**12**



**Services and Settlements**

**Learning Outcomes**

***After reading, studying, and discussing the chapter, students should be able to:***

**Learning Outcome 12.1.1:** Describe the three types of services.

**Learning Outcome 12.2.1:** Explain the concepts of market area, range, and threshold.

**Learning Outcome 12.2.2:** Explain the distribution of different-sized settlements.

**Learning Outcome 12.2.3:** Explain how to use threshold and range to find the optimal location for a service.

**Learning Outcome 12.2.4:** Describe the concept of periodic markets in developing countries.

**Learning Outcome 12.3.1:** Describe the factors that are used to indentify global cities.

**Learning Outcome 12.3.2:** Explain two types of business services in developing countries.

**Learning Outcome 12.3.3:** Explain the concept of economic base.

**Learning Outcome 12.4.1:** Describe the differences between clustered and dispersed rural settlements.

**Learning Outcome 12.4.2:** Identify important prehistoric, ancient, and medieval urban settlements.

**Learning Outcome 12.4.3:** Explain the two dimensions of urbanization.

**Learning Outcome 12.4.4:** Describe the location of the fastest-growing cities.

**Chapter Outline**

**Key Issue 1: Where Are Services Distributed?** Most people in developed countries work in such places as shops, offices, restaurants, universities, and hospitals. These are examples of the tertiary, or service, sector of the economy. A **service** is any activity that fulfills a human want or need and returns money to those who provide it.

**Introducing Services and Settlements** Services account for more than two-thirds of GDP in most developed countries, compared to less than one-half in most developing countries. Services cluster in developed countries because more people who are able to buy services live there. Within developed countries, larger cities offer a larger scale of services than do small towns because more customers live there. Services are located in settlements – this connection between services and settlements is of keen interest to geographers. A **settlement** is a permanent collection of buildings where people reside, work, and obtain services. They occupy a very small percentage of Earth’s surface, well under 1 percent, but most people live in settlements as few choose to reside in isolation.

**Three Types of Services** The service sector of the economy is subdivided into three types: consumer services, business services, and public services. Each of these sectors is divided into several major sub sectors:

* Consumer Services.The principle purpose of **consumer services** is to provide services to individual consumers who desire them and can afford to pay for them. Nearly half of all jobs in the United States are in consumer services. Four main types of consumer services are retail and wholesale services, leisure and hospitality services, health and social services, and education.
* Business Services.The principle purpose of **business services** is to facilitate the activities of other businesses. One-fourth of all jobs in the United States are in business services. The three main types of business services are transportation and information services, professional services, and financial services.
* Public Services.The purpose of **public services** is to provide security and protection for citizens and businesses. About 10 percent of all U.S. jobs are in the public sector. Excluding educators, one-sixth of public-sector employees work for the federal government, one-fourth for one of the 50 state governments, and three-fifths for one of the tens of thousands of local governments.

**Changing Service Employment** All growth in employment in the United States has been in services, whereas employment in primary and secondary sector activities has declined. Within business services, jobs expanded most rapidly in professional services (such as engineering, management, and law), data processing, advertising, and temporary employment agencies. On the consumer services side, the most rapid increase has been in the provision of health care, but other large increases have been recorded in education, entertainment, and recreation.

**Key Issue 2: Where Are Consumer Services Distributed?**

**Central Place Theory** The concept of **central place theory** helps to explain how the most profitable location can be identified. Central place theory was first proposed by German geographer Walter Christaller in the 1930s, based on his studies in southern Germany. August Lösch in Germany and Brian Berry and other in the United States further developed the concept during the 1950s.

**Market Area of a Service** A **central place** is a market center for the exchange of goods and services by people attracted from the surrounding area. The central place is so called because it is centrally located to maximize accessibility. Businesses in central places compete against each other to serve as markets for goods and services for the surrounding region. The area surrounding a service from which customers are attracted is the **market area** or **hinterland**.To establish a market area, a circle is drawn around the node of a service on a map. The territory around the circle is its market area. Because most people prefer to get services from the nearest location, consumers near the center of the circle obtain services from local establishment. The closer to the periphery of the circle, the greater the percentage of consumers who will choose to obtain services from other nodes. People on the circumference of the market-area circle are equally likely to use the service or go elsewhere.

**Range of a Service** The **range** is the maximum distance people are willing to travel to use a service. People are willing to go only a short distance for everyday consumer services, such as groceries and pharmacies. But they will travel longer distances for other services such as a concert or professional ball game. As a rule, people tend to go to the nearest available service. Therefore, the range of a service must be determined from the radius of a circle that is irregularly shaped rather than perfectly round. The irregularly shaped circle takes in the territory for which the proposed site is closer than competitors’ sites.

**Threshold of a Service** The **threshold** of a service is the minimum number of people needed to support the service. Every enterprise has a minimum number of customers required to generate enough sales to make a profit. So once the range has been determined, a service provider must determine whether a location is suitable by counting the potential customers inside the irregularly shaped circle. How expected consumers inside the range are counted depends on the product. Convenience stores and fast-food restaurants appeal to nearly everyone, whereas other goods and services appeal primarily to certain consumer groups.

**Hierarchy of Consumer Service** We spend as little time and effort as possible obtaining consumer services and therefore go to the nearest place that fulfills our needs. We travel greater distances only if the price is much lower or if the item is unavailable locally.

**Nesting of Services and Settlements** According to central place theory, market areas across a developed country would be a series of hexagons of various sizes, unless interrupted by physical features such as mountains and bodies of water. There are four different levels of a market area: hamlet, village, town, and city. Larger settlements provide consumer services that have larger thresholds, ranges, and market areas. Only consumer services that have small thresholds and short ranges are found in hamlets or villages because too few people live in these areas to support many services. A large department store cannot survive in a hamlet or village because the threshold exceeds the population within range of the settlement. Towns and cities provide consumer services that have larger thresholds and ranges. A city has a much larger variety of services than you would find in a hamlet or village. The nesting pattern can be illustrated with overlapping hexagons of different sizes. Hamlets with very small market areas are represented by the smallest contiguous hexagons. Larger hexagons represent the market areas of larger settlements and are overlaid on the smaller hexagons because consumers from smaller settlements shop for some goods and services in larger settlements.

**Rank-Size Distribution** In many developed countries, geographers observe that ranking settlements from largest to smallest (population) produces a regular pattern. This is called the **rank-size rule**, in which the country’s *n*th-largest settlement is 1/*n* the population of the largest settlement. The second-largest city is one-half the size of the largest, the fourth-largest city is one-fourth the size of the largest, and so on. When plotted on logarithmic paper, the rank-size distribution forms a fairly straight line. In the United States and a handful of other countries, the distribution of settlements closely follows the rank-size rule. If a country does not follow the rank-size rule, it may follow the **primate city rule**. A country’s largest city is called the **primate city**. If a country follows the primate city rule it means that the country’s largest settlement has more than twice as many people as the second-ranking settlement. The absence of rank-size distribution in many developing countries indicates that there is not enough wealth in the society to pay full variety of services. The absence of a rank-size distribution constitutes a hardship for people who must travel long distances to reach an urban settlement with shops and such services as hospitals.

**Market Area Analysis** A suitable site is one with the potential for generating enough sales to justify using the company’s scarce capital to build it. Service providers often say that the three most important factors in determining whether a particular site will be profitable are, “location, location, and location.” One corner of an intersection can be profitable and another corner of the same intersection unprofitable.The **gravity model** predicts that the optimal location of a service is directly related to the number of people in an area and inversely related to the distance people must travel to access it. The best location will be the one that minimizes the distances that all potential customers must travel to reach the service.

**Periodic Markets** A periodic market is typically 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 developing countries, as well as rural areas in developing countries, where sparse populations and low incomes produce purchasing power too low to support full-time retailing. Many 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.

**Key Issue 3: Where Are Business Services Distributed?**

**Hierarchy of Business Services** Geographers identify a handful of urban settlements known as global cities (also called world cities) that play an especially important role in global business services. Global cities can be subdivided according to a number of criteria.

**Business Services in Global Cities** Global 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 financial institutions, headquarters of large corporations, and lawyers, accountants, and other professional services) concentrate in disproportionately large numbers in global cities.

**Ranking Global Cities** Global cities are divided into three levels: alpha, beta, and gamma. A combination of economic, political, cultural, infrastructure, communications, and transportation factors are used to identify global cities and to distinguish among the various ranks.

**Consumer and Public Services in Global Cities** Because of their large size, global cities have retail services with extensive market areas. A disproportionately large number of wealthy people live in global cities, so luxury and highly specialized products are especially likely to be sold there. Global cities are also centers of national and international political power. Most are national capitals, and they contain mansions or palaces for the head of state. Structures for national legislature and offices for government agencies are also located in global cities. Also clustered in global cities are offices for groups having business with the government, such as representatives of foreign countries, trade associations, labor unions, and professional organizations.

**Business Services in Developing Countries** In the global economy, developing countries specialize in two distinctive types of business services: offshore financial services and back-office functions. These businesses typically located in developing countries for a number of reasons, including the presence of supportive laws, weak regulations, and low-wage workers.

**Offshore Financial Services** Small countries exploit niches in the circulation of global capital by offering offshore financial services. The privacy laws and low tax rates in offshore centers can also provide havens to tax dodges and other illegal schemes. By definition, the extent of illegal activities is unknown and unknowable. A prominent example of an offshore banking center is the Cayman Islands. Several hundred banks with assets of more than $1 trillion are legally based in the Caymans. Most of these banks have only a handful of people, if any, actually working in the Caymans.

**Business-Process Outsourcing** A second distinctive type of business service found in peripheral regions is back-office functions, also known as business-process outsourcing (BPO). Typical back-office functions include insurance claims processing, payroll management, transcription work, and other routine clerical activities. Traditionally, companies housed their back-office staff in the same office building downtown as their management staff, or at least in nearby buildings. Rising rents downtown have induced many business services to move routine work to lower-rent buildings elsewhere. For many business services, improved telecommunications have eliminated the need for spatial proximity. Selected countries have been able to attract back office work for two reasons related to labor: low wages and ability to speak English.

**Economic Specialization of Settlements** Settlements can be classified by the distinctive types of economic activities that take place there. All sectors of the economy—be they the various types of agriculture, the various types of manufacturers, or the various types of services—have distinctive geographic distribution.

**Economic Base** The economic activities in a settlement can be divided into two types: basic and nonbasic businesses. 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. 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. Settlements in the United States can be classified by their type of basic activity. In a postindustrial society, such as the United States, increasingly the basic economic activities are in business, consumer, or public services. The result can be a cluster of businesses that reinforce each other’s growth. For example, Boston’s basic sector in biotechnology consists of a cluster of business sectors that complement one another.

**Distribution of Talent** Some cities have a higher percentage of talented individuals than others. Talented individuals are attracted to cities with the most job opportunities and financial incentives. Individuals with special talents also gravitate toward cities that offer more cultural diversity. Florida measured talent 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. 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 in Settlements?**

**Services in Rural Settlements** Rural settlements are either clustered or dispersed. A **clustered rural settlement** is an agricultural-based community in which a number of families live in close proximity to each other, with fields surrounding the collection of houses and farm buildings. A **dispersed rural settlement** is characterized by farmers living on individual farms isolated from neighbors rather than alongside other farmers in settlements.

**Clustered Rural Settlements** A clustered rural settlement typically includes homes, barns, tools, sheds, and other farm structures, plus consumer services, such as religious structures, schools, and shops. In common language, such a settlement is called a hamlet or village. Clustered rural settlements are often arranged in one of two types of patterns: circular or linear. New England colonists built clustered settlements centered on an open area called a common. Settlers grouped their homes and public buildings, such as the church and school, around a common. Each villager owned several discontinuous parcels on the periphery of the settlements to provide the variety of land types needed for different crops. Beyond the fields, the town held pastures and woodland for the common use of all residents. However, quaint New England towns are little more than picturesque shells of clustered rural settlements because today’s residents work in shops and office rather than on farms.

**Dispersed Rural Settlements** A **dispersed rural settlement**,typical of the North American rural landscape, is characterized by farmers living on individual farms isolated from neighbors rather than alongside other farmers in settlements. The Middle Atlantic colonies were settled by more heterogeneous groups than those in New England. Most arrived in Middle Atlantic colonies individually rather as members of a cohesive religious or cultural groups. Dispersed rural settlement patterns dominated in the American Midwest in part because the early settlers came primarily from the Middle Atlantic colonies. Dispersed rural settlements were considered more efficient for agriculture than clustered settlements. A prominent example was the **enclosure movement** in Great Britain between 1750 and 1850. The British governments transformed the rural landscape by consolidating individually owned strips of land surrounding a village into a single large farm owned by an individual. When necessary, the government forced people to give up their former holdings. The enclosure movement brought greater agriculture efficiency, but it destroyed the self-contained world of village life.

**Services in Early Urban Settlements** Before the establishment of permanent settlements as service centers, people lived as nomad, migrating in small groups across the landscape in search of food and water. At some point, groups decided to build permanent settlements. Several families clustered together in a rural location and obtained food in the surrounding area. No one knows the precise sequence of events through which settlements were established to provide services. Based on archaeological research, settlements probably originated to provide consumer and public services. Business services followed later.

**Prehistoric Urban Settlements** The first ancient cities may have been in Mesopotamia. Ancient Ur, Athens, and later Rome were all centers of services more complex than those found in smaller rural settlements. Medieval cities represented an expansion of trade and increased liberty for residents compared to the life of rural serfs. Medieval cities lacked space for construction because they were surrounded by walls, so ordinary shops and houses were nestled into the side of the walls and large buildings. After the collapse of the Roman Empire, most of the world’s largest urban settlements were clustered in China.

**Early Consumer Services** The earliest permanent settlements may have been established to offer consumer services, specifically places to bury the dead. Having established a permanent resting place for the dead, the group might then install priests at the site to perform the service of saying prayers for the deceased. This would have encouraged the building of structures—places for ceremonies and dwellings. Settlements also may have been places to house families, permitting unburdened males to travel farther in their search of food.

**Early Business Services** Early urban settlements were places where groups could store surplus food and trade with other groups. People brought plants, animals, and minerals, as well as tools, clothing, and containers, to the urban settlements, and exchanged them for items brought by others. To facilitate this trade, officials in the settlement set fair prices, kept records, and created currency.

**Early Public Services** Early settlements housed political leaders as well as defense forces to guard the residents of the settlement and defend the surrounding hinterland from conquest by others.

**Ancient Urban Settlements** Settlements were first established in the eastern Mediterranean about 2500 b.c. These settlements were trading centers for the thousands of islands dotting the Aegean Sea and the eastern Mediterranean and provided the government, military protection, and other public services for their surrounding hinterlands. These settlements were organized into city-states, self-governing communities that included the settlement and nearby countryside. Athens, the largest city-state in ancient Greece, made substantial contributions to the development of culture, philosophy, and other elements of Western civilization. The rise of the Roman Empire engendered urban settlement. The fall of the Roman Empire in the fifth century caused urban settlements to decline.

**Medieval Urban Settlements** With the fall of the Roman Empire, the majority of the world’s largest urban settlements were clustered in China. Urban life began to revive in Europe in the eleventh century, as feudal lords established new urban settlements. The lords gave residents charters of rights with which to establish independent cities in exchange for their military service. After the end of serfdom, 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. By the fourteenth century, Europe was covered by a dense network of small market towns. The most important public services occupied palaces, churches, and other prominent buildings arrange around a central market square.

**Percent Urban** The process by which the populations of urban settlements grow is known as **urbanization**. Urbanization has two dimensions: an increase in the *percentage* of people living in urban settlements and an increase in the *number* of people living urban settlements. These two factors have different global distributions and occur for different reasons.

**Differences Between Urban and Rural Settlements** A century ago, social scientists observed striking differences between urban and rural residents. An urban dweller follows a different way of life than a rural dweller. These urban settlements differentiated from rural areas by their large size, high population density, and socially heterogeneous people. These characteristics produced differences in the social behavior of urban and rural residents.

**Large Size** If you live in a rural settlement, you know most of the other inhabitants and may even be related to many of them. The people with whom you relax are probably the same ones you see in local ships and at church. In contrast, if you live in an urban settlement, you can know only a small percentage of the other residents.

**High Density** High density also produces social consequences for urban residents. The only way that a large number of people can be supported in a small area is through specialization. Each person in an urban settlement plays a special role or performs a specific task to allow the complex, urban system to function smoothly. By the same token, high density also encourages social groups to compete to occupy the same territory.

**Social Heterogeneity** The larger the settlement, the greater the variety of people. A person has greater freedom in an urban settlement than in rural settlement to pursue an unusual profession, sexual orientation, or cultural interest. In a rural settlement, unusual action might be noticed and scorned, but urban residents are more tolerant of diverse social behavior. Regardless of values and preferences, in a large urban settlement, individuals can find people with similar interests.

**Percentage in Urban Settlements** The percentage of the world’s population living in urban settlements has increased rapidly, from 3 percent in 1800 to 6 percent in 1850, 14 percent in 1900, 30 percent in 1950, and 45 percent in 2000. The population of Earth’s urban settlements exceeded that of rural settlements for the first time in human history around 2008. The percentage of people living in urban settlements mirrors a country’s level of development. In developed countries, 77 percent live in urban areas, compared to 48 percent in developing countries. The gap in urbanization between developed and developing countries is closing rapidly.

**Site of Urban Settlements** Developed countries have a higher percentage of urban residents, but developing countries have more of the very large urban settlements. Seven of the 10 most populous cities are in developing countries: Jakarta, Delhi, Manila, Shanghai, Karachi, Beijing, and Guangzhou. All but 3 of the 100 fastest-growing urban settlements are in developing countries. Five of the 13 growing at more than 4 percent per year are in Africa, 3 are in India, 4 are elsewhere in Asia, and 1 is in Latin America. The three exceptions are in the United States: Atlanta, Austin, and Las Vegas are among the top 100 fastest-growing urban settlements. In developing countries, migration from the countryside is fueling half of the increase in population in urban settlements, even though job opportunities may be scarce.

**Introducing the Chapter**

Students will have a familiarity born of direct experience with many jobs in this sector, thus, it does not warrant as lengthy an introduction. Try the following icebreaker to stimulate discussion and approach central place theory in a roundabout way.

**Icebreaker: Central Places**

Choose three close together (within 100 miles of each other) towns: the one your school is located in and two others, so that the relative sizes are at least 1:5:25 (each town is at least five times the size of the next of the next). Give students an overview of each town and the population size so they are familiar. Now ask the following: which towns would be *likely* to have a . . .

* gas station?
* fast-food restaurant?
* general practitioner?
* shopping center?
* shopping mall?
* movie theater?
* theater for plays or performances?
* professional piano tuner?
* lawyer for traffic court?
* neurosurgeon?
* thrift store?
* lawyer for international litigation?
* luxury fashion shop (e.g., Fendi, Prada, Versace)?
* … etc. . . .

The examples will lead students to the “obvious” answer that the more specialized services will be located in the larger city, while the basic services will be found in every town. However, students will probably not have considered why this pattern is so predictable. You could go back through the list and ask which services are more or less specialized to reveal this, or simply begin a discussion of threshold and range.

**Challenges to Comprehension**

**Range vs. Threshold**

Though both are elementary concepts, students do not always grasp the difference between them. Here is a way to explain the distinction by comparing high-range services and high-threshold services.

High-range services are specialized enough that people will travel great distances to use them. Because they are high-range, their range by default includes a large population (all the people within the range are potential customers). However, many services are so specialized that a low percentage of people within their range will use the service. Examples include specialized medicine, some artists, or specialized producer services.

High-threshold activities can have low ranges, but need a large population to support the business. People would not travel very far for the service, so the service locates central to large populations. Examples include superstores, malls, and fast-food restaurants.

**False Hierarchies**

Students may assume that since services are presented as the tertiary sector of the economy, service jobs are intrinsically more valuable than those in the primary and secondary sectors. Disabuse them of this notion by pointing out that service jobs include low-paid, low-skill jobs like housekeeping and restaurant work.

On the other hand, some students may feel that workers in the first two sectors are the ones doing “real work,” especially if they work in those sectors. Discussions of this topic can create debates about worker productivity, Marxism, and capitalism.

**Assignments**

**Review/Reflection Questions**

* Make a list of the service jobs you’ve had, and identity each by type according to the text.
* Describe the type of job you’re hoping to start after college. Is it a service? What does this, combined with your previous answer, tell you about the range of service jobs?
* Would it be difficult to do well at the job you’ve described above if you lived in a very small town? Use the concepts of threshold, range, and central place theory to describe why high-paying jobs are easier to find in large cities.
* Present the reasoning of a person who chooses to live downtown, near the central business district (CBD). Answer as though you’re explaining to a friend why you chose to live there. Reference concepts from the text in your answer.
* Now present the reasoning of a person who chooses to live in the suburbs while they work in the city. Again, answer as though you’re explaining your decision to a friend and reference concepts from the text.

**Thinking Geographically Questions**

*12.1: Sharing services for housing, such as Airbnb, are illegal in many cities in the United States and Europe. Sharing services for transportation, such as Uber, are strongly opposed in many places. Figure 12-46 shows a protest against Uber by taxi drivers in Budapest, Hungary. Why would cities make these services illegal or difficult to use?*

Cities may want to make services like Uber and Airbnb illegal because they would lack certain regulatory oversight on services provided through these companies. While these services may be convenient for users and independent contractors, regulation is in place for a reason (e.g. cabs are routinely maintenanced and ensured to be road-worthy). Taxi driver unions and hotel lobbying organizations may also appeal to municipal governments to prevent these services from being available to citizens.

*12.2: Education services frequently attract other types of consumer services to nearby locations. What are examples of distinctive consumer services that are located near a university in your community? Why might these consumer services pick locations near a university?*

For a small university town in Alabama, my community offers a decent variety of consumer services that cater to a diverse group of people. For example, there is a Thai restaurant in the downtown area of my community – probably the only restaurant of its kind for 150 miles. This kind of consumer service would pick a location near a university because they know international students will patronize their business.

*12.3: What evidence can you find in your community of economic ties to alpha++ or alpha+ cities? Figure 12-48 offers one example.*

Similar to Figure 12-48, the only consumer services in my town that are linked to alpha++ cities are financial services, such as a Bank of America branch located downtown.

*12.4: Professional sports teams are examples of services with large ranges, thresholds, and areas, and consequently they cluster in large urban settlements. Google “Largest U.S. Metropolitan Statistical Areas.” Compare the list with the distribution of Major League Baseball teams shown in Figure 1-29. What are the largest metropolitan areas without a team? What is the smallest settlement with a team?*

Charlotte, Portland, and Orlando are the largest metropolitan statistical areas without a team. Milwaukee is the smallest settlement with a team.

**Pause and Reflect Questions**

*12.1.1: In which sectors of the economy do you or members of your family work? If in the service sector, in which types of services are these jobs?*

My father works in the secondary sector of the economy, treating lumber. I work in the tertiary sector of the economy (service), as a graduate student at a university. My job is in the public services sub-sector.

*12.2.1: What occurs in nature in the shape of hexagons? You can do an Internet search for “naturally occurring hexagons.”*

Bees make their hives in the shape of hexagons. Bees make their hives in a honeycomb shape. Geographers use hexagons to depict the market area of a good or service because hexagons offer a compromise between the geometric properties of circles and squares.

*12.2.2: Does Peru follow the rank-size rule or the primate city rule? Use you search engine to find “most populous cities in Peru.”*

Peru is definitely a good example of the primate city rule. Lima is almost 10 times larger than the second most populous city in the country.

*12.2.4: Identify an example of a periodic market in developed countries.*

A periodic market in a developed country could be a farmers’ market.

*12.3.1: How would you expect an alpha city such as Chicago to differ from a beta city such as Houston or a gamma city such as Phoenix?*

A wider variety of services would definitely be present in an alpha city compared to beta and gamma cities. There are likely to be more political institutions located in alpha cities, although Phoenix is the capital of Arizona and houses the state government, while Chicago is *not* the capital of Illinois and does not house the state government. There are probably more public transportation options in alpha cities, making urban life much easier compared to cities lacking such infrastructure; the “L” in Chicago, along with its extensive bus network, allows for one to travel the city with ease. A city that contains more sprawl, like Phoenix, may not be suitable for such a public transportation system.

*12.3.2: If it is 3 p.m. on a Tuesday where you live, what time and day is it at a call center in India? Refer to Figure 1-15.*

If it is 3:00 p.m.on a Tuesday in Alabama it would be 6:30 a.m. on Wednesday in New Delhi, India.

*12.3.3: Do settlements with high concentrations of scientists and professionals rank high on “coolness” or low? What might account for that pattern?*

Cities with high concentrations of scientists and professionals do generally mirror cities that rank high on “coolness.” These scientists and professionals may work for companies that have associated their branding with “coolness” (e.g. tech companies in San Francisco), or they may be “cool” by virtue of being a large urban settlement that attracts “cool” people that aren’t professionals or scientists.

*12.4.1: In which sector of the economy would you expect most of the residents of Newfane, Vermont, or Condicote, United Kingdom, to be employed? Why?*

I would guess that the residents of these two towns to be employed in the primary sector of the economy, as both communities seem to be rural clustered settlements surrounded by farmland or dense forestland.

*12.4.2: In prehistoric times, before the invention of settlements, why might caves have played an important role?*

People lived in caves. They provide a natural shelter from the elements.

*12.4.3: What migration factor discussed in Chapter 3 might help to explain why the percentage of people in developed countries living in urban areas may not continue to increase?*

Counterurbanization may play a role in the size of urban areas not continuing to increase.

**Explore**

Use Google Earth to explore North America’s largest shopping mall.

Fly to *West Edmonton Mall, Alberta*.

Show Ruler and measure the area occupied by the mall, including parking lots, inside the rectangle formed by the four perimeter streets. Explore the four streets that form the perimeter of the mall by zooming in to eye alt around 2,500 ft and dragging to Enter Street View.

Large consumer service centers such as a mega-mall often attract other consumer services nearby.

1. Can you see any evidence of consumer services adjacent to the mall? Why might the continent’s largest mall have relatively few services immediately adjacent?

It doesn’t appear as if there are any consumer services adjacent to the mall. There might be few services immediately adjacent to the mall because all of the services are located in the mall itself.

1. What is the principal use of land on the other sides of the four perimeter streets?

The land surrounding the mall is primarily used for residential purposes.

1. What evidence do you see of transportation services for people to arrive other than in individual passenger cars?

It appears as if there are multiple bus stops surrounding the mall, allowing for public transportation to the mall.

**GeoVideo Questions**

1. *How does Serhiy’s family earn its living? What is Serhiy’s contribution?*

Serhiy’s family earns its living by farming. Serhiy’s contribution is to feed the livestock every day, along with personally being responsible for rabbits.

1. *How does Serhiy rate the advantages and disadvantages of village life versus city life?*

Serhiy appreciates the communal feeling of village life, but notes that nobody in his graduating class plans to stay in his village once finished with school. In the city, he remarks that he will be among people who do not share in this sense of community, but that the tradeoff is more opportunity for personal development.

1. *Describe Serhiy’s plan for his life. Does it seem reasonable? What is the alternative?*

Serhiy plans to enroll in the military academy and aims to become a pilot. This seems reasonable, as Serhiy appears to be a capable young man, although only one-in-four applicants to the academy are accepted. If this doesn’t work out, he plans on pursuing a career as a computer programmer.

**Resources**

**U.S. Department of Labor Bureau of Labor Statistics**

This website provides enough statistics on labor and industry to last a lifetime: www.bls.gov/.

Detailed statistics are available on labor, job markets, inflation, productivity, unemployment, and much more.

**U.S. Census Bureau Service Annual Survey**

http://www.census.gov/services/index.htmlThis website details statistics (some collected quarterly) on employment in the service sector. This site includes definitions of each service industry (type), detailed data on each type, and the survey forms used to collect the data.

**Connections between Chapters**

**Back to Chapter 11**

As industrial jobs are lost to higher productivity or simply “offshored,” service jobs represent the majority of job growth in the developed world. Technology and efficiency has been able to create site and situation factors which allow some jobs to move, but many services are location-specific to where the market is.

However, an excellent example of the rapidity of this change is the increasing number of North Americans (though still very small) who travel to places as far away as India for surgery or other healthcare to save medical costs. Not even doctors’ jobs are completely safe in the global marketplace!

**Forward to Chapter 13**

The transition is nearly seamless since Chapter 12 already introduces the fact that settlements and services occur together. With earlier discussions of central place theory and the hierarchical organization of settlements, students should be prepared to delve deeper into urban geography.