

## **Chapter 13: Urban Patterns**

Urban geographers are concerned with the global distribution of urban settlements as well as the distribution of people and activities within urban areas. This chapter begins by addressing why services cluster downtown. The chapter then examines models that have been developed to help explain the internal structure of urban areas in the North America and elsewhere. The distinctive problems of inner cities and suburbs are also considered.

### **Key Issue 1 – Why do services cluster downtown?**

#### **VII. Cities and Urban Land Use**

##### **C. Models of internal city structure**

###### **4. Changing employment mix**

###### **5. Changing demographic and social structures**

The **central business district (CBD)** is the center of a city where services have traditionally clustered. Specifically three types of retail services have concentrated in the center because they require accessibility. These include services with a high threshold, those with a long range, and those that serve people who work in the center. A large department store is a service with a high threshold. Retail services with a high range are specialized shops that are patronized infrequently. Both of these types of services have moved in large numbers to suburban locations in recent years. Retailers survive in some CBDs if they combine retailing with recreational activities. This has become a reality in Boston, Baltimore, Philadelphia, and San Francisco. Services that cater to people working in the CBD have remained in this location and have actually expanded, especially where CBDs have been revitalized. Business services such as advertising and banking have also remained clustered in the CBD.

#### **VII. Cities and Urban Land Use**

##### **C. Models of internal city structure**

###### **4. Changing employment mix**

###### **5. Changing demographic and social structures**

##### **D. Built environment and social space**

###### **1. Housing**

###### **2. Transportation and infrastructure**

###### **4. Urban planning and design**

Land costs in the CBD are very high because of competition for accessibility. Thus land use is more intensive in the CBD, and some activities are excluded from the center because of the high cost of space. The built character is more vertical than other parts of urban areas, both above and below ground. Infrastructure, including

transportation and utilities, typically run underground. Skyscrapers give the central city its distinctive image. Washington, D.C. is the only large U.S. CBD that does not have skyscrapers because no building is allowed to be higher than the U.S. Capitol dome. High rents and land shortages have excluded industrial and residential activities from the CBDs of North American cities. Industries that have not closed have moved their operations to the suburbs where they can take advantage of cheaper land. Residents have also moved away from CBDs. Pull factors have lured them to the suburbs; the crime and poverty of central cities have acted as a push factor. In the twenty-first century, the population of many U.S. CBDs has increased, largely as a result of urban renewal. "Empty nesters" and young professionals are particularly attracted to downtown living. European CBDs are visibly very different because they have tried to preserve their historic cores by limiting high-rise buildings. More people live downtown outside North America, but renovation is more expensive and does not always produce enough space to meet the demand. As a result, rents are much higher in the center of European cities than in U.S. cities.

## Key Issue 2 – Where are people distributed within urban areas?

### VII. Cities and Urban Land Use

#### C. Models of internal city structure

1. Concentric zone model
2. Sector model
3. Multiple-nuclei model
5. Changing demographic and social structures

Three different models were developed in Chicago to help explain the internal spatial organization of the urban environment. The **concentric zone model** was developed in 1923 by Burgess and applies to cities that have concentric rings of development emanating outward from a core or **central business district (CBD)**. The ring immediately outside the CBD is a **zone of transition**, containing industry and poorer-quality housing. The rings each contain different kinds of urban land use and residences become more high class further away from the CBD. The underlying sociological concepts of invasion and succession help to explain how people move away from the city center as they become wealthier and are prepared to commute further. The **sector model** was developed in 1939 by Hoyt who saw the city developing as a series of sectors rather than rings. He believed that certain areas of the city might be more attractive for various activities because of environmental factors. The sectors often followed transportation lines. Hoyt and Burgess both claimed that social patterns in Chicago supported their model. The **multiple nuclei model** was developed by Harris and Ullman in 1945. They believed that cities lack one central core, and instead have numerous **nodes** of business and cultural activities. Although dated, these models help geographers to understand where different people live in an urban area and why they live there. Cities in MDCs as

well as LDC's exhibit characteristics of these models, but no one city matches any model perfectly.

In order to apply these models to reality, accurate data needs to be available. In the United States that information is available from the U.S. Census Bureau which has divided urban areas into **census tracts** that are essentially urban neighborhoods. They provide information about the characteristics of residents living in each tract. Social scientists can compare the distributions of characteristics and create an overall picture of where different people live. This kind of study is known as **social area analysis**.

These three models were developed to describe the spatial distribution of social classes in the urban United States. However they can also be applied to urbanization outside North America. In European cities wealthier people tend to live closer to the CBD, and there is more suburban poverty. European cities are also much older and still retain their medieval city center. In LDCs the poor are also accommodated in the suburbs, whereas the wealthier live near the center of cities. European colonial policies left a heavy mark on the development of cities in LDCs.

**Islamic cities**, such as Mecca, were laid out surrounding a religious core. They have mosques and a bazaar or marketplace at their center with walls guarding the perimeter. In the outer rings there were secular businesses and quarters laid out for Jews, Christians, and foreigners. Some features of these cities were adaptations to the hot and dry physical environment.

In Asia, Africa, and Latin America cities combine elements of native culture, colonial rule, religion, industry, and poverty. Griffin and Ford developed a model of a **Latin American city** which shows the wealthy living close to the CBD. Industrial sectors radiate out from the CBD, and the poorest live on the urban fringe in **squatter settlements**. The latter are known by a variety of names such as *barrios*, *barriadas*, and *favelas* in Latin America, *bidonvilles* in North Africa, and *bustees* in India.

### Key Issue 3 – Why do inner cities face distinctive challenges?

## VII. Cities and Urban Land Use

### C. Models of internal city structure

4. Changing employment mix
5. Changing demographic and social structures
6. Uneven development, ghettoization, and gentrification

### D. Built environment and social space

1. Housing
2. Transportation and infrastructure
3. Political organization of urban areas
4. Urban planning and design
5. Patterns of race, ethnicity, gender, and socioeconomic status

Inner cities in the United States have a multitude of physical, social, and economic problems. One of the major physical problems is **filtering**, which is when

houses are subdivided and occupied by successive waves of lower-income people. It can lead to total abandonment. As a result of filtering inner-city neighborhoods have rapidly declining populations. **Redlining** is when banks draw lines on a map to identify areas where they will refuse to loan money although the Community Reinvestment Act has essentially made this illegal.

Governments at various levels have put together grants to help the revitalization of inner-city neighborhoods. This process is called **urban renewal**. Substandard inner-city housing has been demolished and replaced with **public housing** for low-income people. Many of the public high-rise projects built during the 1950's and 1960's have since been demolished because they were considered unsafe. More recently the trend has been to renovate deteriorating inner-city houses so that they will appeal to middle-class people. This process is known as **gentrification**.

There are numerous inner-city social problems too. Many of the residents are considered an **underclass** because they are trapped in a cycle of economic and social problems. Many lack the necessary job skills for even the most basic jobs, and there are more than 3 million homeless in the United States today. This culture of poverty leads to various crimes including drug use, gangs, and other criminal activities.

Most inner-city residents cannot pay the taxes that are necessary to provide public services. A city has two choices to close the gap between the cost of services and the funding available from taxes. It can reduce services and/or raise tax revenues. Federal government contributions have helped, but these have declined substantially since the 1980's. The percentage of the budgets of the 50 largest U.S. cities supplied by the federal government declined to 6 percent in 1990 and 2000. Some state governments have increased financial assistance to cities.

A major cause of the recession that began in 2008 was the collapse in the housing market, primarily in the inner city. Compounding the problem, housing prices have fallen in the U.S. and other MDCs since their peak in 2006.

#### **Key Issue 4 – Why do suburbs face distinctive challenges?**

### **VII. Cities and Urban Land Use**

#### **D. Built environment and social space**

##### **3. Political organization of urban areas**

**Annexation** is the process of legally adding land area to a city. In the U.S. most surrounding suburban lands have their own jurisdictions and want to remain legally independent of the central city. Instead of annexing peripheral areas, cities are now surrounded by suburbs. As a result, several definitions have been created to characterize cities and their suburbs. In the 1930's Louis Wirth, an urban geography, defined a **city** as a permanent settlement that has a large size, high population density, and socially heterogeneous people. Urban settlements today can be physically defined by legal boundary, as continuously built-up area, and as a functional area. Virtually all countries have a political system that recognizes cities as legal entities with fixed boundaries. In the

United States a city that is surrounded by suburbs is sometimes called a **central city**. The central city and surrounding suburbs are together called an **urbanized area**.

The U.S. Census Bureau defines the functional areas of cities for political and economic purposes. A **Metropolitan Statistical Area (MSA)** includes an urbanized area with a population of at least 50,000 with high density adjacent counties where the majority of inhabitants work in non agricultural jobs. The census has also designated smaller urban areas as **micropolitan statistical areas**. These include an urbanized area of between 10,000 and 50,000 inhabitants and adjacent counties tied to the city. A **Consolidated Metropolitan Statistical Area (CMSA)** consists of two adjacent MSAs with overlapping commuter patterns such as the Washington-Baltimore CMSA. Within a CMSA, an MSA that exceeds one million people may be classified as a **Primary Metropolitan Statistical Area (PMSA)**. The metropolitan areas of the northeastern United States now form one continuous urban complex or **megapolis** (from the Greek word meaning great city).

Many urban regional problems cannot be easily solved because of the fragmentation of local government. There are 1,400 local governments in the New York area alone, and 20,000 throughout the United States. Most U.S. metropolitan areas have a **council of government**, consisting of representatives of the various local governments, and that can do some planning for the entire area. There are two kinds of metropolitan-wide governments. A **federation system** of government combines the various municipalities of a metropolitan area into a single government. Toronto, Ontario has a federation system. Some U.S. cities have consolidated city and county governments. Indianapolis and Miami are both examples of **consolidations**.

## **VII. Cities and Urban Land Use**

### **A. Development and character of cities**

#### **4. Suburbanization and edge cities**

### **C. Models of internal city structure**

#### **4. Changing employment mix**

#### **5. Changing demographic and social structures**

### **D. Built environment and social space**

#### **1. Housing**

#### **2. Transportation and infrastructure**

#### **3. Political organization of urban areas**

#### **4. Urban planning and design**

North American cities are increasingly following a structure that Harris calls the **peripheral model**. The peripheral model consists of an inner city surrounded by growing suburbs that combine residential and business areas and are tied together by a beltway or ring road. Nodes of business and consumer services called **edge cities** have developed around the beltway. Edge cities have grown from suburbs that were originally primarily residential.

In North American urban areas, the further one gets from the center of the city, there will be a decline in the density at which people live. This is called the **density gradient**. The number of houses per unit area of land will decline with distance from the center city. In North American and European cities in recent years, the density gradient has leveled out as more people have moved to the suburbs. **Suburban sprawl** has increased at the expense of agricultural land, and it results in the need for costly infrastructure. Several British cities are surrounded by **greenbelts**, or rings of open space, to prevent suburban sprawl. **Zoning ordinances**, which prevent the mixing of land uses, has resulted in segregated residential suburbs. Residents are separated from industrial and service activities, and poorer residents are excluded because of the cost, size, or location of housing. North American suburbs are no longer just areas of residential growth. Businesses have moved to the suburbs. Retailing has become concentrated in suburban malls. Factories and offices have also moved to suburbia. If they don't require face-to-face contact they can take advantage of the lower rents in the suburbs.

Several U.S. states are passing legislation and regulations called **smart growth**; it limits suburban sprawl and preserves farmland on the urban periphery. Maryland has done an especially good job in this area.

Suburban sprawl has resulted in an increased dependence on transportation, especially motor vehicles in the United States. Public transportation is much more important in most European and Japanese cities. Public transportation in the form of rapid transit is becoming more common in U.S. cities although it is still not recognized as a key utility that needs to be subsidized.

## KEY TERMS

<b>Annexation</b>	<b>Metropolitan Statistical Area (MSA)</b>
<b>Central Business District (CBD)</b>	<b>Micropolitan statistical area</b>
<b>Central city</b>	<b>Multiple nuclei model</b>
<b>Census tract</b>	<b>Nodes</b>
<b>City</b>	<b>Peripheral model</b>
<b>Concentric zone model</b>	<b>Primary Metropolitan Statistical Area (PMSA)</b>
<b>Consolidated Metropolitan Statistical Area (CMSA)</b>	<b>Public housing</b>
<b>Consolidations</b>	<b>Redlining</b>
<b>Council of government</b>	<b>Sector model</b>
<b>Density gradient</b>	<b>Smart growth</b>
<b>Edge city</b>	<b>Social area analysis</b>
<b>Federations</b>	<b>Sprawl</b>
<b>Filtering</b>	<b>Squatter settlements</b>
<b>Gentrification</b>	<b>Underclass</b>
<b>Ghetto</b>	<b>Urban geography</b>
<b>Greenbelt</b>	<b>Urbanization</b>
<b>Islamic city</b>	<b>Urbanized area</b>
<b>Latin American city</b>	<b>Urban renewal</b>
<b>Megacity</b>	<b>Zone of transition</b>
<b>Megalopolis</b>	<b>Zoning ordinance</b>

## Key Issues Revisited

### 1. Why do services cluster downtown?

- the central business district (CBD) contains a large percentage of a settlement's business services
- business services cluster downtown to facilitate face-to-face contact
- retailers with large thresholds or large ranges may also locate downtown

### 2. Where are people distributed within urban areas?

- the concentric zone, sector, and multiple-nuclei models help to explain where various groups of people live in urban areas
- these models provide a framework for understanding the distribution of social and economic groups within urban areas
- with modifications, the models also apply to cities in Europe and LDCs

### 3. Why do inner cities face distinctive challenges?

- inner-city residential areas have physical problems because of older, deteriorating houses