Chapter 13
Urban Patterns
Chapter 13

Key Issue 1:
Why Do Services Cluster Downtown?
Why Do Services Cluster Downtown?

• CBD Land Uses
  – The *central business district* takes up less than 1 percent of the urban land area, yet contains a large percentage of the services offered in the city.
  – Services offered in the CBD can be divided into three types:
    1. Public Services
      – Examples: city hall, courts, county and state agencies, and libraries.
      – Centrally located for ease of accessibility to all residents
      – Sports centers and conventions centers are often downtown to stimulate commerce in the CBD.
Why Do Services Cluster Downtown?

• CBD Land Uses
  – Services offered in the CBD can be divided into three types (continued):
    2. Business Services
      – Examples: advertising agencies, banks, financial institutions, and law firms.
      – Proximity to other service providers for businesses promotes collaboration and face-to-face meetings.
Why Do Services Cluster Downtown?

• CBD Land Uses

  - Services offered in the CBD can be divided into three types (continued):

    3. Consumer Services

      - Historically, three types of retail services clustered in a CBD.

        » Retailers with a high threshold
        » Retailers with a high range
        » Retailers that served people who worked in the CBD

      - Changing shopping habits and a shift of the more affluent to the suburbs have reduced the importance of retail services in the CBD.
Why Do Services Cluster Downtown?

• Activities Excluded from CBDs:
  – Lack of manufacturing
    • Suitable land is often available only in suburbs
  – Lack of residents
    • In the early 1900s – push/pull factors cause people to move to suburbs
    • Today – many CBDs in the US have seen population growth
    • Despite population growth, many services are still lacking – food deserts?
Why Do Services Cluster Downtown?

• Competition for Land in the CBD
  – High demand for the limited space in the CBD has encouraged vertical development.
    • Underground CBD
      – Inadequate space exists above ground for the needed dense network of telephone, electric, and broadband cables, thus they are placed underground and out of sight.
      – Underground passages can segregate pedestrians from motor vehicles and shield them from harsh winter weather.
    • Skyscrapers
      – Demand for space in CBDs has made high-rise structures economically feasible.
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Key Issue 2:
Where are People Distributed within Urban Areas?
Where Are People Distributed Within Urban Areas?

• Models of Urban Structure
  – *Concentric Zone Model*
    • Created in 1923 by sociologist E.W. Burgess
    • First model to explain the distribution of different social groups within urban areas
    • Model suggests that a city grows outward from a central area in a series of concentric rings.
      – CBD: innermost ring where nonresidential activities occur
      – A Zone in Transition: area eventually consumed by CBD
      – Zone of Working-Class Homes: modest, older houses
      – Zone of Better Residence: newer, larger houses for middle-class families
      – Commuter Zone: beyond the continuous built-up
Where Are People Distributed Within Urban Areas?

• Models of Urban Structure
  – Sector Model
    • Created by land economist *Homer Hoyt* in 1939.
    • Model that states a city develops in a series of sectors, not rings.
    • As a city grows, activities expand outward in a wedge, or sector, from the center.
Where Are People Distributed Within Urban Areas?

- Models of Urban Structure
  - *Multiple Nuclei Model*
    - Created by geographers *C. D. Harris and E. L. Ullman* in 1945
    - Model argues that a city is a complex structure that includes more than one center around which activities revolve.
      - Examples
        » Ports
        » Universities
        » Airports
        » Parks
Where Are People Distributed Within Urban Areas?

• Geographic Applications of the Models
  – The models of urban structure help us understand where people with different social characteristics tend to live and why.
  – Critics point out that the models are too simple and may be too dated to explain contemporary urban patterns in the U.S. or in other countries.
  – Combining the models help geographers explain where different types of people live in a city.
    • They suggest that most people prefer to live near others who have similar characteristics.
Where Are People Distributed Within Urban Areas?

- Geographic Applications of the Models
  - Examples
    - Concentric Zone Model
      - Families in newer houses tend to live in an outer ring
      - Families in older houses tend to live in the inner ring
    - Sector Model
      - Given two families who own their homes, the family with the higher income will not live in the same sector as the family with a lower income.
    - Nuclei Model
      - People with same ethnic background are likely to live near each other.
Where Are People Distributed Within Urban Areas?

• Applying the Models Outside North America
  – Applying the Models in Europe
    • Sectors
      – In Europe, the wealthy still live in the inner portions of the upper-class sector, not just in the suburbs like most of the affluent in the U.S.
    • Concentric Zones
      – In Europe, most of the newer housing built in the suburbs is high-rise apartment buildings for low-income people and recent immigrants, unlike the U.S.
Where Are People Distributed Within Urban Areas?

• Applying the Models Outside North America
  – Applying the Models in Developing Countries
    • The poor are accommodated in suburbs.
    • The wealthy live near the center of the city, as well as in a sector extending from the center.
Where Are People Distributed Within Urban Areas?

• Stages of Cities in Developing Countries
  – Precolonial Cities
    • Before the Europeans established colonies, most people lived in rural settlements.
    • There were but a few principal cities in Latin America, Africa, and Asia.
    • Examples
      – In present-day Mexico, the Aztecs built the city Tenochtitlan, where present-day Mexico City is located.
  – Colonial Cities
    • When European colonization gained control of Latin America, Asia, and Africa, they expanded the existing cities to provide colonial services.
Where Are People Distributed Within Urban Areas?

- Stages of Cities in Developing Countries
  - Colonial Cities (Continued):
    - Examples include:
      » Administration
      » Military Command
      » International Trade
      » Housing for European Settlers

- Cities Since Independence
  - Following independence, cities have become the focal points of change.
    - Millions of migrants have arrived to them in search of work.
  - In some cities, such as Mexico City, previous social patterns from the previous century were reinforced.
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Key Issue 3:
Why Are Urban Areas Expanding?
Why Are Urban Areas Expanding?

• Defining Urban Settlements
  – Several definitions have been created to characterize cities and their suburbs.
    1. The term *city* defines an urban settlement that has been legally incorporated into an independent, self-governing unit.
       – In the U.S., these urban settlements are sometimes known as a *central city*. 
Defining Urban Settlements (Continued):

2. An *urban area* consists of a dense core of census tracts, densely settled suburbs, and low-density land that links the dense suburbs with the core. The census recognizes two types of urban areas:
   1. An *urbanized area* is an urban area with at least 50,000 inhabitants.
   2. An *urban cluster* is an urban area with between 2,500 and 50,000 inhabitants.
3. The U.S. Bureau of the Census has created a method of measuring the functional area of a city, known as the *metropolitan statistical area (MSA)*. It includes:

- An urbanized area with a population of at least 50,000
- The county within which the city is located
- Adjacent counties with a high population density and a large percentage of residents working in the central city’s county.
Why Are Urban Areas Expanding?

• Overlapping Metropolitan Areas
  – Some adjacent MSAs overlap so that they now form one continuous urban complex.
  • Example: Extending north of Boston to South of Washington D.C., geographer Jean Gottmann named this region *Megalopolis*, a Greek word meaning “great city”.

– Local Government Fragmentation
  • Most U.S. metropolitan areas have a council of government, which is a cooperative agency consisting of various local government representatives.
    – Purpose may be to do some overall planning for the area that cannot be performed by a single local government.
Why Are Urban Areas Expanding?

• Annexation
  – The process of legally adding land area to a city is *annexation*.
    • Many U.S. cities grew rapidly in the 19th century, because they offered better services than available in the rural countryside (e.g. water supply, sewage disposal, etc.)

• Density Gradient
  – U.S. tend to become less and less dense as one ventures farther from the city’s center; this phenomenon is known as the *density gradient*. 

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Why Are Urban Areas Expanding?

• The Cost of Suburban Sprawl
  – A flattening of the density gradient for a metropolitan area means that its people and services are spread out over a larger area.
  • U.S. suburbs are characterized by sprawl, the progressive spread of development over the landscape.

• Suburban Segregation
  – The modern residential suburb is segregated in two ways:
    1. Social Class
      – Similarly priced houses are typically built in close proximity to one another, thus attracting a specific range of income earners.
Why Are Urban Areas Expanding?

• Suburban Segregation
  – The modern residential suburb is segregated in two ways (Continued):
    2. Land Uses
      – Residents are separated from commercial and manufacturing activities that are confined to compact, distinct areas.
        » Zoning ordinances enacted in the early 20th century have contributed most notably to the segregation of land uses associated with suburban areas.
Why Are Urban Areas Expanding?

• Urban Transportation
  – Motor Vehicles
    • Cars and trucks permitted large-scale development of suburbs at greater distances from the city center.
    • Motor vehicles use a considerable amount of space in U.S. cities.
      – An average city allocated about ¼ of its land to roads and parking lots.
      – Multilane freeways cut a 23-meter (75-foot) path through the heart of a city, and elaborate interchanges consume even more space.
      – Valuable land in the central city is devoted to parking cars and trucks.
Why Are Urban Areas Expanding?

• Urban Transportation
  – The Car of the Future
    • Motor vehicles are one of the greatest challenges to reducing pollution in congested urban areas.
    • Automakers are scrambling to bring alternative-fuel vehicles to the market.
      – Diesel
        » Diesel engines burn fuel more efficiently.
        » Biodiesel fuel can be produced partly with vegetable oils or recycled restaurant grease.
      – Hybrid
        » Energy that would be otherwise wasted when coasting and braking is reduced, because an electric engine takes over during those instances.
Why Are Urban Areas Expanding?

• Urban Transportation
  – The Car of the Future
    – Ethanol
      » Fuel made by distilling crops, such as sugarcane, corn, and soybeans.
      » Critics question whether the amount of energy put into growing the crops is not equal to, if not more than, the amount of energy derived from them as fuel.
    – Plug-In Hybrid
      » Electric motor supplies the power at all speeds.
      » Gas engine can recharge the battery, as well as plugging the car into an electrical outlet.
    – Hydrogen Fuel Cell
      » Hydrogen forced through a PEM (polymer electrolyte membrane or proton exchange membrane) combines with oxygen from the air, producing an electric charge.
Why Are Urban Areas Expanding?

- **Urban Transportation**
  - **Public Transit**
    - **Benefits**
      - In larger cities, public transit is better suited than motor vehicles to move large numbers of people, because each transit traveler takes up less space.
      - More cost effective than privately operated vehicles
      - Emits relatively less pollutants than privately operated vehicles
      - More energy efficient than privately operated vehicles
    - **Limitations**
      - Most people in the U.S. overlook the benefits of public transit, because they place higher value on the privacy and flexibility of schedule offered by a car.
      - Not offered in most U.S. cities
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Key Issue 4:
Why Do Cities Face Challenges?
Why Do Cities Face Challenges?

• Changing Urban Physical Geography
  – *The Process of Deterioration*
    • Filtering
      – Large houses in older neighborhoods are subdivided into smaller dwellings for low-income families, through a process known as *filtering*.
      – Over time, landlords cease maintaining the properties when they are no longer economically feasible.
    • Redlining
      – Some banks engage in *redlining*—drawing lines on a map to identify areas in which they will refuse to loan money to purchase or to fix up a house.
      – Redlining is illegal but difficult to enforce.
Why Do Cities Face Challenges?

• Changing Urban Physical Geography
  – The Process of Deterioration
    • Public Housing
      – During the mid-twentieth century, many substandard inner-city houses were demolished and replaced with public housing—housing reserved for low-income households, who must pay 30 percent of their income for rent.
      – A housing authority, established by the local government, manages the buildings, and the federal government pays for all expenses not covered by rent.
      – Most of the high-rise public housing projects built in the U.S. and Europe at this time are now considered unsatisfactory for families with children.
• Changing Urban Physical Geography
  – Gentrification
    • *Gentrification* is the process by which middle-class people move into deteriorated inner-city neighborhoods and renovate the housing.
    • Most U.S. cities have at least one substantially renovated inner-city neighborhood where middle-class people live.
      – Middle class-families attracted by some of the following:
        » Houses may have more architectural character than those in the suburbs.
        » Proximity to cultural and recreational activities
        » Commuting time reduced to CBD
• Changing Urban Social Geography
  – Underclass
  • Inner-city residents are frequently referred to as permanent *underclass*, because they are trapped in an unending cycle of economic and social problems.
  • Suffers from relatively higher rates of unemployment, alcoholism, drug addiction, illiteracy, juvenile delinquency, and crime.
  • Children often attend deteriorated schools
  • Affordable housing is difficult to secure
  • Tend to ignore good learning habits, regular school attendance, and completion of homework; the tendencies needed to elevate one’s self out of the underclass.
Why Do Cities Face Challenges?

• Changing Urban Social Geography
  – Culture of Poverty
  • Inner-city residents are trapped as a permanent underclass, because they live in a culture of poverty.
  • Characterized by:
    – Unwed mothers giving birth to \( \frac{3}{4} \) of the babies in the U.S. inner-city neighborhoods
    – \( \frac{3}{4} \) of children in the inner city live with only one parent
    – Relatively higher usage of drugs.
Why Do Cities Face Challenges?

• Urban Economic Challenges
  – The Eroding Tax Base
    • Low-income inner-city residents require public services, but they pay little of the taxes needed to fund the public services.
    • Cities have two choices to close the gap between the cost of operating public services and the funding made available by taxing.
      1. Reduce Services
      2. Raise Tax Revenues
• Urban Economic Challenges
  – The Impact of the Recession
    • Housing market collapse in 2008 was one of principal causes of the severe recession.
    • Lower assessed values of houses led to lower tax revenues acquired from property taxes.
    • When borrowers cease paying their mortgages, lenders can take over the property in what is called a foreclosure.
• Services, especially public and business services, cluster in the CBD; some consumer services, especially leisure, are in the CBD.

• Three models help to explain where different groups of people live within urban areas.

• Urban growth has been primarily focused on suburbs that surround older cities.

• Cities face physical, social, and economic difficulties, but some improvements also occurred.