inhabitants. New apartments, schools, hospitals, and shops were planned, as well as electricity, paved roads, and sanitation. In this way, families living in rural areas would have greater access to the services essential for achieving a higher standard of living.

Romanian government planners formulated the policy for what they saw as logical economic geography reasons. But Nicolae Ceaucescu, Romania's longtime leader, turned the policy into a nightmare for many people. Population was controlled in the center of Bucharest by razing entire historic neighborhoods. Eastern Orthodox churches and individual homes were demolished and replaced with apartment buildings, as well as massive squares and monuments honoring Ceaucescu and his family.

Believing that rural residents did not wholeheartedly support his programs for modernizing Romania, Ceaucescu ordered small villages to be destroyed, not expanded. Ironically, because of the isolation of many rural villages, Ceaucescu's policies could not be fully implemented. Typically, rural village leaders demolished only a small number of buildings to show visiting government officials that they had done something to implement Ceaucescu's policy.

After Ceaucescu was overthrown in 1989, the new Romanian government terminated the policy of indiscriminate demolition. But the challenge remained to bring electricity, paved roads, and other improvements to rural settlements and to integrate them into a market-oriented economy.

**KEY ISSUE 3**

**Why Do Business Services Locate in Large Settlements?**

- World cities
- Hierarchy of business services
- Economic base of settlements

Every settlement in an MDC such as the United States provides consumer services to people in a surrounding hinterland of varying area, but not every settlement of a given size has the same number and types of business services. Business services disproportionately cluster in a handful of settlements, and individual settlements specialize in particular business services.

**World Cities**

Prior to modern times, virtually all settlements were rural, because the economy was based on the agriculture of the surrounding fields. Providers of consumer services met most of the needs of farmers living in the village. Even in ancient times, a handful of urban settlements provided business and public services, as well as some consumer services with large market areas.

**Ancient World Cities**

Urban settlements date from the beginning of documented history in the Middle East and Asia. They may have originated in Mesopotamia, part of the Fertile Crescent of the Middle East (see Figure 8–3), and diffused at an early date to Egypt, China, and South Asia's Indus Valley. Or they may have originated independently in each of the four hearths. In any case, from these four hearths, the concept of urban settlements diffused to the rest of the world.

**EARLIEST URBAN SETTLEMENTS.** Among the oldest well-documented urban settlements is Ur in Mesopotamia (present-day Iraq). Ur, which means “fire,” was where Abraham lived prior to his journey to Canaan in approximately 1900 B.C., according to the Bible. Archaeologists have unearthed ruins in Ur that date from approximately 3000 B.C. (Figure 12–10).

Ancient Ur was compact, perhaps covering 100 hectares (250 acres), and was surrounded by a wall. The most prominent structure was a temple, known as a ziggurat, the command center for the ancient settlement and surrounding hinterland. The ziggurat was originally a three-story structure with a base that was 64 by 46 meters (210 by 150 feet) and the upper stories stepped back. Four more stories were added in the sixth century B.C. Surrounding the ziggurat were residential areas containing a dense network of narrow winding streets and courtyards.

Recent evidence unearthed at Titris Hoyuk, in present-day Turkey, from about 2500 B.C. suggests that early urban settlements were well-planned communities. Houses were arranged in a regular pattern, because walls and streets were apparently

**Periodic Markets**

Services at the lower end of the central place hierarchy may be provided at a periodic market, which is a collection of individual vendors who come together to offer goods and services in a location on specified days. The periodic market typically is set up in a street or other public space early in the morning, taken down at the end of the day, and set up in another location the next day.

A periodic market provides goods to residents of LDCs, as well as rural areas in MDCs, where sparse populations and low incomes produce purchasing power too low to support full-time retailing. A periodic market makes services available in more villages than would otherwise be possible, at least on a part-time basis. In urban areas, periodic markets offer residents fresh food brought in that morning from the countryside.

Many of the vendors in periodic markets are mobile, driving their trucks from farm to market, back to the farm to restock, then to another market. Other vendors, especially local residents who cannot or prefer not to travel to other villages, operate on a part-time basis, perhaps only a few times a year. Other part-time vendors are individuals who are capable of producing only a small quantity of food or handicrafts.

The frequency of periodic markets varies by culture. In Muslim countries, periodic markets typically conform to the weekly calendar—once a week in each of six cities and no market on Friday, the Muslim day of rest. In rural China, G. William Skinner found a three-city ten-day cycle of periodic markets. The market operates in a central market on days 1, 4, and 7; in a second location on days 2, 5, and 8; in a third location on days 3, 6, and 9; and no market on the tenth day. Three 10-day cycles fit in a lunar month. In Korea two 15-day cycles fit in a lunar month. In Africa, the cycle can range from three to seven days. Variations in the cycle stem from ethnic differences.
laid out first. Palaces, temples, and other public buildings were placed at the center, and cemeteries were beyond the walls.

Houses varied in size but were of similar design, built around a central courtyard that contained a crypt where some of the family members were buried. Houses were apparently occupied by an extended family, because they contained several cooking areas. Evidence of wine production and weaving has been found in the houses.

Tirite Hoyuk occupied a 50-hectare (125-acre) site and apparently had a population of about 10,000. The site is especially well preserved today because after 300 years the settlement was abandoned and never covered by newer buildings.

**ANCIENT ATHENS.** Settlements were first established in the eastern Mediterranean about 2500 B.C. The oldest include Knossos on the island of Crete, Troy in Asia Minor (Turkey), and Mycenae in Greece. These settlements were trading centers for the thousands of islands dotting the Aegean Sea and the eastern Mediterranean. They were organized into city-states— independent self-governing communities that included the settlement and nearby countryside. The settlement provided the government, military protection, and other public services for the surrounding hinterland.

The number of urban settlements grew rapidly during the eighth and seventh centuries B.C. Hundreds of new towns were founded throughout the Mediterranean lands. The residents of one settlement would establish a new settlement to fill a gap in trading routes and to open new markets for goods. The diffusion of urban settlements from the eastern Mediterranean westward is well documented. For example, the city-state of Syracuse (in the southeastern part of the island of Sicily) established new settlements in Italy and Sicily between 750 and 700 B.C. Farther west at Marseille, France (then known as Massilia), about 600 B.C., Massilians founded settlements along the coast of present-day Spain during the sixth century B.C.

Athens, the largest city-state in ancient Greece, was probably the first city to attain a population of 100,000. Athens made substantial contributions to the development of culture, philosophy, and other elements of Western civilization. This demonstrates that urban settlements have been traditionally distinguished from rural ones not only by public services but by a concentration of consumer services, notably cultural activities, not found in smaller settlements (Figure 12-11).

**ANCIENT ROME.** The rise of the Roman Empire encouraged urban settlement. With much of Europe, North Africa, and Southwest Asia under Roman rule, settlements were established as centers of administrative, military, and other public services, as well as retail and other consumer services. Trade was encouraged through transportation and utility services, notably construction of many roads and aqueducts, and the security the Roman legions provided. The city of Rome—the
empire's center for administration, commerce, culture, and all other services—grew to at least 250,000 inhabitants, although some claim that the population may have reached a million. The city's centrality in the empire's communications network was reflected in the old saying “All roads lead to Rome” (see Figure 6-5).

With the fall of the Roman Empire in the fifth century, urban settlements declined. Their prosperity had rested on trading in the secure environment of imperial Rome. With the empire fragmented under hundreds of rulers, trade diminished. Large urban settlements shrank or were abandoned. For several hundred years Europe's cultural heritage was preserved largely in monasteries and isolated rural areas.

**Medieval World Cities**

Urban life began to revive in Europe in the eleventh century as feudal lords established new urban settlements. They gave residents charters of rights to establish independent cities in exchange for fighting for the lord. Both the lord and urban residents benefited from this arrangement. The lord obtained people to defend his territory at less cost than maintaining a standing army. For their part, urban residents preferred periodic military service to the burden faced by rural serfs, who farmed the lord's land and could keep only a small portion of their own agricultural output.

With their newly won freedom from the relentless burden of rural serfdom, the urban dwellers set about expanding trade. Surplus from the countryside was brought into the city for sale or exchange, and markets were expanded through trade with other free cities. Trade among different urban settlements was enhanced by new roads and more use of rivers. By the fourteenth century, Europe was covered by a dense network of small market towns serving the needs of particular lords.

The largest medieval European urban settlements served as power centers for the lords and church leaders, as well as major market centers. The major public services occupied palaces, churches, and other prominent buildings arranged around a central market square (Figure 12-12). The tallest and most elaborate structures were usually churches, many of which still dominate the landscape of smaller European towns.

European urban settlements were usually surrounded by walls in medieval times, even though by then cannonballs could destroy them. Paris, for example, surrounded itself with new fortifications as recently as the 1840s and did not completely remove them until 1932 (Figure 12-13).

Dense and compact within the walls, medieval urban settlements lacked space for construction, so ordinary shops and houses nestled into the side of the walls and large buildings. Most of the modest medieval shops and homes, as well as the walls, have been demolished in modern times with only the massive churches and palaces surviving. Modern tourists can appreciate the architectural beauty of these medieval churches and palaces, but they do not receive an accurate image of a densely built medieval town.

From the collapse of the Roman Empire until the diffusion of the Industrial Revolution across Europe during the nineteenth century, most of the world's largest cities were in Asia, not Europe. The five most populous cities in 900 are thought to have included Baghdad (in present-day Iraq), Constantinople (now called Istanbul, in Turkey), Kyoto (in Japan), and Changan and Hangehow (in China). Beijing (China) competed with Constantinople as the world's most populous city for several hundred years, until London claimed the
distinction during the early 1800s. Agra (India), Cairo (Egypt), Canton (China), Isfahan (Iran), and Osaka (Japan) also ranked among the world’s most populous cities prior to the Industrial Revolution.

Modern World Cities

In modern times several world cities have emerged where a high percentage of the world’s business is transacted and political power is concentrated. These world cities are centers of business services, but they stand at the top of the central place hierarchy in the provision of consumer services, and many also serve as public-service centers.

New forms of transportation and communications were expected to reduce the need for clustering economic activities in large cities. The telegraph and telephone in the nineteenth century and the computer in the twentieth century made it possible to communicate immediately with coworkers, clients, and customers around the world. The railroad in the nineteenth century and the automobile and airplane in the twentieth century made it possible to deliver people, inputs, and products quickly.

To some extent, economic activities have decentralized, especially manufacturing, but modern inventions reinforce rather than diminish the primacy of world cities in the global economy.

BUSINESS SERVICES IN WORLD CITIES. The clustering of business services in the modern world city is a product of the Industrial Revolution. Factories are operated by large corporations formed to minimize the liability to any individual owner. A board of directors located far from the factory building makes key decisions concerning what to make, how much to produce, and what prices to charge. Support staff also far from the factory account for the flow of money and materials to and from the factories. This work is done in offices in world cities.

World cities offer many financial services to these businesses. As centers for finance, world cities attract the headquarters of the major banks, insurance companies, and specialized financial institutions where corporations obtain and store funds for expansion of production. Shares of major corporations are bought and sold on the stock exchanges, which are located in world cities. Obtaining information in a timely manner is essential in order to buy and sell shares at attractive prices.

Lawyers, accountants, and other professionals cluster in world cities to provide advice to major corporations and financial institutions. Advertising agencies, marketing firms, and other services concerned with style and fashion locate in world cities to help corporations anticipate changes in taste and to help shape those changes.

Transportation services converge on world cities. They tend to have busy harbors and airports and lie at the junction of rail and highway networks.
CONSUMER SERVICES IN WORLD CITIES. Because of their large size, world cities have retail services with extensive market areas, but they may have even more retailers than large size alone would predict. A disproportionately large number of wealthy people live in world cities, so luxury and highly specialized products are especially likely to be sold there.

Leisure services of national significance are especially likely to cluster in world cities, in part because they require large thresholds and large ranges, and in part because of the presence of wealthy patrons. World cities typically offer the most plays, concerts, operas, night clubs, restaurants, bars, and professional sporting events. They contain the largest libraries, museums, and theaters. London presents more plays than the rest of the United Kingdom combined, and New York has nearly more theaters than the rest of the United States combined.

PUBLIC SERVICES IN WORLD CITIES. World cities may be centers of national or international political power. Most are national capitals, so they contain mansions or palaces for the head of state, imposing structures for the national legislature and courts, and offices for the government agencies. Also clustered in the world cities are offices for groups having business with the government, such as representatives of foreign countries, trade associations, labor unions, and professional organizations.

Unlike other world cities, New York is not a national capital. But as the home of the world’s major international organization, the United Nations, it attracts thousands of UN diplomats and bureaucrats, as well as employees of organizations with business at the United Nations. Brussels is a world city because it is the most important center for European Union activities.

Hierarchy of Business Services

Geographers distinguish four levels of cities that play a major role in the provision of producer and other business services in the global economy. Atop the hierarchy are a handful of world cities that can be subdivided into three groups. Below the world cities but still playing major roles in the global business-service economy, are regional command and control centers, specialized producer-service centers, and dependent centers. Differences also exist among cities within each level. Other cities—some with large populations—play less important roles in the provision of business services.

World Cities

As described in the previous section, world cities are most closely integrated into the global economic system because they are at the center of the flow of information and capital. Business services, including law, banking, insurance, accounting, and advertising, concentrate in disproportionately large numbers in world cities.

Three world cities stand out in a class of their own—London, New York, and Tokyo (Figure 12-14). Each is the largest city in one of the three main regions of the more developed world (Western Europe, North America, and East Asia), as discussed in Chapter 9. The world’s most important stock exchanges operate in these three cities, and they contain large concentrations of financial and related business services.

A second tier of major world cities includes Chicago, Los Angeles, and Washington in North America, and Brussels, Frankfurt, Paris, and Zurich in Western Europe. Only two of the nine second-tier world cities—São Paulo and Singapore—are in less developed regions. Major corporations and banks
may have their headquarters in these world cities rather than in London, New York, or Tokyo.

A third tier of secondary world cities includes four in North America (Houston, Miami, San Francisco, and Toronto), seven in Asia (Bangkok, Bombay, Hong Kong, Manila, Osaka, Seoul, and Taipei), five in Western Europe (Berlin, Madrid, Milan, Rotterdam, and Vienna), four in Latin America (Buenos Aires, Caracas, Mexico City, and Rio de Janeiro), and one each in Africa (Johannesburg) and the South Pacific (Sydney).

**Command and Control Centers**
The second level of cities—command and control centers—contains the headquarters of many large corporations, well-developed banking facilities, and concentrations of other business services, including insurance, accounting, advertising, law, and public relations. Important educational, medical, and public institutions can be found in these command and control centers. Two levels of command and control centers can be identified—regional centers and subregional centers.

In the United States, regional command centers include Atlanta, Baltimore, Boston, Cincinnati, Cleveland, Columbus, Denver, Indianapolis, Kansas City, Minneapolis, New Orleans, Philadelphia, Phoenix, Portland (Oregon), St. Louis, and Seattle (Figure 12–15). Subregional centers include Biloxi, Birmingham, Charlotte, Des Moines, Jackson, Jacksonville, Little Rock, Memphis, Nashville, Oklahoma City, Omaha, Richmond, Salt Lake City, Shreveport, Spokane, and Syracuse.

**Specialized Producer-Service Centers**
The third level of cities, specialized producer-service centers, offers a more narrow and highly specialized variety of services. One group of these cities specializes in the management and R&D (research and development) activities related to specific industries, such as motor vehicles in Detroit; steel in
Pittsburgh; office equipment in Rochester, New York; and semiconductors in San Jose, California. A second group of these cities specializes as centers of government and education, notably state capitals that also have a major university, such as Albany, Lansing, Madison, and Raleigh-Durham.

**Dependent Centers**

The fourth-level cities, dependent centers, provide relatively unskilled jobs and depend for their economic health on decisions made in the world cities, regional command and control centers, and specialized producer-service centers. Four subtypes of dependent centers can be identified in the United States:

- Resort, retirement, and residential centers, such as Albuquerque, Fort Lauderdale, Las Vegas, and Orlando, clustered in the South and West.
- Manufacturing centers, such as Buffalo, Chattanooga, Erie, and Rockford, clustered mostly in the old northeastern manufacturing belt.
- Industrial and military centers, such as Huntsville, Newport News, and San Diego, clustered mostly in the South and West.
- Mining and industrial centers, such as Charleston (West Virginia) and Duluth, located in mining areas.

**Economic Base of Settlements**

A settlement's distinctive economic structure derives from its **basic industries**, which export primarily to consumers outside the settlement. **Nonbasic industries** are enterprises whose customers live in the same community, essentially consumer services. A community's unique collection of basic industries defines its **economic base**.

A settlement's economic base is important, because exporting by the basic industries brings money into the local economy, thus stimulating the provision of more nonbasic consumer services for the settlement. New basic industries attract new workers to a settlement, and they bring their families with them. The settlement attracts additional consumer services to meet the needs of the new workers and their families. Thus a new basic industry stimulates establishment of new supermarkets, laundromats, restaurants, and other consumer services. But a new nonbasic service, such as a supermarket, will not induce construction of new basic industries.

A community's basic industries can be identified by computing the percentage of the community's workers employed in different types of businesses. The percentage of workers employed in a particular industry in a settlement is then compared to the percentage of all workers in the country employed in that industry. If the percentage is much higher in the local community, then that type of business is a basic economic activity (Figure 12-16).

Settlements in the United States can be classified by their type of basic activity. Each type of basic activity has a different spatial distribution. Compared to the national average, some settlements have a very high percentage of workers employed in the primary sector, notably mining. Mining settlements are located near reserves of coal, petroleum, and other resources.

The economic base of some settlements is in the secondary sector. Some of these specialize in durable manufactured goods, such as steel and automobiles; others in nondurable manufactured goods, such as textiles, apparel, food, chemicals, and paper. Most communities that have an economic base of

![Figure 12-16 Economic base of U.S. cities. Symbols on this map represent cities that have a significantly higher percentage of their labor force engaged in the type of economic activity shown. Other cities also engage in such activities but are not shown because they specialize in multiple activities or are near the national average for all sectors. (Mathematically, a city was included if the percentage of its labor force in one sector was more than two standard deviations above the mean for all U.S. cities.)](image-url)
manufacturing durable goods are clustered between northern Ohio and southeastern Wisconsin, near the southern Great Lakes. Nondurable manufacturing industries, such as textiles, are clustered in the Southeast, especially in the Carolinas.

Specialization of Cities in Different Services
The concept of basic industries originally referred to manufacturing. Detroit specializes in manufacturing motor vehicles; Gary, Indiana, specializes in steel. But in a postindustrial society, such as the United States, increasingly the basic economic activities are in business, consumer, or public services. Steel was once the most important basic industry of Cleveland and Pittsburgh, but now health services such as hospitals and clinics and medical high-technology research are more important.

O’Hallachain and Reid have documented examples of settlements that specialize in particular types of business services. Boston and San Jose specialize in the provision of services related to computing and data processing. Austin, Orlando, and Raleigh-Durham specialize in the provision of services related to high-technology industries. Albuquerque, Colorado Springs, Huntsville, Knoxville, and Norfolk specialize in the provision of services related to the support of military activity. Washington, D.C., specializes in the provision of management-consulting services.

Settlements specializing in public services are dispersed around the country, because these communities typically include a state capital, large university, or military base. Consumer-service settlements include entertainment and recreation centers such as Atlantic City, Las Vegas, and Reno, as well as medical centers such as Rochester and Minnesota. Business services are concentrated in large metropolitan areas, especially Chicago, Los Angeles, New York, and San Francisco.

Although the population of cities in the South and West has grown more rapidly in recent years, O’Hallachain and Reid found that cities in the North and East have expanded their provision of business services more rapidly. Northern and eastern cities that were once major manufacturing centers have been transformed into business service centers. These cities have moved more aggressively to restructure their economic bases to offset sharp declines in manufacturing jobs.

For example, Baltimore once depended for its economic base on manufacturers of fabricated steel products, such as Bethlehem Steel, General Motors, and Westinghouse. The city’s principal economic asset was its port, through which raw materials and fabricated products passed. As these manufacturers declined, the city’s economic base turned increasingly to services, taking advantage of its clustering of research-oriented universities, especially in medicine. The city is trying to become a center for the provision of services in biotechnology.

OFFSHORE FINANCIAL SERVICES. Offshore centers provide two important functions in the global circulation of capital—tax advantages and privacy. Typically, taxes on income, profits, and capital gains are low or nonexistent. Companies incorporated in an offshore center also have tax-free status regardless of nationality of the owners. The United States loses an estimated $70 billion in tax revenue each year because companies operating in the country conceal their assets in offshore tax havens.

Bank secrecy laws are often more important to individuals and businesses seeking to evade disclosure in their home countries. People and corporations in litigious professions, such as a doctor or lawyer accused of malpractice or the developer of a collapsed building, can protect some of their assets from lawsuits in offshore centers, as can a wealthy individual who wants to protect assets in a divorce. Creditors cannot reach assets in bankruptcy hearings. Short statutes of limitation protect offshore accounts from long-term investigation.

The privacy laws and low tax rates in offshore centers can also provide havens to tax dodgers and other illegal schemes. By definition, the extent of illegal activities is unknown and unknowable.

A prominent example is the Cayman Islands, a British Crown Colony in the Caribbean near Cuba, featured in John Grisham’s best-selling novel and film The Firm. The Caymans comprise three main islands and several smaller ones totalling around 260 square kilometers (100 square miles), with 40,000 inhabitants. About 600 banks with assets of $80 billion are legally based in the Caymans, though most of these banks have only a handful of people, if any, actually working in them in the Caymans. Assets deposited in the Caymans total twice the amount deposited in all of New York City’s banks combined.

In the Caymans, it is a crime to discuss confidential business—defined as matters learned on the job—in public. Assets placed in an offshore center by an individual or corporation in a trust are not covered by lawsuits originating in the United States, Britain, or other service centers. To get at those assets, additional lawsuits would have to be filed in the offshore centers, where privacy laws would shield the individual or corporation from undesired disclosures.

In addition to the Caymans, other British dependencies serving as offshore centers include Anguilla, Montserrat, and the British Virgin Islands in the Caribbean, and Guernsey/Sark/Alderney, Isle of Man, and Jersey in the English Channel, plus Gibraltar, off Spain. Other offshore centers controlled by other countries include Cook Island and Nieu, controlled by New Zealand; Aruba and the Netherlands Antilles, controlled by the Netherlands; and the U.S. Virgin Islands.

Independent countries that serve as offshore centers are primarily island countries in the Caribbean Sea and Pacific and Indian oceans. Caribbean offshore centers include the island countries of Antigua & Barbuda, Bahamas, Barbados, Dominica, Grenada, St. Kitts & Nevis, St. Lucia, St. Vincent & the Grenadines, and Turks & Caicos. Pacific island countries include the Marshall Islands Nauru, Samoa, Tonga, and Vanuatu. The Maldives and Seychelles are offshore center countries in the Indian Ocean. Offshore center countries not on islands include Andorra, Liechtenstein, and Monaco in Europe, Belize and Panama in Central America, Bahrain in the Middle East, and Liberia in Africa.

Business Services in LDCs
In the global economy, LDCs specialize in two distinctive types of business services. Small countries, usually islands and microstates, exploit niches in the circulation of global capital by offering offshore financial services. The second distinctive type of business service found in peripheral regions is back-office functions, also known as business-process outsourcing (BPO).
BACK OFFICES. Typical back-office functions include processing insurance claims, payroll management, transcription work, and other routine clerical activities. Back-office work also includes centers for responding to billing inquiries related to credit cards, shipments, and claims, or technical inquiries related to installation, operation, and repair.

Traditionally, companies housed their back-office staff in the same office building downtown as their management staff, or at least in nearby buildings. A large percentage of the employees in a downtown bank building, for example, have been responsible for sorting paper checks and deposit slips. Proximity was considered important to assure close supervision of routine office workers and rapid turnaround of information.

Rising rents downtown have induced many business services to move routine work to lower rent buildings outside the central business district (CBD). In most cases, sufficient low rents can be obtained in buildings in the suburbs or nearby small towns. However, for many business services, improved telecommunications have eliminated the need for spatial proximity.

Selective LDCs have attracted back offices for two reasons related to labor. The first reason is low wage rates. Most back-office workers earn a few thousand dollars per year—higher than wages paid in most other sectors of the economy, but only one tenth the wages paid for workers performing similar jobs in MDCs. As a result, what is regarded as menial and dead-end work in MDCs may be considered relatively high-status work in LDCs and therefore able to attract better-educated, more-motivated employees in the LDCs than would be possible in MDCs.

The second labor characteristic is the ability to speak English. Many LDCs offer lower wages than MDCs, but only a handful of LDCs possess a large labor force fluent in English. In Asia, countries such as India, Malaysia, and the Philippines have substantial numbers of workers with English-language skills, a legacy of British and American colonial rule. Major multinational companies such as General Electric, American Express, and America Online have extensive back-office facilities in these countries.

The ability to communicate in English over the telephone is a strategic advantage in competing for back offices with neighboring countries, such as Indonesia and Thailand, where English is less commonly used. Familiarity with English is an advantage not only for literally answering the telephone but also for gaining a better understanding of the preferences of American consumers through exposure to English-language music, movies, and television.

Workers in back offices are often forced to work late at night, when it's daytime in the United States, peak demand for inquiries. Many employees must arrive at work early and stay late because they lack their own transportation, so they depend on public transportation, which typically does not operate late at night. Sleeping and entertainment rooms are provided at work to fill the extra hours.

**Distribution of Talent**

Individuals possessing special talents are not distributed uniformly among cities. Some cities have a higher percentage of talented individuals than others. To some extent, talented individuals are attracted to the cities with the most job opportunities and financial incentives.

The principal reason enticing talented individuals to cluster in some cities more than others is cultural rather than economic, according to research conducted by Richard Florida. Individuals with special talents gravitate toward cities that offer more cultural diversity.

Talent was measured by Florida as a combination of the percentage of people in the city with college degrees, the percentage employed as scientists or engineers, and the percentage employed as professionals or technicians. Three measures of cultural diversity were employed—the number of cultural facilities per capita, the percentage of gay men, and a "coolness" index.

The "coolness" index, developed by POVs Magazine, combined the percentage of population in their 20s, the number of bars and other nightlife places per capita, and the number of art galleries per capita. A city's gay population was based on census figures for the percentage of households consisting of two adult men. Two adult men who share a house may not be gay, but Florida assumed that the percentage of adult men living together who were gay did not vary from one city to another.

Florida found a significant positive relationship between the distribution of talent and the distribution of diversity in the largest U.S. cities (Figure 12-17). In other words, cities with high cultural diversity tended to have relatively high percentages of talented individuals. Washington, San Francisco, Boston, and Seattle ranked among the top in both talent and diversity, whereas Las Vegas was near the bottom in both.

Attracting talented individuals is important for a city, because these individuals are responsible for promoting economic innovation. They are likely to start new businesses and infuse the local economy with fresh ideas.

**KEY ISSUE 4**

**Why Do Services Cluster Downtown?**

- Central business district
- Suburbanization of businesses

Historically, services of all types clustered in the center of the city, commonly called downtown and known to geographers by the more precise term central business district (CBD). Recently, services, especially retail, have moved from the CBD to suburban locations.

**Central Business District**

The center is the best-known and the most visually distinctive area of most cities. It is usually one of the oldest districts in a city, often the original site of the settlement. The CBD is compact—less than 1 percent of the urban land area—but contains a large percentage of the shops, offices, and public institutions (Figure 12-18).
Consumer and business services are attracted to the CBD because of its accessibility. The center is the easiest part of the city to reach from the rest of the region and is the focal point of the region’s transportation network.

**Retail Services in the CBD**

Three types of retail services concentrate in the center, because they require accessibility to everyone in the region—shops with a high threshold, shops with a long range, and shops that serve people who work in the center.

**RETAIL SERVICES WITH A HIGH THRESHOLD.** A shop may be in the center if it has a high threshold. High-threshold shops, such as department stores, traditionally preferred a central location to be accessible to many people. Large department stores in the CBD often clustered across the street from one another. Retailers referred to the intersection nearest such a cluster as the “100 percent corner.” Rents were highest there because this location had the highest accessibility for the most customers.

In recent years many 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.

**RETAIL SERVICES WITH A HIGH RANGE.** The second type of shop in the center has a high range. Generally, a high-range shop is very specialized, with customers who patronize it infrequently. High-range shops prefer central locations because their customers are scattered over a wide area. For example, an expensive jewelry or fur shop attracts shoppers from all over the urban area, but each customer visits infrequently.

Many high-range shops have moved with department stores to suburban shopping malls. These shops can still thrive in some CBDs if they combine retailing with recreational activities. People are willing to make a special trip to a specific destination downtown for unusual shops in a dramatic setting, perhaps a central atrium with a fountain or a view of a harbor.

 Entirely new large shopping malls have been built in several downtown areas in North America in recent years. In Boston the eighteenth-century market, known as Faneuil Hall, was transformed from a derelict area into a modern shopping center of more than 150 stores, covering 34,000 square meters (362,000 square feet). Philadelphia’s Gallery at Market East, a downtown four-level shopping center of 93,000 square meters (1 million square feet), has more than 120 stores. It is anchored by three large department stores and provides direct access to a subway station and multistory parking garage.

Harbor Place in Baltimore (13,000 square meters or 135,000 square feet) includes two shopping pavilions with about 75 stores integrated into a collection of waterfront museums, tourist attractions, hotels, and cultural facilities. These downtown malls attract suburban shoppers as well as out-of-town tourists because in addition to shops they offer unique recreation and entertainment experiences.

A number of cities have preserved their old downtown markets. These markets feature a large number of stalls, each operated by individual merchants. They may have a high range because they attract customers who willingly travel far to find more exotic or higher-quality products. At the same time, inner-city residents may use these markets for their weekly grocery shopping.
RETAIL SERVICES SERVING DOWNTOWN WORKERS.

A third type of retail activity in the center serves the many people who work in the center and shop during lunch or working hours. These businesses sell office supplies, computers, and clothing, or offer shoe repair, rapid photocopying, dry cleaning, and so on.

The CBDs in cities outside North America are more likely to contain supermarkets, bakeries, butchers, and other food stores. However, these stores may be open for limited hours in the evenings or on weekends. The 24-hour supermarket is rare outside North America because of preferences of shopkeepers, government regulations, and longtime shopping habits.
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.

Many cities have attempted to revitalize retailing in the CBD and older neighborhoods. One popular method is to ban motor vehicles from busy shopping streets. By converting streets to pedestrian-only walkways, cities emulate one of the most attractive attributes of large shopping malls. Shopping streets reserved for pedestrians are widespread in Northern Europe, including in the Netherlands, Germany, and Scandinavia.

**BUSINESS SERVICES.** Offices cluster in the center for accessibility. Despite 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 to establish a relationship of trust based on shared professional values.

People in such business services as advertising, banking, finance, journalism, and law particularly depend on proximity to professional colleagues. Lawyers, for example, locate to be 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.

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.

**High Land Costs in the CBD**

The center’s accessibility produces extreme competition for the limited sites available. As a result, land value in the center is very high. In a rural area a hectare of land might cost several thousand dollars. In a suburb it might run tens of thousands of dollars. But in a large CBD like New York or London, if a hectare of land were even available, it would cost several hundred million dollars.

Tokyo’s CBD probably contains Earth’s most expensive land. Transactions average $125,000 per square meter ($500,000,000 per acre). If this page were a parcel of land in Tokyo, it would sell for $10,000.

Tokyo’s high prices result from a severe shortage of buildable land. Buildings in most areas are legally restricted to less than 10 meters in height (normally three stories) for fear of earthquakes, even though recent earthquakes have demonstrated that modern, well-built skyscrapers are safer than older three-story structures. Further, Japanese tax laws favor retention of agricultural land. Although it is the world’s most populous urban area, Tokyo contains 36,000 hectares (90,000 acres) of farmland.

Two distinctive characteristics of the central city follow from the high land cost. First, land is used more intensively in
the center than elsewhere in the city. Second, some activities are excluded from the center because of the high cost of space.

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

A vast underground network exists beneath most central cities. The typical “underground city” includes multistory parking garages, loading docks for deliveries to offices and shops, and utility lines (water, sewer, phone, electric, and some heating). Subways run beneath the streets of larger central cities. Cities such as Minneapolis, Montreal, and Toronto have built extensive pedestrian passages and shops beneath the center. These underground areas segregate pedestrians from motor vehicles and shield them from harsh winter weather.

Typically, telephone, electric, and cable television wires run beneath the surface in central areas. Not enough space is available in the center for the large number of telephone poles that would be needed for such a dense network, and the wires are unsightly and hazardous.

**SKYSCRAPERS.** Demand for space in the central city 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 two inventions—the elevator and iron-frame building construction. The first high-rises caused great inconvenience to neighboring 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.

A recent building boom in CBDs of many North American cities is generating problems again. Too many skyscrapers built near each other cause traffic congestion in the narrow streets. Skyscrapers may prevent sunlight from penetrating to the sidewalks and small parcels of open space, and high winds can be channeled through the deep artificial canyons created between buildings. Construction of high-rises may also be affected in the future by the need to conserve energy. As the Sun and natural air movement are increasingly relied upon again for light and ventilation, the old complaints about high-rises may return.

Skyscrapers are an interesting example of “vertical geography.” The nature of an activity influences which floor it occupies in a typical high-rise. Some shopowners demand street-level space to entice customers and are willing to pay higher rents. Professional offices are less dependent on walk-in trade and can occupy the higher levels at lower rents. Hotel rooms and apartments may be included in the upper floors of a skyscraper to take advantage of lower noise levels and panoramic views. Residents of the world’s highest apartments, on the upper floors of the 97-story John Hancock Center in Chicago, sometimes are above the clouds. They may telephone the doorman to find out about the weather at street level.

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. The city’s CBD spreads over a much wider area than those in comparable cities.

### Activities Excluded from the CBD

High rents and land shortage discourage two principal activities in the central area—manufacturing and residence.

**DECLINING MANUFACTURING IN THE CBD.** The typical modern industry requires a large parcel of land to spread operations among one-story buildings. Suitable land is generally available in suburbs. In central Paris, manufacturing jobs declined from around 500,000 in 1970 to around 400,000 in 1980, 200,000 in 1990, and 100,000 in 2000. The Citroën automobile factory, situated along the River Seine, barely 1 kilometer from the Eiffel Tower, was replaced by high-rise offices and apartments. Warehouses on the southeast edge of the central area were also replaced by office and apartment towers. Slaughterhouses in the northeastern part of central Paris were replaced by a park and museum complex.

Port cities in North America and Europe have transformed their waterfronts from industry to commercial and recreational activities. Ships at one time docked at piers that jutted out into the water, and warehouses lined the waterfront to facilitate the loading and unloading of goods. But today’s large oceangoing vessels are unable to maneuver in the tight, shallow waters of the old inner-city harbors. Consequently, port activities have moved to more modern facilities downstream. Cities have demolished derelict warehouses and rotting piers along their waterfronts and replaced them with new offices, shops, parks, and museums.

Once-rotting downtown 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 also have 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 conventioneers.

**LACK OF RESIDENTS IN CBDs.** Many people used to live downtown. Poorer people jammed into tiny overcrowded apartments, and richer people built mansions downtown. In the twentieth century, most residents abandoned downtown living.

Residents moved away from downtown for a combination of pull and push factors. People were lured to suburbs, which offered larger homes with private yards and modern schools and escape from the dirt, crime, congestion, and poverty of the central city. At the same time, residents were pushed out of downtown by high
rents. Business and consumer services were willing and able to pay more than residents for the limited amount of space downtown.

The population of most U.S. downtowns increased an average of 10 percent during the 1990s, and the pace has increased in the twenty-first century. New apartment buildings have been constructed, and abandoned warehouses and outdated office buildings have been converted into residences. 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.

**European CBDs**

The central area is less dominated by commercial considerations in Europe than in the United States. In addition to retail and office functions, many European cities display a legacy of low-rise structures and narrow streets, built as long ago as medieval times. Today these buildings are protected from the intrusion of contemporary development. The most prominent structures may be churches and former royal palaces, situated on the most important public squares, at road junctions, or on hilltops. Parks in the center of European cities often were first laid out as private gardens for aristocratic families and later were opened to the public.

Some European cities have tried to preserve their historic core by limiting high-rise buildings and the number of cars. Several high-rise offices were built in Paris during the early 1970s, including Europe’s tallest office building (the 210-meter or 688-foot Tour Montparnasse). The public outcry over this disfigurement of the city’s historic skyline was so great that officials reestablished lower height limits. In Rome, officials periodically try to ban private automobiles from the center city, because they cause pollution and congestion and damage ancient monuments.

The central area of Warsaw, Poland, represents an extreme example of preservation. The Nazis completely destroyed Warsaw’s medieval core during World War II, but Poland rebuilt the area exactly as it had appeared, working from old photographs and drawings. The reconstruction of central Warsaw served as a powerful symbol of cultural tradition for the Polish people after the upheavals of World War II and the post-war Communist takeover.

Although constructing large new buildings is difficult, many shops and offices still wish to be in the center of European cities. The alternative to new construction is renovation of older buildings. However, 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 of comparable size.

**Suburbanization of Businesses**

Businesses have moved to suburbs. Manufacturers have selected peripheral locations because land costs are lower. Service providers have moved to the suburbs because most of their customers are there.

**Suburbanization of Retailing**

Suburban residential growth has fostered change in traditional retailing patterns. Historically, urban residents bought food and other daily necessities at small neighborhood shops in the midst of housing areas and shopped in the CBD for other products. But, since the end of World War II, downtown sales have not increased, whereas suburban sales have risen at an annual rate of 5 percent.

Downtown sales have stagnated because suburban residents who live far from the CBD won’t make the long journey there. At the same time, small corner shops do not exist in the midst of newer residential suburbs. The low density of residential construction discourages people from walking to stores, and restrictive zoning practices often exclude shops from residential areas.

Instead, retailing has been increasingly concentrated in planned suburban shopping malls of varying sizes. Corner shops have been replaced by supermarkets in small shopping centers. Larger malls contain department stores and specialty shops traditionally reserved for the CBD. Generous parking lots surround the stores. Shopping malls require as many as 40 hectares (100 acres) of land and are frequently near key road junctions, such as the interchange of two interstate highways (Figure 12–19).

Some shopping malls are elaborate multilevel structures exceeding 100,000 square meters (1 million square feet), with more than 100 stores arranged along covered walkways. Malls have become centers for activities in suburban areas that lack

St Paul’s Cathedral, designed by Sir Christopher Wren in 1673, dominates the skyline of central London. St. Paul’s survived the German air attack on London during World War II, whereas all of the surrounding buildings were destroyed.
FIGURE 12-19 Major retail centers in Atlanta. Most shopping malls in the Atlanta metropolitan area, as elsewhere in North America, are in the suburbs, not the inner city. The optimal location for a large shopping mall is near an interchange on an interstate highway “beltway.” These encircle many American cities, such as I-285 around Atlanta.

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other types of community facilities. Retired people go to malls for safe, vigorous walking exercise, or they sit on a bench to watch the passing scene. Teenagers arrive after school to meet their friends. Concerts and exhibitions are frequently set up in malls.

A shopping mall is built by a developer, who buys the land, builds the structures, and leases space to individual merchants. Typically, a merchant’s rent is a percentage of sales revenue. The key to a successful large shopping mall is the inclusion of one or more anchors, usually large department stores. Most consumers go to a mall to shop at an anchor and, while there, patronize the smaller shops. In smaller shopping centers the anchor is frequently a supermarket or discount store.

Suburbanization of Factories and Offices

Factories and warehouses have migrated to suburbia for more space, cheaper land, and better truck access. Modern factories and warehouses demand more land for efficient operation.
because conveyor belts, forklift trucks, loading docks, and machinery are spread over a single level. Suburban locations facilitate truck shipments with good access to main highways and no central city traffic congestion. Industries increasingly receive inputs and distribute products by truck.

Offices that do not require face-to-face contact are increasingly moving to suburbs where rents are much lower than in the CBD.

Executives can drive on uncongested roads to their offices from their homes in nearby suburbs and park their cars without charge. For other employees, however, suburban office locations can pose a hardship. Secretaries, custodians, and other lower-status office workers may not have cars, and public transportation may not serve the site. Other office workers might miss the stimulation and animation of a central location, particularly at lunchtime.

**SUMMARY**

Geographers do not merely observe the distribution of services; they play a major role in creating it. Shopping center developers, large department store and supermarket chains, and other retailers employ geographers to identify new sites for stores and assess the performance of existing stores. Geographers conduct statistical analyses based on the gravity model to delineate underserved market areas where new stores could be profitable, as well as to identify overserved market areas where poorly performing stores are candidates for closure. Developers of new retail services obtain loans from banks and financial institutions to construct new stores and malls. Lending institutions want assurance that the proposed retailing has a market area with potential to generate sufficient profits to repay the loan. They employ geographers to make objective market-area analyses independent of the excessively optimistic forecasts submitted by the retailer.

Many service providers make location decisions on the basis of instinct, intuition, and tradition. In an increasingly competitive market, retailers and other services that locate in the optimal location secure a critical advantage.

1. Where did services originate? Services are divided into three types—consumer (including retail, health, education, and leisure), business (including financial, professional, and management), and public (including federal, state, and local). Services originated in settlements. Early settlements, established to serve rural areas, provided primarily personal and public services.

2. Why are consumer services distributed in a regular pattern? Consumer services attract customers from market areas of varying size. Geographers calculate whether a service can be profitable within a market area. In more developed countries, market areas form a regular hierarchy by size and distance from each other.

3. Why do business services locate in large settlements? Financial, professional, and other business services cluster disproportionately in large world cities to support the operations of major corporations. World cities also play major consumer- and public-service functions.

4. Why do services cluster downtown? The central business district 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, as well as those attracting producer services.

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**CASE STUDY REVISITED**

What’s Left in the United States?

China’s manufacturing growth is highly visible to consumers when they open boxes stamped “made in China” or read about a factory closure. Much less visible is India’s growing service sector. The person at the other end of a telephone could be anywhere in the world. Increasingly, they are in India. Just as China now has the world’s largest labor force engaged in manufacturing, India now has the world’s largest labor force engaged in services.

People in the United States and other MDCs have long been told that they needed a good education to get a good job. Reinforcing this view, the manufacturing jobs being added in China and other LDCs generally do not require high levels of education or skills. In contrast, many of the service jobs being added in India have been held in the United States by college graduates. Service jobs outsourced from the United States to India include financial analysts, patent researchers, insurance claims processors, architectural drafters, radiologists, and software executives.

The lure of India for service providers, like China for manufacturers, is partly low wages. India’s universities are turning out graduates with MBAs willing to do the same job for $12,000 that Wall Street analysts have been doing in the United States for $100,000. Computer programmers paid $45 an hour in the United States can be replaced by college graduates in India willing to do the same job for $7 an hour. Adding to the appeal of India’s labor force is the ability to work in English. Fluency in English is not a critical skill for manufacturers of goods exported to the United States, but it is a critical skill for providers of services to U.S. consumers and businesses, and it is a skill available in India.

Business services are moving from the United States to India at the rate of 300,000 a year, according to Forrester Research. Another survey has estimated an annual relocation from the United States to India of 100,000 financial services jobs, 30,000 management jobs, and 20,000 architectural design jobs.

So what jobs are left in the United States? The United States added 2 million jobs in 2005. One-fourth of those jobs were in professional services, especially consulting and design. Another one-fifth of those jobs were in health-care services, one-eighth in leisure services. Though many jobs are “footloose” and susceptible

(Continued)
Recognizing that virtually all Americans are tied to the services of a large urban settlement, studies conducted by C. A. Doxiadis, Brian Berry, and the U.S. Department of Commerce divided the 48 contiguous states into 171 functional regions or “daily urban systems,” which are centered around commuting hubs (Figure 12–20). In LDCs most people are not part of a “daily urban system.” They live in rural settlements that lack access to many services. Until the gap in income between MDCs and LDCs is reduced, the contrast will continue in the level of services offered in the two sets of countries.

**KEY TERMS**

- Basic industries (p. 418)
- Business services (p. 400)
- Central business district (CBD) (p. 420)
- Central place (p. 406)
- Central place theory (p. 406)
- City-state (p. 413)
- Clumped rural settlement (p. 403)
- Consumer services (p. 400)
- Dispersed rural settlement (p. 403)
- Economic base (p. 418)
- Enclosure movement (p. 405)
- Gravity model (p. 408)
- Market area (or hinterland) (p. 406)
- Nonbasic industries (p. 418)
- Primate city (p. 411)
- Primate city rule (p. 411)
- Public services (p. 400)
- Range (of a service) (p. 407)
- Rank-size rule (p. 410)
- Service (p. 398)
- Settlement (p. 398)
- Threshold (p. 407)

**THINKING GEOGRAPHICALLY**

1. Determine the economic base of your community. Consult the *U.S. Census of Manufacturing or County Business Patterns*. To make a rough approximation of your community’s basic industries, compute the decimal fraction of the nation’s population that lives in your community. It will be a small number, such as 0.0005. Then, find the total number of U.S. firms (or employees) in each industrial sector that is present in your community. Multiply these national figures by your local population fraction. Subtract the result from your community’s actual number of firms (or employees) for that type of industry. If the difference is positive, you have identified one of your community’s basic industries.

2. Your community’s economy is expanding or contracting as a result of the performance of its basic industries. Two factors can explain the performance of your community’s basic industries. One is that the sector is expanding or contracting nationally. The second is that the industry is performing much better or worse in the community than in the nation as a whole. Which of the two factors better explains the performance of your community’s basic industries?
3. Rural settlement patterns along the U.S. East Coast were influenced by migration during the Colonial era. To what extent do distinctive rural settlement patterns elsewhere in the United States result from international or internal migration?

4. Compare the CBDs of Toronto and Detroit. What might account for differences?

5. What evidence can you find in your community of economic ties to world cities located elsewhere in North America, Western Europe, or Japan?

FURTHER READINGS


