Chapter 13
Urban Patterns

KEY ISSUE 1

Why Do Services Cluster Downtown?

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.

Learning Outcome 13.1.1: Describe the three types of services found in a CBD.

The CBD contains a large percentage of an urban area's public, business, and consumer services. Offices cluster in the CBD to take advantage of its accessibility. Retail services, as well as manufacturers and residents, are less likely than in the past to be in the CBD.

Learning Outcome 13.1.2: Explain the three-dimensional nature of a CBD.

A CBD is characterized by an extensive underground city of services and utilities, as well as high-rise buildings. Outside North America, CBDs may have more consumer services and fewer high-rise offices.

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.

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 Revisited**

13. **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
KEY ISSUE 2

Where Are People Distributed Within Urban Areas?

Learning Outcome 13.2.1: Describe the concentric zone, sector, and multiple nuclei models.

According to the concentric zone model, a city grows outward in rings. According to the sector model, a city grows along transportation corridors. According to the multiple nuclei model, a city grows around several nodes.

Learning Outcome 13.2.2: Analyze how the three models help to explain where people live in an urban area.

According to the concentric zone model, housing is newer in outer rings than in inner rings. According to the sector model, wealthier people live in different corridors than do poorer people. According to the multiple nuclei model, different ethnic groups cluster around various nodes.

Learning Outcome 13.2.3: Describe how the three models explain patterns in cities outside North America.

In other countries, wealthier people live in different sectors than poorer people, and outer rings have newer housing. In cities outside North America, lower-income people are more likely to live in outer rings.

Learning Outcome 13.2.4: Describe the history of development of cities in developing countries.

Many cities in developing countries are shaped by colonial powers. Since gaining their independence, developing countries have seen cities grow rapidly.

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 LDCs 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 Are Urban Areas Expanding?

Learning Outcome 13.3.1: State three definitions of urban settlements.

A city is a legally incorporated entity that encompasses the older portion of the urban area. An urban area includes the city and built-up suburbs. A metropolitan area includes the city, built-up suburbs, and counties that are tied to the city.

Learning Outcome 13.3.2: Describe how metropolitan areas contain many local governments and overlap with each other.

In some regions, adjacent metropolitan areas overlap with each, creating large contiguous urban complexes. The United States has nearly 90,000 local governments, making it difficult to address urban problems.

Learning Outcome 13.3.3: Identify historical and contemporary patterns of suburban expansion.

In the past, cities expanded their land area to encompass outlying areas, but now they are surrounded by independent suburban jurisdictions. Suburban sprawl has been documented to be costly.

Learning Outcome 13.3.4: Explain two ways in which suburbs are segregated.

Suburbs are segregated according to social class and land uses.

Learning Outcome 13.3.5: Describe the impact of motor vehicles in urban areas.

Motor vehicles take up a lot of space in cities, including streets, freeways, and parking areas. Some cities control the number of vehicles that can enter the center of the city.

Learning Outcome 13.3.6: Describe recent and possible future improvements in vehicles.

Vehicles that are more fuel-efficient and less polluting are likely to become more widely available in the future.

Learning Outcome 13.3.7: State benefits and limitations of public transportation.

Public transit, such as subways and buses, are more suited than private cars to move large numbers of people into and out of the CBD. New investment in public transit has occurred in a number of U.S. cities, though less extensively than in other countries.

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 is 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.

Annexation is the process of legally adding land area to a city. In the United States 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 1930s Louis Wirth, an urban geographer, 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 nonagricultural 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 Combined Statistical Area (CSA) consists of two adjacent MSAs with overlapping commuter patterns such as the Washington-Baltimore CSA. Within a CSA, an MSA that exceeds one million people may be classified as a Primary Census Statistical Area (PCS A). The metropolitan areas of the northeastern United States now form one continuous urban complex or megalopolis (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 governments, 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.

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 ISSUE 4

Why Do Cities Face Challenges?

**Learning Outcome 13.4.1:** Describe the processes of deterioration and gentrification in cities.

The older housing in the inner city can deteriorate through processes of filtering and redlining. Massive public housing projects were once constructed for poor people, but many of them have been demolished. Some cities have experienced gentrification, in which higher-income people move in and renovate previously deteriorated neighborhoods.

**Learning Outcome 13.4.2:** Explain the problems of a permanent underclass and culture of poverty in cities.

Inner cities have concentrates of very poor people, considered to belong to an underclass, some of whom are homeless. A culture of poverty traps some poor people in the inner cities.

**Learning Outcome 13.4.3:** Describe the difficulties that cities face in paying for services, especially in a recession.

Cities are faced with the choice of reducing services or raising taxes to pay for needed services. The severe recession that started in 2008 continues to hurt the economic condition of cities. Some cities have seen a revival of retail services downtown.

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 1950s and 1960s 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 1980s. 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 United States and other MDCs since their peak in 2006.

Food deserts have begun to emerge in major cities, which compounds the problems of the underclass as they do not have accessibility to healthy foods because they lack transportation and the ability to go to a local supermarket.

**Key Issues Revisited**

13.4. Why do cities face challenges?

- Inner-city residential areas have physical problems because of older, deteriorating houses
- Inner-city residential areas have social problems as a result of a high percentage of low-income households
- Inner-city residential areas have economic problems stemming from a gap between demand for services and supply of local tax revenue
1. What TWO things are urban geographers concerned with?
   a. 
   b. 

2. Define Central Business District:

3. What THREE types of retail services have concentrated in CBDs?
   a. 
   b. 
   c. 

4. Now, from the textbook, define the following:

   Threshold:

   Range:

5. What is a reason why land costs in the CBD are high?

6. What is the only large US city which doesn’t have skyscrapers? Why is this?

7. Why have most industries relocated from CBDs to the suburbs?

8. Name one push and one pull factor as to why many residents have moved away from CBDs.
   
   PUSH:

   PULL:

9. In the 21st century, why has the population of many U.S. CBDs increased?
10. Why are European CBDs different than American CBDs?

AS ALWAYS, USE THE TEXTBOOK TO HELP YOU ANSWER MULTIPLE CHOICE QUESTIONS

11. Review Question 13.1.1. The oldest area of a city would be found in
   A. the zone of transition
   B. the industrial zone
   C. the CBD
   D. the zone of gentrification
   E. the suburbs

12. Review Question 13.1.2. In cities outside the United States, more people live
   A. in the agricultural zone
   B. in the manufacturing zone
   C. in the suburbs
   D. in rural areas
   E. in the CBD

13. Three different models were developed in Chicago to help explain the internal spatial organization of the

14. **Concentric Zone Model (A)**

   Year developed?______________

   Developed by whom?___________

   Explain the model's purpose:
15. **Sector Model (B)**
   
   Year developed?____________
   
   Developed by whom?____________
   
   Explain the model's purpose:

16. **Multiple Nuclei Model (C)**
   
   Year developed?____________
   
   Developed by whom?____________
   
   Explain the model's purpose:

17. In order to apply the aforementioned models to reality, what is needed?

18. Define Social Area Analysis:

19. WHY were the three models developed?

20. Through the application of these models, in what TWO ways are European cities different?
   a.
   b.

21. Through the application of these models, in what TWO ways are LDCs different?
   a.
   b.

22. Explain the “rings” of Islamic cities:

23. Explain the model of a **Latin American city** (by Griffin and Ford):
24. Review Question 13.2.1. Urban areas in the United States are divided by
   A. the department of Homeland Security
   B. the Department of Urban Planning
   C. the Census Bureau
   D. the Population Reference Bureau
   E. the World Health Organization

25. Review Question 13.2.2. In cities like Paris, most of the low-income housing would be found in
   A. the suburbs
   B. the CBD
   C. the zone of transition
   D. the industrial area
   E. the gentrified zone

26. Describe the Harris Peripheral (Galactic) Model:

27. Define Annexation:

28. Define City (1930's Wirth definition):

29. In the US, a city that is surrounded by suburbs in sometimes called a ____________________. The central city and surrounding suburbs are together called an _____________________.

30. What does a Metropolitan Statistical Area (MSA) include?

31. What do micropolitan statistical areas include?
32. What does a Combined Statistical Area consist of?

33. What is a megalopolis?

34. Why can't many urban regional problems be easily solved?

35. Define Density Gradient:

36. Why has the density gradient leveled out in recent years? (This is also known as Suburban Sprawl)

37. What are greenbelts and what are they designed to do?

38. What prevents the mixing of land uses and has resulted in segregated residential suburbs?

39. Besides people, list THREE things that have also have moved to the suburbs.
   a. 
   b. 
   c. 

40. What legislation and regulations limit suburban sprawl and preserve farmland on the urban periphery?

41. Suburban sprawl has resulted in an increased dependence on ________________________.

43. Review Question 13.3.1. The largest increase in population within American cities has occurred in
   A. the CBD
   B. rural areas
   C. the zone of transition
   D. the manufacturing zone
   E. the suburbs
44. Review Question 13.3.2. A council of governments would most likely be concerned with
   A. nuclear disarmament
   B. garbage pick-up in megalopolises
   C. education of women
   D. aging populations
   E. environmental destruction

45. What is filtering and what can it lead to?

46. What is redlining?

47. What is the process called in which governments at various levels put together grants to help the revitalization of inner-city neighborhoods?

48. Define gentrification:

49. Approximately how many homeless are there in the United States today?

50. What does the culture of poverty in inner-cities lead to?

51. What TWO choices does a city have to close the gap between the cost of services and the funding available from taxes?
   a.
   b.

52. Define food deserts:

53. Review Question 13.4.1. Which of these are problems faced by cities in the United States?
   A. redlining
   B. public housing
   C. filtering
   D. white flight
   E. All of these are problems in U.S. cities

54. Review Question 13.4.2. A collapse in the inner city housing market was a major cause of
   A. the 2008 recession
   B. outsourcing
   C. the New International Division of Work
   D. “right to work states” being created
   E. the gentrification movement