# Supply of Transient Accommodations 

A hotel appraiser should be familiar with both macro and micro hotel supply factors. Long-term macro supply trends often have a significant effect on local hotels, particularly with respect to hotel size, layout, design, chain affiliation, financial structure, and type of management. An understanding of the micro supply is needed to predict the relative competitiveness of area properties and to estimate the subject property's probable market share.

## Macro Supply

It has traditionally been difficult to determine the macro supply for transient lodging accommodations within the United States because there was no uniform, long-term census that quantified the number of hotel units on a yearly basis. One of the problems relates to definition. What constitutes a lodging facility? Should properties such as rooming houses, residential hotels, dor-
mitories, camps, seasonal resorts, and motels of fewer than 10 units be included? The U.S. Bureau of the Census has information dating back to 1939, but the definition of a lodging facility used at that time included many properties that would not be considered competitive lodgings today.

Today the hotel data-consulting firm of Smith Travel Research (STR) addresses the problem of quantifying the supply of hotel and motel rooms in the United States. STR has become the best source of hotel operational data in the industry. STR tracks the number of lodging units currently operating in the United States and compiles occupancy, average room rate, and other operational statistics on thousands of hotels and motels throughout the nation. This information is then published in composite form and made available to subscribers of Lodging Outlook. STR can also be commissioned to generate specific data such as information on market share and penetration, or produce a trend report detailing supply, demand, occupancy, average rate, and RevPAR trends for a specific collection of hotels. (RevPAR is defined in the subsequent pages.) As noted previously in this text, STR may be contacted at (615) 824-8664, or on-line at www.str-online.com.

## Occupancy, Average Rate, and RevPAR Data

Table 4.1 identifies historical and projected trends in supply, demand, and occupancy for the United States, based on data provided by STR, as well as HVS International. Between 1970 and 1998, the number of hotel rooms in the United States increased at an average annual compounded percentage rate of $2.4 \%$. Between 1990 and 1998, the rate of growth equated to $1.8 \%$ per year. Recession in the early 1990s, and oversupply throughout the industry, slowed growth to a low of $0.3 \%$ in 1993. As the industry stabilized, the environment for additional gains in supply improved. Gains of $3.5 \%$ and $3.9 \%$ were noted in 1997 and 1998, respectively. Demand growth was outpaced by supply growth between 1970 and 1998, driving the national occupancy rate down from $71.4 \%$ in 1970 to $64.0 \%$ in 1998. The national occupancy rate has generally remained in the range of $60 \%$ to $65 \%$ since 1982. The strongest national occupancy rate noted on the chart, $72.3 \%$, was recorded in 1979. The lowest national occupancy rate, $61.9 \%$, was recorded in 1991.

STR also records average rate and RevPAR trends for the nation. Table 4.2 identifies historical and projected trends in national average rate, occupancy rate, and RevPAR. RevPAR equates to revenue per available room and is calculated as the product of occupancy and average rate. Because it accounts for both occupancy and average rate together, this figure provides the best overall measure of revenue-generating results for a single property or a group of hotels. For example, a hotel operating at a $55 \%$ occupancy rate with a room rate of $\$ 65$ has a RevPAR of $\$ 35.75$ ( $55 \%$ x $\$ 65$ ). This hotel is generating more rooms revenue than a hotel with a $70 \%$ occupancy rate and a room rate of \$50, which has a RevPAR of $\$ 35$ (70\% x $\$ 50$ ). Table 4.2 also sets forth the CPIU (Consumer Price Index for Urban Consumers). A comparison of national average rate growth trends with the CPI-U is meaningful.

Between 1970 and 1998, the national average rate increased at an average annual compounded percentage rate of $6.2 \%$, slowing to $3.7 \%$ between 1990 and 1998. In both cases, hotel average rate growth has exceeded the rate of gain in the CPI-U. In 1998, the national average rate increased by $4.4 \%$, compared to the $1.6 \%$ gain in the CPI-U. RevPAR growth has also outpaced the rate of
change in the CPI-U. In that the rate of change in hotel expenses generally conforms with that of the CPI-U, the fact that average rate gains (and therefore hotel revenues) have increased at a superior pace is a highly positive scenario from the standpoint of overall profit margins.

Table 4.3 sets forth supply levels for each of the 50 states in the nation, as well as the District of Columbia, as of year-end 1989 and 1994, and as of September 30,1999 . As of 1999 , the states with the largest quantity of hotel rooms (in descending order) were California, Florida, and Texas. Between 1994 and 1999, the highest rates of supply growth were noted in Mississippi, Minnesota, and Nevada.

STR also sorts lodging industry census data by the type of hotel location, i.e., urban, suburban, airport, highway, and resort. Table 4.4 shows these census data, sorted by location. In terms of the number of rooms, suburban supply increased most dramatically between 1994 and 1999, while the resort sector recorded the smallest increase in inventory. Table 4.5 shows the share of total
supply contributed by each of the various location types. The suburbs account for the largest single share, at $34 \%$.

STR also sorts lodging industry census data by property type, i.e., gaming, convention, conference center, all suites, and standard hotels. Table 4.6 shows these census data, sorted by property type. In terms of the number of rooms, the number of all suites hotels increased by $68.8 \%$, while gaming hotels increased by 38.0\%. Only minor increases in convention and conference center hotels were noted. Table 4.7 shows the share of total supply contributed by each of the various property types.

Table 4.8 sets forth occupancy levels for each of the 50 states in the nation, as well as the District of Columbia, for 1989, 1994, and the 12 months ended September 30, 1999. In 1999, the highest occupancy rates were recorded by Nevada, Rhode Island, and New York. The lowest occupancy rates were recorded by Wyoming, South Dakota, and Arkansas. Between 1994 and 1999, the strongest rates of occupancy gain were realized by Maine, Connecticut, and Vermont.

Table 4.9 sets forth occupancy rate levels by location type. Urban hotels posted the strongest occupancy rate in 1999; the urban location was the only one to realize a gain in occupancy between 1994 and 1999.

Table 4.10 sets forth occupancy rate levels by property type. Gaming hotels posted the highest occupancy level in 1999, although this sector's occupancy levels actually declined between 1994 and 1999. Between 1994 and 1999, occupancy rates increased for both the convention and conference center sectors.

Table 4.11 sets forth average rate levels for each of the 50 states in the nation, as well as the District of Columbia, for 1989, 1994, and the 12 months ended September 30, 1999. In 1999, the highest average rate levels were recorded by New York, Hawaii, and Massachusetts, as well as the District of Columbia. The lowest average rate levels were recorded North Dakota, Oklahoma, and


#### Abstract

Arkansas. Between 1994 and 1999, the strongest rates of average rate gain were realized by New York, Connecticut, and Delaware.


Table 4.12 sets forth average rate levels by location type. Resorts and urban hotels posted the strongest average rate levels in 1999. Urban hotels experienced the strongest rate of average rate growth between 1994 and 1999.

Table 4.13 sets forth average rate levels by property type. Convention and conference center hotels posted the highest average rate levels in 1999. These sectors also recorded the strongest rate of average rate growth between 1994 and 1999.

Table 4.14 sets forth RevPAR levels for each of the 50 states in the nation, as well as the District of Columbia, for 1989, 1994, and the 12 months ended September 30, 1999. In 1999, the highest RevPAR levels were recorded by the states of New York, Hawaii, and Massachusetts, as well as the District of Columbia. The lowest RevPAR levels were recorded by the states of North Da-
kota, Oklahoma, and Arkansas. Between 1994 and 1999, the strongest rates of RevPAR gain were realized by the states of Connecticut, New York, and Rhode Island.

Table 4.15 sets forth RevPAR levels by location type. Resorts and urban hotels posted the strongest RevPAR levels in 1999, as well as the strongest rates of RevPAR growth between 1994 and 1999.

Table 4.16 sets forth RevPAR levels by property type. Convention and conference center hotels posted the highest RevPAR levels in 1999, as well as the strongest rates of RevPAR growth between 1994 and 1999.

## Classification of Lodging Facilities

Hotels and motels are designed and located to attract one or more specific markets. Because hotels differ in their design, physical facilities, amenities, and locations, all of which directly impact financial operating results, it is
important to define and accurately classify the different characteristics of lodging facilities.

Hotels and motels can be classified using three categories:

- Type of facilities offered
- Class or quality of facilities and service
- Location

Using this classification procedure, a hotel could be described as a mid-rate, convention hotel with an airport location. Its class or quality level is mid-rate, the facilities are specifically designed to accommodate conventions, and the property's location is near an airport. Each of the three categories will be discussed and illustrated with examples.

The type of facilities refers to the physical hotel property as well as the amenities and services available to guests. The types of lodging facilities commonly found in the United States include:

- Commercial
- Convention
- Resort
- All-suite
- Extended-stay
- Microtel
- Conference center
- Casino
- Bed and breakfast
- Health spa


## Commercial

This type of facility caters primarily to the individual commercial traveler, whose purpose of travel is generally to conduct business within the market area surrounding the hotel. Consequently, these properties are usually situated near concentrations of office and industrial buildings, restaurants, entertainment outlets, and one or more modes of transportation. Facilities and amenities normally include a restaurant and lounge (on site or nearby), small meeting and conference rooms, recreational facilities (e.g., swimming pool, fitness center) and shops. The services offered are oriented toward the commercial traveler and generally include room service, secretarial support, computer terminals, photocopy and fax services, concierge and valet services, airport pickup, local transportation, and auto rentals. Commercial hotels typically experience high occupancy rates Monday through Thursday nights with a significant drop-off on Friday, Saturday, and Sunday nights. This weekly occupancy pattern can sometimes be balanced by supplementing the low weekend commercial demand with meeting and group patronage.

## Convention

Convention hotels are designed to accommodate large groups and functions. They provide facilities such as one or more large ballrooms with break-out areas for meetings and conferences, exhibit space for trade shows, sample and display rooms for sales meetings, extensive restaurant and lounge capacity, and the same recreational amenities found in commercial hotels. The key component of a convention hotel is meeting space, which should amount to at least 30 square feet per guest room. Convention hotels are often located near commercial hotels and sometimes proximate to convention centers. The services offered are oriented toward groups and generally include meeting planning and meeting support services; efficient check-in, check-out and billing procedures; rental of audiovisual, computer, and communications equipment; and entertainment as well as the services previously described for commercial hotels. Convention hotels experience occupancy trends that are generally strong Monday through Thursday nights and drop-off on weekends. Since some groups prefer to meet on weekends, a convention hotel may post higher weekend occupancies than most commercial hotels. Con-
vention hotels are also affected by monthly occupancy trends because many groups do not meet during the summer months or holiday periods.

## Resort

Because resort hotels are oriented toward the leisure traveler, they either provide or are located near activities such as a swimming, tennis, golf, boating, skiing, ice skating, riding, hiking, sightseeing and other recreational amusements. Resort properties are usually situated in scenic areas such as the mountains or the coast. In addition to recreational activities, resort hotels generally offer a limited amount of meeting and banquet space; restaurant, lounge, and entertainment outlets; a fitness center; concierge and valet services; and transportation and tour services. At some resorts meals are included in the room rate. An American Plan provides breakfast, lunch, and dinner; only breakfast and dinner are included in the Modified American Plan. A European plan hotel includes no meals in the price of the accommodations. Allinclusive resorts are increasingly popular, and predominate in Caribbean and Mexican resorts. In this plan, any activity that might commonly generate an
extra charge (meals, all beverages, recreation, etc.) is included in the tariff. Resort hotels are often affected by seasonality. Depending on the nature of the resort area, certain periods of time may have potentially high or low levels of occupancy. For example, a ski resort should boom during the winter ski months and sometimes be busy during the summer as well. The shoulder months in the spring and fall can be quite slow. These fluctuations in occupancies create operational inefficiencies that can affect a property's financial performance adversely.

## All-Suite

All-suite hotels have guest rooms that include both a sleeping area and a separate living area in a single unit. In some hotels the suites are two room modules that are side-by-side; others have elongated suites with the living area located at the front and the sleeping area to the rear. The living area typically contains a couch that converts into a bed, armchairs, a coffee table, an eating table, and a television. Most offer a kitchen with at least a microwave oven and a small refrigerator. Some are more elaborate and contain full kitchens.

The bedrooms generally have less area than normal hotel rooms but are furnished in a standard manner. The economics of the all-suite concept are based on eliminating or reducing a significant portion of the hotel's public space (i.e., restaurant, lounge, meeting space, and lobby area) and transferring this square footage to the guest rooms. All-suite hotels cater primarily to individual commercial and leisure travelers who do not have need for a large amount of public area. Transferring public space to the guest rooms effectively maintains the same total building area so an all-suite hotel can charge the same room rate as a comparable, full-facility property. For the traveler who does not require public space, the all-suite product is an excellent value.

All-suite hotels offer most of the amenities normally found in commercial hotels, but in some instances they are downsized. Amenities may include a restaurant that serves in the evenings as a lounge, a swimming pool, and a fitness center. The services offered are generally comparable to a commercial hotel. In a number of chain hotels, the all-suite service includes a full breakfast and a complimentary cocktail period in the evening. All-suite hotels can be located in any area suitable for commercial hotels.

In the past two decades, a number of all-suite hotels have been occupancy leaders in their individual markets, demonstrating that the concept has been well received by the U.S. travel market.

## Extended-Stay

The extended-stay hotel is a cross between an apartment complex and an allsuite hotel. Its guestroom units are generally larger than those found in a standard, all-suite hotel and contain more living space, larger closets, and a full kitchen. Because the guest units are designed to accommodate stays of more than 10 days, they are equipped with full-size refrigerators, stoves with ovens, microwaves, sinks, and dishwashers. They also include cooking equipment, dishes, and eating utensils. The exterior of the property generally resembles a garden apartment complex and the overall atmosphere is residential. The amenities and services offered by an extended-stay hotel are similar to those provided by all-suite facilities. Some chains include a free conti-
nental breakfast along with a complimentary cocktail reception. A unique service offered by at least one extended-stay chain is grocery-shopping service. Hotel staff will purchase the items requested on a guest's shopping list and deliver the order by the end of the day. The best locations for extendedstay hotels are residential or commercial areas where guests have access to daily conveniences such as grocery stores, dry cleaners, pharmacies, restaurants, movie theaters, and other entertainment.

The extended-stay concept works the best when the market has a sufficient number of travelers who are staying for five or more consecutive days and can account for at least $70 \%$ of the property's overall occupancy. This customer mix enables the hotel to achieve high week- end occupancy, which greatly enhances the property's operational efficiencies. Well-operated extended-stay hotels routinely operate at more than $80 \%$ occupancy when there is a sufficient amount of long-term patronage.

## Microtel

One of the new hotel products introduced in the last half of the 1980s was the microtel. This low-end budget product is based on the idea that much of the floor area in a typical hotel guest room is unnecessary and can be eliminated, thereby lowering the property's development cost, reducing operating expenses, and allowing the microtel to charge lower room rates than other budget hotels. While the standard budget or economy hotel room has more than 250 square feet of space, the microtel provides a queen-size bed, dresser, nightstands, desk, sitting alcove, and a full bath with a combination shower and tub in an area of less than 195 square feet. The concept can go further by eliminating many of the costly amenities that have recently been creeping into budget properties such as swimming pools, continental breakfast, morning newspapers, and so forth. The French have taken the microtel concept one step further by providing only a sink in each guest room and communal commodes and showers accessed from the corridors. This allows the hotel to further shrink the size of guest rooms and reduce the number of bathroom fixtures. It remains to be seen whether the American traveling public will accept a guest room without a lavatory and bath.

## Conference Center

Dedicated conferences centers are unique hotel products designed specifically to accommodate small groups and meetings. Unlike commercial hotels with attached conference space that derive demand from all market segments, conference centers usually concentrate on the meeting market and some actually exclude other segments that might distract the in-house groups. The primary objective of a conference center is to create an ideal environment for productive, successful meetings. To this end, the following facilities and services are usually offered: high technology meeting space with the latest audiovisual and computer equipment; conference planning services; group meals and coffee breaks, generally packaged in an all-inclusive price; recreational facilities such as swimming, tennis, golf, and fitness equipment; and guest rooms suitable for studying and doing homework. Conference centers are often situated in relatively remote locations to eliminate any distractions that could disrupt the purpose of the meeting. Howev-
er, good transportation is essential and driving time to and from a major airport is usually under one hour.

Conference centers typically cater to small groups that are meeting for training or educational purposes. Social activities are usually minimized so as not to distract the attendees. During weekends and holiday periods when meeting demand is low, conference centers will either try to attract leisure travelers or close down altogether.

The marketing of a conference center is highly specialized because the facilities are directed almost totally toward the high-end meeting planner. Conference center operators must have established contacts in this market niche to capture this segment of the market. Once stable revenue can be established, the profitability of a dedicated conference center is generally very good because facility usage is known at least several weeks in advance and staffing and purchasing can be highly regulated and controlled.

In addition to commercially oriented conference centers, a number of educational institutions and large companies have their own dedicated meeting and lodging facilities.

## Casino

Casino hotels combine a transient hotel with a full casino facility. In most instances the guest rooms, restaurants, lounges, and other amenities of the hotel are designed to attract the guest to the casino and keep him or her on the property. The rooms are actually an amenity to the casino. Casino hotels seek to attract individual leisure travelers who enjoy gambling as well as groups. The operation of a casino hotel requires very specialized expertise, not only in marketing the product to the gambler-user but also in controlling the actual gaming activities.

## Bed and Breakfast

During the past two decades, the bed and breakfast inn experienced a tremendous increase in popularity. This product, which is not much more than a spruced-up rooming house, offers relatively low-cost accommodations in a comfortable, residential-like atmosphere. Many establishments are historictype houses with period furnishings and breakfast is generally included in the price. Bed and breakfast establishments are typically owner-operated. They are basically large homes where roomers are taken in to help supplement the property's operating expenses. Since the economics or incomegenerating capability of such small lodging facilities can seldom support absentee ownership, the most appropriate appraisal approach for bed and breakfast properties is usually sales comparison.

A bed and breakfast facility traditionally connotes a lodging establishment that has a residential-like external appearance, usually with an historical feel. Certain older, independent, small motels feature the same type of ownership and economics as a bed and breakfast; however, these are generally referred to as ma and pa motels.

## Health Spa

Dedicated health spa resorts are similar in concept to dedicated conference centers in that they cater almost exclusively to one market segment: the health-conscious leisure traveler. A number of hotels offer health and fitness facilities, but they usually do not provide the total environment of a dedicated health spa. Health spas generally offer an all-inclusive program that includes accommodations, meals, a medical check-up, individually designed health-related activities (usually an exercise program), and various types of counseling. Guests normally stay for three days to two weeks and are not encouraged to partake in meals or activities off the premises unless they are under the supervision of the spa's staff. This type of regulation is designed to help the guest achieve a desired, health-related goal. These properties are usually located in resort areas. Their facilities typically include those normally found in resort hotels with heavy emphasis on fitness equipment, exercise rooms, and similar amenities. Health spas require highly specialized marketing and operating expertise, particularly in the area of exercise, fitness, and
health management. The ratio of staff to guests is quite high, so a constant, year-round occupancy is important for operating efficiency.

## Class or Quality of Facilities and Services

The class of a lodging facility is a way of describing the quality of the property and the level of service provided by the staff. Generally class is reflected in a hotel's ability to achieve a particular room rate. The class of a hotel relates to its particular market area. The facilities and level of service that might be considered first-class in Amarillo, Texas, may not get such a rating in San Francisco. Generally the best hotel in a particular market is classified as the area's first-class property and other facilities in the same area that offer a lower level of quality or service are assigned lower rankings.

The lodging industry in the United States does not seem to recognize a uniform system of hotel classes. Terms such as first-class, luxury, and superluxury have various meanings to different people. Table 4.17 shows some of
the class categories frequently used in the United States and their typical ranges of 1999 room rates.

Hotel chains try to market their properties to a particular class of traveler. For example, Motel 6 caters to the very rate-sensitive budget traveler while Four Seasons Hotels attract an upper-end, luxury-oriented clientele. Table 4.18 sets forth an informal ranking of various major U.S. lodging chains based on pricing. This was based on a study performed by HVS International that surveyed hundreds of hotels in the Central U.S. and developed an average published room rate for each chain. This table shows the room rate positioning of each chain as of 1990, 1992, and 1996. The table also divided the group into five classes. Because of the range in product quality of the various hotels operating under a common brand, it is difficult to perform a definitive ranking of the chains. Nevertheless, this table provides a general indication of the identified brands' respective class level, in ascending order.

Over the years there has been very little movement between classes by hotel chains. Most chains attempt to create and maintain a specific image with re-
spect to their class of facilities and service. Some exceptions to this rule include Days Inn and Rodeway Inn. Over the past two decades, Days Inn officials have raised the quality of its affiliates, elevating the brand out of the economy class and into the luxury-budget category. Rodeway Inn was originally known as a mid-rate chain but is now considered economy class.

In the United States the Mobil Travel Guide and the American Automobile Association (AAA) regularly inspect and rate hotels and motels based on factors such as quality and cleanliness of facilities, level of service, professionalism of staff, and types of amenities offered. Their findings are published annually and include a quality rating. Mobil ranks lodging facilities with one to five stars and AAA uses one to five diamonds. Many travelers rely on these guides in the selection of a lodging facility.

## Location

The third way to classify lodging facilities is based on location. A property's location affects many factors including the market segments served, the types of facilities and services required, and occupancy cycles. Hotel locations may be classified as airport, highway, center city, suburban, convention center, and resort.

## Airport

An airport hotel is situated near a commercial airport and serves out-of-town visitors. This type of location attracts those who use the airport, mostly airline passengers from delayed flights and flight crews. Airport hotels are also natural sites for small and medium sized meetings when some or all of the attendees are coming from outside the immediate area. Most airport hotels are designed to accommodate commercial travelers as well as meeting and group patronage. Leisure demand does not normally make up a significant portion of an airport hotel's market area. Lodging facilities that go after a significant amount of airline-generated business such as airline crews and delayed passengers tend to trade room rates for occupancy. This type of de-
mand is extremely price-sensitive, so the property's average room rate must be low. The offsetting benefit of higher occupancy sometimes makes this strategy effective.

One of the unique services provided by most airport hotels is passenger pickup and delivery using hotel cars and vans. Depending on the flight schedule, airport shuttle service can range from intermittent to continuous. In either case, operating an airport van is expensive and this expense should be considered in the projection of operating expenses.

Airport hotels generally experience fairly stable year-round occupancy patterns; they usually have higher weekend occupancies than most commercial hotels.

## Highway

A highway-oriented lodging facility is located near a major travel route. Visibility and easy access are important. Highway hotels generally attract individual commercial and leisure travelers. These properties are not normally used by the meeting and group segment, so several, small meeting rooms are usually sufficient. A highway hotel should either have its own restaurant or be near a food service facility that serves three meals a day. The long-term success of a highway hotel depends on auto travel, which has at times been adversely affected by shortages of fuel. Changes in highway traffic patterns brought about by new roads, highways, and interchanges can also impact the desirability of a particular location. These are some of the risks inherent in a lodging facility that depends on a single mode of travel access. The occupancy patterns of highway hotels typically reflect the type of travelers using the adjacent highway. Their average length of stay is usually short, ranging from one to three days.

## Center City

A center city hotel is in an urban, downtown area. This type of location generally attracts individual commercial travelers as well as the meeting and group market. Some center city hotels in popular destinations such as Boston, New York City, Washington, DC, New Orleans, and San Francisco also attract leisure demand. The physical characteristics important to a center city hotel are adequate parking (usually on-site or valet), strong security, quiet rooms away from street noise, and room service. In areas with a good selection of restaurants nearby, a center city hotel needs only minimal food and beverage facilities unless the property depends on a significant amount of meeting and banquet business. Center city hotels usually have high-rise construction and are more expensive to operate than their suburban counterparts. These properties are almost always subject to higher property taxes, energy costs and labor rates. Moreover, due to site constraints, the physical layout of a center city hotel is not always the most efficient.

## Suburban

Suburban hotels are located just outside the center city near commercial areas with concentrations of office, retail, and industrial businesses. These properties cater to individual commercial travelers, meeting and group demand, and some leisure business- particularly on weekends and holidays. Many suburban hotels are constructed as mid-rise buildings and provide a full range of amenities, including restaurants, lounges, meeting and banquet rooms, swimming pools (indoor and outdoor), health and fitness clubs, tennis courts, and a jogging track. Parking is generally free and readily available. Developing a suburban hotel is generally less expensive than developing a comparable center city property.

## Convention Center

As the number of convention centers throughout the United States has grown, so has the number of convention center hotels constructed in conjunction with convention facilities. Some of these hotels are physically attached to a convention center, while others are in close proximity. These hotels generally capture a significant portion of the room nights generated by the conven-
tion center, but it must be recognized that even the best convention centers are only used for approximately half the year. This statistic can be easily verified. Assuming that a typical, four-day convention takes two days to set up and two days to dismantle, the facilities are really only in use $50 \%$ of the time, or 180 days per year. If this is the maximum potential utilization and slow periods are experienced in summer and during holiday periods, it is easy to see why convention facilities are not consistent generators of lodging demand.

## Resort

Leisure travelers go to resorts during vacations and other free time to relax and have fun. Resort locations often offer one or more special recreational attractions such as water sports, winter activities, unique entertainment, scenic beauty, or a historic experience. Many resort locations also attract leisureoriented meeting and group demand, but most are not frequented by commercial travelers. Immediate site access and visibility are often unimportant and can actually be detrimental to a resort location. Area access can be criti-
cal, however, particularly for remote locations. Other factors that can affect the desirability of resort locations are: climate (especially adverse periods such as hurricane season in the Caribbean), perceived safety and guest comfort, political stability (in foreign countries), and distance and travel time from the point of origination to the resort destination.

## Hotel Chains

Every year the American Hotel and Motel Association compiles a directory of hotel-Motel chains. A chain is defined as any group of three or more hotels, motels, or resorts operated under a common name or by a single owner or operator. Generally a hotel chain is equated with a recognizable name such as Marriott, Holiday Inn, or Super 8 rather than an independent hotel with no brand-name affiliation. Over the past 20 years, chain affiliation has become increasingly prevalent in the hotel industry. Whereas $35 \%$ of all hotels were chain-affiliated in 1970, the current ratio is estimated to be in the range of $80 \%$. The rapid growth of hotel chains over the last three decades can be at-
tributed to three factors: franchising, management contracts, and internal expansion.

Table 4.19 identifies the top 50 hotel chains as of 1999 , based on the total number of branded rooms. The identified hotel chains operate under recognized trade names. Trade names are used by individual lodging facilities in one of three ways. First, a hotel may actually be owned by the hotel chain. For example, all Red Roof Inns and Motel 6 hotels are owned by the chain; they do not franchise or operate under management contracts. Second, a hotel may be owned by an independent owner who uses the trade name under a franchise arrangement with the hotel chain. Third, a hotel may be owned by an independent owner and managed by the hotel chain, which provides management service and the trade name identification. Most hotels in the United States are operated under a franchise arrangement. Some use the chain's management services, but very few hotels are actually owned by the lodging chain. Since chain affiliation can have a direct impact on a hotel's value, appraisers should be familiar with hotel franchising and management contracts.

## Franchising

A franchise is an agreement between a hotel-motel company (usually a national or regional chain) and an independent hotel owner in which the owner pays a fee to use the name, trademarks, and various services offered by the chain. A franchise creates certain benefits and costs for both the owner and the chain.

## Benefits to the Owner (Franchisee)

Instant identity, recognition, and image. Every chain has its own image, which indicates its price level (economy, standard, or luxury) and market (leisure, commercial, or convention). To have a positive effect, the franchise image must conform to the facilities offered and the available market.

Reservation or referral service. Most franchises have some type of centralized reservation system that enables guests to reserve a room by calling a toll-free number. Most of the chains offer computerized services; others have teletype and phone connections with individual properties. A good reservation system generates approximately $15 \%$ to $30 \%$ of a property's occupancy.

Chain advertising and sales. All major franchises publish a directory in which each property is briefly described and location and rate information are provided. The extent of media advertising and actual sales solicitation varies from chain to chain. In most cases the business generated through the reservation system and national or regional promotions cannot support an individual hotel. Sales efforts on a local level are also necessary.

Procedures manual. Chains urge all their properties to follow standardized systems and procedures. Operating manuals are provided, and each affiliated facility is inspected periodically to ensure that policies and standards are being observed. Some chains have training schools to instruct management on basic operational techniques.

Management assistance. Most chains can provide franchises with specialized assistance in the various aspects of hotel-motel development and management such as planning, operations, and marketing. These services generally are not covered by the normal franchise fee and are contracted for separately.

Group purchasing. Chains require that affiliated properties use certain identity items such as ashtrays, monogrammed towels, silverware, china, and uniforms. They offer group purchasing programs that reduce the cost of these items to owners.

## Costs to Owner

Hotel franchise fees are the compensation paid to the franchisor for the use of the chain's name, logo, identity, image, good will, procedures and controls, marketing, and referral and reservation systems. Franchise fees normally include an initial fee
with the franchise application, plus continuing fees paid periodically throughout the term of the agreement.

The initial fee typically takes the form of a minimum dollar amount based on a hotel's room count. For example, the initial fee may be a minimum of $\$ 45,000$ plus $\$ 300$ per room for each room over 150. Thus, a hotel with 125 rooms would pay $\$ 45,000$ and a hotel with 200 rooms would pay $\$ 60,000$. The initial fee is paid upon submission of the franchise application. This amount covers the franchisor's cost of processing the application, reviewing the site, assessing market potential, evaluating the plans or existing layout, inspecting the property during construction, and providing services during the pre-opening or conversion phases.

If the hotel is existing and the franchise represents a conversion, the initial fee structure is occasionally reduced. Some franchisors will return the initial fee if the franchise is not approved, while others will keep a portion ( $5 \%$ to $10 \%$ ) to cover the cost of reviewing the application.

Converting the affiliation of an existing hotel may require the purchase of towels, brochures, operating supplies, and paper items imprinted with the national franchi-
sor's logos. The potential affiliate may have to undertake a property refurbishment or renovation (ranging from installing a higher grade of carpeting to enclosing a property's exterior corridors). Both new franchises and converting franchises will also have to pay the cost of signage. Although these potential costs are not quantified in our analysis, they must be considered when measuring the costs and benefits of affiliation. Requirements of this kind will vary from hotel to hotel and among various franchise organizations.

## Continuing Fees

Payment of continuing franchise fees commences when the hotel assumes the new franchise affiliation; the fees are paid monthly over the term of the agreement. Continuing fees generally include a royalty fee, an advertising or marketing contribution fee, and a reservation fee. In addition, continuing fees may include a frequent traveler program and other miscellaneous fees. The continuing fees we analyzed are broken down as follows.

Royalty Fee: Almost all franchisors collect a royalty fee, which represents compensation for the use of the chain's trade name, service marks and associated logos, good will, and other franchise services. A significant profit is generally factored into this fee.

Advertising or Marketing Contribution Fee: Chainwide advertising and marketing consists of national or regional advertising in various types of media, the development and distribution of a chain directory, and marketing geared toward specific groups and segments. In many instances, the advertising or marketing fee goes into a fund that is administered by the franchisor on behalf of all members of the chain. These dollars must be used to promote the chain, and normally do not represent a source of profit to the franchisor.

Reservation Fee: If the franchise chain has a reservation system, the reservation fee supports the cost of operating and paying for the central office, telephones, computers, and reservation personnel. The reservation fee is designed to cover the cost of the reservation system, and (like advertising and marketing fees) generally provides little profit to the franchisor.

Frequent Traveler Program: Some franchisors maintain incentive programs that reward guests for frequent stays; these programs are designed to encourage loyalty to the chain. The cost of administrating the program is financed by a frequent traveler assessment.

Other Miscellaneous Fees: Some of these fees, which include fees payable to the franchisor for additional systems or procedures, such as required training programs, travel agent commissions and global distribution system (GDS) fees, are generally minimal and often do not generate a profit. For the first time in our study, we have also included in other miscellaneous fees the cost of any computer hardware and software, software and computer hardware and software maintenance that a franchise requires. Technology is becoming more prevalent and franchisors are requiring more in the way of computer systems; hence, we thought it was important to reflect these potential costs.

Sometimes the franchisor offers additional services for a fee. These services may include any of the following: consulting, purchasing assistance, computer equipment or satellite communication equipment rental, optional training programs, onsite opening assistance, or additional advertising services. The fees for these services are typically not qualified in the disclosure documents. Our analysis considers only those costs that are mandatory and are quantified by the franchisor.

## Calculation of Continuing Franchise Fees

The assessment of continuing franchise fees is based on several different formulas. In general, royalty fees are calculated on a percentage of rooms revenue. Typically, the royalties range from $2.0 \%$ to $6.5 \%$. Advertising, marketing, and training fees are usually calculated as a percentage of rooms revenue, and typically range from 1.0\% to $3.75 \%$; however, the formula for calculating these fees may use a dollar amount per available room, per month.

Reservation fees may also be based on a percentage of rooms revenue ( $0.8 \%$ to $2.5 \%$ ) or dollar amount per available room, per month ( $\$ 3.00$ to $\$ 8.65$ ), or in some cases, the reservation fee is based on an amount for each reservation that is sent to the property through the central reservation system (\$1.00 to \$11.00). Some franchisors use a combination of two or all three of these methods to calculate reservation fees.

Frequent traveler program assessments are typically based on a percentage of total or rooms-only revenues ( $0.3 \%$ to $5 \%$ ) generated by a program member staying at a hotel, or a fixed dollar amount ( $\$ 1.25$ to $\$ 15.00$ ) for each room occupied by a program member. Many programs also require hotels to contribute a one-time participation fee of approximately $\$ 10.00$ per guestroom, while others use a combination
of all three methods. In determining the frequent traveler program fees we have not considered any costs associated with the granting of frequent flyer miles.

For the most part, these various fee formulas are applied individually, but in some cases, franchisors combine a number of formulas (e.g., a marketing fee that might be the greater of $\$ 0.50$ per available room per day or $2.0 \%$ of rooms revenue). Many also have first-month contingency fees in lieu of recorded revenues (e.g., a royalty fee of $\$ 24.00$ per room for the first month and then $5 \%$ of gross revenues in the ensuing months).

Each fee structure offers advantages and disadvantages for the individual property. A fee based entirely on a percentage of rooms revenue is favorable for hotels that derive significant income from food and beverage sales. Fees based on an amount per available room are fixed, and tend to benefit high volume-hotels and penalize properties with lower operating results. Paying a reservation fee based on the number of reservations received is equitable, as long as the reservations equate to occupied room nights and not to no-shows.

## Analysis of Franchise Fees

To provide a comparison of hotel franchise fees, HVS International periodically researches hotel franchise fees from information presented in the Uniform Franchising Offering Circular (UFOC) documents prepared by the respective franchisors. Tables 4.21, 4.22, and 4.23 assume a different class of lodging facility (i.e., level of quality), so that comparisons can be made between chains of a similar class. The economy chains include chains that are classified as economy chains by Smith Travel Research. The mid-rate chains include chains that are classified as mid-scale chains with and without food and beverage by Smith Travel Research. The first-class chains include chains that are classified as upscale or upper upscale chains by Smith Travel Research. Table 4.20 summarizes the assumptions incorporated in Tables 4.21, 4.22, and 4.23.

The HVS International model assumes that each affiliation is capable of generating the same portion of occupancy from its reservation system. In actuality, some affiliations generate more demand and some contribute less.

Tables 4.21, 4.22, and 4.23 summarize the franchise fee information relating to each franchise affiliation. The first column lists the franchisor name. The second column shows the initial fee based on the room count assumed for each class of facility. The
next five columns outline the continuing fees, which are divided into royalty, reservation, marketing, frequent traveler program, and miscellaneous cost. The continuing fees were calculated on an annual basis and represent the total amount that would be paid by the franchisee over the ten-year projection period. The next column illustrates the sum of the initial and continuing fees. The final column shows the percentage relationship between the total projected franchise fees and the total projected rooms revenue.

A total of 73 franchise groups, including 27 economy, 24 mid-rate, and 22 first-class franchisors, participated in the analysis. The trend towards continued franchise expansion and segmentation was exhibited by a $14.1 \%$ increase in the number of study participants from 1996 to 1998. The Budget Host organization led the latest analysis, with only $0.8 \%$ of its projected ten-year revenue going toward expenses related to franchise fees. Other organizations achieving low percentages included Best Western at 1.8\%, Scottish Inns at 4.8\%, and Candlewood at 5.1\%. Study results showed that the percent of rooms revenue figures ranged from $0.8 \%$ to $10.3 \%$ in the economy category, $1.8 \%$ to $10.4 \%$ in the mid-rate category, and $7.1 \%$ to $11.4 \%$ in the first-class category. Low percentage leaders in each category were Budget Host, Best Western, and Omni, respectively. The overall range was a low of $0.8 \%$ to a high of $11.4 \%$, with a median of $8.8 \%$.

Some of the lower franchise fee percentages belong to chains such as Budget Host and Best Western; technically, these represent associations or referral organizations rather than franchises. These groups are structured for the benefit of their member hotels, so fees are oriented more toward covering operating costs rather than producing large profits. Consequently, their percentages are somewhat representative of the actual cost of operating a franchise organization and provide an indication of the margin of profit realized by other chains.

As shown in the tables, a Marriott affiliation is still the most expensive, and in 1998, this was the only franchisor whose royalty fees were based on a percentage of the combined rooms and food and beverage revenues. Marriott's frequent traveler award program also contributes to the above-average cost of this affiliation. However, few would argue with the success of Marriott's proven operating abilities, as well as their favorable customer image and good will. There is often a direct relationship between a hotel's good will and potential for asset value enhancement. Thus, although affiliating with this type of franchisor may well prove feasible and prudent, it will be comparatively costly.

In 1998, a total of 30 franchisors offered frequent traveler programs that involved costs to the franchisee, up from 16 in 1996, 13 in 1994, and 7 in 1991. This represents an increase of $329 \%$ from 1991 to 1998. This increase can be attributed, in part, to franchisors segmenting their franchise offering into different property types, including suite and extended-stay hotels.

## Long-Term Strategies

Tables $4.24,4.25$, and 4.26 compare the results of the past five HVS International franchise fee studies.

As mentioned earlier, the trend toward continued franchise expansion and segmentation was exhibited by a $14.1 \%$ increase in the number of 1998 study participants. In 1996, 64 franchises were included in the study, as compared to 57 in 1994, 51 in 1991, and 37 in the original 1989 study. There has been a 97\% net increase in study participation since 1989.

Nine economy, thirteen mid-rate, and seven first-class franchises participated in all four studies. Throughout all five studies, Scottish Inns in the economy segment, Best Western in the mid-rate segment, and Omni in the first-class segment maintained
the lowest overall average percent of rooms revenue at 4.0\%, 1.6\%, and 6.8\% respectively. Days Inn logged the five-study average high, at 9.0\%.

The overall franchise class average showed steady growth over the course of the five studies; however, some of the cost increase in the 1998 study can be attributed to the inclusion of costs associated with required computer equipment and systems, as these costs were not included in the previous studies. The economy class maintained a five-study average of 6.3\%, the mid-rate class carried a 7.0\% average, and the first-class group had a five-study average of 7.6\%. The economy group exhibited the lowest averages in all five studies, while the first-rate group logged the highest.

## Liability of Owner

In granting a franchise a chain offers no guarantee or financial commitment to the success of the property. Should the property fail, the chain can immediately withdraw its franchise and demand that all forms of identity be removed. The owner assumes all financial liabilities.

## Benefits to Chain (Franchisor)

Inexpensive, low-risk expansion. Franchising allows hotel chains to expand their operations with minimal capital and personnel investment. Increased representation improves the chain's recognition, which tends to increase occupancies. The cash flow from franchise fees and royalties is attractive to publicly held companies.

Allied expansion. Several chains have developed allied businesses to support their franchises and company-owned operations. These businesses include interior designers, building contractors, furniture equipment and supply dealers, travel agencies, and tour packagers.

## Costs to Chain

Franchise services. Chains must provide the services described in the franchise agreement. Maintaining the reservation system and advertising the chain comprise the bulk of their responsibility.

Quality control. Inspection, supervision, and enforcement of franchise procedures and standards are essential. One neglected property can harm the reputation of the entire chain. The need for strict quality control has led some chains to abandon their franchise programs because they found it impossible to enforce operational standards.

From a valuation standpoint, a franchise is neither a requirement nor a guarantee of success. A franchise well-suited to the local market demand can provide a competitive advantage over independent properties and those with less desirable affiliations. Naturally, any competitive advantage enhances the business value of a property.

It is important to remember that franchises are not permanent and are commonly terminated when the property is sold. New owners must apply for and be granted a new franchise, which could require that an outdated hotel be brought up to current chain standards. It may cost several hundred thousand dollars to maintain a franchise affiliation; the appraiser must be sure to consider this factor in determining a property's present value.

## Management Contracts

A management contract is an agreement between a management company (operator) and a property owner (investor) whereby the operator assumes complete responsibility for managing the hotel. For this service the operator is paid a fee based on a prescribed formula. The owner has little say in operational policies, procedures, and day-to-day management, but he or she is financially responsible for the property and must replenish operating capital if necessary. The difference between a management contract and a lease is that under a management contract the residual income (or loss) after payment of all expenses, including the management fee, goes to the owner; in a lease ar-
rangement the residual income (or loss) after payment of rent goes to the tenant, or operator.

A hotel management company can be classified as either a first-tier management company or a second-tier management company depending on the types of services they offer.

A first-tier management company operates lodging facilities for third parties under a management contract and provides two types of services: 1) day-today operational supervision and property management, and 2) national or regional customer recognition through affiliation with a chain. Marriott, Hilton, and Hyatt are examples of first-tier management companies.

A second-tier management company, which also operates lodging facilities for third parties under a management contract, provides day-to-day operational supervision and property management but offers no trade name customer recognition. Second-tier management companies often use hotel fran-
chises for identification. Examples of second-tier management companies include MeriStar Hotels \& Resorts, Lodgian, Richfield Hospitality Services, and Ocean Hospitalities.

Hotel management contracts offer both benefits and costs to the property owner (investor) and the management company.

## Benefits to Investor

Professional management. Management contracts allow an inexperienced investor to participate in the benefits of hotel ownership without becoming involved in day-to-day management. Management companies offer professional talent, proven methods of operation, and relief from most of the operational burden. An owner who contracts with a first-tier management company benefits from the chain's image, reservation system, and advertising programs.

Profitable affiliation. Some chains do not franchise, so the only way an owner can obtain the benefits of a potentially profitable affiliation with such a chain is through a management contract with a first-tier management company.

Borrowing power and possible operator investment. Many lenders are more willing to make loans on hotels that are managed by reputable management companies, rather than by individual operators. Occasionally a management company will pay to obtain a particularly desirable contract. They may invest initial working capital, inventories, or furniture, fixtures, and equipment.

## Costs to Investor

Management fees. Unlike a franchise fee, the individual investor and operator typically negotiate management fees. These fees may be influenced by projected operating results, the expected ratio of food and beverage volume to rooms revenue, the services offered by the operator, the financial investment of the operator, and the property's desirability. The fee for management con-
tracts is generally structured in one of three ways: 1) a percentage of a defined gross revenue (usually $2 \%-6 \%$ ); 2 ) a percentage of a defined gross as a basic fee, plus a percentage of a defined operating income as an incentive fee (usually $1 \%-4 \%$ of the gross and $5 \%-10 \%$ of the net); 3 ) a percentage of a defined operating income (usually 10\%-25\%).

From the investor's point of view, a fee structure based on a percentage of the hotel's operating profit is more desirable than one based on a percentage of gross revenue. Because the investor receives only the residual income after all expenses have been paid, a fee structure that provides an incentive to maximize revenue and minimize costs is a logical choice.

Required facilities and standards. Management companies require that the properties they operate meet certain physical specifications pertaining to size, layout, design, and decor. Operators actively participate in the planning of new hotels and the renovation of existing ones. The investor must provide sufficient funds to maintain the property properly and to replace short-lived items periodically.

## Benefits to Operator

Inexpensive expansion with quality control. Like franchises, hotel chains can expand with a low capital investment and still keep quality under control with in-house management.

Good profit potential. Management contracts offer good potential for profit, especially with high-volume operations. Because the owner is responsible for all expenses, the financial risk to the operator is minimal.

## Costs to Operator

Management services. In addition to providing the standard franchise services of a reservation system and chain advertising, the operator employs a staff of
regional managers, supervisors, and specialists in food and beverage service, accounting, marketing, and engineering.

The quality of the management provided by a professional hotel company varies depending on the chain and on the individual property. The appraiser should thoroughly evaluate management's effectiveness to determine whether current operating results indicate competent supervision. The assumption of competent management is discussed in a subsequent section of this text.

## Choice of Management

Using either a first-tier or second-tier hotel management company has certain advantages and disadvantages.

- Often less expensive than using a second-tier management company and a franchise affiliation.
- Some chain affiliations are only available by management contracts (e.g., Four Seasons and Ritz Carlton).
- Combines the operating company with the entity that carries the name recognition, which tends to produce more unified management.
- Usually provides a larger, more effective convention and group sales infrastructure.


## Disadvantages of a first-tier management company

- Sometimes not available for smaller properties.
- Less likely to manage distressed properties.
- Term of contract usually longer.
- Termination provisions often more difficult to obtain.
- More difficult to negotiate an owner-oriented management contract.


## Advantages of a second-tier management company

- Easier to negotiate an owner-oriented management contract.
- Smaller management company likely to give a property more individual attention.
- More likely to manage unique hotels that are small or distressed or operating in specialized markets, secondary locations, or secondary cities.

Disadvantages of a second-tier management company

- Lenders less likely to approve financing.
- Perceived risk of company is higher.
- Can be more expensive when management fee is added to national franchise fee. (Some second-tier management companies attempt to negotiate a first-tier fee structure.)


## Management Contract Provisions

Management Fees. As has historically been the case, the management fee paid to hotel companies typically consists of a two-tiered structure: a base fee and an incentive fee. The base fee is commonly defined as a percentage of gross revenues, while the incentive fee is tied to some profit criteria.

Historically (in the 1970s and 1980s), the base fee ranged from $3 \%$ to $5 \%$ of gross revenues and constituted the greater part of the compensation achieved by the operator. Incentive fees were typically defined as a percentage of defined net operating income. This amount was sometimes subordinated to debt service, but often subject also to accruals. In virtually all cases, the revenue derived from the base fee was significantly greater than the revenue derived from the incentive fee.

Common examples from this period include typical Marriott contracts that generally provided for a base fee of $3 \%$ of gross revenues plus an incentive fee of $20 \%$ of defined net income that, if deferred, was often subject to accruals. Typical Hyatt contracts dating from this period provided for a management fee equal to the greater of $5 \%$ of gross revenues or $20 \%$ of net income.

As this structure required the management company to achieve a net income level of $25 \%$ of gross revenues in order to have the incentive fee surpass the base fee, the incentive factor was somewhat limited.

Today, the emphasis has shifted from the base to the incentive fee. Base fees now ranged from $1.5 \%$ to $4 \%$ of gross revenues, with the most common range being $2 \%$ to $3 \%$. With the higher base fees ( $3 \%$ and above), it is not uncommon for a portion of the base fee to be subordinated to debt service and/or some owner's priority whereby the operator receives a reduced management fee if certain objectives are not achieved. Incentive fees are now very dealspecific, as opposed to being based on a standardized formula. Common structures include a percentage of gross operating profit over a defined amount (hurdle), usually related to the historic or budgeted performance of the property. Depending on the threshold, these fees range from $10 \%$ to $25 \%$ of the defined amount. Moreover, incentive fees are virtually always subordinate to debt service and, in many cases, also to an owner's priority return. These amounts may be influential in determining the hurdle for the incentive fee to be earned. The strategy behind these structures is to align the operator
with the owner's position by exposing the operator to a similar level of risk as related to both the operation and the capital structure of the deal.

Termination Provisions. Termination provisions set forth the circumstances in which a management contract may be canceled, by either the owner or the operator. Termination provisions may be generally divided into two categories: those related to ownership of the hotel, and those that are "for cause." While there are many specific terms that may influence termination "for cause," the most common are related to the performance of the two parties in fulfilling their obligations under the contract.

Historically, the termination provisions in hotel management contracts were extremely limited and were related to the financial health of the parties to the contract. The most common opportunity for termination was the bankruptcy or other financial breach by one of the parties. With respect to termination upon the sale of the property, such provisions, when included, usually addressed the operator's right to terminate the contract upon the sale of the hotel; typically, the owner had no such right. Some contracts also provided the
owner with the right to terminate in the event that the operator did not perform to some standard. In some instances, the standard was defined on the basis of performance as compared to operating history or budget, or in terms of market share. However, more often these clauses were ill defined and difficult to enforce. One common cause was "failure to operate and maintain the hotel in a first-class manner," or some similar vague language, which could result in years of dispute.

In management contracts that are currently being negotiated, the termination provision is often the most crucial clause. In some cases, the owner has the right to terminate the contract upon sale of the property, with minimal notice (30 to 60 days). This clause is of particular importance to the owner in terms of enhancing the salability of the hotel by enabling another hotel operator to bid on the property. In the early 1990s, many contracts (particularly those of the second-tier companies) also provided the owner the right to terminate with minimal notice, for no specific cause (i.e., without the sale of the property). Today, these latter provisions are tempered by buy-out clauses, whereby the owner may terminate the contract on short notice but must make a pay-
ment to the management company - generally, 0.5 to 3.0 times the management fee paid during the past 12 months.

Term of the Contract. The term of the contract refers to the time for which the contract will be in force. Included in this category are renewals of the initial term, which may be invoked at the behest of the owner or the operator.

Given the prevalence of termination provisions, the significance of the term of the contract has been somewhat undermined. During the recent past, some contracts were written with relatively short terms, ranging from one to five years, with no renewal provision. The majority of these where shorter (one to two years); some were actually month-to-month. This is in dramatic contrast to the long terms of 10 to 30 years, with as many as 50 years of renewal options, which historically prevailed.

The current standard has shifted away from the extreme short term, and now ranges from 3 to 10 years for second-tier operators and 10 to 20 years for first-
tier companies. Renewals are most commonly subject to negotiation within the year prior to the expiration of the original term. These more extended terms recognize the benefit of long-term, consistent management and are often seen as a way to "reward" the management company for good performance.

Other Contract Issues. The following issues are also subject to negotiation in hotel management contracts. The ranges and standards set forth represent the terms currently employed in today's hotel management contracts:

- Financial reporting requirements. Monthly statements should be provided within 10 to 15 days. Annual budgets should be prepared for owner review and approval 60 days in advance.
- Operator independence/owner control. Owner should have right of approval of budget and any expenditures exceeding a defined amount $(\$ 10,000$ to $\$ 20,000$ depending on the size of the hotel).
- Owner versus operator as employer of personnel. This issue is generally dictated by the specific circumstances of the owner, as well as the structure of the
management company. Institutional owners typically require all employees to be personnel of the operator.
- Allocation of home office expense. The current standards indicate a wide range of fees charged under this heading. These charges typically include reservation fees, central marketing expense, charges for frequent guest programs, and possibly some accounting or computer use fees. Reservation fees are most often charged on a dollar-per-reservation transaction, which can include both the making of and the canceling of a reservation. These charges range from $\$ 4.00$ to $\$ 6.00$ per reservation. Central marketing fees typically range from $2 \%$ to $3 \%$ of revenue, and may be supplemented by the cost of participation in select (voluntary) marketing programs. The cost of frequent guest programs varies dramatically depending on the nature of the program and cannot be standardized. Similarly, the accounting and computer use fees vary from chain to chain; the latter are usually relatively minimal and depend on the sophistication of the management company's MIS systems.
- Reserve for replacement. This is one area where owners and operators are increasingly in agreement, as both parties recognize the necessity and importance of maintaining the asset in marketable condition. Although most contracts now provide a reserve for replacement equal to a minimum of $3 \%$ of
gross revenues, we have also seen $4 \%$ and $5 \%$ reserves with increasing frequency.
- Capital contributions by the operator. In today's highly competitive market for management contracts, a number of operators now assume an actual ownership position in the hotel. Thus, capital contributions may be seen as crucial to the successful attainment of a management contract.
- Restrictive covenants concerning other hotels and contracts. This issue is most important in the case of first-tier management companies, and generally depends on the likelihood that multiple hotels with the same brand will be located in a given market area. Restrictive covenants are still used, but the specific scope of the restriction is subject to negotiation based on market circumstances and the strength of the brand.


## Internal Expansion

Some of the growth in hotel chains between 1970 and 2000 can be attributed to internal expansion. The availability of capital allowed many chains to construct new facilities and purchase existing properties. It is not uncommon for
a hotel chain to purchase hotels that are already operating under its franchise.

## Future of Chains

Hotel-motel chains should continue to dominate the supply of transient accommodations; in fact, their market share is expected to increase. After economic recession in the early 1990s, a new wave of construction began to take shape in 1995 and has continued through 1999. Nearly all new hotel construction involves chain-affiliated projects, and a number of new brands have been introduced, most notably in the increasingly segmented extended-stay sector.

## Independent Hotels and Motels

The number of nonaffiliated hotels and motels has been declining rapidly. Most of these properties are small "mom-and-pop" motels constructed during
the 1950s and 1960s which are now on the brink of functional and external obsolescence due to the proliferation of larger, more modem chain operations. New budget chains have hurt independent lodging facilities deeply. With the exception of a few isolated market areas in which independent hotels continue to predominate (e.g., Cape Cod, New Orleans' French Quarter), the national lodging market is dominated by chain-affiliated hotels.

The major problem facing most independent hostelries is the lack of identity. Travelers usually prefer a known product that offers services, accommodations, and rates within an expected range. An independent can, however, create its own identity with a massive advertising campaign, a highly visible and convenient location, a large number of repeat customers, or facilities and services of superior quality.

When valuing an independent hotel or motel, the appraiser should be aware of the risk factors involved. Unless circumstances clearly indicate that the independent can overcome the competitive disadvantages, the market will
usually reflect either a lower stabilized net income or a higher capitalization rate for an independent hotel property.

## Micro Supply

Another term for the micro supply of hotels and motels is competition. The previous section described how to classify lodging accommodations by the type of facilities offered (e.g., commercial, convention, resort, suite, extended stay), the class (e.g., luxury, first-class, mid-rate, economy) and the location (e.g., highway, downtown, airport, resort). Compiling this information on all the hotels within the local market area allows the appraiser to identify the primary and secondary competition and evaluate the relative competitiveness of each property. These tasks are fundamental to the build-up approach based on the analysis of lodging activity.

The appraiser's next step is to determine the future guest room supply considering both the addition of new properties into the market and the removal
of existing rooms. From this information the total room nights available can be projected. The accommodatable latent demand and the total usable latent demand is then calculated to project annual area-wide occupancy.

The last step in the market analysis phase of the appraisal is to evaluate the relative competitiveness of all the hotels within the market area. This evaluation will form a basis for projecting the future market share of the subject property. Once the market share has been determined, the number of room nights captured and the resulting projected occupancy can be calculated.

## Total Guestroom Supply

The total guestroom supply consists of the existing area hotels (primary and secondary competition), which were previously identified in the build-up approach based on an analysis of lodging activity, plus any facilities currently under construction and proposed projects likely to be completed. Infor-
mation on the room counts of existing hotels and those under construction is fairly simple to obtain.

Since most proposed hotels are never actually developed, it may be difficult to pinpoint projects that have a reasonable probability of reaching fruition. Good sources of information about proposed hotels include the local building department, development agencies, the chamber of commerce, local hotel associations, newspapers, American Hotel and Motel Association development reports, developers, hotel managers, real estate brokers, lenders, and other appraisers. In addition, construction industry consultant F.W. Dodge can be commissioned to produce standard and customized reports detailing hotel developments in a particular area. They may be reached at 1-800FWDODGE, or on line at www.fwdodge.com.

The key issue in evaluating a proposed hotel is determining whether the project will ultimately be developed. The following list of criteria can assist in answering this question.

- Does the developer have all necessary zoning approvals, building permits and licenses? These approvals must be obtained before construction can begin. A project planned for a jurisdiction with restrictive development policies has less chance of reaching the development stage.
- Is the project financing in place? The entire financing package, including both debt and equity capital, must be fully committed and in place before a proposed hotel is considered definite. Hotel financing has always been difficult to secure and most of the projects that are discontinued during the development process fail because they lack some form of financing.
- Does the project have a franchise and/or management company commitment (contractually obligated)? Sophisticated lenders generally require a franchise affiliation and an experienced operator before committing to finance a project. In markets where appropriate identification is unavailable, the development probability is reduced.
- Does the developer have a track record of successful hotel projects? Most first time developers fail to complete their contemplated hotel projects. Lenders are often reluctant to finance inexperienced hotel developers.
- What is the current supply and demand situation in the local hotel market? If the lodging market is overbuilt or suffering from decreased demand, proposed hotel projects are generally reconsidered and either postponed or terminated. An appraiser should investigate the competitive environment several years into the future to determine the probable impact of definite additions to supply over the projection period. Should the anticipated areawide occupancy drop below an acceptable level, it becomes more likely that some of the proposed hotel projects will be withdrawn.
- What is the current condition of the hotel financing market? Over the past 40 years, the availability of hotel financing has followed a cyclical trend. Since very few hotel projects are developed without some form of financing, a downward trend in the availability of debt and/or equity money will usually curtail many proposed projects.

Using these criteria the appraiser evaluates each proposed hotel within the market area and determines whether the project should be considered a definite addition to the future lodging supply or should be disregarded as unlikely to be built. A third alternative would be to assign a probability factor to the project based on its chance of being developed. Using the criteria set forth
above, the project can be considered a future addition to the competitive supply, but its room count would be weighted to reflect its development probability. For example, assume that a 200 -room hotel is planned for a site within a given market area. Based on the preceding development criteria and discussions with the building department and developer, the appraiser estimates that there is a $50 \%$ chance that this project will be built. When projecting the competitive supply, the appraiser would include this project, but apply a $50 \%$ probability factor and consider it a 100 -room hotel rather than a 200-room hotel.

The total guestroom supply is estimated for each projection year by totaling the existing supply of hotel rooms. Actual room counts are used for those hotels considered primary competition and appropriately weighted room counts are used for properties considered secondarily competitive. To this existing supply are added any new rooms currently under construction and rooms in proposed hotels that are likely to be completed. If a hotel that is under construction or proposed is expected to open at some point during one of the projection years, its room count is weighted for that year based on the ra-
tio of 12 minus the month opened divided by 12 . If a hotel will be removed from the market during the projection period, its room count is deducted after it is appropriately weighted for the number of rooms available.

## Total Room Nights Available

The total room nights available is quantified by multiplying the total guestroom supply for each projection year by 365 .

## Total Accommodatable Latent Demand

If the appraiser projects any type of latent demand, a calculation should be made to determine what portion of the latent demand can be accommodated by the new additions to the guestroom supply. Accommodatable latent demand is calculated for each projection year by multiplying the number of new hotel rooms that have opened since the base year by 365 . This calculation indicates the number of new rooms available per year, which is then
multiplied by the estimated area-wide occupancy for that year. The portion of the latent demand that cannot be accommodated by the new rooms entering the market is known as the unaccommodatable latent demand and is calculated as follows:

Latent demand - accommodatable latent demand $=$ unaccommodatable latent demand

Since the supply of hotel rooms is insufficient to accommodate the unaccommodatable latent demand, the unaccommodatable latent demand must be deducted from the previously calculated total demand to produce an accurate estimate of occupancy and total usable demand. The unaccommodatable latent demand is allocated to each market segment based on the percentage relationship between each segment's latent demand and the market's total latent demand.

## Total Usable Latent Demand

The total usable latent demand for any given projection year is either the total latent demand or the total accommodatable latent demand, whichever is less.

The following case study illustrates quantification of the area's total guestroom supply, the total room nights available, the area occupancy, the accommodatable latent demand, and the total usable latent demand.

## CASE STUDY

## Total Guestroom Supply

In addition to the 250 -room subject Sheraton Hotel, which is expected to open on January $1^{\text {st }}$ of the third projection year, a 140-room Best Western Hotel is scheduled to open on October $1^{\text {st }}$ of the first projection year, and a 200room Marriott Suites is scheduled to open on January $1^{\text {st }}$ of the second pro-
jection year. Financing for both of these projects has been secured, and the likelihood of their completion appears to be very high. In addition, each of these hotels is expected to enter the market at $100 \%$ competitiveness.

Rumors have spread that Hyatt is interested in developing a 300-room convention hotel within the subject market. A site has not been selected and suitable zoning would be difficult to obtain because of a local water moratorium. At this preliminary stage, the development is highly speculative; even if a site and approvals could be obtained, this property would probably not enter the market for six to eight years. For these reasons, a new Hyatt is not included in this supply analysis. Table C.S.4.1 shows the projected guestroom supply for the market area.

## Total Rooms Available

During the base year, the total existing supply (HARC) equated to 1,962 rooms. Along with accounting for the new hotels, our analysis also reflects the impact of the Courtyard by Marriott's partial year of operation in the base year. This 124-room hotel opened on July $1^{\text {st }}$ of the base year, thus its room
count for the base year was pro-rated to 62 . The remaining 62 rooms must be factored into the analysis as of the first projection year. In addition, only 35 of the Best Western's 140 rooms are allocated to the first projection year, reflecting that hotel's projected opening on October 1st. Pro-rating the 140 rooms to account for three months of operation (140 x 25\%) render the year one allocation of 35 rooms. In the second projection year, the Best Western is open for the full year, which effectively adds another 105 rooms to the market.

Once the total number of rooms has been quantified, this figure may be multiplied by 365 in order to generate the market's total room nights available per year

## Unadjusted and Adjusted Market-wide Occupancy

Before the market-wide occupancy can be properly calculated, the accommodatable latent demand and the total usable latent demand must first be determined. Table C.S.4.2 begins by presenting an unadjusted forecast of market-wide occupancy, using the room night demand levels developed in
the previous chapter, and the room night supply levels identified above. As indicated, an unadjusted market-wide occupancy rate of $76.8 \%$ is calculated for the base year, followed by $75.9 \%$ in the first projection year.

Since the market-wide occupancy projection for each year contains latent demand, this occupancy figures may be overstated because latent demand cannot be accommodated until new rooms are added to the market. Further calculations are needed to determine the actual market-wide occupancy based on total usable latent demand.

During the base year, the accommodatable latent demand is always zero. As a result, all of the latent demand is considered unaccommodatable latent demand, and the total usable latent demand is zero. Only after new inventory enters the market can latent demand begin to be realized as accommodatable demand. Table C.S.4.2 identifies the quantity of new rooms that is scheduled to enter the subject lodging market. In the first projection year, a total of 97 new rooms will enter the market, offering a total of 35,405 room nights per year (97 rooms x 365 nights/year). This new supply component is then multiplied by the unadjusted market-wide occupancy rate (75.9\%) in
order to calculate the share of rooms that could logically be expected to accommodate latent demand. The result, in the first projection year, is 26,856 ( $35,405 \times 75.9 \%$ ) accommodatable room nights. In the successive years, the new inventory component is calculated on a rolling basis, as opposed to incrementally.

In order to test the extent to which the latent demand is usable, the latent demand is compared to the accommodatable room nights allocated to the new supply. In the first projection year, latent demand amounts to 34,297 room nights, exceeding the accommodatable room nights of 26,856 by 7,441 room nights. The 7,441 room nights represent unaccommodatable demand. From the second projection year forward, the new inventory features far more capacity than the available latent demand. As such unaccommodatable demand drops to zero for the remainder of the projection period.

Once the overall unaccommodatable demand figures have been quantified for the base year and each projection year, this total must be allocated to each specific demand segment. The bottom half of Table C.S.4.2 is devoted to this methodology. The allocation ratio is figured by calculating the share of latent
demand generated by each segment for each year. Table C.S.4.3 identifies this process. Based on the calculated allocation ratios, the amount of base year unaccommodatable demand is estimated as follows: 24,184 room nights in the commercial segment; 5,767 room nights in the meeting and group segment; and 2,977 room nights in the leisure segment. Table C.S.4.4 identifies these calculations, while Table C.S.4.5 illustrates the calculation of the adjusted room night demand levels, by segment, for the base year. After adjustment, the base year market-wide occupancy rate equates to $72.2 \%$, as illustrated in Table C.S.4.2. Tables C.S.4.6 and C.S.4.7 set forth the calculations associated with the adjustment of the year one projections. After adjustment, the year one market-wide occupancy rate equates to $74.9 \%$.

The projected market-wide occupancy provides an indication of the future health of the local lodging market and a rough estimate of occupancy for any proposed lodging facility.

When projected area-wide occupancies are anticipated to fall below $55 \%$ to $60 \%$, the normal breakeven point for hotels, the health of the local lodging market could be in jeopardy. In these situations the average hotel within a market is unable to generate sufficient cash flow to meet debt service, so competition generally intensifies and hotels reduce their rates to hold onto their market share. If the market does not recover within a short period of time, owners run out of loss reserves and hotels are taken back by lending institutions. These situations can sometimes be avoided by carefully considering the economic impact on both existing lodging facilities and any proposed hotels before recommending that a new hotel be developed in a seriously overbuilt market.

A rough estimate of occupancy can be developed for a proposed hotel using the following rules of thumb:

- A new hotel entering the market should achieve an occupancy rate in Year I that is $5 \%$ to $15 \%$ below the market-wide occupancy level.
- In its second year of operation a new hotel should achieve an occupancy rate that is approximately equal to the market-wide level.
- In Year 3 a new hotel should achieve an occupancy rate approximately 5\% to $15 \%$ higher than the market-wide level.

As with all general rules, there are many exceptions, but this procedure provides a basis for a quick go or no go decision before proceeding to the next step in the analysis.

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## Market-wide Occupancy

The market-wide occupancy for the base year and each of the projection years is set forth in Table C.S.4.8.


#### Abstract

Market-wide occupancy levels are expected to decline significantly beginning in the second projection year, as the new wave of inventory enters the market and absorbs all of the latent demand. Market-wide occupancy is expected to reach a low of $63.6 \%$ in year three, the year in which the proposed Sheraton is slated to open. Thereafter, as supply levels stabilize and demand continues to grow, market-wide occupancy levels are expected to improve and return to levels in excess of $70 \%$ by the sixth projection year.


## Allocate Area Demand to All Competitive Hotels

Once the relationship between supply and demand has been quantified with the estimate of market-wide occupancy, all the competitive hotels are evaluated to quantify their relative competitiveness. Evaluating each hotel's competitive characteristics helps the appraiser fit any new properties into the market and calculate how much of the room night demand each hotel is likely to attract.

The percentage of the market captured by an individual lodging facility is called its market share; the market shares of all competing properties, including the subject, should total $100 \%$ for each market segment.

The allocation of the area's total room night demand among the lodging facilities in the area can be accomplished through an analysis of customer preference items or an analysis of penetration factors. Just as the two build-up approaches for quantifying an area's demand analyze the actual generators of transient visitation, and the demand indicated by all lodging activity, the two approaches for allocating the total demand to individual properties concentrate on the nature of the visitation and the characteristics of the lodging activity. Due to the similarities in these methodologies, demand allocation based on an analysis of customer preference items is generally used in conjunction with the build-up approach based on an analysis of demand generators, while demand allocation based on an analysis of penetration factors is usually applied in conjunction with the build-up approach based on an analysis of lodging activity.

## Demand Allocation Based on an Analysis of Customer Preference Items

Demand allocation based on an analysis of customer preference items generally begins after the build-up approach based on an analysis of demand generators has been completed. Once the final market area is defined and the sources of transient visitation are identified, surveyed, and quantified, the procedure can be applied. The first step is to identify the area's competing lodging facilities by type and class. As described previously, hotels and motels can be categorized by type (commercial, convention, resort, etc.) and each type can be further divided into classes (luxury, standard, economy). Interviews with area hotel managers and a review of published room rate information can facilitate categorization.

The second step is to allocate the demand generated by each source of visitation among the subject property and the other area hotels based on
the characteristics of the demand and the relative competitiveness of the supply. This allocation is based on customer preference items.

Choosing a hotel or motel is actually a complex procedure. Several customer preference items influence the selection of a particular lodging facility. Hotel and motel patrons can be grouped into three categories based on the primary purpose of their trips.

1. Commercial - business travel, either alone or in groups of fewer than five.
2. Convention - gathering for groups, meetings, lectures, seminars, or trade shows.
3. Leisure - recreation, sightseeing, or visiting friends and relatives.

A further breakdown of each group reveals customers' reaction to room rates; economy accommodations will appeal to highly rate-conscious travelers, standard rates draw moderately rate-conscious customers, and
individuals who regard rates of little importance will choose luxury lodgings.

Combining the three customer categories with the three rate reactions produces nine types of guests (e.g., commercial-economy rate, conven-tion-standard rate, leisure-luxury rate). Each customer preference item represents a specific characteristic guests consider in choosing one hotel over another. Six of the most prominent customer preference items are shown in Table 4.27.

Ranking the six customer preference items in order of importance establishes a basis for predicting how guests will choose among several lodging facilities in a particular market area. Table 4.28 ranks the preference items listed above.

For example, an economy-minded commercial traveler will drive farther (more travel time) to stay at a hotel that offers favorable prices. This same
traveler will probably select a property with good-quality facilities over a lower-quality hotel with more amenities. Similarly, a standard-rate leisure traveler places primary emphasis on a hotel's amenities and price, regarding travel time as less important.

A market share distribution can be constructed by carefully analyzing the preferences and characteristics of the typical transient traveler visiting the market area and matching these selection criteria with the competitive hotel-motel supply. Each competitive property should receive a portion of the overall market share; the size of the portion will depend on the property's relative competitiveness and its ability to attract a particular type of traveler. The sum of all the allocated market shares for each generator of demand should equal $100 \%$.

The number of room nights captured by an individual property can be calculated by multiplying each generator's percentage market share allocated to the hotel by the total number of room nights quantified in the build-up approach based on an analysis of demand generators. The total
of all allocated room nights from all generators of demand is divided by the property's room count (multiplied by 365) to produce the estimate of occupancy. The following example illustrates how customer preference information can be used to allocate the room nights generated by a source of visitation among the subject property and all competing lodging facilities. Table 4.28 illustrates the importance of various hotel characteristics to different market segments.

Example. The subject property is a proposed nationally franchised, commercial motor hotel offering typical amenities at standard rates. There are three competing lodging facilities within the market area. Competition A is a luxury-rate, nationally franchised, commercial hotel with high-quality facilities and a good image. Competition $B$ is a standard rate, nationally franchised, commercial motel with good-quality facilities. Competition C is an economy-rate, independent commercial motel with fair facilities.

The home office of a prominent national manufacturing company is one generator of transient visitation within the market area. Based on a sur-
vey of various department heads, an estimate of the firm's out-of-town visitation is developed as shown in Table 4.29.

The property being appraised will be built approximately eight travel minutes away from this source of visitation. The other properties are also nearby. Competition A is 15 minutes from the source of visitation, Competition $B$ is 12 minutes away, and Competition $C$ is 10 minutes away.

In allocating the room nights generated by this source of visitation, the appraiser assumes that most corporate executives will continue to travel the extra seven minutes to stay at Competition A because it offers the best image and quality. Some may use the new facility if Competition A is full or inclement weather or some other factor makes a closer location more desirable. The allocation of room nights based on customer preference items for this market segment is shown in Table 4.30.

Middle-management visitors will choose either the new property or Competition B. Because the property being appraised will be newer and four minutes closer, it may capture a sizable portion of this market. Competition B may respond by upgrading its facilities and/or lowering its rates. If differences in travel time are minimal, the quality of the facilities, price, image, and management could be deciding factors. The allocation of room nights for this market segment is shown in Table 4.31.

Economy-minded visiting salespeople will probably drive the extra two minutes to take advantage of the low rate offered by Competition C. Standard-rate salespeople, like the middle-management visitors, must choose between the new property and Competition B. The allocation of room nights for this market segment is shown in the Table 4.32.

The tables indicate that the total demand from this particular source of visitation allocated to the appraised property is 5,685 room nights: 185 room nights for corporate executives, 3,250 for middle management, and

2,250 for visiting salespeople. If the subject has 150 guest units, the 5,685 room nights would equate to approximately $10 \%$ of occupancy.

Quantifying the total demand generated by all sources of visitation and allocating the room nights between the subject and competing properties is accomplished using the procedure described above. The result is an estimate of occupancy, calculated as the total number of room nights allocated to the appraised property divided by the property's total available rooms per year:

Total number of room nights = Estimated occupancy

Number of rooms X 365

Demand Allocation Based on an Analysis of Penetration Factors

Demand allocation based on an analysis of penetration factors is usually employed in conjunction with the build-up approach based on an analysis of lodging activity. The approach assumes that the accommodated room night demand for each competitive hotel has been determined and allocated among the appropriate market segments. To calculate new market shares for area hostelries when another lodging facility is added to the market, a rating factor known as the penetration factor is used.

Penetration factors show how well each property in the market area competes for a particular market segment. The penetration factor is calculated by dividing a given hotel's market share by its fair share. Market share represents that portion of total demand accommodated by a given property. Fair share represents that portion of total supply accounted for by the same property. A 100 -room hotel in a 1,000-room market has a fair share of $10 \%$. If that same hotel accommodates $12 \%$ of the market's total demand, then its penetration factor is $120 \%(12 \% / 10 \%)$. In other words, this hotel attracts $120 \%$ of its fair share of the market's demand. When a
new hotel enters the market, the projection of future penetration factors is somewhat complicated, and requires the use of a market share adjuster.

Example. Assume that the local market consists of three competitive lodging facilities with a total of 675 rooms. Hotel A has 300 rooms, therefore its fair share equates to $44.44 \%$ (300/675). Market research indicates that, over the past 12 months, Hotel A has operated at $80 \%$ occupancy; $50 \%$ of its total accommodated demand comes from the commercial segment of the market. The number of accommodated room nights per year in the commercial segment for Hotel A is calculated as follows:

300 rooms $\times 365$ days $X 0.80 \times 0.50=43,800$ commercial room nights

After doing similar calculations for the other hotels in the market, Hotels B and C, the total level of commercial demand is estimated at 83,836 room nights. As such, Hotel A's commercial segment market share equates to $52.24 \%(43,800 / 83,836)$. With known fair share and market share ratios,

Hotel A's commercial segment penetration factor can be calculated as follows:

$$
\underline{52.24 \%}=118 \%
$$

44.44\%

Commercial segment penetration factors for each of the hotels in the competitive market are presented in Table 4.33.

The penetration factors show that Hotel C is somewhat more competitive than Hotel A in the commercial segment, and that both Hotels A and C are significantly more competitive than Hotel B. As noted, Hotel A's fair share equates to $44.44 \%$. If it were to capture its fair share of the commercial market, it would receive $44.44 \%$ of the demand, and have a penetration factor of $100 \%$. Hotel C is the most competitive property for commercial demand, with a penetration factor of $126 \%$. However, it has only

125 rooms, so it captures $23.27 \%$ of the commercial market, which is the smallest share noted among the three competitors.

Now, assume that Hotel D enters the market, adding 200 rooms to the total supply. Market research and analysis of its location, amenities, management, and other competitive characteristics indicate that Hotel D will be more competitive than Hotel B for commercial demand, but somewhat less competitive than Hotel A. The penetration factor for Hotel D should fall somewhere between $66 \%$ and $118 \%$, but probably closer to $118 \%$. It is also anticipated that Hotel D will become increasingly competitive during its first two years of operation. Therefore, based on market research and the appraiser's judgment, the penetration factor for Hotel D is estimated to be $97 \%$ in Year I and $105 \%$ in Year 2.

Because this new property has entered the market, the commercial demand must be reallocated among four hotels and the market shares and commercial room nights captured must be recalculated. In this process, note that penetration factors of the existing hotels are expected to remain
stable, and our projections also assume that the level of demand in the market remains fixed. Table 4.34 illustrates this procedure.

The fair share of each property is multiplied by its projected penetration factor to yield the market share adjuster. Each property's market share adjuster is then divided by the total of all the market share adjusters, rendering a revised market share. The market share adjuster re-establishes the market share factors for each property, which is necessary due to the projected opening of the new hotel. Note that Hotel A's market share declines from the historical level of $52.24 \%$ shown in Table 4.33 to $40.6 \%$ in Table 4.34. The decline is chiefly a function of the hotel's decreased fair share. When the market expanded by 200 rooms, Hotel A's fair share declined from $44.44 \%$ to $34.29 \%$. Because the new hotel is expected to increase in the second projection year, Hotel A's market share declines further in that year, falling to $39.8 \%$.

Because the opening of Hotel D is not expected to increase the actual number of commercial room nights accommodated within the market
area, the current demand of 83,836 must be reallocated among the four hotels.

The key to this example is the use of a market share adjuster in the calculation of a property's market share. This unique factor allows an analyst to compare many competitive aspects of a lodging establishment, regardless of the property's room count or changes in the overall supply of accommodations. The example assumes that the relative competitiveness of the original three hotels remains constant, while the new hotel becomes more competitive. This is generally the situation experienced by established lodging facilities operating at stabilized penetration levels. If market research indicates that any of these properties is becoming more or less competitive, however, its penetration factor can be modified upward or downward, as demonstrated in the case study.

The example illustrates demand allocation based on an analysis of penetration factors for the commercial market segment. The same procedure could be used to allocate meeting and group demand, leisure demand, or
any other quantifiable source of visitation within the market area. The ultimate result is a total room night estimate for the subject property, which can be converted into a projection of occupancy by dividing the total projected room nights by the number of available room nights. The results are shown in Table 4.35.

In practice, analysts generally use a combination of customer preference items and penetration factors to allocate room night demand among competitive lodging facilities. Both approaches call for judgments on a wide variety of competitive factors. Experience in hotel operations and analysis can prove invaluable in determining the most probable sequence of events.

## CASE STUDY

## Penetration Factors

The relative competitiveness of the existing area hotels will be compared using penetration factors. The penetration factors for each hotel in the market are calculated by dividing the properties' market share by their fair share in each market segment. Table C.S.4.9 summarizes the base year penetration factors for the hotels included in the market analysis.

Penetration factors must now be assigned to each new lodging facility as it enters the market. Moreover, if the relative competitiveness of any area hotel is expected to change, its penetration factors need to be adjusted. Assigning penetration factors to new properties or adjusting the factors of existing properties is largely judgmental; the factors of similar hotels operating within the market can be used as a basis for these judgments.

The following factors should be considered when assigning penetration factors:

- A new hotel generally becomes increasingly competitive in its initial years of operation, as it builds toward a stabilized occupancy rate.
- Factors that could alter the penetration factors of an existing hotel include: 1) a major renovation or addition; 2) a change in management or franchise; 3) a change in market orientation; and 4) growing levels of physical or functional obsolescence.
- Hotels with particularly high penetration factors in one market segment generally have a relatively low penetration factor in another.

After reviewing the various factors that affect the relative competitiveness of all the hotels within the market area, the following rationale was developed and used in projecting each hotel's penetration factors into the future.

The Embassy Suites opened four years ago and is therefore a relatively new product. It is commercially oriented and its competitive position in the market is strong and stable. The property is well located relative to the competition and demand generators. Its facilities are up-to-date and well maintained. Management operates the property in a competent manner and the Embassy Suites brand name is well recognized among frequent travelers. The market penetrations presently achieved by the Embassy Suites are expected to continue at similar levels into the future.

The Hilton Inn was constructed ten years ago as a convention-oriented hotel and is currently the largest hotel in the market. Its extensive meeting and banquet space, along with aggressive group marketing and skilled management, makes this property the most competitive product in the meeting and group market. With so much emphasis directed towards the meeting and group demand, the Hilton is the area's least competitive hotel in the commercial market. Essentially, most of the Hilton's commercial demand has been purposely displaced by meeting and group patronage. A recent renovation has brought this property up to first-class condition, and it should remain as the meeting and group leader into the future. The market penetration factors presently achieved by the Hilton Inn are expected to continue into the future.

The Radisson Hotel is a convention hotel that competes with the Hilton for group patronage. Constructed fourteen years ago, this property completed an extensive renovation approximately 18 months ago. The upgrade enabled the Radisson to maintain its competitive position. The square footage of its meeting space is somewhat less than the Hilton, making the property less attractive to large groups and banquets. Like the Hilton, the Radisson concen-
trates on group patronage, which displaces much of the commercial business that would normally be using the hotel Monday through Thursday. The market penetration levels presently achieved by the Radisson are expected to continue at similar levels into the future.

The Holiday Inn is one of the area's newer hotels; it opened five years ago. Its facilities include extensive recreational amenities. Like most Holiday Inns, this property benefits from a strong reservation system that draws a good mix of commercial, meeting and group, and leisure demand. The sports facilities are particularly attractive to weekend visitors who come to the property for various organized escape packages. The Holiday Inn also has some good quality meeting and banquet space, which attracts small groups and conferences. As with the group-oriented Radisson and Hilton, the meeting and group demand displaces some of the commercial patronage that would generally use the hotel during the week. The hotel is well maintained and operated by a competent management company. The market penetration levels presently achieved by the Holiday Inn are expected to continue at similar levels into the future.

The Courtyard by Marriott opened mid-way through the base year, and realized strong penetration factors immediately upon opening. The hotel demonstrated particular strength in the commercial and leisure markets. Its excellent location, strong management, and connection with the Marriott brand should make the Courtyard one of the occupancy leaders in the area. With only six months of operating history, the Courtyard has not yet achieved a stabilized level of competitiveness. Gains are expected in all three market segments. The market mix of the Courtyard is expected to be similar to that of the Embassy Suites (i.e., strong commercial, minimal meeting \& convention, and good leisure). It should undercut the Embassy Suites in room rate, capturing the more price-sensitive travelers, particularly in the leisure market. On the other hand, the suite concept seems to be uniformly more competitive in the commercial segment. These factors should enable the Courtyard to be more competitive in the leisure segment, somewhat more competitive in the meeting and group segment and almost as competitive as the Embassy Suites in the commercial segment. Based on this analysis, the market penetration levels for the Courtyard by Marriott are set forth in Table C.S.4.10.

The Ramada Inn is a 17 -year-old property that suffers from some deferred maintenance and a second-rate location in an older industrial park. It has a similar market orientation as the Holiday Inn, but does not capture as much meeting and group or leisure business. The neighborhood surrounding the Ramada consists of warehouses and industrial buildings, which is not conducive to either meeting or leisure demand. Ownership has renovated the property on a regular basis so its competitive position is not expected to deteriorate. The market penetration levels presently achieved by the Ramada Inn are expected to continue at similar levels into the future.

The Island Inn is the oldest hotel in the market, having been constructed twenty-five years ago. Frequent changes in ownership, along with indifferent management has adversely affected the operating results of this property over the past five years. The Island Inn was originally a Sheraton Inn, but lost its franchise four years ago. Without a national identification, reservation system, or sufficient revenue to maintain this property at an attractive level, it is likely that the Island Inn's competitive position will decline over the coming years. The market penetration levels presently achieved by the Island Inn are expected to decline in the future. Declines in competitiveness
are anticipated in all three market segments. Based on this analysis, the market penetration levels for the Island Inn are set forth in Table C.S.4.11.

The Quality Inn opened four years ago with immediate success. Its location next to a growing office complex and an established recreational theme park has enabled this property to capture an attractive mix of commercial and leisure patronage. Weekends and holiday periods are particularly strong for the Quality Inn, enabling it to achieve the area's highest market penetration in the leisure segment. Ownership is presently considering the addition of more meeting space, which currently is quite limited. Initial indications show, however, that the property has a good market mix and any increase in meeting and group usage would probably just displace commercial demand and ultimately lower the average room rate. The property is well maintained and in good physical condition. Its management is competent, especially in marketing to the leisure segment. The market penetration levels presently achieved by the Quality Inn are expected to continue at similar levels into the future.

The Days Hotel is a commercially oriented property that opened twelve years ago. Its convenient highway location enables this hotel to attract a sizable amount of weekend leisure demand along with a high level of commercial patronage. On the other hand, limited meeting space hinders the Days Hotel's performance in the meeting and group segments, but it does attract some rate-sensitive groups. The property has been well maintained and effectively managed. It benefits from a strong reservation system and moderate prices. The market penetration levels presently achieved by the Days Hotel are expected to continue at similar levels into the future.

The composition and competitiveness of the secondary competition is not expected to change over the projection period so the consolidated market penetration factors presently achieved by these properties should continue at the current levels into the future.

In addition to these existing hotels, three new hotels are expected to enter the competitive set over the near term.

The proposed Sheraton hotel is expected to open at the beginning of the third projection year. It will reportedly be designed as a convention-oriented hotel with approximately the same amount of meeting space as the Radisson Hotel. It plans to go after both the meeting and group and commercial segments in a manner that will maximize rooms revenue by not displacing as much of the higher-rated commercial demand with lower-priced meeting and group patronage. The new facilities offered by the Sheraton, along with its excellent location, should make it highly competitive in the local market. Its market penetration levels in all three segments are expected to stabilize at a level somewhat above those experienced by the Radisson Based on this analysis, the market penetration factors projected for the proposed Sheraton hotel are set forth in Table C.S.4.12.

The Marriott Suites hotel will be the second Marriott product in the marketplace. It is expected to open at the beginning of the second projection year, and will cater to a more upscale traveler than the Courtyard and thereby achieve a higher average room rate. Plans call for limited meeting space similar to the Embassy Suites, but the property will have a more upscale overall décor. With a projected room rate somewhat higher than the Embassy Suites, the Marriott Suites should be slightly less competitive in the commer-
cial and leisure segments as far as occupancy is concerned. Marriott's strength in marketing to meeting planners is anticipated to make this property more competitive than the Embassy Suites in the meeting \& convention segment. Based on this analysis, the market penetration factors projected for the Marriott Suites hotel are set forth in Table C.S.4.13:

The Best Western Hotel is expected to open in October of the first projection year. Its facilities will be oriented toward the rate-sensitive commercial traveler and weekend leisure patronage. Meeting space will be limited, so its competitiveness in this segment is anticipated to be minimal. The Best Western has building plans that look attractive, but the property will have an inferior location near the interstate. Based on this competitive analysis, the Best Western should be slightly less competitive than the nearby Days Hotel for highway-oriented leisure patrons. Its competitiveness in the commercial segment is expected to be just below the Quality Inn, which is also a new property with limited meeting space. The market penetration factors projected for the Best Western hotel are set forth in Table C.S.4.14.

Tables C.S.4.15 through C.S.4. 17 show the penetration factors forecasted for each existing and new hotel, by market segment, over the projection period.

The penetration factors form the basis for calculating the market share of each hotel within the market. Once the market share is known, the number of room nights captured by each hotel can be projected, which then leads to an estimate of occupancy.

The process of converting the penetration factor projections into an occupancy forecast includes the following steps:

- Fair share calculations are performed to determine the fair share for each hotel in the market, over the projection period. Because the market-wide inventory commonly changes year to year due to the opening of new hotels, fair share levels generally shift over the projection period.
- For each hotel, the market penetration factor is multiplied by its appropriate fair share, resulting in a factor referred to as the market share adjuster. The market share adjuster is then divided by the total of all the market share adjusters for the
area's competitive hotels. This calculation results in each property's market share percentage. These calculations are performed separately for each segment, by year.
- The segmented market share percentages are then multiplied by the total market demand for each segment. This step produces the actual room nights captured by each hotel, in each market segment.
- The room nights captured by segment are summed to obtain the total room night capture for each hotel.
- Each property's occupancy rate is then determined by dividing the total room nights captured by the hotel's number of available rooms per year (room count x 365).

Table C.S.4.18 sets forth the fair share factors calculated for each of the hotels in the competitive market. Note that the sum of all the fair share factors always equates to $100.0 \%$.

Table C.S.4.19 demonstrates the calculation of the market share adjuster associated with the Embassy Suites, by segment, for each projection year. The penetration factor is multiplied by the fair share factor to produce the market share adjuster.

In Tables C.S.4.20 through C.S.4.22, the market share adjusters for each segment, for each competitive hotel are set forth. Note that the sum of the market share adjusters is generally in the range of, but not equal to, $100.0 \%$.

Table C.S.4. 23 demonstrates how the Embassy Suites' market share adjusters are converted into market share percentages. In each segment, in each year, the Embassy Suites' market share adjuster is divided by the sum of all market share adjusters.

In Tables C.S.4. 24 through C.S.4.26, the market share percentages for each segment, for each competitive hotel are set forth. In this portion of the analysis, the sum of the market share percentages is always $100.0 \%$.

The projected room nights captured by any hotel can be calculated by multiplying the hotel's market share percentage by the total room night demand for the corresponding segment. This process is repeated for each market segment and the results are totaled to yield the number of room nights captured.

## CASE STUDY

## Room Nights Captured

Table C.S.4.27 demonstrates how the market share percentages calculated for the Embassy Suites are converted into an estimate of room nights captured, by segment. In each year, by each segment, the Embassy Suites' market share ratio is applied to segmented market-wide demand levels.

In Tables C.S.4. 28 through C.S.4.30, the segmented room night capture levels for each of the competitive hotels are set forth. In Table C.S.4.31, the segmented demand levels are summed and presented as a total room night capture.

In the case of the Embassy Suites, the occupancy rate is calculated in Table C.S.4.32. The total capture is divided by the number of room nights available per year. This table also identifies the demand segmentation and the overall penetration factor projected for the hotel. Demand segmentation calculations are based on the segmented demand forecast for the property. The overall penetration factor is calculated by dividing the overall market share by the hotel's fair share.

Table C.S.4.33 sets forth the same set of data and conclusions as Table C.S.4.32, although this table pertains to the projections for the proposed Sheraton Hotel. As indicated, the Sheraton is expected to realize an overall penetration factor of approximately $94 \%$ in its initial year of operation, improving to approximately $105 \%$ in its third year of operation. These penetra-
tion factors reflect a normal occupancy buildup for new properties like the proposed Sheraton.

Demand capture levels for each competitive hotel have been divided by their respective supply levels, rendering a forecast of occupancy over the projection period. The results are set forth in Table C.S.4.34.

## Stabilized Occupancy

When projecting a property's room nights captured and occupancy rates into the future, the assumptions of continued growth and no new additions to the competitive supply will ultimately produce unreasonably high capture and occupancy levels. As a result, appraisers use the concept of a stabilized occupancy.

A property's stabilized occupancy level reflects the anticipated level of occupancy over its remaining economic life of the property, given any or all periods of buildup, plateau, and decline in its life cycle. The concept of stabilized occupancy excludes from consideration any abnormal relationship between supply and demand as well as any transitory or nonrecurring conditions, whether favorable or unfavorable' that may result in unusually high or low levels of occupancy. Although it is common for a hotel to operate at occupancies above its stabilized level for a period of time, it is equally possible that new competition and temporary downturns in the economy could force actual occupancy below stabilized occupancy.

Projections become more uncertain the further into the future they are made. The use of a single stabilized occupancy rate produces the same results as a forecast that attempts to reflect the inevitable upward and downward occupancy cycles that a typical lodging facility experiences. Furthermore, discounting future economic benefits tends to smooth out the cycle, providing additional support for using a stabilized level of occupancy.

For new hotels like the proposed Sheraton described in the case study, a two- to five-year buildup in occupancy is generally factored into the projection. Very few hotels stabilize in their initial year of operation. Since the initial years tend to generate operating losses, the build-up period must be included in the projection to illustrate the actual start-up cash requirements.

Many factors influence the selection of a stabilized level of occupancy. The following list identifies several key considerations:

Market-Specific Considerations

- Market area demand trends
- Composition of local demand
- Supply and competitive trends
- Historic occupancy cycles


# Property-Specific Considerations 

- Location-specific factors
- Competitiveness
- Age
- Management and image
- Obsolescence

The nature of the local hotel demand is probably the best indicator to analyze in establishing a stabilized level of occupancy. Different types of travelers have different travel patterns (i.e., days of travel, length of stay, and seasonality), so the mix of visitor types within a given market will influence the area's overall level of occupancy.

For example, assume a market has a very strong business base, which generates a significant room night demand Monday through Thursday
nights. However, the local area has no leisure attractions, so very few people use local hotels and motels on Friday and Saturday nights. Some commercial demand is experienced Sunday night as business travelers try to get a head start on Monday's activities. Because of this occupancy pattern, the maximum market-wide occupancy would be approximately 67\%, assuming near sellouts every Monday through Thursday. Table 4.36 illustrates how this maximum occupancy level was established.

Considering market conditions and the nature of the existing lodging demand, a stabilized occupancy rate higher than $67 \%$ could not be justified unless the property has competitive or physical attributes that enable it to capture more than its fair share of weekday demand as well as the existing weekend demand.

The historic occupancy cycles experienced in the market area also provide an indication of where the stabilized occupancy rate should fall. Table 4.37 shows the 20-year occupancy cycle of three different hypothetical cities.

Statistical data relating to the 20-year occupancy cycles are shown in Table 4.38 .

The stabilized occupancy for each of these cities should approximate the average occupancy, which is generally the midpoint between the highest and lowest occupancy levels recorded during the 20-year period.

The following case study illustrates the estimation of stabilized occupancy.

## CASE STUDY

Estimating Stabilized Occupancy

The end result of the supply and demand analysis is a yearly estimate of occupancy over a given period of time. The appraiser must now evaluate each yearly occupancy estimate and determine whether it is appropriate for use in the projection of income and expenses. This evaluation also includes determination of the subject's stabilized level of occupancy. Table C.S.4.35 shows the yearly occupancy projections for the market at large, the existing Embassy Suites, and the proposed Sheraton Hotel.

The occupancy for the market area peaks in the first projection year at $75 \%$ and declines to a low of approximately $64 \%$ in the third projection year. Thereafter, market-wide occupancy levels are expected to improve.

Projected occupancy levels for the Embassy Suites rise to $82 \%$ in the first projection year, then decline substantially to $70 \%$ in year three. Based on the Embassy Suites popular design and stable market presence, a stabilized occupancy rate of $72 \%$, as realized in the fourth projection year, is considered to be appropriate. Table C.S.4. 36 sets forth the projection of occupancy through the stabilized year for the Embassy Suites. For the proposed Sheraton, the new hotel may be expected to reach a stabilized level of operation as of its
third year of operation (the fifth projection year), when an occupancy rate of $71 \%$ is forecasted. Table C.S.4.37 sets forth the projection of occupancy through the stabilized year for the proposed Sheraton Hotel.

## Average Rate Per Occupied Room

After occupancy has been estimated, the average rate per occupied room is needed to forecast a hotel's rooms revenue. Like occupancy, the projected average rate is derived through market analysis. The ability of a hotel to achieve a satisfactory average room rate can impact both its financial feasibility and its market value. Appraisers must understand the definition of average rate per occupied room, how is it estimated, and what factors can affect its future movement.

## Definition

The average rate per occupied room is defined as the net rooms revenue derived from the sale of guest rooms divided by the number of paid rooms occupied. The Uniform System of Accounts for Hotels defines the components of this formula as follows:

- Net rooms revenue - Total rooms revenue less allowances.
- Allowances - Rebates and overcharges or revenue not known at the time of sale but adjusted at a subsequent date. Allowances may also include revenue foregone as a result of hotel promotions or complimentary services.
- Paid rooms occupied - Rooms occupied by hotel guests on a paid basis. It should be noted that the overall average rate per occupied room does not include any occupancy derived from complimentary rooms.

Since most hotels have many different rate categories depending on the size of the accommodations, view and location, age and condition, and types of travelers served, the average room rate represents the weighted average of all these rate categories. Several of the rate categories used by hotels are described below.

- Rack rate - An undiscounted room rate generally given to anyone who does not qualify or ask for a special discounted rate. The term is derived from the room rack, a front desk feature that is less common in the computer age. The room rack traditionally contained information about each room's rate, including the highest rate that can be charged for that particular accommodation. When a hotel is expected to be full during a certain period or a guest arrives without a reservation, the rack rate is generally the only rate available. The average room rate is always less than the rack rate.
- Published rate - The rate listed in directories and other publications. This rate is usually quoted as a range (i.e., single: $\$ 70-\$ 100$ ) and represents the various rack rates for specific types of accommodations. Published room rates usually set the upper limits of average rates. Average room rates tend to be closer to published rates for single rooms than for double rooms.
- Commercial rate - A discounted room rate available to certain commercial travelers. Some hotels will charge any commercial traveler a commercial rate upon request, while others offer it only to established accounts based on their projected usage of the hotel. Commercial rates often differ because they are individually negotiated between the commercial business and the hotel. Commercial rates are always below the rack and published rates and,
depending on the market mix, will often approximate the property's average room rate
- Contract rate - A discounted room rate available to specific high-volume users such as airlines, convention groups, and bus tours. Contract rates are negotiated by the user and the hotel and often apply to a block of rooms that are reserved on an ongoing basis and paid for whether they are used or not. For example, an airline may contract for 35 rooms per night for a full year. Two crews may utilize these rooms in a 24 -hour day, if scheduling permits, or they may not be used at all if a flight is delayed or canceled. Depending on the amount and timing of the usage, a contract rate may be heavily discounted and fall significantly below both the average rate and the commercial rate.

The mix of business it attracts in various rate categories affects the average room rate of a hotel. A hotel that caters to a large number of airline crews or convention groups will generally have a lower average room rate than a property used primarily by commercial travelers.

Hotels operators continually attempt to maximize their room rates. With computer software that can perform yield management, hotels can coor-
dinate projected future usage by market segment and employ a continuously sliding scale of room charges to achieve the best room rates. The ability to adjust room rates constantly to maximize the yields produced by changes in room night demand is one of the advantages of hotel investment.

## Estimating the Average Rate per Occupied Room

Different procedures are used to forecast the average rate per occupied room for existing and proposed hotels. An existing hotel has an operating history that establishes an actual average room rate, which serves as a starting point for forecasting future rates. Proposed hotels have no operating history, so the initial average room rate must be derived by analyzing the competitive rates actually achieved by local hotels with comparable facilities. The various procedures for forecasting average room rates for existing and proposed hotels are outlined in the following sections.

## Forecasting Average Room Rates for an Existing Hotel

In forecasting average room rates for an existing hotel, the property's operating history is used as a starting point and future rate changes are forecast based on market conditions and the property's relative competitiveness. Seven steps are involved in this process.

1. Compile the subject's overall average room rates by month for the past three to five years.
2. Analyze historical trends in the subject's average room rates.
3. Consider the historical relationship between the average room rate and occupancy.
4. Research the average room rates for the subject property's primary and secondary competition.
5. Compare the average room rates of the subject and the competition.
6. Project future changes in average room rates.
7. Project the subject property's average room rate.

First, the subject's overall average rates are compiled month by month for the last three to five years. A monthly analysis is used to highlight any seasonality in the property's ability to charge desirable rates.

Next, historical trends in the subject's average room rates are studied and the compounded annual growth rate is calculated. If sufficient data are available, growth trends should be evaluated on a monthly basis and by individual market segments.

Since average room rate and occupancy are often related, the historic relationship between these two components should be analyzed. Average room rate can be affected by changes in occupancy. In markets where occupancies are declining, for example, average room rates will usually soften and sometimes even fall. In markets where hotel patronage is rising, average rooms rates will often show real growth in excess of inflation. These fluctuations can be attributed to competitiveness and price sensitivities. When a market experiences a decrease in lodging demand or an increase in the supply of hotel rooms, occupancy levels tend to decline. In-
dividual properties react to this erosion of patronage by becoming more competitive and rate-conscious or by holding a hard rate policy when negotiating for new business or contracts. As market-wide occupancy levels fall further, hotels feel increased pressure to cut rates even more to hold on to their market shares. By understanding the historic occupancy pattern experienced by the subject property, the appraiser is better able to explain past movements in average room rates based on this room rateoccupancy relationship.

In addition to the external market factors that influence average room rates, an individual hotel will generally experience an increase in its average rate as a result of increased occupancy. This increase can be attributed to the fact that as a hotel approaches $100 \%$ occupancy, management is able to sell more of the property's higher priced rooms and is less willing to offer discounts and other incentives to promote occupancy. A potential customer making a reservation at a hotel with one room remaining will probably pay the full or rack rate. By selling out its higher-priced rooms,
a hotel can generally increase its average room rate faster than either inflation or local market conditions would allow.

The appraiser's next task is to research the average room rates of the subject property's primary and secondary competitors. This information is usually gathered during competitive interviews. The appraisers should be sure that the data represent recent average room rates rather than published or rack rates.

The subject's average room rate is compared with the rates exhibited by the competition. Some differences can be attributed to factors such as location, the scope of the physical facilities, management, image, quality, and the market segments served. If the average room rate comparison reveals differences that cannot be adequately explained, further investigation is needed.

To project future changes in average room rates, many factors must be considered. The ability of a hotel to increase room rates over time is influenced by supply and demand, inflation, competitive standards, and specific property improvements.

As discussed previously, the relationship between the local supply of transient accommodations and the demand for lodgings is a determining factor contributing to future trends in hotel occupancy and average room rates. A market that is overbuilt or is losing demand will probably not experience any significant increases in average room rates. In fact, as this situation becomes more severe, room rates may even start to decline.

Price increases caused by inflation also affect room rates, but in an indirect manner. When a hotel operator sees profits being eroded by increased operating costs, there is a natural tendency to raise room rates to offset higher expenses. If other hotels in the market are in the same situation, the competitive environment will probably allow them all to increase their rates.

Room rates can also increase due to an improvement in the competitive standard. In established hotel markets where the stock of existing lodging facilities shows obvious physical and functional obsolescence, room rates may tend to lag behind inflation. This trend is often reversed when a new, upscale property is introduced into the markets. The new hotel must quickly achieve a higher-than-typical room rate to be economically justified. Most existing hotels in the same market benefit from the introduction of the higher-priced competition because it exerts upward pressure on room rates and enables all operators to raise their rates.

Changes in the subject property that make it more or less desirable to transient visitors can affect future trends in average room rates. The expansion, renovation, upgrading, or addition of facilities and amenities, new management, or a different franchise affiliation can allow a hotel to increase room rates more rapidly than normal. Similarly, the lack of periodic maintenance and replacement can make a property less competitive and cause room rates to decline.

After evaluating all the room rate data available and forming appropriate conclusions, the appraiser is ready to forecast the subject's average room rate over the projection period. Up to the point when the subject property reaches stabilized occupancy, movement in the average room rate is generally attributed to the property-specific and market specific factors described above. After the hotel achieves stable occupancy, most forecasters assume that room rates will continue to increase at the anticipated rate of inflation over the remainder of the projection period. Since each market situation is unique, this inflation assumption should be validated before it is utilized.

## Forecasting Average Room Rates for a Proposed Hotel

Forecasting the average room rate for a proposed hotel is similar to the procedure applied to an existing property except the appraiser does not have an operating history and a benchmark rate from which to project
room rates into the future. The appraiser should begin by compiling a complete database of information relative to the room rates actually achieved by competitive properties in the area. In addition to collecting room rate data (by market segment if possible), the appraiser should examine the relative competitiveness of each property to identify the reasons for any room rate differentials. This information is then used to project average room rates for the proposed subject property.

Three methods can be used to forecast average room rates:

1. Competitive positioning
2. Market segmentation
3. Rule-of-thumb

Competitive positioning method. The competitive positioning method starts with an analysis of the average room rates currently achieved by local competitive hotels. These rates establish a range within which the
room rate for a proposed hotel is likely to fall. The projected average rate for the subject property is then set close to the average rate of the hotel in the sample that is most similar to the subject in quality, size, facilities, amenities, market orientation, location, management image, and affiliation. Upward and/or downward adjustments are then made to the average rate to reflect any differences between the comparable and the subject property.

The competitive positioning method works well if the local market contains a hotel that is relatively comparable to the proposed subject property. It can also be used to verify that the average room rates achieved by an existing hotel represent an optimum level for the market.

Market segmentation method. In applying the market segmentation method, the appraiser develops an average room rate by individual market segments. This method starts with the previously developed demand forecast for the subject property, which includes a projection of the number of room nights captured for each market segment (commercial, meet-
ing and group, leisure, etc.). Using the rates charged by competitive properties as a base, a room rate estimate is developed for each market segment. The estimated room rate for each market segment is multiplied by the projected number of room nights captured and the results are totaled to yield the total rooms revenue. An average rate is then calculated by dividing total rooms revenue by the number of rooms occupied.

The advantage of the market segmentation method is its ability to adjust the projected average room rate for changes in market mix. For example, a new, convention-oriented hotel is likely to experience a buildup of convention capture during its initial years as sales efforts become more effective and groups are drawn to the property. If convention rates are lower than the property's commercial rates, the change in the market mix away from commercial business and toward more convention patronage will probably slow the growth of the average rate. This room rate sensitivity can only be examined by assigning an individual rate to each market segment and using the market segmentation method.

Rule-of-thumb method. In the hotel industry there is a rule of thumb that states that for every $\$ 1,000$ of total project cost (on a per-room basis), a hotel must achieve an average room rate of at least $\$ 1.00$ to be financially feasible. Therefore, if it costs $\$ 90,000$ per room to construct a new hotel, the property must attempt to achieve an average rate of $\$ 90$.

The rule-of-thumb method provides a target indicating where the average room rate should be set; it is not a market-based approach and does not consider the various local competitive factors investigated in the other methods. However, in markets where several new properties have recently been added, the upward pressure on room rates generated by the economics inherent in this thumb rule often causes the entire market to raise rates.

Because the rule-of-thumb method is extremely simple, it must rely on numerous assumptions. Some of the many assumptions built into this method pertain to the subject's occupancy rate, the ratio of food and beverage revenue to rooms revenue, operating costs, fixed expenses and capi-
tal costs. Properties that do not fit the national norms for these characteristics are apt to require more or less than $\$ 1.00$ of average rate to justify $\$ 1,000$ per room of development cost. For example, assume that this rule of thumb works for hotels with an occupancy rate of $72 \%$. If the subject property is projected to achieve only $68 \%$ stabilized occupancy, then it will take more than $\$ 1.00$ of average room rate to cover $\$ 1,000$ per room in development costs. In this case an adjusted rule of thumb of $\$ 1.25$ to $\$ 1.50$ of average room rate might be needed to justify each $\$ 1,000$ of cost per room.

## Room Rate Discounts

It is not unusual for new hotels to discount their room rates during the initial years of operation in an attempt to increase the hotel's market share and generate occupancy. If this strategy is likely to be utilized, the appraiser should adjust the average room rates established by the previously described methods downward to reflect appropriate room rate discounts.

In the following case study, average room rates are projected for an existing hotel, as well as a proposed lodging facility.

## CASE STUDY

## Projecting Average Room Rates

The average room rates for the existing Embassy Suites and the proposed Sheraton Hotel will be estimated for each projection year until the hotel achieves stabilized occupancy.

Since hotel room rates depend greatly on the local competitive market, it is necessary to survey the average rates achieved by the competition. Table C.S.4. 38 shows the average room rates for the primary competition (including the Embassy Suites) in the base year. The weighted average of the aver-
age room rates is also presented; it accounts for the size and base year occupancy level of the properties.

In the base year, the Embassy Suites posted the strongest average rate, at \$151. This hotel led the market by virtue of its all-suites guestroom facilities, the quality of its location, and the popularity and strong loyalty engendered by the Embassy Suites brand. The market's Hilton, Courtyard, and Radisson affiliates also achieved relatively high average rate levels, each exceeding the market average of $\$ 130.57$. Overall, the Embassy Suites actual results for the base year are considered to adequately reflect its competitive position, requiring no material adjustment.

In order to project future increases in the Embassy Suites' average rate levels, additional context for rate growth trends may be derived from market data provided by Smith Travel Research (STR). Table C.S.4.39 sets forth average rate trends for all hotels located in suburban Long Island, as compiled and published by STR. Note that this survey pertains to a broader market area than that defined for the subject property. Nevertheless, the data are a worthy indicator of general pricing trends.

Between 1990 and 1999, average rate in the suburban Long Island market area increased at an average annual compounded percentage rate of $5.5 \%$. This growth rate encompasses the early 1990s, during years of economic recession, as well as the economic expansion of the late 1990s. Whereas the market's average rate actually declined in 1991, dramatic growth of $11.5 \%$ was noted in 1998. In 1999, average rate growth slowed slightly, but remained strong at $9.0 \%$.

In future years, as new hotels begin to enter the competitive market, average rate growth may be expected to slow significantly. Occupancy levels are expected to soften in the near term, and therefore limit prospects for the type of aggressive pricing increases noted in the past four years. These considerations are reflected in the projection of average rate for the Embassy Suites, as detailed in Table C.S.4.40.

In projecting the average rate of the proposed Sheraton, we have used the market segmentation method. Because we have access to the historical segmented average rate results realized by the Embassy Suites, the data may be
used as a basis for estimating the subject property's segmented average rates. Table C.S.4.41 identifies the Embassy Suites' data, as well as the projections for the Sheraton. As noted, the Sheraton's average rate is expected to be lower than that of the Embassy Suites in each demand segment, owing to the popularity of the Embassy Suites operating concept, and the fact that each of its guest units are two-room suites. After accounting for the proposed Sheraton's higher share of discounted meeting and group demand relative to the Embassy Suites, the resultant average rate will also account for the impact that market segmentation has on a given hotel's overall average rate.

In order to project future changes in the segmented rates selected for the Sheraton, Table C.S.4.42 sets forth the appraiser's estimate of future changes in market-wide average rate. Variation in the overall pricing trends may be reflected in a given market segment; however, in the case of the subject market area, we have projected uniform increases of $6.0 \%$ in year one, $5.0 \%$ in year two, $4.0 \%$ in year three, and $3.0 \%$ in year four and thereafter. Table C.S.4. 43 sets forth the basis for the segmented average rate forecast. In Table C.S.4.44, the projected segmented average rates are multiplied by the segmented demand forecast for the proposed Sheraton, beginning as of year three, the hotel's first year of operation. The revenue in each year is totaled
and divided by the total demand, resulting in a forecast of weighted average rate.

Since the projected average room rates for the proposed Sheraton were estimated through comparison with the average rates achieved by similar, but more established hotels in the market, the initial years' rates must be adjusted downward to account for factors such as discounting, occupancy buildup, and customer acceptance. Most new hotels will discount their room rates during the first year or two to offer a competitive advantage and build occupancy. This strategy tends to set a new property's actual average rate below that of a comparable hotel operating at its stabilized level of occupancy. As occupancy builds up, room rates tend to increase because the hotel is selling more of its higher-priced rooms and suites. Management can usually begin to be less flexible in offering discounts and acquires more experience in maximizing yield. Finally, as a hotel matures, customer acceptance becomes more established, and this loyalty often allows the operator to push room rates upward.

To account for all the factors that tend to depress room rates during the initial years of operation, an appropriate discount must be applied to the projected average rates derived from comparable hotels. Generally the size of this discount is inversely proportional to the hotel's overall competitiveness. The discount may also be related to the general health of the local hotel market, which might suggest deeper discounts when occupancy levels are depressed.

Based on the appraiser's analysis, the discounts shown in Table C.S.4.45 were applied to the proposed Sheraton's average rate during its first two years of operation.

