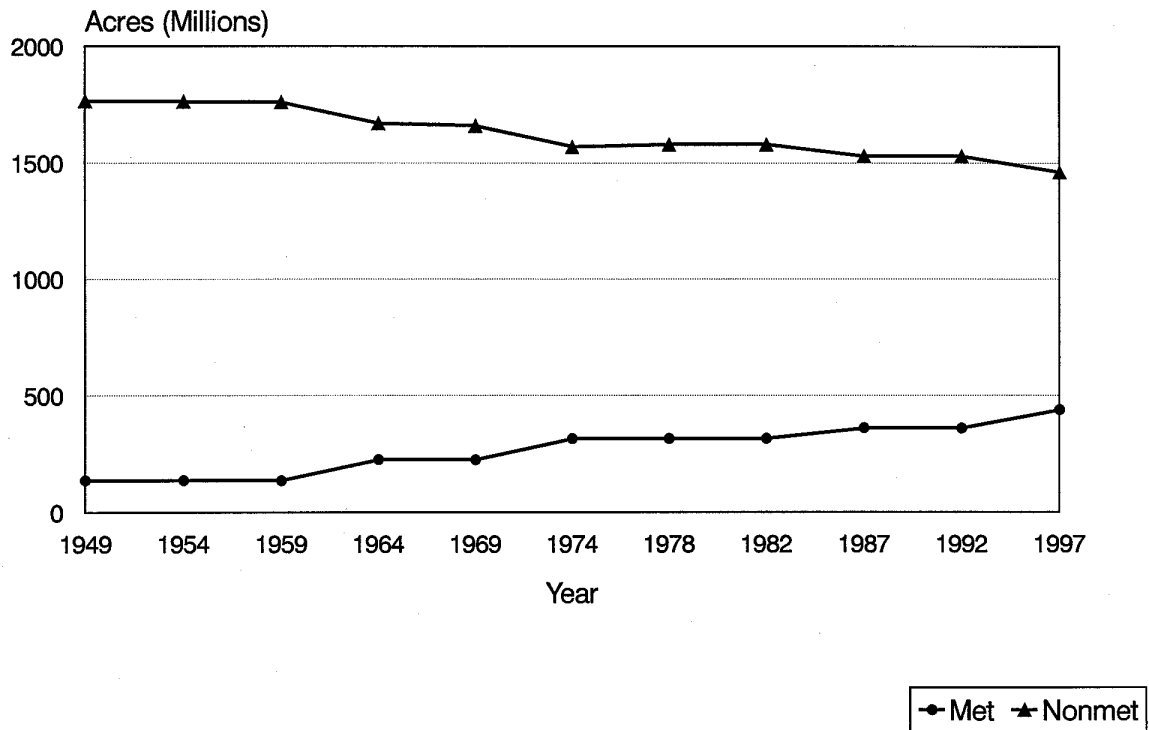
Figure 5
Population Density in Nonmetropolitan Areas, United States,
1950 - 1990



Nonmetropolitan counties adjacent to metropolitan areas also displayed a pattern of population deconcentration since 1960, and have average population densities about the same as that of smaller metropolitan areas (see Figure 4).

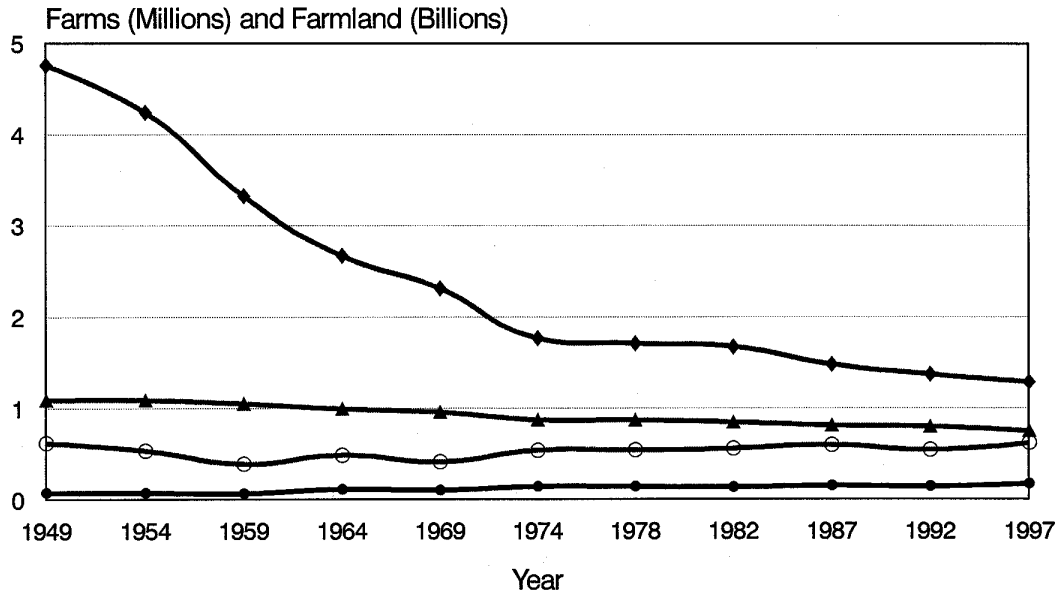
It should be noted that the trends shown are for types of areas, not for particular places (e.g. St. Louis). The population densities were calculated for types of areas -- the total population in nonadjacent nonmetropolitan areas in 1950 divided by the total nonadjacent nonmetropolitan land area in 1950. This means that the amount of metropolitan and nonmetropolitan land area changes over time, as does the population in such areas.

Figure 6
Land Area in Metropolitan and Nonmetropolitan Areas, United States
1949 - 1997



Metropolitan areas extend across the landscape, and over time have enveloped rural areas, and a variety of traditionally rural land uses like agriculture. While nationally the most land remains in nonmetropolitan areas, the area incorporated into metropolitan areas has more than tripled between 1949 and 1997, from about 136 million acres in 1949 to 438 million in 1997.

Figure 7
 Number of Farms and Acres of Farmland in Metropolitan and Nonmetropolitan Areas,
 United States, 1949 - 1997

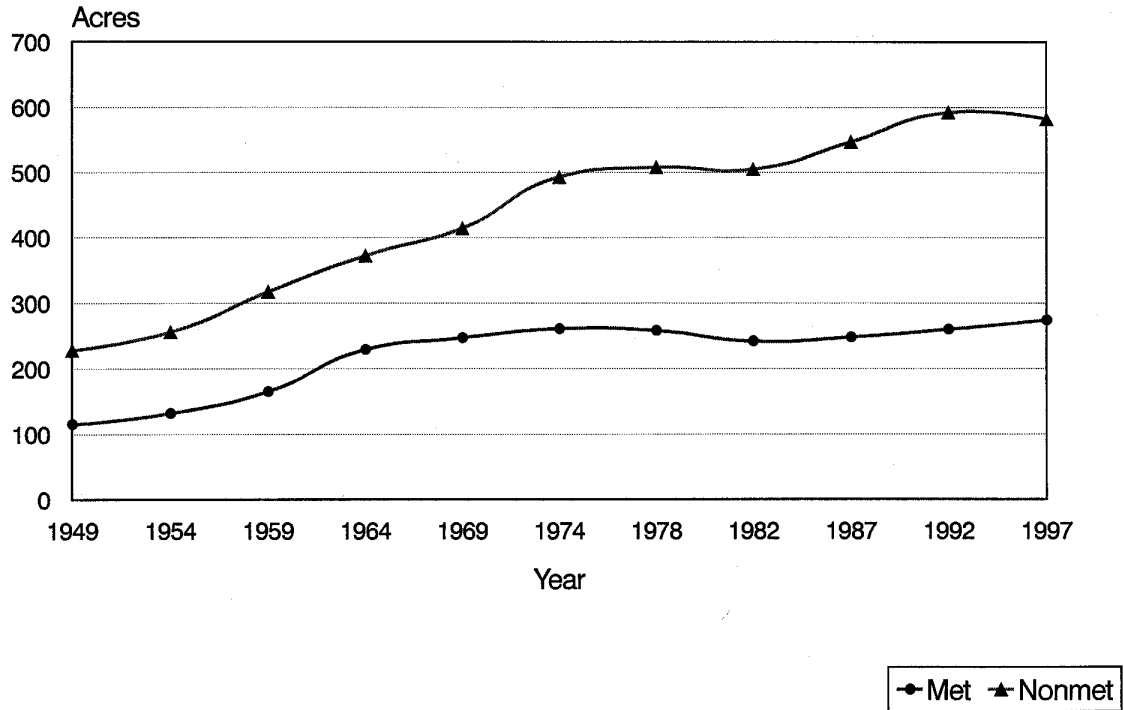


See Appendix C for 1997 numbers.

—●— Met Farm Land —▲— Nonmet Farm Land —◻— Met Farms —◆— Nonmet Farms

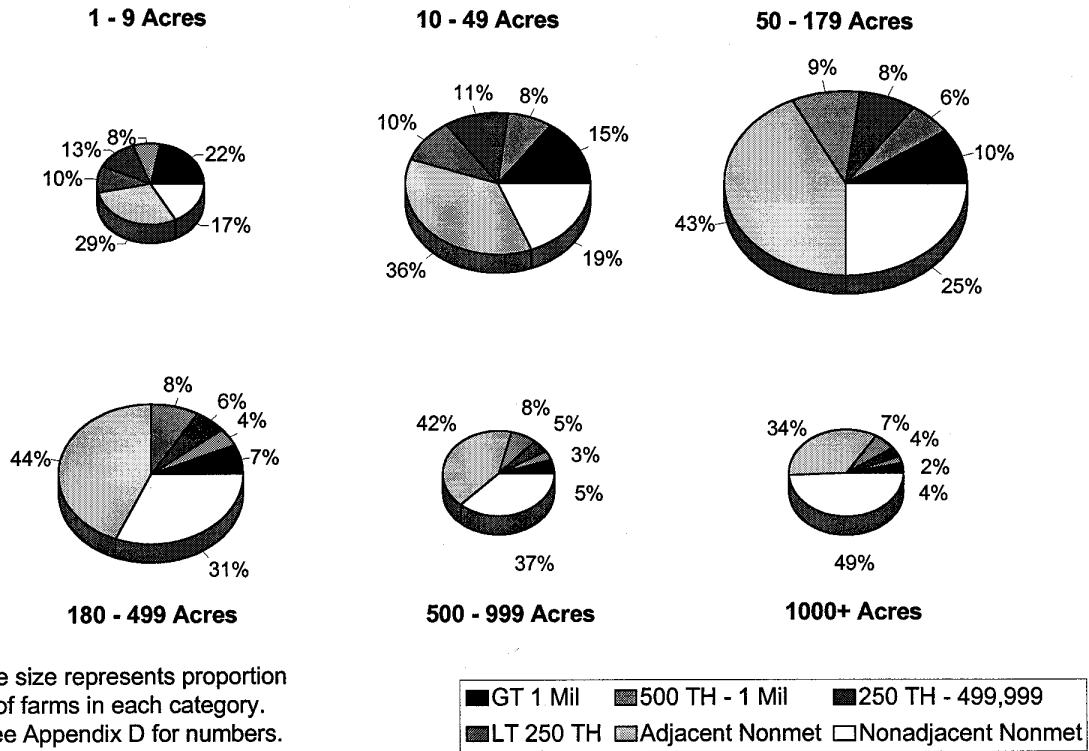
The industrialization of agriculture has led to a sharp drop in farm numbers in nonmetropolitan areas while the amount of farmland has remained constant. These patterns reflect the concentration of farm production in a smaller number of farms (see Figure 8). In contrast, both the number of farms and land in farms have remained constant in metropolitan areas. While such areas are not immune to changes in the organization of the industry, farmland and farms have been added as a result of their spatial expansion. By 1997, eighteen percent of all farmland and thirty-two percent of all farms were located in metropolitan areas nationwide.

Figure 8
Average Farm Size in Metropolitan and Nonmetropolitan Areas,
United States, 1949 - 1997



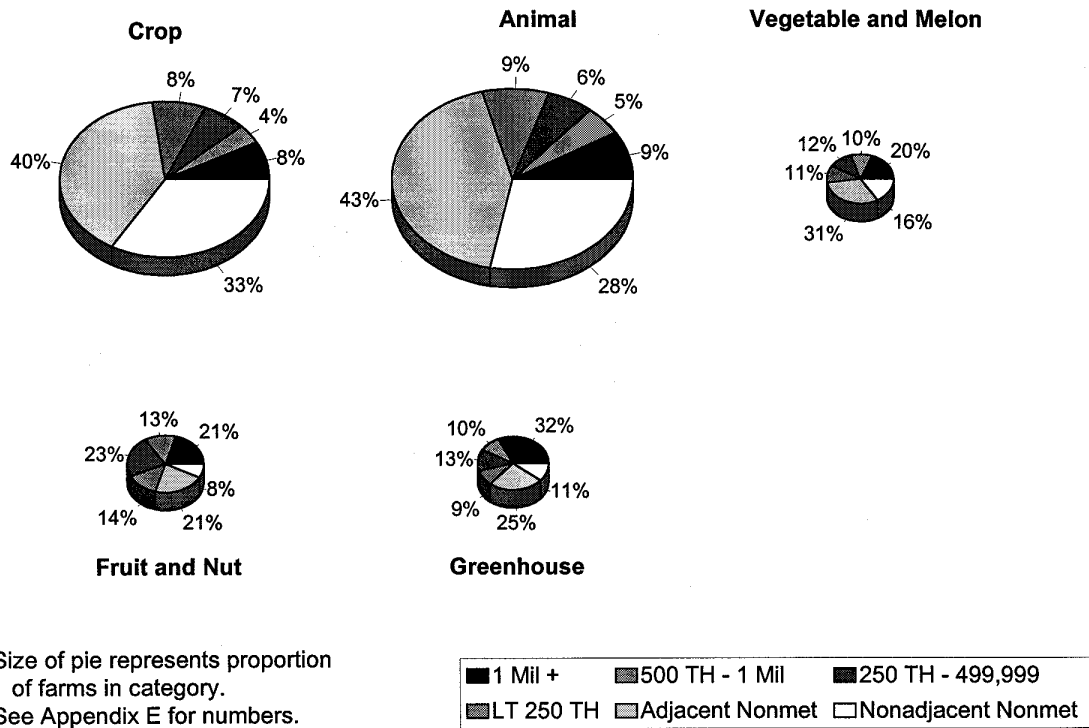
The average size of farms located in metropolitan areas remained relatively constant between 1964 and 1997, while it increased steadily in nonmetropolitan areas. Changes in the average farm size of nonmetropolitan farms were most pronounced in the 1969-1974 and 1982-1992 periods. It should be noted, however, that the Census definition of a farm changed in 1974 (see Technical Documentation), raising the minimum value of sales required for an operation to be counted as a farm. This change may have had a greater effect on smaller nonmetropolitan farms, creating the jump in average farm size. Throughout the entire study period nonmetropolitan farms had about twice the acreage of their metropolitan counterparts.

Figure 9
Farms in Acreage Classes by Metropolitan Status, United States, 1997



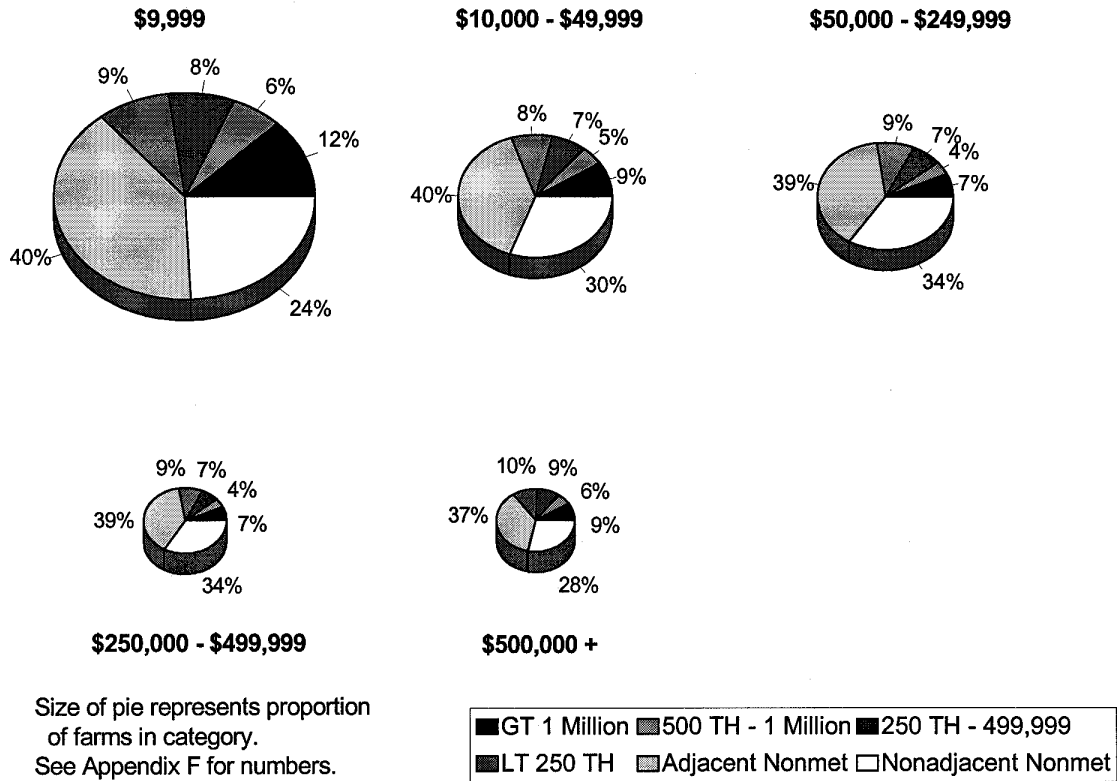
About one-half of the smallest farms (1 to 49 acres) are located in metropolitan areas, but some farms of all size classes can be found in these areas. The largest concentration of very small farms (1 to 9 acres) among metropolitan areas is in those with populations of more than one million. A greater proportion of larger farms (500 - 1000+ acres) are located in nonmetropolitan areas. More than three-fourths of all farms with more than 500 acres are found in nonmetropolitan areas.

Figure 10
 Farms in Standard Industrial Classification by Metropolitan Status, United States, 1997



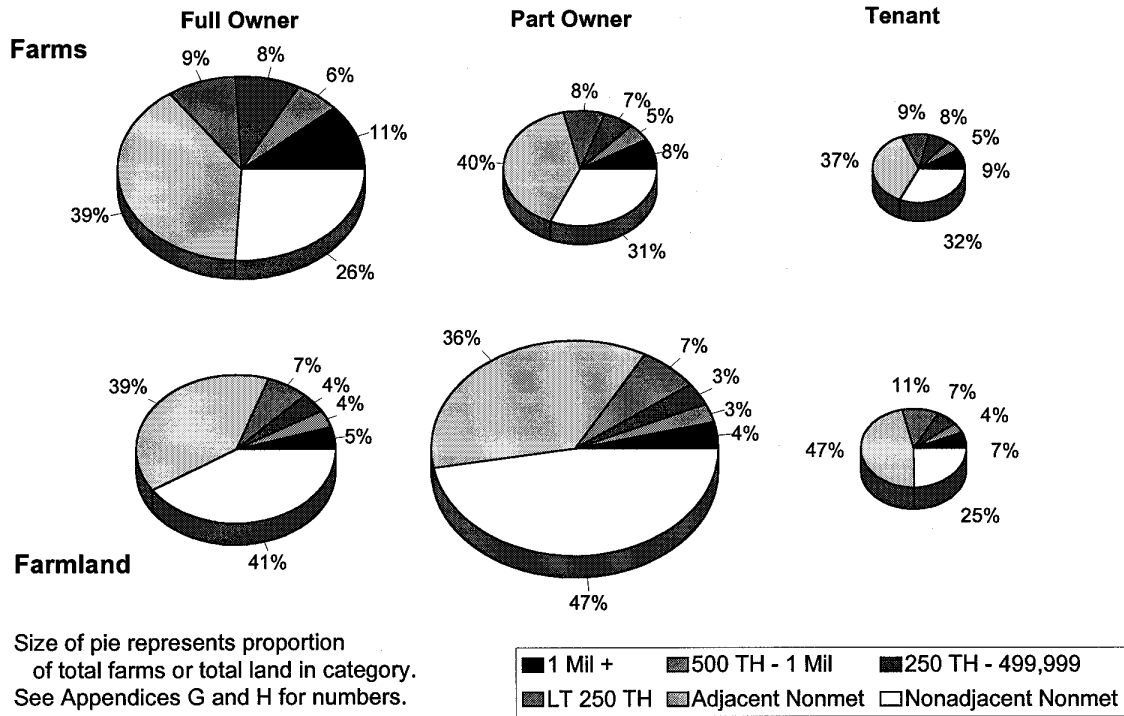
Greenhouse production and vegetable and melon farms nationwide are more likely to be found in the largest metropolitan areas and in nonmetropolitan counties adjacent to metropolitan areas. Fruit and nut farms in the U.S. are relatively evenly distributed across the landscape. Farms specializing in field crops and animals are most likely to be found in nonmetropolitan areas. Surprisingly, more crop and animal farms are found in nonmetropolitan counties adjacent to metropolitan areas than in areas furthest from urban centers .

Figure 11
Farms by Total Sales and Metropolitan Status, United States, 1997



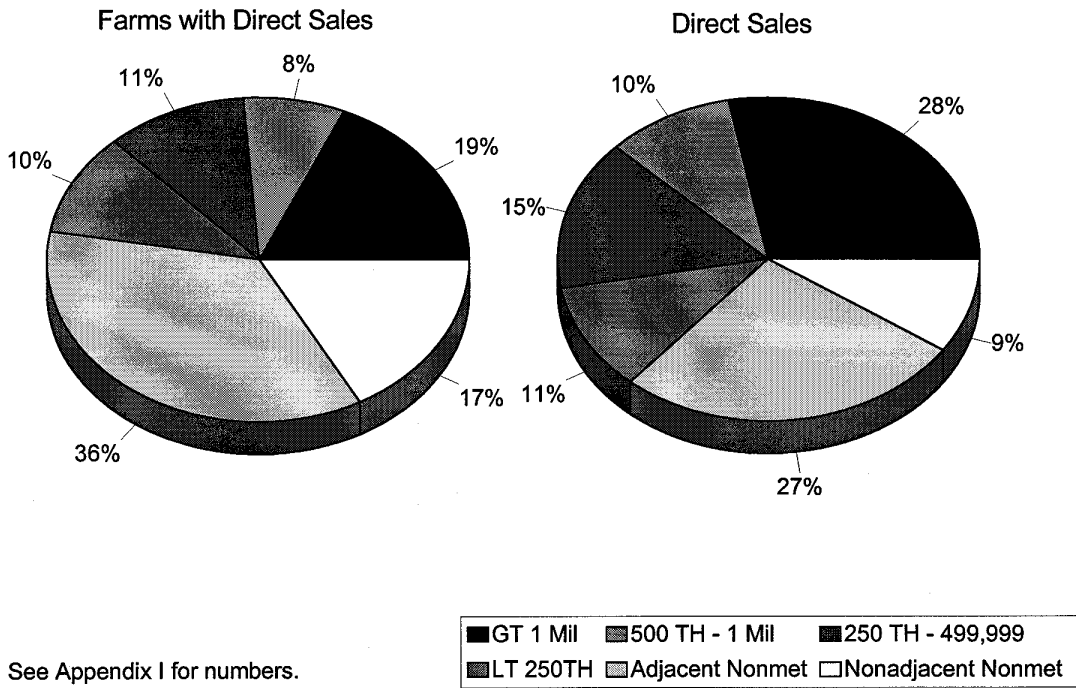
Farms with a wide range of total sales are found across the landscape, though the total number of farms decreases as total sales per farm increases. For example, in the largest metropolitan areas one finds about the same proportion of farms with sales of less than \$10,000 as with sales of more than \$500,000. This is true for each of the metropolitan classes we considered. Nationally, farm sales remain concentrated in more rural, nonmetropolitan, areas.

Figure 12
Farms and Farmland by Tenure and Metropolitan Status, United States, 1997



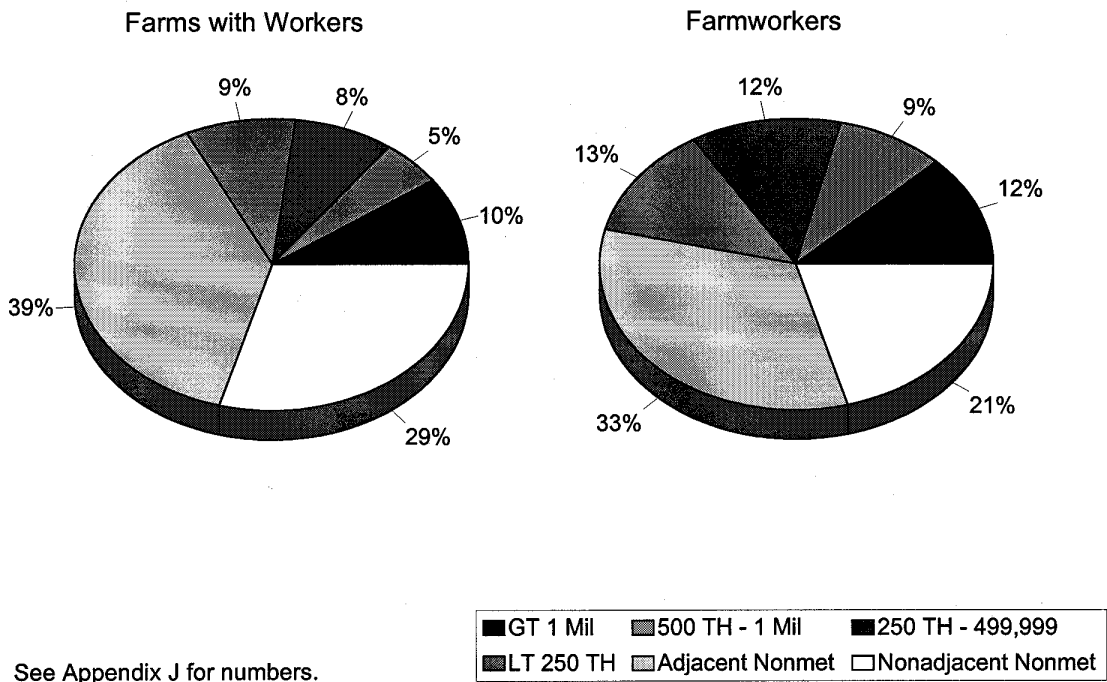
Farms and farmland in the United States are concentrated in nonmetropolitan areas, regardless of the tenure classification. A higher proportion of farmland operated by tenants is found in metropolitan areas and in adjacent nonmet counties, compared with the other tenure classes.

Figure 13
 Farms with Direct Sales and Direct Sales by Metropolitan Status, United States, 1997



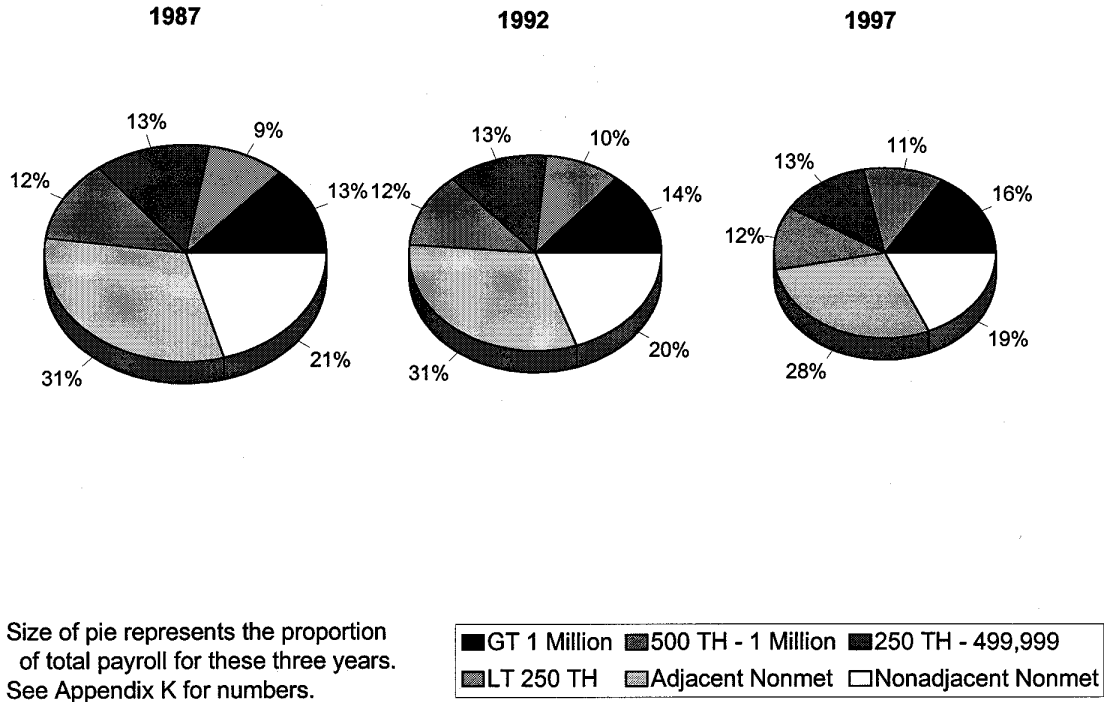
Farms located in metropolitan areas account for a disproportionate share of all direct sales. Almost one-half of all farms with direct sales of farm produce are located in metropolitan areas, but they account for more than sixty percent of all sales. While total direct sales in 1997 amounted to about \$500 million, they made up less than one percent of total farm sales for the country. There is some variation when looking at each metropolitan area individually. With the exception of farms located in areas with populations between 250,000 and 500,000 (for which direct sales represented five percent of total sales), no area's direct sales represented more than one percent of the area's total sales. This suggests there is a potential for growth in metropolitan areas, where the presence of farmers' markets and direct sales to restaurants have increased noticeably in recent years.

Figure 14
 Farms with Workers and Farmworkers by Metropolitan Status, United States, 1997



Farms in metropolitan areas have a strong demand for labor. Only about one-third of all farms employing workers are located in metropolitan areas, but almost one-half of all farmworkers are employed on farms in these areas. This reflects the labor intensive farming activities which are most prominent in metropolitan areas, like various types of horticultural production (see Figure 10).

Figure 15
Payroll by Metropolitan Status, United States, 1987, 1992, 1997



For the U.S. overall, payroll has declined since 1987, from a total of about fourteen million dollars to about ten million dollars in 1997, but its distribution across the metropolitan landscape has remained stable.