CHAPTER 2

Population Distribution and Suburbanization

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Much of contemporary demographic research focuses on population groups that are geographically defined by a single areal universe, such as the United States or the world. Population research has gained much of its impetus in the past few decades from the effort to understand the unparalleled growth of many of these aggregates—what has been termed the population explosion.

Geographically defined aggregates may be further divided by their distribution according to specific territorial subdivisions such as regions, metropolitan areas, cities, and neighborhoods. Often the patterns for a country in terms of population size and growth have only a weak relationship to those reported for the subdistricts. Indeed, many national populations are characterized by such incredibly diverse patterns of internal change among their subdistricts that the interpretation of “average” patterns for a population universe may have little practical meaning. Thus, in some countries, specific territories are growing at rates of 10% or more per year while others are declining. To illustrate, in the United States, the Las Vegas metropolitan area tripled its population between 1980 and 2000, while 46 of the 53 counties in the state of North Dakota lost population.

For those who study population distribution, a key term is population implosion, which is the dramatic, growing tendency for human populations to be disproportionately concentrated in large urban agglomerations. In other words, high proportions of the population are found in a small number of communities, occupying generally low proportions of national territories. In effect, the population implosion represents urbanization, but in its current manifestation also includes the idea of megacities (Zwingle...
2002), where literally millions of people are concentrated together within one part of a nation’s territory.

One consequence of the population implosion is a growing inequality in population distribution within societies, a trend that will likely continue for a number of decades. Societies may need, as in recent decades, to develop bipolar social policies toward their parts: for the large agglomerations, the problem will be providing enough new infrastructure (roads, highways, and services) so that the community may function smoothly; for the small agglomerations, the problem will be providing enough services to cushion the ill effects of the decreasing opportunities for their residents.

Historically, the implosion of populations occurred in a relatively finite geographical space so that cities emphasized upward growth of densities to accommodate increasing numbers. But in recent decades, territorial distribution has been characterized by a new pattern of outward spread into surrounding areas that were once lightly settled, areas commonly called suburbs. This suburbanization process is especially evident in highly developed societies such as the United States but is also occurring in many other societies around the world with lower standards of material living.

While this chapter provides a general overview of major trends in population redistribution in the world, it devotes special attention to suburbanization. In particular, it analyzes the case of the United States, where suburbanization has been particularly important. This chapter documents some of the principal trends of the past few decades and then uses the results of the 2000 U.S. census to chart the major dimensions of recent change.

THE WORLDWIDE IMPLOSION

For most of human history, aggregate populations were relatively small and mobile. Limited human technology made it difficult for most communities to produce goods and services beyond very basic needs. Many groups knew so little about the techniques of sedentary agriculture that they roamed or foraged to find adequate food. Most agriculturalists lacked the knowledge and tools to produce a food surplus that would support large numbers of individuals in nonagricultural places (Sjoberg 1960).

During the past several thousand years, this situation gradually changed, and urban agglomerations slowly began to develop. Even in 1800, only 2% of the world’s population lived in agglomerations of 20,000 or more (Davis 1955). Since 1800, the percentage of the world’s population living in dense concentrations of this size has doubled about every 50 years or so. According to the United Nations (2004: Table 3), almost one-half of the world’s population lived in urban agglomerations, as defined by member countries in 2000, in comparison to about one-third in 1950.

Interestingly, while national populations differ greatly in their population distributions, they have all had major increases in population concentration. Almost all parts of the world have higher levels of urbanization today than were found 200 years ago. Even the continent of Africa, which has an unusually high proportion of very poor countries, was more than 37% urban in 2000, according to the United Nations (2004: Table 8).

One social science approach to the study of population issues is that of human ecology (see chapter 20, “Ecological Demography,” in this Handbook). A central interest of human ecology is how population growth and change respond to the level and complexity of technology, to the ways that societies and communities organize their
productive and political activities, and to the social and physical environment (Hawley 1986; Namboodiri 1988). Human ecologists study various levels of population aggregation, including regions, cities, and neighborhoods, but tend to eschew individuals as units of analysis.

From the human ecological perspective, the simultaneous emergence of the population explosion and implosion is understandable. As technological knowledge has increased, it has been possible to improve dramatically the living conditions of populations, setting off declines in mortality and increasing overall population growth. At the same time, as the general level of technological knowledge has increased, individual agriculturalists have developed techniques to raise more food than they need and, consequently, support large numbers of nonagriculturists in concentrated communities. In addition, both population explosion and implosion have resulted from the increasing complexity and sophistication of human social organization. For instance, contemporary societies often have highly organized and relatively efficient health care services that enhance the health and well-being of their population and, in the process, encourage high population growth due to low mortality rates. At the same time, the development of organized government bureaucracies has permitted the planning and coordination that are necessary to sustain the spatial concentration of thousands, even millions, of diverse individuals.

THE IMPLOSION MOVES OUTWARD

For most of human history, population implosion involved concentration within small geographical areas. Urban agglomerations generally had only, at most, a few thousand residents (Davis 1955; Winsborough 1963). In addition, transportation, communication, and building construction were relatively primitive by standards of recent decades. Most movement was by foot, and most communication occurred by face-to-face contact. Given the primitive development of transportation and communication, most interrelated activities such as workplace and home had to be located in proximity. The problem of accommodating populations was complicated by the fact that primitive methods of building construction facilitated only small structures that were rarely more than two to four stories in height. The result was a cluttered and spatially delimited community at points of population concentration.

This situation changed greatly after about 1880 in societies such as the United States, resulting in an expansion of the population boundaries of many territories. One fundamental development was the electric streetcar/railway in the very late 1800s, which generally emanated from the center of cities on fixed radial lines (Ward 1971; Warner 1972). Given its relatively rapid speed, this development permitted the outward dispersal of activities, both workplaces and residences, but especially residences, since many individuals wanted to reside outside the congestion of the center. In addition, activities within the metropolis began to separate spatially into various subdistricts because they no longer required physical proximity. Clearly delineated areas of the rich and poor, of residences and workplaces, began to appear. The electric streetcar, with its orientation to transportation points at the center of the urban core, also had what might be considered the paradoxical effect of increasing the concentration of activities there that especially depended on proximity to the whole region (such as government offices and retail department stores).
Perhaps a more important transportation development was the mass production of the motor vehicle, which spread throughout the population, particularly the economically stable working and middle social classes, in the period after 1920, that is, roughly the years after World War I (Hawley 1978). Individuals and families could now live at some distance from various activities but be within reasonable commuting distance. While the streetcar oriented many activities to the downtown, the motor vehicle with its more flexible routes encouraged the development of numerous subcenters outside the traditional downtown.

Historically, much of the outward physical movement of Americans from traditional urban concentrations occurred via the political annexation of territories by the central cities, leading to a situation in which the social, physical, and political cities were largely coterminous. However, in the period after 1920, populations in many of the newer outer areas rejected the political dominance of the central cores and began forming numerous legally recognized communities. In general, political jurisdictions that were the traditional growth nodes of urban agglomerations became known as central cities, and the more peripheral communities were known as suburbs. This division and specialization of parts between the politically defined central city and the suburban ring became known as the metropolitan community (Schnore 1959).

The most dramatic outward expansion of urban concentrations occurred after World War II ended (Guest 1975; Hawley 1978; Tobin 1976). Furthermore, growth was sprawling, creating extensive geographical regions where much of the population lived at low densities. Even in comparison to the 1920s and 1930s, automobile ownership increased greatly in importance, influenced partly by the merchandising of auto manufacturers and by the development of high-speed, limited-access highways. In addition, affluence grew greatly in American society, especially in comparison to the economically depressed years of the 1930s. As a result, families sought larger and lower-density living units. The federal government also played an important role by encouraging and offering low-interest loans for persons buying homes on the periphery.

A primary historical factor in the clustering of population within small areas was the need for direct face-to-face interaction. This changed some in the post-1920 period with the development of community telephone systems (Fischer 1992), but the electronic revolution of the past few decades has undoubtedly had an even greater impact. In the past two decades, computer technology has permitted electronic workplaces in which individuals communicate actively with each other but at some physical distance. Individuals can work and live well beyond the conventional spatial limits of metropolitan areas, and many workplaces such as banks can spin off auxiliary operations like record keeping to remote locations where they are linked electronically with central offices.

Without doubt, the outward spread of population in American urban concentrations during the early post–World War II period had many ill effects on the older central core areas. Downtowns suffered precipitous declines in many types of employment, especially in retailing, as peripheral auto-oriented shopping malls developed for the first time in American history (Sternlieb 1971). A number of central neighborhoods experienced significant population declines (Price-Spratlen and Guest 2002), and, unlike the early part of the 20th century, few population groups were available to serve as replacements. Immigration from abroad had declined to a trickle, and the major in-migration group to urban cores was comprised of African Americans (Taeuber and Taeuber 1965). As the demand for centrally located housing became low, the surviving residents lacked the resources and the social incentive to maintain the quality of many
areas. Central city governments, while aggressively confronting their social ills, developed many financial problems as they tried to deal with an eroding tax base, due to factors such as population loss.

The tremendous redistribution of population within the United States is indicated in recent data from the U.S. Census Bureau. Counties have been divided by the Census Bureau into those that are considered part of metropolitan areas and those that are not. The metropolitan counties themselves have been divided into their central cities, or historic centers, and the remaining parts of the metropolitan areas, i.e., the suburbs. The Census Bureau reports (Hobbs and Stoops 2002: 33) that in 2000, for the first time in American history, at least half of the U.S. population lived in suburbs. This represents an incredible change since 1950, the midpoint of the 20th century, when for the first time at least half (56.1%) the U.S. population lived in metropolitan areas, whether central cities or suburbs. In 1950, only about one-quarter of the American population lived in what were considered suburbs, and the number of central city residents outnumbered suburbanites by almost 10 million. Yet even the 1950 pattern represented a dramatic change from 1910, in which only 7% of the U.S. total population lived in suburban areas.

Since 1970, in several time periods, nonmetropolitan areas have grown at faster rates than metropolitan areas, and, overall, metropolitan and nonmetropolitan growth rates have not differed strikingly (Fuguitt and Brown 1990; Wardwell 1980). It turns out that much of the nonmetropolitan growth in these periods has occurred in territories that are physically close to the suburbs of conventional metropolitan areas. Apparently, the borderline between territories of heavy population concentration and those of low population concentration is becoming blurred, so that the “real” boundaries of metropolitan agglomerations are increasingly difficult to define.

The influence of the metropolis now extends to long distances from the traditional centers. On the metropolitan periphery, previously independent communities such as agricultural service centers are increasingly housing residents who work elsewhere in the metropolis. In addition, new communities, sometimes called exurbs, are being created from scratch by developers. These communities are often detached physically from the expanding crest of suburban development.

**CHANGING SUBURBAN DEVELOPMENT**

Much of our understanding of suburbs rests on the literature and observations of the middle part of the 20th century. However, new social forces have emerged in recent decades, and the major dimensions of the suburban community demand charting. What are the key questions and the possible answers about changing suburban development?

One set of questions deals with the degree to which suburbs continue to grow rapidly in population, especially relative to their central cities. No one doubts that suburban rings continue to grow more rapidly, in an absolute sense, than their central cities. But what is the emerging balance of growth between central cities and suburbs?

Certainly, many central cities have emerged from their depressed years in the early post–World War II period. The 2000 census shows that a number of central cities, especially older places in the Northeast and Midwest, experienced patterns of population increase (albeit often small) in the 1990s compared to the 1980s (New York Times 2001c, 2001d). A number of central city downtown areas have begun to prosper as they have assumed important roles in specialized employment niches such as convention...
centers and government/legal services for extensive surrounding territories. These downtown industries have undoubtedly attracted many individuals (often characterized by at least moderate socioeconomic status) to live nearby, and one can point to a number of gentrifying neighborhoods in central cities (London et al. 1986).

Few could doubt that many central cities have shown recent sparks of vitality and that some suburbs face central-city-like problems, but one should be cautious about downgrading the importance of suburbs as growth centers in American society. Many central cities have limited physical space in which to expand, while suburban rings continue to offer extensive undeveloped land. Indeed, the persistence of massive suburban growth is suggested by the growing political issue of suburban sprawl (Squires 2002). Many individuals dislike the formless, haphazard nature of peripheral metropolitan development and fear that highly valued land that might be used for recreation and nonresidential activities will be lost forever (Lindstrom and Hartling 2003).

Another important factor in considering suburban versus central city growth is the explosive development of diverse employment activities in suburban rings (Bourne 1996). Whereas early post–World War II suburbanization heavily involved residences that were tied to central city workplaces, more recent years have seen the creation of major peripheral employment centers. This has involved high rates of job relocation from central cities to suburbs and the creation of many new job opportunities, as in the computer industry. Examples that come to mind are Silicon Valley in the San Francisco metropolitan region and Redmond, outside Seattle. This growth of employment, both the amount and the diversity of activity, has created a need to house increasingly diverse workforces, a factor that would encourage growing diversity in the age and family structure of suburbs.

Many metropolitan dwellers now work and live in suburban rings and have little contact with central cities. Some (Leinberger and Lockwood 1986) have even argued that communities in the suburban rings are becoming “urban villages,” characterized by self-sustaining autonomous mixes of employment and residence. Garreau (1991) has described such self-sustaining settlements as “edge cities,” since they are often on the suburban outskirts.

A second set of questions deals with the universality of the suburban movement across metropolitan areas in the United States. Historically, older metropolitan areas, disproportionately concentrated in the Northeast and Midwest, have experienced the greatest loss of population from their central core cities (Schnore 1957, 1959). This may partially reflect the fact that they often have congested and unattractive neighborhoods in their centers, providing an incentive for the residential population to move elsewhere. At the same time, newer metropolitan areas may still have some open space for development in their central cities. In addition, central cities in newer metropolitan areas may also have an unusual propensity to grow by political annexation of potentially suburban territory. Older central cities tend to be hemmed in by already incorporated suburbs, and new central cities can often exert political leverage over surrounding territories by exercising control of amenities such as water rights.

Yet, as has been pointed out, a number of older central cities apparently resumed population growth in the 1990s after experiencing decline for several decades. Perhaps old and new metropolitan areas are converging into a common pattern of suburbanization.

A third set of questions deals with the emerging population composition of various parts of suburbia. In comparison to their central cities, suburban rings have tradition-
ally had adult residents with above-average incomes, a disproportionate number of whom were married with children. Today, however, there is a great deal of population diversity within suburbs. Although perhaps the most striking traditional characteristic of suburbia is the overwhelming dominance of persons from European ancestries (Guest 1980), these patterns are changing. Indeed, a dominant theme in recent research about suburbia is its growing diversity (Bourne 1996, Frey 2003). Allegedly, suburbs have become less homogeneous over time. It is increasingly difficult to distinguish a suburban neighborhood from a central city neighborhood. People of African, Asian, and Hispanic ancestry are increasingly represented, although not in proportions equivalent to their representation in the larger metropolitan population (Frey 2003). Poverty is evident in many suburban rings, and the increasing diversity of American family structure is also represented in many suburbs.

A primary task in the study of territorial distribution in relationship to suburbs is charting the variations in composition but, just as importantly, understanding why they occur. According to the human ecological perspective, such factors as the spatial position of the community in the metropolis and the overall density of the population should affect the characteristics of the types of persons who live there. The following sections of this chapter deal with each of these questions.

**SUBURBAN GROWTH: SLOWING OR ROARING?**

To chart the general dimensions of suburban growth in the last part of the 20th century, designated central cities are compared with their total suburban rings for metropolitan areas in each decade between 1960 and 2000. While some of the analysis in this chapter concentrates on the period since 1970, inclusion of 1960 in the analysis of growth provides some comparative perspective with the heyday of post–World War II suburbanization. The data focus on the census-designated Metropolitan Statistical Areas (MSAs) with total populations of at least 250,000 in 2000, an admittedly arbitrary threshold but one suggesting large-scale urbanization. While 163 such areas were recognized in the 2000 census, two could not be included because they lacked the requisite data for 1960.

Since the development of the census-designated metropolitan area in the 1940s, numerous changes in the specific definitions and their parts have occurred, although many of the basic conceptions remained fixed. Literal use of central city designations in 2000 would be a mistake. In earlier censuses, central city designations were generally limited to one or two places per metropolitan area and were restricted primarily to places with over 50,000 population. However, by 2000, the number of central cities “exploded” in census reports. By then, many MSAs contained “central cities” of less than 50,000 population, and many of the designated central cities could hardly be considered original growth centers for their regions. For instance, the Seattle-Bellevue-Everett MSA includes Seattle, clearly the original growth center for the region and the dominant community in terms of population; Bellevue, which now has over 100,000 population but which developed as a residential suburb near Seattle in the period after World War II; and Everett, a peripheral, small lumber mill city that was the hometown for Henry “Scoop” Jackson, Washington’s powerful senator at the time Everett was designated as a “central city.”

This chapter treats as central cities those census-designated places that have at least 50,000 population and are the largest designated central city in the MSA. In addition, to
recognize the very real possibility of dual central cities, census-designated central cities of 50,000 population that are at least half the size of the largest recognized central city are also included.

The stupendous dimensions of suburbanization since 1960 are suggested by Figure 2.1, which shows the total numbers of persons living in the central cities and suburban rings of the 161 profile areas. In 1960, 61.9 million persons lived in the suburban rings, while 124.8 million lived in the rings in 2000. Some observers of the suburban scene (Jackson 1985: 297) have argued that suburbanization would slow down in the late 20th century due to such checks as the high costs of transportation fuel and new land. But the most noteworthy aspect of the figure is the virtually linear, continuous increase in the suburban population, regardless of decade. The data suggest that suburbanization, as measured by raw numbers, is on an upward, endless trajectory. The figure shows that the absolute number of new suburbanites has grown by a constant number each decade, although the percentage growth rate is higher in earlier decades because the base number of suburbanites was smaller.

In contrast, central cities have also shown some overall growth, but the pattern is much less dramatic and more erratic. Interestingly, in the 1970s, the average central city actually declined slightly in population size, yet the 1990s were characterized by the most positive growth of any decade, gaining 5.3 million residents. In addition, the 1980s also showed overall positive central city growth, but at a lower rate. Apparently, the 1970s involved the “dog days” of central cities in the United States, when their problems and outmoded land uses resulted in little attraction for population growth.

However, one should be cautious about emphasizing the rebound of central cities from their losses in the 1970s. Even in the 1990s, suburban growth was strikingly higher than central city growth, and there is little evidence that any central cities have moved from dramatic patterns of population decline to dramatic patterns of population increase. The so-called rebound of central cities is but a “blip” in the larger pattern of continuing, massive suburbanization. For instance, Chicago, the third largest U.S. central city, grew in the 1990s by 112,290 to a population of 2,896,016 in 2000. However, given previous losses, Chicago’s population size in 2000 was still 109,662 less than in 1980, and 470,941 less than in 1970.

![Figure 2.1. Persons (in millions) in U.S. central cities and suburban rings.](image-url)
While the differences in central city growth across decades are socially significant, one should be cautious in interpreting the data. As Frey and Berube (2003: 264) show for large metropolitan areas, the 1970s involved substantial growth in the numbers of households in many central cities, but the shrinkage in the average household size had major effects in producing overall population decline. The depressed period of central cities in the 1970s is not as evident if one compares growth in the number of central city households in the 1970s with the 1990s.

**SUBURBAN GROWTH: OLD VERSUS NEW METROPOLITAN AREAS**

While the overall degree of suburbanization is impressive, patterns may differ significantly over metropolitan areas. How important is this variation? As suggested earlier, metropolitan age or the major period of development of central cities is important for distinguishing the growth of central cities from their suburban rings. Age is defined by the census year in which the central city (or cities) first achieved a population of at least 50,000. The figure of 50,000 is important because it has historically been used to define the existence of central cities within metropolitan regions (Schore 1959). Age thus indicates the rough time period in which population size grew large enough to foster a metropolitan region.

In this chapter, metropolitan areas are divided into three age groups that are roughly defined by major changes in the nature of urban transportation. Pre-1890 metropolitan areas developed their large sizes when most movement occurred by foot or horse and were characterized, at the time, by high-density central development. Metro areas that developed between 1890 and 1910 were heavily influenced by the more rapid electric streetcar, which encouraged some physical expansion of the metropolitan territory. Finally, post-1910 metropolitan areas became important in the era of the motor vehicle.

Figure 2.2 illustrates three different aspects of growth in the 161 metropolitan areas when they are divided by their age. The first panel depicts the percentage of central city agglomerations, by age group, that showed any population growth at all during each decade. The second panel illustrates similar information for the suburban rings of the same central cities. Since suburban ring growth occurs ubiquitously across metropolitan areas, suburban rings are distinguished by whether they grew at a high rate (by at least 20% in each decade) or at a relatively low rate (less than 20%). The third panel presents, for the same age groups of metropolitan areas, the relative percentage of all metropolitan dwellers that live in the suburban rings (as opposed to central cities) at each point in time.

Panel 1 of the figure shows quite strong differences in central city growth by age, regardless of time period. Clearly, the existence of central city population decline is most evident in the oldest metropolitan areas having central cities which were originally developed in a period of slower transportation. Less than 40% of central cities in the oldest metropolitan areas (pre-1890) grow in any decade. In contrast, the newest metropolitan areas are characterized by positive growth of central cities, regardless of decade. In each decade, at least 80% of central cities that came of age in 1910 or later show population growth.

The data do suggest, nevertheless, that the gap in central city growth between new and old metropolitan areas has declined. In the 1970s, a quite striking gap was evident...
FIGURE 2.2. Growth patterns, 1960 to 2000, by age of metropolitan area.
with hardly any of the old metropolitan areas showing positive central city growth. By the 1990s, the percentage of growing central cities among the oldest metropolitan agglomerations was the highest in the decades. Yet, the “rebound” pattern was limited, with only 39% of the central city agglomerations of old metropolitan areas growing in the 1990s.

Perhaps surprisingly, the second panel shows that the same general metropolitan age effects characterize suburban rings. Suburban rings of older metropolitan agglomerations have quite low percentages growing by 20%, except during the 1960s. Suburban rings of the newest metropolitan areas show higher percentages with at least 20% growth in each decade.

The age variation in suburban growth, similar to the central city variation, partially reflects the fact that older metropolitan areas in the United States have been less attractive for overall population growth than newer metropolitan areas, which tend to be concentrated in the southern and western regions, where the population is shifting. In other words, older metropolitan areas have less overall population growth than new metropolitan areas, and both their central cities and suburban rings have less chance of longitudinal growth. However, this finding must be interpreted cautiously because suburban rings are less differentiated by age in growth pattern than central cities. In other words, high suburban ring growth is a more universal characteristic of metropolitan areas than changes in central city populations.

The fate of the older central cities relative to their suburban rings is more starkly delineated in the third panel of Figure 2.2. This panel shows how the percentage of MSA residents living in suburban rings has changed over the decades. The major finding is that old and new metropolitan areas are becoming increasingly differentiated in the degree of population suburbanization. In 1960 and 1970, both the oldest and the newest metropolitan areas have the highest suburban percentages. By 2000, all types of metropolitan areas show an increasing percentage of population in the suburban ring. Yet by 2000, the oldest metropolitan areas clearly have the highest percentage living in the suburban ring. This is a product of the newest metropolitan areas showing little change in their suburbanization of population, while the oldest metropolitan areas have lost relative shares of population to the suburban ring.

The march toward a suburb-dominated society thus seems evident, at least superficially, in the oldest and medium-aged metropolitan regions. But, almost paradoxically, suburban rings are growing less rapidly in absolute numbers in the older metropolitan regions than in newer regions. The reason for these different patterns is that overall metropolitan growth in newer metropolitan areas fuels both the central cities and suburban rings, while the lower overall growth in the older metropolitan areas is disproportionately oriented toward the suburban ring. This is a pattern that slowed down in the 1990s but still continues. Even the so-called “rebound” growth pattern of central cities in the 1990s did not slow what appears to be an inevitable march toward increasing suburban proportions of older metropolitan populations. In other words, the rebound of old central cities in the 1990s is only a blip in the long-term historical redistribution of population.

Why is suburbanization, at least in terms of share of the total metropolitan population, more evident in the oldest metropolitan areas? For the oldest metropolitan areas, this reflects partially their undesirability for residential living. But it also reflects the fact that central cities are largely hemmed in by incorporated suburbs and have difficulty expanding their geographical area. Newer central cities benefit from residential
desirability, but another important factor is the ability of central cities in the newer metropolitan regions to annex what had been suburban territory. In these regions, suburban areas less often have incorporated city governments to resist annexation, or, if incorporated, they have shorter-term traditions of community sentiment that would encourage them to remain independent.

While longitudinal 1960 to 2000 data on populations in annexed areas are unavailable, the geographical size of central cities may be compared. For the oldest metropolitan regions, the 1960 areas of their central cities are over 90% of the size of their 2000 central city areas. At the other extreme, in the newest metropolitan regions, the 2000 areas of central cities are typically at least twice the size of the 1960 areas of their central cities. However, this apparently dramatic change for new metropolitan areas must be tempered by the knowledge that the average is heavily influenced by a few extreme cases of massive growth of central city areas.

In some statistical analyses, patterns of change between 1960 and 2000 in the percentage of population in the suburban ring showed little variation by age of the central city among metropolitan areas that had relatively fixed central city borders. To an important degree, then, peripheral population redistribution occurs in all metropolitan regions, but central cities in newer metropolitan regions have retained their viability at the expense of the suburbs on their peripheries.

Clearly, more needs to be known about the relative effects of annexation versus actual living conditions of central cities in producing differential patterns of suburbanization. For some previous research on this topic, see Klaff and Fuguitt 1978.

POPULATION DECLINE AMIDST SUBURBAN GROWTH

Since the suburban rings are growing so dramatically over time, one might superficially assume that nearly all parts of the suburban ring are also growing. This need not be true. As previously pointed out, urban centers before the late 1800s accommodated population growth by increasingly concentrating residents in relatively fixed areas. But the development of high-speed transportation and communication permits the well-known phenomenon of sprawl, where new territories are continually developed at low densities. Once communities are built up, there is little reason to develop them more intensely because builders can simply move on or leapfrog to new territory. Many suburbs, of course, will continue to grow over time, but one should anticipate that a sizable number of suburbs will also experience population decline. So it is worthwhile to ask, among individual suburban places, how universal is growth? What are the major spatial, social, and economic characteristics of individual suburbs that continue to predict their growth?

Guest’s (1979) research on population loss for individual suburbs in the three time periods of 1950 to 1960, 1960 to 1970, and 1970 to 1975 serves as a model for analyzing recent decades. He found a dramatic temporal increase in the number of suburbs that lost population; consistent with early post–World War II images of suburbia, loss was quite rare in the 1950s and 1960s, but by the 1970s occurred in about one-third of the suburban communities.

Historically, analysts have used a “life-cycle” perspective in analyzing the relative growth rates of various parts of metropolitan areas. According to this view, parts of the metropolis pass through a regular cycle of population growth and decline as a conse-
sequence of spatial position. The cycle involves an initial period of rapid residential growth, the achievement of a slower rate of change with the aging and building up of the community, and finally population decline (Hoover and Vernon 1962). The alleged mechanisms are severalfold. For instance, areas that are close to the metropolitan center are desired for commercial and industrial activities, and residential uses may be preempted. Furthermore, many older, central parts of the metropolis have achieved high levels of residential development and have little land left for residential development. In addition, many of the existing older residential structures, linked to low socioeconomic status, are undesirable for occupancy.

Researchers (Duncan, Sabagh, and Van Arsdol 1962; Price-Spratlen and Guest 2002) have applied the life-cycle perspective to parts of the central city and inner suburbs, showing that some of the very oldest parts of the central city experience population declines after periods of growth. Indeed, the life-cycle perspective helps address the question of why many central cities have population declines, especially those in older metropolitan areas. The answer is that many central city neighborhoods are too dense and the housing is too outmoded.

The general life-cycle idea has been applied to suburbs (Jackson 1985: 301–302; Orfield 1997). Research suggests that the inner suburbs of many metropolitan areas are especially experiencing population decline and an associated economic decline because they are considered unattractive for residential living.

Guest’s (1979) study of suburban growth between 1950 and 1975 provides support for the life-cycle perspective. Population loss was most evident in suburbs that had borders touching their central cities, although loss was not as great as for the central cities. Guest found, furthermore, a dramatic increase over these time periods in population loss in the inner suburbs, relative to more peripheral areas. This pattern could have reflected a tendency for decline to be evident in communities that were at advanced stages in the life cycle.

Guest’s study of suburban growth between 1950 and 1975 also investigated population change in the most peripheral communities. This was an attempt to test whether the outward expansion of the suburban ring was relatively boundless or had distinct constraints based on distance of the community from its central city. He found that those suburbs more than 20 miles from central city borders (a substantial distance) were more likely to experience population loss in the 1950 to 1960, 1960 to 1970, and 1970 to 1975 periods than suburbs between 10 and 20 miles from the central city. This pattern showed little change over the three time periods. However, population loss was still most characteristic of inner suburbs, those with borders touching the central city, rather than the most peripheral communities.

Guest’s study ended in 1975. It could well have limited implications for more recent time periods, especially in light of what has been found about broad patterns of central city and suburban growth in the 1990s. As noted, some central cities, especially in the oldest metropolitan areas, have shown some rebound from previous population declines. Presumably inner suburbs in older metropolitan areas would benefit from this pattern, also showing some rebounds. Indeed, the increasing ability of developers to leapfrog already existing patterns of suburban development may mean that the life-cycle theory is less useful now for studying the growth patterns of individual suburbs.

To analyze these issues for the last part of the 20th century, Guest’s sample of suburbs for the 1950 to 1975 time periods is used. His basic sample included 3,282 suburban places of at least 2,500 population in the metropolitan areas, as defined in
1970. All census-designated urban places in the metropolitan counties are called suburban except the census-designated central cities in 1970. The 1970 cutoff of 2,500 population was necessary since the census data on a variety of social and economic characteristics are reported only for communities of this size. The longitudinal parts of this analysis include only the 3,061 suburbs, from the 1970 sample, that could be traced over time, both backward and forward. Most of the omitted suburbs were likely annexed or consolidated with other communities, although they could have disappeared for other reasons such as major name changes.

Census definitions of metropolitan area have changed over time, and it is impossible to identify a constant set of “suburbs” over various time periods. In this longitudinal analysis, suburbs will be defined on the basis of the 1970 metropolitan area definition. There is a high overlap over time in the counties that are included in metropolitan areas, but in general the number of metropolitan areas and the number of counties in them have expanded. In particular, peripheral counties have tended to be added to metropolitan areas, and as a result, the sample underrepresents the most peripheral suburban communities, using the metropolitan area definitions of 1990 and 2000.

The 1970 definition of metropolitan area also differs in other ways from more contemporary definitions. One important virtue of the 1970 definition is its more exclusive definition of central city, generally only identifying places that were the “original” growth centers of their metropolitan regions. Another difference is that 1970 metropolitan areas are treated as all being at one hierarchical level, rather than differentiated into various complicated tiers of metropolitan types on the basis of population size. Thus, the 1970 definition has the virtue of simplicity, if not necessarily the analytical neatness of later definitions.

Suburbs are categorized by four distance zones, measuring from the nearest suburban community border to the nearest central city border as of 1970: (1) borders touch, (2) within 10 miles, (3) between 10 and 20 miles, and (4) more than 20 miles. The crude nature of the categories is necessitated by the often unusual and elongated shapes of some communities. This distance categorization does not account for central city and suburban boundary change before or since 1970 but should provide a crude approximation of suburban proximity to central cities.

TEMPORAL DISTANCE TRENDS

The percentage of central cities and suburbs in each distance zone that gained (as opposed to lost) population is shown for each of the three time periods in Figure 2.3. Even though the longitudinal analysis of individual suburbs involves a slightly different definition of metropolitan area than the central city–suburban ring comparisons, there is a great overlap in the growth patterns for the central cities. As Figure 2.3 shows, the 1970s and 1980s involved dramatic patterns of population loss for many central cities, but these had become somewhat less evident with the rebound in the 1990s.

Many suburbs also lost population in the three time periods. Only 57.8% of suburbs in the sample grew in the 1970s compared to 69.2% in the 1990s. A sample that included brand new or recently developed suburbs would show higher percentages of positive growth, but still it is striking that over 30% of this sample of suburbs was losing population in the 1990s.
Among the individual suburbs, consistent with the life-cycle perspective, the areas adjoining central cities have lower percentages growing, compared to the other groups of suburbs, regardless of time period. Also noteworthy is the pattern of growth of the most distant suburbs. In a metropolis where the constraints of transportation and communication place few limits on the outward spread of population, the most peripheral communities might be expected to have the greatest population growth. However, in the 1990s, the most peripheral suburbs are actually less likely to grow in population than those located 10 to 20 miles from central city borders. This does not indicate that the metropolis has stopped expanding outward, but only that distance from the center of the metropolis still constrains growth possibilities.

Variations across time in patterns of growth within the suburban ring are related to the patterns that are evident among the central cities. In the 1970s and 1980s, patterns of population growth are least pronounced in the inner suburbs, just as they were in the central cities. However, just as the 1990s represented a rebound for central cities, the same pattern is evident in the inner suburbs.

The net result of the growth renewal in the inner suburbs is that suburban growth patterns in the 1990s tend to have little overall relationship with centrality in the metropolis. Thus, growth has a much more formless character than in the previous time periods. The dominant view of community growth, the life-cycle perspective, receives limited support in the 1990s.

**ALTERNATE GROWTH PERSPECTIVES**

With the declining usefulness of the community life-cycle perspective, new major correlates of suburban growth should be identified. Figures 2.4 and 2.5 consider a few other suburban characteristics that may play crucial roles in emerging suburban growth and development patterns. The figures show how characteristics of suburbs at the initial point in time, 1970 or 1990, are related to population growth in the subsequent decade.
Of particular importance in understanding recent suburban growth is the influence of immigration. As noted earlier, the amount of immigration to the United States changed greatly between the 1970s and 1990s (Smith and Edmonston 1997). In the 1970s, immigration to the U.S. was low compared to earlier and later decades in the 20th century. In such a situation, communities with high proportions of the foreign born would exert little attraction for an overwhelmingly native-born population. In contrast, the 1990s involved heavy immigration to American society, and communities of the foreign born have exerted an attraction for the large numbers of individuals seeking new residences. For instance, in the New York metropolitan region, communities of the foreign born were growth centers of the suburban ring relative to communities with smaller percentages of the foreign born (New York Times 2001a, 2001b).

The data are presented in a series of bar graphs. In Figure 2.4, the darkest bars indicate the suburbs in the 1970s. The lighter bars refer to the same suburbs in the 1990s. The height of the bars indicates the percentage of suburbs growing in that category of

![Bar Graph](image1)

![Bar Graph](image2)

**Figure 2.4.** Changes in patterns of suburban growth, 1970 to 2000.
the population characteristic. Thus, note that population growth occurred among about 70% of the suburbs in the 1970s with less than 1% foreign born, while only slightly more than 50% grew in the 1990s with the same low percentage foreign born.

The graph in the first panel of Figure 2.4 supports the point that population growth has shifted to the suburbs with high percentages of foreign born. As the percentage foreign born increases in 1970, the percentage of growing suburbs generally declines (the bars are lower in height). As the percentage foreign born increases in 1990, the percentage of growing suburbs sharply increases. Now a strong positive gradient occurs with regard to population growth. Note, for instance, that only slightly more than 50% of suburbs with hardly any foreign born grew in the 1990s, while over 80% of suburbs grew with at least 10% foreign born.
Black population composition of suburbs should also be considered. Historically, the black population has had limited housing opportunities in suburbia, a manifestation primarily of their general difficulties in finding housing in nonblack parts of the metropolis. Greater representation in suburbs could have two possible conflicting influences. On the one hand, their presence might lead nonblacks to flee or avoid living in the community, depressing population growth. On the other hand, their presence could attract other minorities, previously excluded from suburban areas. This might enhance community growth. However, little association occurs in either decade between the percentage of black residents and community growth (see second panel of Figure 2.4).

Consideration should be given to other characteristics that have traditionally been identified with the suburbanites: their economic status and the traditional suburban family, that is, married couples with children under 18.

Past research has shown that a community’s socioeconomic status is related to its population growth, with well-off areas having higher population growth (Guest 1978). Not surprisingly, families would prefer to locate in communities where the population is affluent. In fact, some research (Price-Spratlen and Guest 2002) finds that socioeconomic status is increasingly correlated with neighborhood growth in central cities. Using poverty status as a measure of community socioeconomic position, the data do not show much of a systematic relationship of poverty status to growth, either in the 1970s or the 1990s (see third panel of Figure 2.4). Nevertheless, the relationship of socioeconomic status to population growth shows a systematically stronger pattern in the 1990s with poor communities having lower growth than other communities.

Given the past identification of suburbs with familism, one might expect, especially in the 1970s, for this factor to be related positively with population growth. Family status is measured as the percentage of all households that include married couples with children under 18. In both decades, population diversity is a strong correlate of population growth but in somewhat unusual ways (see the fourth panel of Figure 2.4). In the 1970s, the communities with the fewest and the most married couples with children were the most likely to grow, but in the 1990s, these were the communities that were most likely to experience population decline. Another way to put this is that diversity in family structure has emerged as an important positive predictor of community growth. Within the context of growing diversity in the organization of American families, the suburbs that represent this diversity tend to have the greatest growth.

Environmental characteristics also need to be considered in an explanation of recent population growth. One such factor is whether the suburb possesses extensive workplace activity. Historically, manufacturing activity has had a reputation as being incompatible with the location of residences, since the production facilities are often polluting and visually unattractive (Logan and Golden 1986). Thus, suburbs with high amounts of manufacturing might be characterized by population decline. However, manufacturing has been in a process of change. Environmental regulations increasingly regulate the nature of manufacturing sites, and new clean manufacturing industries such as those developing computer software have emerged. As a consequence, the location of manufacturing may not deter growth as it did in past decades. Furthermore, a noticeable trend of recent decades has been the relocation of workplace activities to the suburban rings. The location of workplaces could encourage residential development for workers who wish to live nearby.

Manufacturing censuses are not taken in the same year as the population census, but it is possible to link data from the 1967 and 1987 manufacturing censuses with data
on community growth in the subsequent decade. Consistent with the traditional view of manufacturing, its presence was associated in the 1970s with population decline, but its later presence in the 1990s was actually associated with population growth (see the top panel of Figure 2.5).

Although the distance of the suburb from its central city had little relationship to population growth in the 1990s, a correlated factor, the already existing population density of the community, should be considered. High-density communities usually have less room to grow than low-density communities. In fact, the life-cycle perspective implies that a major reason for the disproportionate negative growth in inner suburbs is the high levels of population density that restrict the possibilities of growth. Consistent with the patterns for distance from the central city, high density is associated with negative growth in the 1970s but has a much weaker relationship in the 1990s. This is especially true for the highest-density suburbs. High density in 1970 was associated with population decline, but this pattern changed noticeably by the 1990s (see the bottom panel of Figure 2.5).

**Figure 2.5.** Changes in patterns of suburban growth, 1970 to 2000.
panel of Figure 2.5). Apparently, pre-existing intensity of settlement has decreased as a constraint on population growth.

A noteworthy trend of suburban growth research has been the development of political economy perspectives (Baldassare and Protash 1982; Logan and Zhou 1989; see also Chapter 16, “Urban and Spatial Demography,” in this Handbook). Such perspectives view the suburb’s growth as somewhat indifferent to its general environmental context and, rather, emphasize the role of community elites (primarily business interests and the wealthy) in encouraging or discouraging growth through a variety of mechanisms, including planning and zoning requirements. Consistent with the political economy view, community growth should be less related to traditional life-cycle predictors such as distance from the central city and population density, which presumably reflect the intensity of development. But the suburb’s environmental characteristics still tend to maintain an importance, as indicated by factors such as the presence of workplaces and the immigrant composition of the population. More research is definitely needed to better understand these changing patterns of central city and suburban growth. Certainly, the life-cycle perspective is increasingly useful for interpreting growth among suburbs.

HOW SUBURBS EVOLVE IN STATUS

Space does not permit an extensive analysis of the substantial diversity of population composition among suburbs. To provide a flavor of some of the issues and trends, this section focuses on variations in poverty rates across suburban communities. Of particular interest is the issue of whether neighborhood life-cycle theory may be applied to the socioeconomic status of communities. As the community develops high density land uses, experiences older and outmoded housing, and becomes attractive to nonresidential uses, the theory argues (Hoover and Vernon 1962), the relatively poor will increasingly become the only economic group that is willing to occupy the area.

This issue may be appraised empirically with the sample of Guest’s suburban communities that were previously traced, using the 1970 metropolitan definition. One important pattern shown in the data is the substantial stability in economic status. Among the continuously existing suburbs, there is a .71 correlation between the 1970 and 2000 levels of poverty. This means that about half of the variance in suburban status in 2000 is a function of the status 30 years earlier. Indeed, the correlation of 1990 and 2000 status is .90, indicating that one will do well predicting 2000 status simply by knowing 1990 status level. Yet the data also suggest that the socioeconomic status of suburbs is not totally inflexible. These high correlations, by the way, represent the continuation of a pattern that was also evident for the 1950 to 1970 period (Guest 1978; Farley 1964).

Figure 2.6 shows how poverty rates of suburbs vary by distance from the central city over the three decades from 1970 to 2000. Regardless of date, there is a curvilinear relationship between distance and economic status, with the lowest-status suburbs being located the most centrally and peripherally. Yet the highest poverty rates occur at the greatest distances from the central city (more than 20 miles), presumably areas that are beyond the normal commuting range and are characterized disproportionately by nonurban work activities such as agriculture, forestry, and mining, which tend to pay low wages. While the most proximate areas to the central city are not the highest in poverty, a very slight longitudinal trend indicates that poverty has increased over time in these areas.
Even though the finding is consistent with the idea that central city problems are being transposed to the inner suburbs, a suburb’s level of poverty in relationship to its distance from the central city remains amazingly constant over time. The upward trend in poverty among the central suburbs is real but relatively unimportant.

Some support for the life-cycle theory is evident if changes are analyzed in the poverty rates of the sample of suburbs in the two time periods, the 1970s and the 1990s. A straightforward measure of how the status of the population changed in each time period is whether the poverty rate at the second time point is higher than at the first time point. In Figure 2.7, bar graphs show the percent of suburbs, separately for the 1970s and the 1990s, that have increasing percentages in poverty by the distance of the suburb from its central city. In addition, the patterns are shown by level of population density at the initial point of the decade. In general, the more dense suburbs should be more advanced in the neighborhood life cycle. As expected, the figure shows that poverty rates increased in both decades in the relatively central suburbs, but, consistent with Figure 2.6, most of the differences are not large. A stronger pattern is found when population density is considered. It is especially noteworthy that over two-thirds of the very-high-density suburbs had increasing poverty rates in the 1990s compared to only slightly more than 40% of the very-low-density suburbs. But again these patterns indicate a wide variation in the experience of suburbs, even with the same characteristics.

An alternate perspective on the evolution of suburban economic levels is that they are being influenced noticeably by their changing population composition. Given that immigration had become an important determinant of population growth patterns among suburbs, it is reasonable to expect that immigration may also affect the status levels of suburban communities, especially since significant shares of the immigrant population experience low wages.

Immigration is having a major impact on poverty rates within the suburban ring. Figure 2.8 shows that while communities of the foreign born had only a tendency for economic decline in the 1970s, the relationship emerges as quite strong in the 1990s. Almost three-quarters of the 1990 communities with the highest percentage of foreign born showed an increase in poverty in comparison to only about 30% of the
communities with the lowest representation of the foreign born. The differences are greater than those found for the life-cycle variables.

Although immigration has emerged as a strong correlate of poverty problems in the suburbs, the in-movement of blacks to suburbs, another important social trend, seems to have had little direct relationship with changes in poverty rates. The patterns in Figure 2.8 show little consistent relationship between the presence of African Americans in 1970 or in 1990 and increasing rates of poverty in the subsequent decade.

**CROSS-CULTURAL PERSPECTIVES**

Compared to many other economically developed societies (especially those in Europe), urban agglomerations in the United States are relatively young. They thus represent an
essentially “pure” case of how cities have developed under capitalistic/industrial economic structures. Land use allocation has primarily occurred through competition among numerous individuals and organizations (such as realtors, corporations, and neighborhood associations). European cities have long histories under various political and economic systems such as monarchies and socialism that have influenced their basic patterns of land use and the spatial relationship of different activities.

In addition, American metropolitan areas have not experienced much centralized planning of their overall development. Rather, the political jurisdictions, both the central cities and their suburbs in each metropolitan area, have tended to compete with each other, although cooperation has been possible when the various interests benefit. In Europe, coordinating power over the character of population distribution is typically more vested in the national state or at least with regional authorities. National
policies are frequently promulgated to direct overall metropolitan development (Summers et al. 1999).

Since the 1930s, the U.S. national government has had a major influence on metropolitan development through extensive housing, land clearance, and neighborhood renewal programs. There is little doubt that these programs increasingly affect the nature of population concentrations, including suburbanization, but they are less oriented toward a comprehensive program of planning than in the European case.

Even though the control of suburbanization differs between the United States and many European countries, suburbanization as a large-scale movement from central cities is also important in many European societies, both in size and date of major development. In the United Kingdom, population loss in such central core areas as Liverpool, London, and Manchester began in the 1960s, and 89% of the urban core areas (equivalent to central cities) lost population between 1981 and 1991 (Summers et al. 1999). Interestingly, the efforts of national and metropolitan authorities in the United Kingdom to control suburban growth have had mixed effects (Cohen 1994; Harper 1987). During the past few decades, greenbelts as wide as 25 km have been built around the original settled core areas of major metropolitan areas, with major restrictions on the density and type of development. These areas were intended to provide high-quality suburban environments, but the restrictions on development were also intended to encourage the continued growth of core areas. However, in practice, there has been extensive pressure to develop the greenbelts beyond the original plans, and suburban development has tended to leapfrog the original greenbelts, producing even more sprawling suburbanization.

The rate of urban growth is unprecedented in world history in parts of the developing world, mainly Africa, Asia, and Latin America. This primarily occurs due to the unprecedented population explosions of these societies, as a function of the gap between declining mortality and still high fertility. While historically most of the largest urban agglomerations were in Europe, they are now becoming dominant among countries in the developing world.

Urban concentrations differ greatly within and across continents, and it is not easy to develop simple generalizations. As an example, Malawi’s leading urban center, Blantyre (with a population of over 500,000), is best described as a mélange of little villages in close proximity. The villages, many with thatched huts and shacks, are spread at relatively low density over many square miles and differ little between the center of the metropolis and its suburban ring. In contrast, Kenya’s Nairobi (with a population of over 1.8 million) has a well-developed central business district with tall buildings and varied residential neighborhoods.

Unfortunately, while there is substantial literature on the overall population implosion in the developing world, there is little literature on patterns of suburbanization, except to recognize its importance (Kasarda and Crenshaw 1991; Lowry 1990). Nevertheless, it is clear that the outward deconcentration of traditional cores is probably important in developing countries, just as in the United States and Europe. Much of the outward spread of population likely began in the period after 1950 or 1960. In one sense, this should hardly be surprising, given that most developing countries have been heavily impacted by worldwide revolutions in technology and communications and organizational complexity. In a typical developing country, many individuals own automobiles, and a segment of the population has the income that is necessary to support a lifestyle with a low-density, single-family dwelling. Yet incomes in many
developing countries are often maldistributed, with a large proportion of the population in poverty. One consequence is that land, regardless of whether it is suburban, is often as maldistributed as income, so that a small proportion of the population lives on a high proportion of the land (Griffin and Ford 1980).

Suburbanization is also encouraged in many developing societies by factors that are not as important in highly developed societies (Hackenberg 1980). Due to their explosive overall growth, many urban agglomerations lack space in central areas for new employment activities such as manufacturing goods for foreign corporations; these activities have hence been forced to relocate to the outskirts. Their employees often congregate in suburban areas to be near their workplaces. In addition, many dwellers in the major urban centers often maintain strong family, social, and employment ties with the rural areas from where they originated. Being located in the suburban region maximizes physical access to the rural areas.

A major issue about suburbanization in the developing world is whether it will eventually assume the same spatial form as suburbanization in a country such as the United States. Some (Schnore 1965) have suggested the possibility of a universal “evolutionary” pattern for metropolitan areas in which suburbanization occurs at a high rate, with disproportionate selectivity of high-status households in the outskirts, as occurred in the United States. This, of course, is a variation of the traditional neighborhood life-cycle perspective. Indeed, in many suburban rings of developing societies, one finds relatively new neighborhoods that are similar to the single-family tracts of the prosperous working and middle classes in the United States. However, others (Griffin and Ford 1980) challenge the generality of this idea, arguing that historical and cultural differences among countries are too great to indicate a convergence of suburban form in the near future. Many low-income persons in developing societies lack the resources to buy or build “nice” homes. As a result, they gravitate to undeveloped land on the urban outskirts where they “squat” at little or no cost. They construct cheap dwellings out of available materials, and then upgrade to the degree that improved economic resources permit.

**SUBURBAN FUTURES**

Suburbanization seems here to stay, whether in the United States or in the world as a whole. Indeed, almost all available evidence suggests that the redistribution of population outward within areas of population concentration will be one of the great demographic trends of the 21st century. The most fundamental factors are twofold. First, transportation technology increasingly makes it possible to travel over long distances in short time spans, although traffic congestion in cities such as Chicago, Los Angeles, New York, and Seattle imposes constraints. Second, improvements in electronic communications increasingly make it necessary for interacting individuals and activities to be in physical proximity. One of the traditionally important advantages of central core areas should thus continue to decrease in importance.

Of course, one should not just assume the position of a technological determinist. Clearly the way of life in contemporary society is affected increasingly by large governmental organizations, large corporations, and large organized interest groups of citizenry. Powerful organizations will exert important influences in fostering or discouraging suburbanization and may be especially crucial in understanding differences across societies. Yet given the sweeping power of broad societal forces such as
technology, it is difficult to envision much slowing of the outward spread of urban agglomerations.

Many societies will continue their population explosions, although at lower levels than in recent history due to declines in fertility. For many societies, there will be little choice except to tolerate or encourage further suburbanization.

As this chapter has suggested, an important goal for researchers will be the development of more sophisticated models that explain suburbanization rates across metropolitan areas and countries. Some ambiguity continues on whether suburbanization is an essentially ubiquitous phenomenon in which individual characteristics of places have little differential effect. Clearly, researchers need to undertake more research in which they separate the influence of changing physical boundaries as opposed to inherently attractive community qualities in the ability of central core areas to retain their populations.

A major goal for population researchers should also be understanding the internal spatial organization of the suburban community and how central core areas differ from their suburban rings. A sizable empirical literature on suburbanization exists for the United States, but recently it has tended to have a somewhat specialized focus, for instance, on the ethnic composition of suburbs. Research should compare suburban rings with their central cities and suburbs with each other on a number of dimensions of population composition and land use.

While simple ideas such as the neighborhood life-cycle theory may have an intrinsic appeal, it appears that they are decreasingly useful for understanding suburban differences in both cross-sectional and longitudinal population patterns. In contrast, international immigration has become a major determinant of the fate of many suburbs. Since immigration flows to the United States show no indication of declining, this factor will undoubtedly continue to influence suburban development.

In addition, there is a great need to relate the employment base of suburbs to the types of residents and to their growth patterns. Traditional assembly-line manufacturing is on the decline, and as suggested, the presence of manufacturing workplaces no longer has the same consequences for community character that it once did. It is important to recognize, however, the influence on communities of the dramatic growth of human service industries such as government, health care, retirement services, finance, and real estate. These are undoubtedly having major consequences for the types of persons and families who live in the surrounding areas.

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