

## KEY ISSUE 1

# Why Do Services Cluster Downtown?

- CBD Land Uses
- CBDs Outside North America

Downtown is the best-known and the most visually distinctive area of most cities. The downtowns of most North American cities have different features than the downtowns in the rest of the world.

## CBD Land Uses

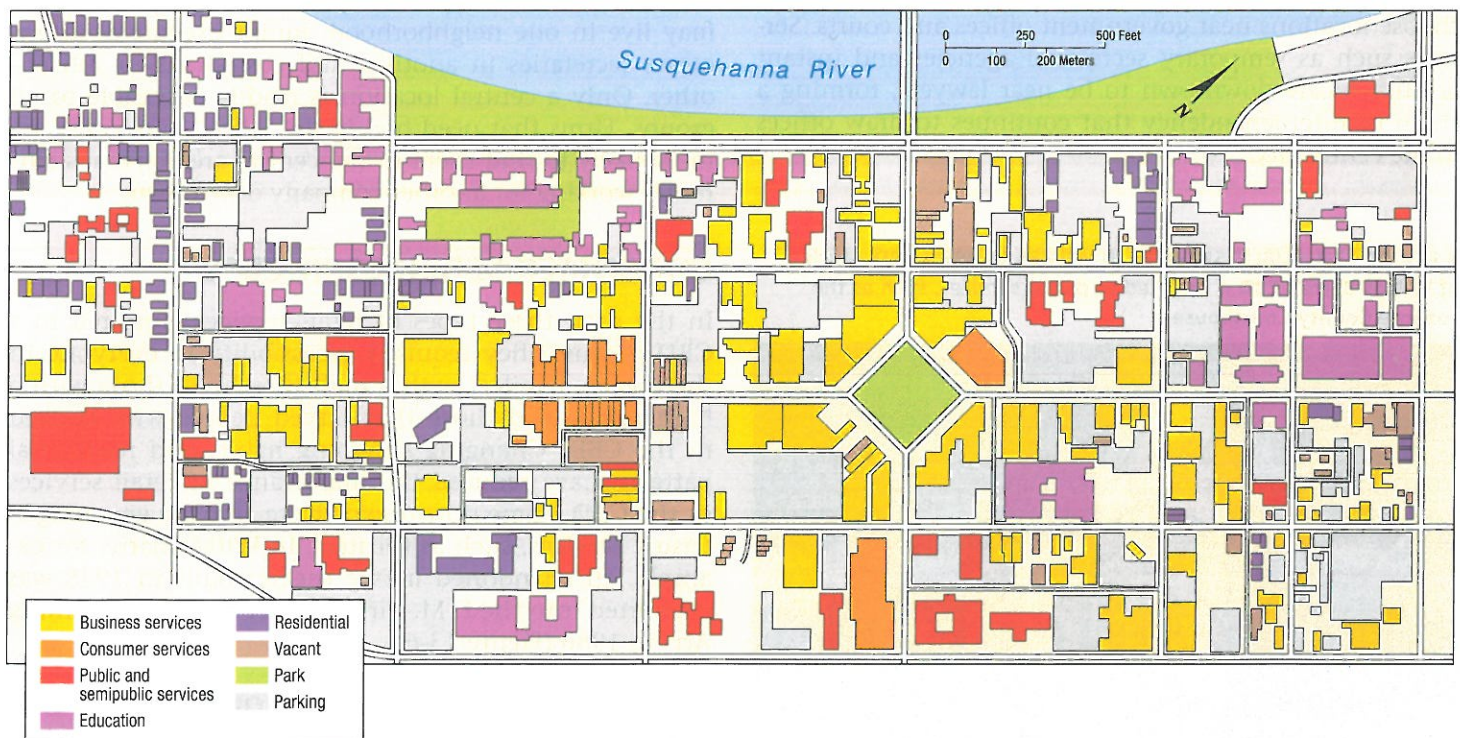
Downtown is known to geographers by the more precise term **central business district (CBD)**. The CBD is compact—less than 1 percent of the urban land area—but contains a large percentage of the public, business, and consumer services (Figure 13-2). Services are attracted to the CBD because of its accessibility. The CBD is the



▲ **FIGURE 13-3** SITE OF WILKES-BARRE'S CBD Wilkes-Barre was built along the south bank of the Susquehanna River.

easiest part of the city to reach from the rest of the region and is the focal point of the region's transportation network.

The CBD is one of the oldest districts in a city, usually at or near the original site of the settlement. The CBDs of older cities are often situated along a body of water, a principal transportation route prior to the twentieth century (Figure 13-3).



▲ **FIGURE 13-2** CBD OF WILKES-BARRE, PENNSYLVANIA Wilkes-Barre, a city of 40,000 inhabitants, has a central business district typical of U.S. cities, with a mix of business, consumer, and public services.

## PUBLIC SERVICES IN CBDs

### Learning Outcome 13.1.1

Describe the three types of services found in a CBD.

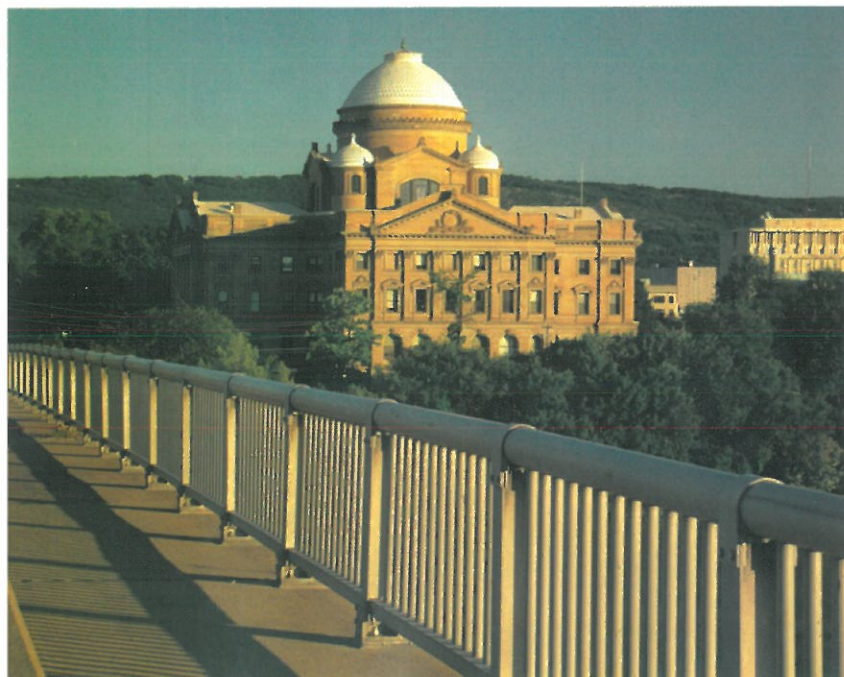
Public services typically located in a CBD include city hall, courts, county and state agencies, and libraries (Figure 13-4). These facilities historically clustered downtown, in many cases in substantial structures. Today, many remain in the CBD to facilitate access for people living in all parts of town. Similarly, semipublic services such as places of worship and social service agencies also cluster downtown in handsome historic structures.

Sports facilities and convention centers have been constructed or expanded downtown in many cities. These structures attract a large number of people, including many suburbanites and out-of-towners. Cities place these facilities in the CBD because they hope to stimulate more business for downtown restaurants, bars, and hotels. Cities such as Wilkes-Barre have reclaimed their waterfronts as public park space.

## BUSINESS SERVICES IN CBDs

Offices cluster in a CBD for accessibility (Figure 13-5). People in business services such as advertising, banking, finance, journalism, and law particularly depend on proximity to professional colleagues. Lawyers, for example, choose locations near government offices and courts. Services such as temporary secretarial agencies and instant printers locate downtown to be near lawyers, forming a chain of interdependency that continues to draw offices to the center city.

▼ **FIGURE 13-4 PUBLIC SERVICES IN WILKES-BARRE'S CBD** Much of Wilkes-Barre's CBD is devoted to public services, such as the Luzerne County Courthouse.



▲ **FIGURE 13-5 BUSINESS SERVICES IN WILKES-BARRE'S CBD** Downtown buildings house offices for financial and professional services.

Even with the diffusion of modern telecommunications, many professionals still exchange information with colleagues primarily through face-to-face contact. Financial analysts discuss attractive stocks or impending corporate takeovers. Lawyers meet to settle disputes out of court. Offices are centrally located to facilitate rapid communication of fast-breaking news through spatial proximity. Face-to-face contact also helps establish a relationship of trust based on shared professional values.

A central location also helps businesses that employ workers from a variety of neighborhoods. Top executives may live in one neighborhood, junior executives in another, secretaries in another, and custodians in still another. Only a central location is readily accessible to all groups. Firms that need highly specialized employees are more likely to find them in the central area, perhaps currently working for another company downtown.

## CONSUMER SERVICES IN CBDs

In the past, three types of retail services clustered in a CBD because they required accessibility to everyone in the region: retailers with a high threshold, those with a high range, and those that served people who worked in the CBD. Changing shopping habits and residential patterns have reduced the importance of retail services in the CBD. Some downtowns have actively encouraged leisure services, such as theaters. In Wilkes-Barre, for example, an abandoned movie theater built in 1938 was converted into the F. M. Kirby Center for the Performing Arts in 1986 (Figure 13-6).

**RETAILERS WITH A HIGH THRESHOLD.** Retailers with high thresholds, such as department stores, traditionally preferred a CBD location in order to be accessible to many people. Large department stores in the CBD would cluster near one intersection, which was known as the "100 percent corner." Rents were highest there because that location had the highest accessibility for the most customers.



▲ **FIGURE 13-6 CONSUMER SERVICES IN WILKES-BARRE'S CBD** Kirby Center for the Performing Arts is in downtown Wilkes-Barre.

Most high-threshold shops such as large department stores have closed their downtown branches. CBDs that once boasted three or four stores now have none, or perhaps one struggling survivor. The customers for downtown department stores now consist of downtown office workers, inner-city residents, and tourists. Department stores with high thresholds are now more likely to be in suburban malls.

**RETAILERS WITH A HIGH RANGE.** High-range retailers are often specialists, with customers who patronize them infrequently. These retailers once preferred CBD locations because their customers were scattered over a wide area. For example, a jewelry or clothing store attracted shoppers from all over the urban area, but each customer visited infrequently. Like those with high thresholds, high-range retailers have moved with department stores to suburban locations.

**RETAILERS SERVING DOWNTOWN WORKERS.** A third type of retail activity in the CBD serves the many people who work in the CBD and shop during lunch or working hours. These retailers sell office supplies, computers, and clothing or offer shoe repair, rapid photocopying, dry cleaning, and so on. In contrast to the other two types of retailers, shops that appeal to nearby office workers are expanding in the CBD, in part because the number of downtown office workers has increased and in part because downtown offices require more services.

Patrons of downtown shops tend increasingly to be downtown employees who shop during the lunch hour. Thus, although the total volume of sales in downtown areas has been stable, the pattern of demand has changed. Large department stores have difficulty attracting their old customers, whereas smaller shops that cater to the special needs of the downtown labor force are expanding.

## ACTIVITIES EXCLUDED FROM CBDs

High rents and land shortage discourage two principal activities in the CBD—industrial and residential.

**LACK OF MANUFACTURING IN CBDs.** Modern factories require large parcels of land to spread operations among one-story buildings. Suitable land is generally available in suburbs. In the past, inner-city factories and retail establishments relied on waterfront CBDs that were once lined with piers for cargo ships to load and unload and warehouses to store the goods. Today's large oceangoing vessels are unable to maneuver in the tight, shallow waters of the old CBD harbors. Consequently, port activities have moved to more modern facilities downstream.

Port cities have transformed their waterfronts from industry to commercial and recreational activities. Derelict warehouses and rotting piers have been replaced with new offices, shops, parks, and museums. As a result, CBD waterfronts have become major tourist attractions in a number of North American cities, including Boston, Toronto, Baltimore, and San Francisco, as well as in European cities such as Barcelona and London. The cities took the lead in clearing the sites and constructing new parks, docks, walkways, museums, and parking lots. They have also built large convention centers to house professional meetings and trade shows. Private developers have added hotels, restaurants, boutiques, and entertainment centers to accommodate tourists and conventioners.

**LACK OF RESIDENTS IN CBDs.** Many people used to live in or near the CBD. Poorer people jammed into tiny, overcrowded apartments, and richer people built mansions downtown. In the twentieth century, most residents abandoned downtown living because of a combination of pull and push factors. They were pulled to suburbs that offered larger homes with private yards and modern schools. And they were pushed from CBDs by high rents that business and retail services were willing to pay and by the dirt, crime, congestion, and poverty that they experienced by living downtown.

In the twenty-first century, however, the population of many U.S. CBDs has increased. New apartment buildings and townhouses have been constructed, and abandoned warehouses and outdated office buildings have been converted into residential lofts. Downtown living is especially attractive to people without school-age children, either “empty nesters” whose children have left home or young professionals who have not yet had children. These two groups are attracted by the entertainment, restaurants, museums, and nightlife that are clustered downtown, and they are not worried about the quality of neighborhood schools.

Despite the growth in population in the center of some U.S. cities, some consumer services, such as grocery stores, may still be lacking (see Sustainability and Inequality feature on the next page).

### Pause and Reflect 13.1.1

**Do you ever spend time in a CBD? If so, for what reasons?**

## COMPETITION FOR LAND IN THE CBD

### Learning Outcome 13.1.2

Explain the three-dimensional nature of a CBD.

A CBD's accessibility produces extreme competition for the limited sites available. As a result, land values are very high in the CBD, and it is too expensive for some activities. In

a rural area a hectare of land might cost several thousand dollars. In a suburb it might run tens of thousands of dollars. In the CBD of a global city like London, if a hectare of land were even available, it would cost more than two hundred million dollars. If this page were a parcel of land in the CBD of London, it would sell for \$1,000.

The intensive demand for space has given the CBD a three-dimensional character, pushing it vertically. Compared to other parts of a city, the CBD uses more space below and above ground level.

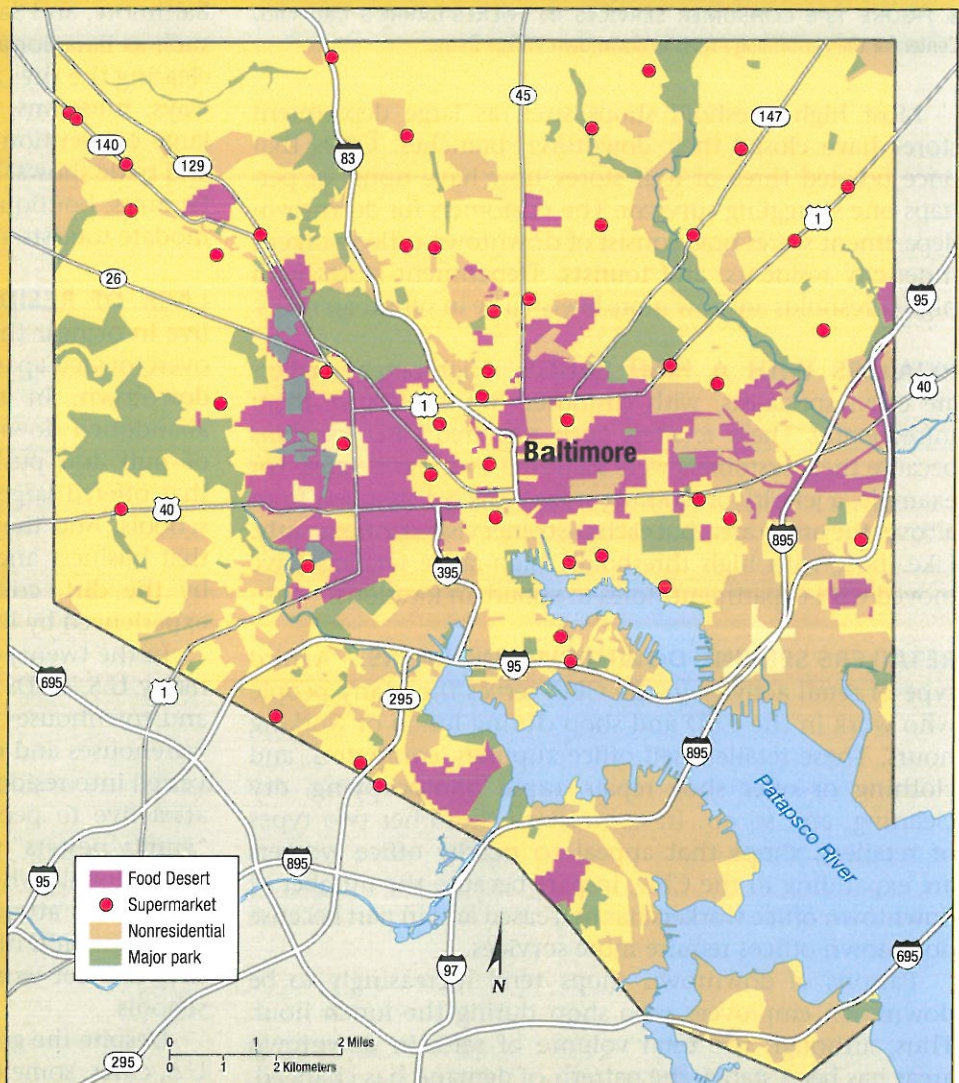
## SUSTAINABILITY AND INEQUALITY IN OUR GLOBAL VILLAGE

### Identifying Food Deserts

A **food desert** is an area in a developed country where healthy food is difficult to obtain. Food deserts are especially common in low-income inner-city areas.

In Baltimore, the Baltimore Food Policy Initiative is a joint venture of the Johns Hopkins University Center for a Livable Future and several local government agencies. The initiative prepared a food environment map and found that approximately 20 percent of Baltimore's residents lived in a food desert; the percentages were highest for children and for African Americans (Figure 13-7). An area was determined to be a food desert if it met all four of these criteria:

- The distance to the nearest supermarket was more than  $\frac{1}{4}$  mile. This distance was chosen as the maximum convenient distance for walking with grocery bags.
- The median household income was at or below 185 percent of the federal poverty level.
- At least 40 percent of the area's households did not have any motor vehicles.
- The average Healthy Food Availability Index score was low for nearby supermarkets and convenience stores. This index was calculated by sending researchers into each market and assessing the availability of fresh and healthy food in the store, using a survey form called the Nutrition Environment Measures Survey developed at the University of Pennsylvania.



▲ **FIGURE 13-7 FOOD DESERTS IN BALTIMORE** Baltimore's food deserts are clustered in predominantly low-income African American inner-city neighborhoods.



◀ **FIGURE 13-8 UNDERGROUND CBD** Montreal's CBD has an extensive network of underground walkways lined with retail services.

**THE UNDERGROUND CBD.** A vast underground network exists beneath most CBDs. The typical “underground city” includes garages, loading docks for deliveries to offices and shops, and pipes for water and sewer service. Telephone, electric, TV, and broadband cables run beneath the surface as well because not enough space is available in the CBD for the large number of overhead poles that would be needed for such a dense network, and the wires would be unsightly and hazardous. Subway trains run beneath the streets of large CBDs. And cities in cold-weather climates, such as Minneapolis, Montreal, and Toronto, have built extensive underground pedestrian passages and shops. These underground areas segregate pedestrians from motor vehicles and shield them from harsh winter weather (Figure 13-8).

**SKYSCRAPERS.** Demand for space in CBDs has also made high-rise structures economically feasible. Downtown skyscrapers give a city one of its most distinctive images and unifying symbols. Suburban houses, shopping malls, and factories look much the same from one city to another, but each city has a unique downtown skyline, resulting from the particular arrangement and architectural styles of its high-rise buildings.

The first skyscrapers were built in Chicago in the 1880s, made possible by several inventions, including the elevator, steel girders, and glass structures because they blocked light and air movement. Artificial lighting, ventilation, central heating, and air-conditioning have helped solve these problems. Most North American and European cities enacted **zoning ordinances** early in the twentieth century in part to control the location and height of skyscrapers.

Skyscrapers are an interesting example of “vertical geography.” The nature of an activity influences which floor it occupies in a typical high-rise:

- Retail services pay high rents for street-level space to entice customers.

- Business services, less dependent on walk-in trade, occupy offices on the middle levels at lower rents.
- Apartments on the upper floors take advantage of lower noise levels and panoramic views.

The one large U.S. CBD without skyscrapers is Washington, D.C., where no building is allowed to be higher than the U.S. Capitol dome. Consequently, offices in downtown Washington rise no more than 13 stories. As a result, the typical Washington office building uses more horizontal space—land area—than in other cities. Thus the city's CBD spreads over a much wider area than those in comparable cities.

### Pause and Reflect 13.1.2

**The Capitol is the tallest building in the CBD of Washington, D.C. Is Washington's CBD typical of American cities? Why or why not?**

### CHECK-IN: KEY ISSUE 1

#### Why Do Services Cluster Downtown?

- ✓ **Business, public, and some consumer services cluster in the CBD.**
- ✓ **The CBD has relatively few manufacturers and residents.**
- ✓ **North American CBDs are characterized by high-rise office buildings, as well as extensive underground services.**
- ✓ **Historic European CBDs have fewer high-rises and more residents and consumer services.**

## KEY ISSUE 2

# Where Are People Distributed within Urban Areas?

- Models of Urban Structure
- Geographic Application of the Models
- Applying the Models Outside North America

### Learning Outcome 13.2.1

Describe the concentric zone, sector, and multiple nuclei models.

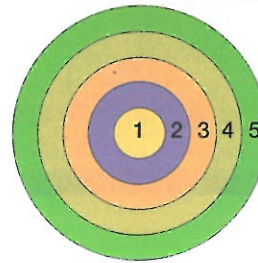
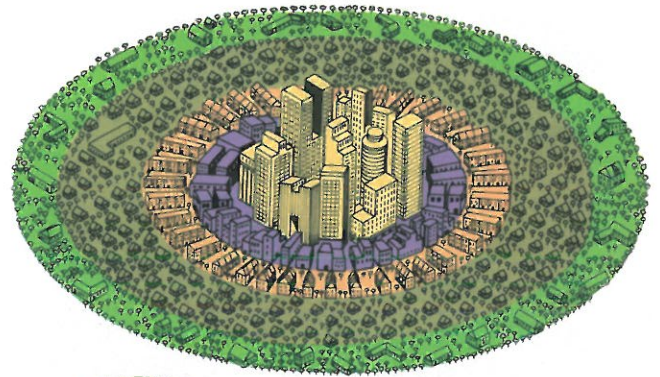
People are not distributed randomly within an urban area. They concentrate in particular neighborhoods, depending on their social characteristics. Geographers describe where people with particular characteristics are likely to live within an urban area, and they offer explanations for why these patterns occur.

## Models of Urban Structure

Sociologists, economists, and geographers have developed three models to help explain where different types of people tend to live in an urban area—the concentric zone, sector, and multiple nuclei models. The three models describing the internal social structure of cities were developed in Chicago, a city on a prairie. The three models were later applied to cities elsewhere in the United States and in other countries. Chicago includes a CBD known as the Loop because transportation lines (originally cable cars, now El trains) loop around it. Surrounding the Loop are residential suburbs to the south, west, and north. Except for Lake Michigan to the east, few physical features have interrupted Chicago's growth.

### CONCENTRIC ZONE MODEL

The **concentric zone model** was the first model to explain the distribution of different social groups within urban areas (Figure 13-9). It was created in 1923 by sociologist E. W. Burgess. According to the concentric zone model, a city grows outward from a central area in a series of



- |   |                                    |
|---|------------------------------------|
| 1 | Central business district          |
| 2 | Zone of transition                 |
| 3 | Zone of independent workers' homes |
| 4 | Zone of better residences          |
| 5 | Commuter's zone                    |

▲ **FIGURE 13-9 CONCENTRIC ZONE MODEL** According to this model, a city grows in a series of rings that surround the central business district.

concentric rings, like the growth rings of a tree. The precise size and width of the rings vary from one city to another, but the same basic types of rings appear in all cities in the same order. Back in the 1920s, Burgess identified five rings:

1. **CBD**, the innermost ring, where nonresidential activities are concentrated.
2. **A zone in transition**, which contains industry and poorer-quality housing. Immigrants to the city first live in this zone in small dwelling units, frequently created by subdividing larger houses into apartments. The zone also contains rooming houses for single individuals.
3. **A zone of working-class homes**, which contains modest older houses occupied by stable, working-class families.
4. **A zone of better residences**, which contains newer and more spacious houses for middle-class families.
5. **A commuters' zone**, beyond the continuous built-up area of the city. Some people who work in the CBD nonetheless choose to live in small villages that have become dormitory towns for commuters.

### Pause and Reflect 13.2.1

If you cut down a large tree, the cross-section will appear to be a circle with concentric rings. Which rings of the tree are the newest? Are tree rings a good analogy to the concentric zone model? Why or why not?