Chapter 8

Parking

8.1 Parking Demand

Parking is one of the most critical issues facing any retailer or shopping district today (Figure 8-1). Unlike work, school, or obligatory tasks, most shopping trips are elective activities. People do not have to shop and will often avoid downtown commercial districts or suburban shopping centers if parking is difficult to find or challenging. If parking is not readily available, potential customers will simply continue on their way, often to alternative shopping areas. If a street space or surface parking is available, even for a small fee, these customers will likely stop and shop.

Easy-to-use, clean, well-lit parking is essential to the sustainability of shopping districts and their individual stores. It should be logically organized, hassle-free, and nonthreatening to the consumer. Nonetheless, parking should not dominate the site plan for town centers or shopping centers. New town centers should be planned with storefronts lining pedestrian-oriented streets that have convenient on-street parking. Whenever possible, new shopping



Figure 8-1
Urban shopping villages and towns rely on convenient on-street parking and passing vehicular traffic for their lively hood. Shown: An active Irish town. Robert J. Gibbs

centers should be modeled on walkable, urban environments where retail stores are built near the sidewalk edge and parking is within an easy walk.

Parking—size, design, and layout—needs to be functionally appropriate to the retailers and the type of shopping center that it serves. There is an inverse correlation between the time it takes for consumers to find a place to park and then walk to stores or restaurants and the amount of time they are willing to spend shopping or dining. If the search for parking takes longer than the actual store visit, consumers will consider parking inconvenient or too difficult. This is particularly true for the short shopping trip to a convenience store or a neighborhood retailer, such as a coffee shop, cleaner, florist, or carry-out restaurant.

Shoppers have a peculiar relationship to their parking spaces. They form habits, and most shoppers will seek the same aisle or stall they used on their first visit for all subsequent shopping trips. If they can see the entrance to the store or shopping center from their parking spot, people will consider that parking space as being convenient and close—though it may be hundreds of feet away. In standard suburban shopping centers, for example, the closest general parking stall is usually 100 feet from the entrance or the nearest store, which is equivalent to walking almost third of a typical city block.

In contrast, these same shoppers will demand parking directly in front of the destination store in a small town or convenience center. Their reluctance to park in remote lots diminishes when a shopping district reaches a critical mass of over 250,000 square feet of general-merchandise business, the minimum size for accommodating a broad range of desirable retailers. Lifestyle and regional centers, as well as large towns and cities, have the variety and breadth of retail activity to require both convenient on-street parking and more remote parking facilities.

In all cases, when the favored parking aisle becomes unavailable or when the view of the storefront becomes blocked, many shoppers will conclude that parking has become problematic and, at best, inconvenient. As a result, many of these shoppers will ignore the next impulse to visit that store or shopping area and explore alternatives. Such behavior may not seem fair or even logical, but it is practiced by most consumers—a reality that must be addressed in the planning and design of any commercial center.

8.2 Historical Information on Parking Ratios and Indices

In 1949, the ICSC first defined the metric of "parking ratio" as the relationship between space allotted for the parking and the space occupied by the building.² Building space in this metric was determined in terms of gross floor area; building use was considered for planning purposes only. The parking ratio was calculated as a simple ratio, with a standard assumption given for the amount of space occupied by each car.

Initially called a parking index, the measure referred to today as a "parking ratio" is defined as the number of parking spaces made available per 1,000 square feet of gross leasable area (GLA). Prior to 1954, this was computed as "the total area devoted to parking [compared with] the net retail area of the stores." See Table 8-1.

Table 8-1		
Year	Standard	Notes
1949	10 cars/1,000 sf GLA ^a	Equivalent to a 3:1 parking ratio with 300 sf/car assumed ^b
1960	6 cars/1,000 sf GLA	Said to be "ample provision" for regional centers; 5 cars/1,000 sf GLA was the lowend figure ^c
1965	5.5 cars/1,000 sf GLA	Recommended standard for all shopping centers ^d
1977	5 cars/1,000 sf GLA; 4 cars/1,000 sf GLA with off-site employee parking during peak sales days ^e	Study did not immediately change the ULI standard of 5.5 cars/1,000 sf GLA ^f
1982	5 cars/1,000 sf for GLA >600,000 sf 4.5 cars/1,000 sf for 400,000– 600,000sf GLA ^{1g} ; 4 cars/1,000 sf GLA for 25,000– 400,000 sf GLA	At a GLA >1.2 million sf, the ratio drops below 5 cars/1,000 sf. At the time, too few centers of this size existed to accurately quantify a precise figure ^h
1998	4.5 cars/1,000 sf for GLA >600,000 sf; 4.25 cars/1,000 sf for 400,000– 600,000sf GLA ⁱ ; 4 cars/1,000 sf GLA for 25,000– 400,000sf GLA ^j	Figures are for centers with less than 20% of GLA devoted to restaurant, entertainment, or cinema space. If these uses constitute >20% of GLA, shared parking methodology is recommended for computation.k

^aExpressed as "net retail area"; equivalent to GLA

^blbid, p. 12.

^cCommunity Builders' Handbook (Washington, DC: Urban Land Institute, 1960), p. 303.

^dCommunity Builders' Handbook (Washington, DC: Urban Land Institute, 1968), p. 342.

eTechnical Bulletin 53, Parking Requirements for Shopping Centers (Washington, DC: Urban Land Institute, 1965).

fR. C. Gem, "Parking Demand at the Regionals, "Urban Land, May 1977.

glean M. Keneipp, "Demand," in The Dimensions of Parking (Washington, DC: Urban Land Institute and National Parking Association, 1979), pp. 17-22.

hAverage of 4.5 cars; standard was a linear progression ranging from 4.0 to 5.0 cars as GLA increased from 400,000 to 600,000 sf.

Parking Requirements for Shopping Centers (Washington, DC: Urban Land Institute and International Council of Shopping Centers, 1982), pp. 14-15.

Average of 4.25 cars; standard was a linear progression ranging from 4.0 to 4.5 cars as GLA increased from 400,000 to 600,000 sf.

kIn those cases where centers had 11–20% GLA devoted to entertainment, restaurant, and cinema uses and the total center size ranged from 480,000 to 2.5 million sf GLA, recommended ratios ranged from 4.53 cars/1,000 sf GLA to 4.8 cars/1,000 sf GLA.

Accepted parking ratios for regional centers have declined from 10 cars per 1,000 square feet of building area during the 1960s to 4.0 to 4.5 per 1,000 square feet today (see Table 8-1). Industry leaders acknowledge that the current parking ratio is necessary only for the 20 most active shopping days of the year. Nonetheless, this nearly three-week period generates most of the annual revenue for regional centers and is considered crucial to their economic sustainability. It is plausible that as shopping centers continue to be developed in dense mixed-use areas, the required parking ratios will further decline.

A 2006 University of Connecticut parking study 5 found that peak demand for regional centers can be as low as 2.3 parking spaces per 1,000 square feet of occupied gross building area. However, the retail industry is presently implementing parking ratios of 4.0 to 4.5 as the minimum required for most shopping centers.

Corner Stores and Convenience Center Parking

Consumers have little patience when shopping at corner stores and convenience centers: they have come to expect quick, hassle-free parking. Corner stores and convenience centers (unanchored shopping centers with less than 30,000 square feet of building area each) provide shoppers with quick and easy access to a limited selection of food, sundries, personal services, and banking in exchange for convenience. Such stores offer expediency in use, not high levels of service or low prices. If milk, bread, or beer is needed at the last minute, the typical homemaker is willing to pay more within a smaller range of choices when the store is closer to home and parking is easier than at a full-service supermarket. Ironically, convenience centers are sometimes inconvenient. To be successful, convenience shopping must live up to its name.

CONVENIENCE SHOPPING MUST BE CONVENIENT

Most corner stores and convenience centers must have free parking near their entrances unless they are located in high-density, pedestrian-oriented urban areas. The parking can be on the street or in a small parking lot, so long as it is readily accessible and close to the store's entrance. If the location allows, such a business can have front and back entrances, with a small parking lot in the rear and on-street or frontage street parking along the storefront. In the case of national chains that rely on consumers to impulsively stop and shop, parking must be visible from the adjacent highway or street.

In general, corner stores and convenience centers require 3.5 to 4.0 parking spaces per 1,000 square feet of gross building area, including on-street parking. Each parking stall must have a high turnover rate, often 8 to 10 vehicular changes per hour. These busy surface parking lots require high levels of maintenance for trash removal and cleaning. Because the parking required for a convenience center is much smaller than for a shopping center, the parking lot can be designed to parallel the building footprint. In some cases, the parking demand for corner stores and convenience centers can be met with on-street stalls.

8.3 Neighborhood Center Parking

Incorporating 60,000 to 90,000 square feet of retail space anchored by a supermarket, neighborhood centers generate frequent visits from shoppers residing within

a 1- to 2-mile trade-area radius in suburban areas. Although shoppers are willing to walk farther in neighborhood centers than in convenience centers, in most cases (and then in dense urban centers) they still expect to see the entrances to the center and its retailers from the place where they parked. Supermarket shoppers simply will not tolerate inconvenient parking (Figure 8-2).

Supermarkets have high sales volumes but often generate slim profit margins, forcing their operations to focus on attracting and drawing in every potential customer. The last thing a manager wants is for the parking lot to appear full, compelling potential shoppers to forego stopping and seek an alternative location, which could become a permanent switch for future purchases. As a result, supermarkets object to businesses that generate high volumes of parking from opening nearby. These businesses could be anything from a restaurant or coffee shop to a fitness club or pharmacy. For mutual economic viability, planners should place these businesses as far away as possible from supermarkets. Although a grocery trip can consume more than an hour of a shopper's time, most visits to a supermarket and its nearby businesses will be short and purpose-driven. In contrast to shopping in a downtown, lifestyle, or regional center, consumers frequenting neighborhood centers tend not to stroll casually between shops seeking to make an impulse purchase.

Planners need to be aware that the economics of neighborhood-center commerce requires the smaller inline retailers and restaurants to generate enough sales and dining revenue to subsidize the supermarket anchor. For its economic survival, the neighborhood center must be planned so that its building placement and parking design ensure that the entrances to inline businesses are visible from both the parking lot and the supermarket's entrance and exit. The parking-lot surface should be well lit for safety and visibility, and be level, dry, and ice-free for ease



Surface parking lots can be more walkable with landscaping and civic art. Shown: garden walkway, Wildwood, Missouri. Gibbs Planning Group, Inc.

of shopping cart use. The heavy use of shopping carts also requires wider parking stalls than in other types of retail centers.

Neighborhood centers should be planned to have parking ratios high enough to handle peak periods of use, which commonly occur on weekends. As a rule of thumb, a 50,000-square-foot supermarket requires 250 to 275 parking stalls within a 250-foot radius of its entrance, or a parking ratio of 4.5 to 5.0 cars per 1,000 square feet of gross building area (Figure 8-3). The balance of the neighborhood center's retailers can often be developed with as few as 3.5 cars per 1,000 square feet of gross building area. Together, this yields a blended ratio of 4.0 to 4.5 cars per 1,000 square feet of total neighborhood center building area.

In suburban locations, neighborhood centers with a supermarket, multiple sitdown restaurants, and two to three high-volume tenants may require parking ratios in excess of 5.0 cars per 1.000 square feet. High-volume restaurants frequently require up to 10 cars per 1,000 square feet of GLA. The supermarket and parking lot should be visible from the busiest street, and its aisles should be oriented to the supermarket's entrance.

In planning for future growth, especially for businesses not yet established, many developers prefer a parking ratio of 4.8 or higher to accommodate unforeseen industry trends and to ensure long-term financial sustainability for the center. In such cases of piecemeal growth, large underused parking fields can be avoided in markets with moderate land values by installing landscaped areas as placeholders for future parking and building development. Note that significantly lower parking ratios are sustainable in many urban locations.

Parking decks can be adapted to multilevel neighborhood centers by installing vertical circulation systems, such as sloped ramps or "cart-o-lators." In these



Most suburban and rural supermarkets require 250 or more parking stalls located adjacent to their front entry. Decked parking and smaller ratios can be supportable in dense urban locations. Robert J. Gibbs

situations, the parking level with direct access to the supermarket should be designated for its shoppers. Like other retail garages, these garages must be well lit, clean, airy, and high-ceilinged.

8.4 Community Center Parking

Sized between neighborhood and regional centers, community centers average 250,000 to 350,000 square feet in total gross building space. Community centers include large-format anchors, such as home improvement and discount department stores, along with 8 to 12 large junior-anchor retailers, each averaging 10,000 to 20,000 square feet in size and selling crafts, electronics, office supplies, pet supplies, sporting goods, or groceries. Restaurants and smaller shops are usually located as one-acre parcels in parking lots.

Typical consumers of these centers make purpose-driven trips to one or two stores, often driving between them. For most suburban locations, large surface parking lots are necessary, with parking ratios ranging from 4.0 to 4.5 cars per 1,000 square feet of building area. Though these centers have a proven business format, they often lack all sense of pedestrian comfort and any semblance of urban form.

Developers and planners now have the opportunity to significantly improve the economic sustainability and walkability of the standard community center. They can do this by adopting new urbanist and smart growth planning, as well as design concepts for linking outparcel businesses with retailer-lined streets. Recently, new infill designs for community centers with adjacent parking decks have been built in high-density urban areas. In some of these developments, large-format retailers are stacked, allowing each one to have direct access to its designated level of parking.

8.5 Regional Center Parking

Averaging almost 1 million square feet of retail space, including several fashion department stores and a large variety of retailers and restaurants, regional centers attract shoppers from a considerable distance. Once they arrive, these shoppers tend to visit numerous stores, each for an extended period of time.

Unlike shoppers making a quick purpose-driven visit to a convenience, neighborhood, or community center, shoppers in regional malls or major central business districts park once and walk throughout the center before returning to their cars. In exchange for the greater variety of stores and merchandise these centers offer, consumers are willing to park farther away from storefronts than they would in smaller shopping or urban centers. On subsequent visits, they prefer to park in the same aisle they used on their initial shopping trip, similar to the pattern of shopping in other centers.

The layout and design of a regional center's parking lots and circulation roads are given considerable attention, often involving debates reflecting the conflicting interests of the developer and the anchor tenants. Shopping center developers receive little or no rent revenue from most department stores, and thus aim to have shoppers flow directly into the center's interior rather than through those anchor stores. Conversely, department store owners demand that parking placement and alignment be directed to the entrances of their stores. Given the importance of anchors to the overall productivity of a regional center, department stores' parking requirements and other demands usually prevail.

In the past, two-level regional centers struggled financially because shoppers resisted climbing stairs or riding escalators to enter at the second floor. To solve this problem, Taubman Centers introduced the graded parking lot in the early 1970s so that shoppers could enter at the second floor directly from their cars. Today, upper-level parking accounts for up to 60 percent of the surface parking in many of their regional centers.⁶⁻⁸

Suburban regional center parking fields are often laid out in a circular pattern resembling a fried egg, where the center is the yolk. Similar to other centers, all parking aisles should lie perpendicular to the center's entrances. Large parking fields should be broken into smaller parking areas separated by landscaped islands. Where entry roads meet the center's outer ring road, "T" intersections are formed with islands, called "canoes" because of their shape. The landscaped canoes direct traffic around parking isles to improve safety and vehicular flow.

8.6 Lifestyle Center Parking

Lifestyle centers combine convenience and ample merchandise selection in openair semiurban settings. Shoppers have the option of making a quick purchase or staying for longer periods to shop or dine.

A relatively new shopping center type, this center has succeeded in offering busy, time-pressed consumers the opportunity to purchase preferred national brands—soft goods and home furnishings—without having to wend their way through an entire shopping center or enclosed mall. Rather, they can run in and out of a targeted store in minutes, often on their way home from work or other activities. Lifestyle centers can accommodate these purpose-driven trips to a specific retailer by having an urban street pattern where buildings line streets with on-street parking. Such a layout offers the convenience of purchasing department store merchandise in smaller, easily accessible storefront shops.

Early lifestyle centers did not have department stores and were a fraction of the size of regional centers. Nonetheless, with 30 to 40 popular retailers and restaurants occupying 150,000 to 250,000 square feet of building space, these centers had and continue to have the critical mass of retailers necessary to serve as destination shopping districts. Modern lifestyle centers incorporate several department stores and a specialty grocery or supermarket to establish the essential retail critical mass and consequent shopper traffic.

Lifestyle centers are urban in form, with retail buildings grouped on blocks that face streets. Unlike conventional strip centers, they do not have large parking fields. Rather, most of the convenient storefront parking can be accommodated on streets (preferably metered), while the larger lots or decks can be hidden behind retailers. Some lifestyle center businesses, such as grocery stores, junior anchors, and, if included, department stores, may require large parking fields in front. If the

site allows, these businesses can be pulled off to the side and oriented to the busiest street.

Off-street parking lots and decks are necessary for long-term shoppers and employees. The economics of most lifestyle centers require surface lots rather than decks unless 50 percent or more of the total commercial space is for professional offices, which can share some of the parking.

Saving the consumers time is the key to the success of lifestyle centers. They require both convenient storefront parking and remote off-street surface lots or decks. For these centers to compete with large regional centers, 10 percent or more of their visitors—the short-term shoppers—must be able to find parking near or directly in front of their destinations. Long-term visitors will likely park once and cross-shop the entire center. These consumers can easily spend over two hours shopping, dining, or watching movies, and usually take more time to park and reach their first destination.

8.7 Village and Town Downtown Parking

Like the layout, location, and design of parking for shopping centers, sound parking strategies for a historic downtown depend upon its business mix. Retail shopping in hamlets, villages, and many small towns is often limited to neighborhood goods and services, such as hardware stores, small groceries, personal services, and specialty retailers. In most cases, these small to medium-sized businesses rely on purpose-driven shoppers and do not serve as general-shopping destinations. The typical shopper may drop by the hair salon, pick up flowers, stop at the bank, or call on the doctor without making any other visits (Figures 8-4 and 8-5).



Figure 8-4 Coastal towns frequently develop parking lots along their waterfront and orient their storefronts to the highway. Shown: Fish Don't Shop, Damariscotta, Maine. Gibbs Planning Group, Inc.



Figure 8-5
Damariscotta, Maine's commercial stores line its main street rather than the waterfront to take advantage of vehicular traffic and to offer its visitors convenience. Gibbs Planning Group,

Village and small-town shoppers expect to be able to park within a short distance of their destination, if not in front of it. In general, parking meters should not be installed in hamlets, villages, or towns with less than 50,000 square feet of commercial space unless on-street parking is consistently unavailable. On-street parking near or on the same block—and preferably on the same side—as a store or restaurant is essential to the economic sustainability of that establishment. Excluding major tourist-oriented regions, few small villages and towns have the critical mass of businesses necessary for a visitor to spend more than an hour shopping or dining. In these instances, downtown parking requirements are similar to those for convenience centers.

For most people visiting a small town, parking in remote off-street lots or decks requires too much time and effort if the visit is short. Not only does the visit seem less than worthwhile, it also creates a negative perception regarding the value of the town's goods and services. Remote parking areas are necessary, however, for long-term users, such as retail store and office employees. These surface lots can also serve as land banks for future parking decks or infill development.

8.8 Large Town and City Parking

Large towns and cities whose commercial centers offer the variety and critical mass of retail stores and entertainment necessary to occupy at least one hour of a consumer's time require both on-street and off-street parking. To serve as a shopping destination, a downtown commercial district must generally exceed 100,000 square feet of viable retail, restaurant, and office uses. In contrast, a suburban shopping

center requires at least one anchor plus 150,000 square feet of retail stores and restaurants to become a viable shopping destination. Smaller downtowns without competitive retail stores can become destination-shopping districts through effective management, such as grouping popular restaurants and niche retailers.

Shoppers using convenient on-street parking will generate the bulk of retail sales for large downtown centers. Given their greater variety and breadth of shopping, dining, and entertainment selections, downtown centers will also draw visitors willing to take the time to use off-street parking lots and garages. In these cases, parking fees should be relative to a stall's convenience. Prime on-street spaces should be metered and more expensive than outlying on-street stalls, off-street surface lots, and parking garages. If possible, surface lots should be free or nearly free and garages entirely free during the first two hours of use. Though many shoppers are willing to pay a nominal fee (\$1 to \$2, for example) for the luxury of parking near their destinations, more frugal shoppers and employees should be rewarded for their extra walk.

8.9 On-Street Parking

On-street parking is the preferred parking location for most shoppers and employees. When metered and properly managed, each space can have a turnover of 18 to 22 cars per day, which is equivalent to three to five parking lot stalls (Figure 8-6).

Ideally, parallel parking spaces should line the primary streets serving downtown commercial districts and shopping centers. Although more difficult to navigate, parallel stalls are preferable to head-in parking, since they mask the front and



Parking meters are commonly installed in new shopping centers at prime locations to allow for easy parking by busy shoppers. Time is considered the new luxury by many young families and career builders. Shown: Woodlands Town Center, Houston, Texas. Gibbs

rear of vehicles while providing a solid shield between sidewalk pedestrians and vehicular traffic. Diagonal head-in parking should be located on less active side streets.

Many drivers avoid parallel parking because it is too challenging. Nonetheless, the benefits of parallel-parked cars to pedestrians outweigh any inconvenience to motorists. As an alternative, traffic planners have started to promote back-in parking stalls on urban streets. While these stalls are easy to negotiate when leaving the shopping district, they are much more difficult to enter than diagonal head-in stalls. Planners should concentrate on making it as easy as possible for shoppers to enter and park in retail centers, not on the ease of leaving once purchases have been made.

8.10 Parking Garages and Decks

Well-planned and well-managed garages are essential to the success of shopping districts in large towns and cities. Their decks provide parking for long-term shoppers and, more importantly, for retail employees, office workers, and patrons of major anchors, such as cinemas and restaurants. The decks also provide spaces for valet parking services.

Parking decks for shopping districts should be designed, constructed, and managed to a higher level than office or residential garages since most shopping visits are elective activities. Parking decks also represent a visitor's first and last impression of the shopping destination. A dirty, poorly lit, and confusing deck is not only threatening to shoppers, but also gives the impression that the goods and services offered at the center are low in value, poor in quality, and dated. This is especially true for downtown decks, which tend to be unsightly when compared to those in shopping centers.

Parking decks in downtowns and shopping centers should have floor-to-ceiling heights of 8 to 12 feet, painted surfaces, color-corrected lighting, logical signage and way-finding graphics, and office-quality finishes for elevators and stairwells. Although painted and finished surfaces require more maintenance than exposed concrete and steel, they are essential to giving new customers a positive first impression of the shopping destination (Figure 8-7).

Whenever possible, light wells should be designed to bring natural light into the deck's center and elevator areas. Motorists and pedestrians will be naturally drawn to these well-lit areas, making navigating the deck more intuitive and less confusing. In the evening, these light wells should be artificially illuminated to levels higher than those in surrounding deck areas.

To increase the sense of security, stairwells, elevator shafts, and all doors should be well lit and transparent or have ample clear glazing. Ticket booths should be manned during all hours of operation. Fully automated ticketing machines can be confusing and may malfunction, frustrating shoppers and likely discouraging them from returning (Figure 8-8).

Parking garages should be located adjacent to, or within a block of, the prime shopping destination. Located in midblock, garages can provide easy access to both primary stores and nearby restaurants. Ideally, the garage should be located so



Figure 8-7 Shopping district parking decks should be designed with high ceilings, good lighting, and clean painted surfaces. Gibbs Planning Group, Inc.

that motorists can enter with an easy right-hand turn. At the entrance, the garage should have large, illuminated signage that is coordinated with the municipal wayfinding system.

Parking decks have level floors connected by vehicular ramps, either spiral or straight. Parking ramps have sloped floors that provide both parking and vehicular



Figure 8-8 Parking machines often malfunction and should not be substituted for manned ticket booths in shopping center parking decks. Gibbs Planning Group, Inc.

circulation between floors. In shopping districts, decks are preferable since level surfaces are easier for shoppers to maneuver and to orient themselves.

Since shoppers tend to become attached to their initial parking spot, replacing surface lots with decks—no matter how well designed and planned—can be a challenge. The author was surprised to discover this phenomenon in the mid-1990s while conducting focus group interviews regarding Rodeo Drive in Beverly Hills, California. Beverly Hills has some of most well-designed and well-managed garages in the world, with painted surfaces, excellent lighting, and coordinated graphics. Some of the garages could pass for finished commercial interiors. Nevertheless, focus group members complained about the Rodeo Drive garages but were content with nearby shopping centers' garages.

Compared to the Rodeo Drive garages, the competing centers' garages were dark, confusing, and poorly maintained. Why did the focus group prefer these older garages to the new ones in Beverly Hills? As it turned out, when those shoppers first visited the nearby center, they parked in its garages and, as a consequence, felt comfortable parking there on subsequent visits. They had become accustomed to using the surface lots the Rodeo Drive garages replaced. When compelled to use the new garages, these focus group members felt cheated and inconvenienced, no matter how nice the new city garages turned out to be.

This author has discovered that numerous cities have inadvertently suppressed market growth because their shopping districts either do not have enough parking garages or have none at all.

8.11 Parking Meters

Parking meters are a must for medium-sized to large towns, cities, and new town centers. The old-fashioned coin-operated parking meter is underrated in importance and is crucial to the success of a commercial center (Figure 8-9). Meters are familiar and easy to use, require little reading to understand, and tend to work in even the most severe weather. Coins are easily carried in pockets or stored in cars and can be exchanged for paper currency from sympathetic business owners and fellow shoppers. Modern meters have new technologies for accepting credit cards, prepaid cards, and wireless payments via cell phones, which are great attributes so long as the meters continue to accept coins. Meters that show expired minutes and allow for a grace period engender a sense of fairness.

Time is the new luxury. Most shoppers in medium-sized and large downtowns will gladly pay a reasonable fee for convenient metered parking. However, more frugal or long-term shoppers should be given an opportunity to park in more remote spaces. Ideally, preferred on-street parking spaces should cost twice as much as remotely located stalls. If possible, outlying surface parking lots should be very inexpensive or at least free for the first two hours of use.

Parking meters are the only proven method for deterring business owners and their employees from parking directly in front of their stores. Although occupying convenient customer parking is counterproductive and thus not rational, store owners and employees simply cannot help themselves. There is no known practical parking management method to deter self-centered employees or store



Figure 8-9
Computer-operated parking machines are too complicated for many users and contribute to a frustrating shopping experience. Some cities have removed the machines and replaced them with traditional coin-operated meters. Robert I. Gibbs

owners from using their preferred spots. Employees have been known to go to great lengths to protect their spaces, including coating their tires with chemicals to repel the meter patroller's chalk.

The city of Birmingham, Michigan, is a proven example of the potential economic stimulus that well-planned and managed parking decks can provide. Birmingham has a population of only 19,000, but over 1 million square feet of retail and restaurant space and 1.5 million square feet of office space, the result of having five parking decks dispersed along the edges of its central business district. The city offers free parking for the first two hours in all of its five decks. On-street parking is metered, expensive, and well policed. As a result, shoppers can almost always park near a destination if they are willing to pay for the convenience.

Recently, many downtowns have been replacing individual parking meters with clustered parking pay stations. These stations are reported to offer shoppers greater convenience because they can be programmed to accept credit cards and paper currency. City managers and urban designers prefer clustered meters because they eliminate the clutter of multiple meters, shortening the time needed for collections and enforcement.

Unfortunately, clustered parking meters are nearly impossible for some shoppers to use. Even well-designed pay stations require multiple steps and careful reading of detailed instructions. Elderly, visually impaired, or non-English-reading users may find the machines difficult to use. These machines also lengthen the duration of the parking event considerably: users must find their stall numbers, locate

the pay station, and walk from their cars and then deal with the machine. In some cases, a pay receipt must be placed inside the vehicle, requiring users to return to their cars. If the station is located in the opposite direction from the desired retail store, the shopper may have to walk a considerable distance out of his or her way to pay for parking.

Although the time and distances required to pay at a remote station may be only minutes, the whole experience can be frustrating to many shoppers, exaggerating their perception of difficult-to-use or inconvenient parking in that downtown or shopping center. It cannot be overemphasized that time is the new luxury, and asking shoppers to pay for inconvenient parking is counterproductive and shortsighted. Municipal authorities would be wise to safely store the displaced oldfashioned coin meters for future use. Recently, Birmingham, Michigan, removed a test group of cluster parking meters because of frequent malfunctions and shopper complaints.