

CHAPTER 10

Lodging Demand Analysis

10.01 Introduction	10-1	[b] Induced Demand	10-6
10.02 Demand Generator Build-Up Approach	10-2	[c] Final Determination of Latent Demand	10-7
[1] Definition of Market Area	10-2	[3] Accommodatable Latent Demand	10-7
[2] Potential Demand Generators	10-3	[4] Accommodated Room-Night Demand	10-9
[3] Demand Interviews and Surveys	10-3	[5] Total Usable Latent Demand	10-9
10.03 Lodging Activity Build-Up Approach	10-4	[6] Total Available Room-Nights	10-9
[1] Current Accommodated Room-Night Demand	10-5	[7] Overall Occupancy	10-9
[2] Current and Forecasted Total Latent Demand	10-5	EXHIBIT 10.1 Demand Generator Interview Form	10-11
[a] Unaccommodated Demand	10-5	EXHIBIT 10.2 Demand Generator Survey	10-12
		CASE STUDY Lodging Demand Analysis	10-15

10.01 INTRODUCTION

Careful analysis of the demand for lodging in the subject market area is essential in determining the feasibility of a proposed facility or the value of an existing one. An appraiser should begin an analysis of lodging demand by identifying the demand generators in the area (the reasons why people who need overnight accommodation visit the subject market area). Table 10.1 contains a list of typical demand generators. The unit of measurement used to quantify demand is the room-night, which represents one hotel or motel room occupied by one or more persons for one night. The case study at the end of this chapter provides an example of a lodging demand analysis.

Once the demand generators (also called generators of transient visitation) in the market area are identified, the current amount of demand they create can be estimated. This estimate serves as a basis for projecting future demand, which is a basic component of an economic market study and appraisal. Two techniques—the demand generator build-up approach and the lodging activity build-up approach—are used to quantify current demand. The demand generator build-up approach is the more complicated and time-consuming of the two, but it is the preferred way to determine the level of demand in new market areas (i.e., those without competing facilities) for proposed facilities that would cater to untapped markets, or in markets with only one demand generator.

TABLE 10.1
Lodging Demand Generators

Airports	County seats and state capitals	National or state parks and scenic areas
Amusement parks	Court houses	Racetracks
Association headquarters	Festival sites	Regional shopping centers
Casinos	Historical attractions	Resort areas
Colleges and universities	Hospitals	Sports stadiums
Companies and businesses	Military installations	Theaters
Convenient highway stopping points	Museums	Tourist attractions
Convention centers	Offices and industrial parks	World and state fairs

10.02 **DEMAND GENERATOR BUILD-UP APPROACH**

The demand generator build-up approach involves the use of interviews and statistical sampling techniques to estimate lodging demand by projecting the room-nights attributable to local demand generators. This method should be used when:

- The subject property will be situated in a new market area where there is no current competition by which to measure existing room-night demand, such as a new resort area.
- The subject property will cater to a particular market segment, such as upscale executive conferences, that does not exist in the current marketplace.
- The subject property will cater to a segment of the market that does not currently use standard hotels and motels, such as the extended-stay market.
- The market has only one demand generator (e.g., a large university situated in a small town, such as the University of North Carolina at Chapel Hill).

The demand generator build-up approach is not usually used to quantify room-night demand in established markets, because its sampling requirements are very time-consuming, it is an expensive process to carry out, and the final results are not always as accurate as those obtained from the lodging activity build-up approach. However, even when the primary method for gathering information is the lodging activity build-up approach, it is often beneficial to conduct the demand generator interviews in order to collect data on the needs, desires, and experience of actual participants in the marketplace. The resultant "feel" for the market can be very helpful during the evaluation of the competitive environment.

[1] **Definition of Market Area**

The appraiser's first step in using the demand generator build-up approach is to define the market area for the subject property. As described in Chapter 9, the boundaries of the market area for a lodging facility are generally considered to be the distance that can be covered in all directions from the subject property in 20 travel

minutes. Normally, most of the demand generators relevant to the study will be situated within this market area.

[2] Potential Demand Generators

The appraiser’s next step is to identify potential demand generators within the market area. Common sources of information that may prove to be instrumental in the identification process include the following:

- Hotel managers
- Directories of local businesses (usually available from the Chamber of Commerce)
- Visitors’ and Convention Bureaus
- Car rental agents, taxi drivers, gas station operators, restaurant managers, and real estate agents
- A drive-through inspection of the area (i.e., to determine the number of out-of-state cars)

[3] Demand Interviews and Surveys

Once all of the significant generators of overnight visitation in the market area have been identified, the appraiser conducts demand interviews. The key to obtaining useful information from demand interviews is simply finding and talking to the right person—an individual with firsthand knowledge about the room-night generating capability of the area demand generators. In most instances, this person is either a “seer” or a “booker.”

A seer personally interacts with transient visitors to particular demand generators in the normal course of business. Purchasing agents, office managers, receptionists, security personnel, and admission ticket clerks are all seers. A seer typically can offer information that is general in nature, such as impressions of the volume and types of visitors to an individual facility.

A booker is responsible for actually booking transient visitors into local lodging facilities. In addition to travel agents and centralized reservation service agents, examples of bookers are personnel managers, travel department personnel, office managers, training department personnel, and executive secretaries. A booker can usually provide more detailed data on lodging demand than a seer. In many instances, bookers will be able to provide information concerning the preferences of travelers, such as the types of accommodations used and the frequency of travel.

After identifying appropriate seers and bookers, the appraiser can begin the demand interviews. Generally, the most effective interviews are those held in person or over the telephone. However, satisfactory information can occasionally be obtained from letter surveys. The following is a list of the most important questions that the appraiser should ask during demand generator interviews.

- How many visitors do you see or book during a typical week? (An important point to remember when asking questions such as this is to keep the timeframe as short as possible because people generally have difficulty quantifying data over an extended period of time.)
- Are there any seasonal, monthly, or weekly patterns to the visitation?

- How long do the visitors stay in the area?
- Do the visitors go to other demand generators in the area?
- Where do visitors currently stay, and why?
- What would you estimate is the percentage split between single- and double-occupancy bookings?
- What facilities do visitors normally use in the hotel?
- What sort of price sensitivity do visitors generally have?
- How do visitors book their reservations?

Exhibit 10.1 is an example of the type of form that an appraiser uses to compile information elicited during a demand generator interview. The demand generator survey shown in Exhibit 10.2 is an example of a written survey that can be used to quantify lodging demand and to learn about traveler preferences. When a written survey approach is used, it is essential that the most appropriate party receive the survey material. Sometimes a preliminary phone call is necessary to correctly identify the individual with the most knowledge of the material covered by the survey. The case study at the end of this chapter is based in part on the results of a battery of actual demand generator interviews.

10.03 **LODGING ACTIVITY BUILD-UP APPROACH**

The lodging activity build-up approach is the most frequently used procedure for quantifying current hotel room-night demand, because it yields the actual number of occupied hotel rooms in the subject market area. In most parts of the country, the market area for a hotel can be readily defined and the competitive facilities within it easily identified, so that once these facilities' occupancy rates are determined, current room-night demand in the market area can be calculated and future demand projected.

The steps involved in this approach are as follows:

1. Identify the primary and secondary competitive lodging facilities situated within the market area.
2. Estimate the occupancies of the competitive lodging facilities.
3. Determine the percentage of total occupancy represented by each market segment for each facility.
4. Quantify the current accommodated room-night demand in the area.
5. Estimate total latent demand (i.e., unaccommodated and induced demand) for the area and develop a forecast of latent demand.
6. Calculate accommodatable latent demand and total usable latent demand.
7. Forecast accommodated room-night demand over the projection period and combine it with total usable latent demand to yield total usable room-night demand.
8. Quantify the area's total guestroom supply and the total room-nights available.
9. Estimate overall area occupancy over the projection period.

The procedures that must be followed to accomplish the first three steps in the approach are described in Chapter 9. The balance of this chapter outlines the tasks that an appraiser must undertake to complete the process.

[1] Current Accommodated Room-Night Demand

The quantification of the current accommodated room-night demand is accomplished by totaling the number of occupied rooms by market segment for each of the competitive facilities in the subject market area. The formula for this calculation is as follows:

$$\begin{aligned} &\text{Room count} \times \text{Occupancy percentage} \times \text{Market segmentation} \times 365 \\ &= \text{Total number of occupied rooms per year} \end{aligned}$$

[2] Current and Forecasted Total Latent Demand

Latent demand is defined as demand that potentially exists in a market but for any of a number of reasons is not accommodated by the current lodging supply. Estimating the total latent demand in a market area is probably the most difficult part of the lodging activity build-up approach, because the two main components of latent demand—unaccommodated demand and induced demand—are not easily quantified.

[a] Unaccommodated Demand

Unaccommodated demand is difficult to measure because it is made up of transient travelers who seek accommodations within a market area but must either defer their stay or settle for less desirable accommodations because the facilities where they want to stay have no vacancies.

This form of excess demand is a result of the cyclical nature of the lodging industry. In commercial markets, for example, area occupancy levels from Monday through Thursday often approach 100 percent. When occupancy reaches this level, a certain number of visitors to the area will usually go unaccommodated. Similarly, when resort areas frequently sell out during peak vacation periods, a percentage of total room-night demand goes unaccommodated. Unaccommodated transient visitation is, in fact, a normal occurrence in every type of lodging market because total area room supply cannot freely expand in response to surges in lodging demand.

Unaccommodated demand is an important consideration in a market study and appraisal. If it is ignored or not properly quantified, the conclusions drawn by the appraiser regarding the effect of the entry of a new facility in the market will be inaccurate.

In order to properly judge the amount of unaccommodated demand in a market area, an appraiser must assess the following factors relevant to the market area in question:

- Nature of demand.* The appraiser must determine whether demand in the market is highly cyclical, with a tendency toward concentration at particular times (e.g., Monday through Thursday, vacation periods, or during special local events).

- Area occupancy level.* The appraiser must determine whether most of the local lodging facilities are operating at or near their stabilized levels of occupancy (considering, of course, the nature of transient demand in the area). As a rule of thumb, in a typical commercial market, where demand is high Monday through Thursday and drops considerably on weekends, a strong stabilized level of occupancy would be 70 percent. Under such circumstances, an areawide occupancy rate of 78 percent would probably produce a significant amount of unaccommodated demand. If, on the other hand, most of the lodging facilities in the area were operating with an occupancy level of around 60 percent, the unaccommodated demand would probably be negligible.
- Number of fill nights.* Some of the questions asked in competitor interviews (described in Chapter 9) should be directed toward estimating the number of nights on which area hotels actually fill to capacity. Once this number has been established, the number of potential customers who are turned away can be quantified. Some hotels with centralized reservation systems generate a monthly denial report, which shows the number of people who call to make a reservation at a specific hotel but are denied a reservation because the facility is fully booked. Occasionally, individual hotels also keep track of the number of walk-ins (people who arrive without a reservation) that occur on days when the hotel is fully booked. These alternative ways of measuring unaccommodated room-night demand are useful, but unfortunately are not often available to appraisers.
- Alternative accommodations.* If it is apparent that a sizable amount of unaccommodated demand exists in the subject area, the appraiser might want to interview personnel at some of the alternative choices of accommodations to determine where their demand originates and how many of these customers would use other facilities if they were available. (Alternative accommodations typically include lodging facilities outside the subject market area or hotels within the area that are considered less desirable by these travelers.)

Unaccommodated demand is generally estimated as a percentage of the accommodated demand for each market segment. Unaccommodated demand typically ranges from zero to 30 percent of the accommodated demand, with the upper end of the range representing exceptionally strong markets. In good hotel markets a reasonable level of unaccommodated demand is usually 5 to 10 percent. Unaccommodated demand is always difficult to quantify accurately, so a conservative estimate by the appraiser is usually warranted.

[b] Induced Demand

In addition to unaccommodated demand, there is a second form of latent demand called induced demand. Induced demand represents customers who are attracted to the market area for one or more specific reasons, such as:

- The opening of new lodging facilities that offer previously unsupplied amenities such as extensive meeting and convention space, a golf course, skiing, or a health spa.
- The aggressive marketing efforts of individual properties. Some of the major hotel chains bring new customers into the market through other properties they operate. Convention-oriented lodging chains, for example,

are frequently able to book convention groups in a different hotel in their system each year, thus creating induced demand.

- The opening of a new major demand generator, such as a convention center, commercial enterprise, retail complex, or recreational attraction.

The procedure for totaling induced demand is similar to the demand generator build-up approach¹ in that the appraiser evaluates each generator of induced demand to determine the number of room-nights that will be attracted to the market area. Induced demand can enter the market either all at once or gradually over one or more years.

[c] Final Determination of Latent Demand

The sum of unaccommodated and induced demand equals the latent demand in a market area. The method for forecasting unaccommodated latent demand over a projected period of time is based on the procedures described in Chapter 8 for evaluating economic and demographic trends in a market area and estimating future change in lodging demand. In most instances, accommodated room-night demand and unaccommodated demand change in the same direction and at the same rate over the projection period of time. Most types of induced demand, however, will act independently. For example, the opening of a large convention hotel in an area that had little existing convention demand might cause a large increase in induced demand for convention room-nights. Depending on the size of the convention hotel, this additional demand will usually increase rapidly over a period of time and then stabilize as the hotel approaches its capacity. The growth in this induced demand is generally independent of the growth in the convention demand in the market area.

[3] Accommodatable Latent Demand

Accommodatable latent demand is the portion of latent demand that can be absorbed by a market area in the future, and is based on the number of additional new rooms that are expected to become part of the market supply. In order to calculate accommodatable latent demand, the appraiser must first determine the number of competitive rooms currently proposed and the number already under construction in the area. Locating the properties under construction is easily accomplished by interviewing personnel in the local building department, which monitors all area development activities. The building department is also a good source of information for identifying proposed lodging facilities. Most market areas have several hotel projects in various stages of planning but not presently under construction. The difficulty in making predictions based on proposed projects is that very few are actually built; in fact, probably only one in ten proposed hotel projects ever makes it out of the planning stages. The question the appraiser must answer is at what point should a proposed hotel be considered an addition to the competitive supply? Appraisers use the following criteria to make their determination.

- Is the financing package in place?* The total financing, including both debt and equity, must be fully committed and in place before a project can be considered definite.

¹ See 10.02 supra.

- Does the developer have all zoning approvals, building permits, and licenses?* Projects are required to obtain these approvals before construction can begin.
- Does the project have a franchise and/or management company under contract?*
- Does the developer have a track record of successful hotel projects?* This attribute is important, because the majority of first-time developers fail to complete their projects.
- What is the current condition of the hotel market?* If the local lodging market has become overbuilt or occupancy levels are depressed, proposed hotel projects generally will be reconsidered and either postponed indefinitely or terminated.
- What is the current condition of the financing market?* Very few hotel projects are developed without mortgage financing. In down markets, lenders tend to pass up hotel projects in favor of other investments that carry less risk.

Using these criteria, the appraiser evaluates each proposed hotel within the market area and determines whether the project should be considered a future addition to the lodging supply or whether it should be disregarded.

An alternative to working in absolute terms is to assign a probability factor to a proposed project based on the likelihood of its being developed. This procedure allows a proposed project to be considered a future addition to the competitive supply, but with a weighted room count determined by the project's probability of completion. For example, suppose that a 300-room hotel is planned for a site within the subject market area. Based on discussions with the building department and developer, the appraiser estimates that there is a 50 percent chance that this project will be built. When totaling the size of the competitive supply, the appraiser includes this project, but considers it to be a 150- rather than a 300-room hotel given the 50 percent probability factor. The appraiser should be liberal in including proposed hotel projects within the competitive supply in order to arrive at a reasonable estimate.

As stated earlier, identifying proposed hotels is more difficult than locating projects under construction. However, there are a number of potential sources of information on proposed hotel developments, including:

- Local building department
- Assessor
- Chamber of commerce
- Development agencies
- Hotel managers
- Local hotel association
- American Hotel and Motel Association development reports
- Local real estate brokers
- Local lenders
- Hotel appraisers and consultants

Once the currently proposed additions to the lodging supply are identified, the appraiser calculates the number of room-nights of supply that will be available to absorb latent demand. The demand that can be met by this additional new supply is the accommodatable latent demand. As an illustration, assume that a 200-room hotel is expected to open in two years in the subject market area. This addition to supply

would be able to absorb the following number of latent room-nights of demand (accommodatable latent demand):

$$200 \text{ rooms} \times 365 \times 75\% = 54,750 \text{ room-nights}$$

The 75 percent is the estimated areawide occupancy as of the projected year. It is normally assumed that latent demand will not provide a property (or the market) any more occupancy than the average occupancy percentage for the area, although some forms of property-induced demand are exceptions to this assumption. For example, a new convention hotel that is part of a chain may receive business from its own internal resources.

[4] Accommodated Room-Night Demand

The appraiser's forecast of accommodated room-night demand over a projected period is based on the expected changes in lodging demand determined through careful analysis of the area's economic and demographic indicators, as discussed in Chapter 8.

The combination of the forecasted accommodated room-night demand and the total usable latent demand produces the total usable room-night demand, which serves as the basis for estimating areawide and individual property occupancy levels.

[5] Total Usable Latent Demand

Total usable latent demand represents the amount of latent demand in a market area that could be accommodated provided the supply of rooms were adequate. It differs from accommodatable latent demand only in that it may be a smaller amount. In other words, while there may be the capacity in the market to accommodate a certain amount of latent demand, the actual "usable" latent demand may be smaller, so some capacity still remains that could absorb more latent demand if it existed.

[6] Total Available Room-Nights

The total number of room-nights available in the market area is calculated by multiplying the number of competitive rooms for each projected year by 365. If additional rooms become operational during a projected year (either in the form of a new hotel or as an addition to an existing property), the total number of rooms must be adjusted to reflect the actual number of rooms available during the year.

[7] Overall Occupancy

The overall area occupancy for each year during the projected period is calculated by dividing the projected usable room-night demand (i.e., accommodated room-night demand) by the annual number of available rooms.

Overall area occupancy is an important statistic for providing a preliminary indication of project feasibility. A general rule of thumb applicable to new hotels is that the occupancy level of a hotel should be somewhat below the areawide occupancy

during its first year of operation. In its second year, a hotel should operate at the same level as the overall area occupancy. A hotel should exceed the area occupancy by its third year of operation. If the overall area occupancy is expected to be below profitable levels when the new hotel is scheduled to open, the potential for financial difficulties could decrease the feasibility of the project. Extreme caution should be exercised when developing a hotel in a market that shows a potential overall area occupancy of less than 55 to 60 percent. If the overall area occupancy is projected to fall below 50 percent, a hotel project is rarely justified.

EXHIBIT 10.1 Demand Generator Interview Form

1. Company name: _____

2. Phone number: _____

3. Location (including subsidiary office in marketplace if any): _____

4. Distance from site of proposed hotel: _____

5. Name of contact/position: _____

6. Present number of employees: _____

7. Projected growth in employees: _____

8. What hotels/motels does interviewee currently use? _____

9. Reason for lodging selection (location, rate, facilities): _____

10. Room-nights booked: _____

11. What rate would interviewee be willing to pay for a suite on a daily basis? _____

12. Describe the proposed hotel and ask whether interviewee would have use for this type of facility; elicit reasons for response.

13. Indicate the proposed hotel's location and ask whether interviewee thinks this would be a good location; elicit reasons for response.

Interview by: _____

EXHIBIT 10.2 Demand Generator Survey

SPRING VALLEY HOTEL SURVEY

A new hotel is planned for the Spring Valley area. It will be conveniently located for many area businesses at the northwestern corner of the intersection formed by Central Avenue (State Route 59) and Exit 14 of the New York State Thruway.

Your responses to the following questions will assist us in assessing what type of lodging facility will best serve the needs of your firm and other firms in the area. While we realize that you may not be able to precisely answer a number of the following questions, we would appreciate your best estimates. If you have any questions or comments, feel free to call John Smith at (212) 555-8828.

- 1. Your Name/Title _____
- 2. Company Name _____
- 3. Department _____
- 4. Street Address _____
- 5. City, State, Zip Code _____
- 6. Telephone Number _____
- 7. What is the current number of employees at this location?
Entire firm _____ Your department _____
- 8. What are the primary business activities at this location?

In answering the following questions, please indicate whether your response is for your FIRM as a whole or for your DEPARTMENT individually by circling the proper word in the question.

- 9. Within the next year, is the number of employees in your FIRM/DEPARTMENT projected to (circle one) Increase? Decrease? By how much? ____ Remain the same?
- 10. During an average month, how many people visiting your FIRM/DEPARTMENT require overnight hotel accommodations? _____
- 11. What percentage of the people visiting your FIRM/DEPARTMENT who require overnight accommodations arrive during the following seasons?
Winter _____ Spring _____ Summer _____ Fall _____ (Total 100%)
- 12. What percentage of the visitors described above currently:
Book their own accommodations? _____
Have their accommodations booked by someone in your company? _____

Please indicate the name, department, and telephone number of the person in your firm responsible for booking accommodations:

Name _____
Department _____ Telephone Number _____

13. Please complete the following chart.

- a. What percentage of the people visiting your FIRM/DEPARTMENT who require overnight accommodations do so for the reasons indicated?
- b. What is the average number of nights per visit?
- c. On average, how many people stay in one hotel room per visit?

<i>Reason for overnight stay</i>	(a) <i>Percent of total visitors</i>	(b) <i>Average length of stay</i>	(c) <i>Number of people per room</i>
Relocation			
Training			
Temporary Assignment			
Consulting			
Meeting/conference			
Other (please specify)			

14. Which lodging facilities does your firm currently use (in order of preference)? (Please complete the following chart.)

<i>Name of facility</i>	<i>Room rate charged</i>
1.	
2.	
3.	
4.	

15. What characteristics determine how a lodging facility is chosen?

- a. Please rank the following six factors in order of importance in choosing a lodging facility (1 = most important; 6 = least important)

<i>Factor</i>	<i>Rating</i>	<i>Factor</i>	<i>Rating</i>
Price	_____	Convenience of location	_____
Quality of amenities	_____	Chain affiliation	_____
Facilities offered	_____	Other (please specify) _____	_____

- b. Would the availability of a health club/fitness center be an important consideration in choosing a lodging facility? _____

16. Do you currently use meeting and/or banquet facilities in area hotels? (Please circle whichever applies) Meeting facilities Banquet facilities Neither

(If meeting and/or banquet facilities are used, please complete the following chart.)

	<i>For meetings</i>	<i>For banquets</i>
How frequently do you use these facilities?	_____	_____
What is the average size of your group?	_____	_____
What is the smallest size?	_____	_____
What is the largest size?	_____	_____
What percentage of attendees require overnight accommodation?	_____	_____
What percentage occurs on weekends?	_____	_____

17. a. Are you familiar with the location of the Spring Valley project? _____
 b. How would you rank the location of the Spring Valley project compared to the locations of the hotels you now currently use? (Please circle one)
 Better About the same Inferior

18. Given a choice between a full service hotel (e.g., Marriott, Holiday Inn, Hilton) and a limited service hotel (e.g., Days Inn, Red Roof Inn, Comfort Inn), which would you be more likely to choose when booking overnight accommodations for visitors? _____
 Why? _____

19. All suite hotels (e.g., Guest Quarters, Embassy Suites) provide separate living and sleeping rooms within the same guest area. Typically, these accommodations are priced \$10 to \$15 more per room than comparable full-service hotels. Given the choice between a full-service hotel and an all suite hotel, which would you be more likely to choose when booking overnight accommodations for visitors? _____
 Why? _____

20. Please rank the following hotel chains (fifteen are listed) in the order that you would choose them when booking overnight accommodations for visitors.

<i>Hotel chain</i>	<i>Rank</i>	<i>Hotel chain</i>	<i>Rank</i>	<i>Hotel chain</i>	<i>Rank</i>
Doubletree	_____	Holiday Inn	_____	Pickett Suites	_____
Embassy Suites	_____	Hyatt	_____	Quality Inn	_____
Four Seasons	_____	Loews	_____	Radisson	_____
Guest Quarters	_____	Marriott	_____	Red Roof Inn	_____
Hilton	_____	Omni	_____	Sheraton	_____

Thank you for your cooperation.

CASE STUDY Lodging Demand Analysis

DEMAND GENERATORS

The following is a list of the largest demand generators for each market segment in the Spring Valley market area as determined by the results of interviews and surveys.

<i>Market segment</i>	<i>Demand generator</i>
Commercial	Nyack Laboratories
Meeting and convention	Rockland County Convention and Exhibition Center
Leisure	U.S. Military Academy—Tourist Visitation

DEMAND GENERATOR INTERVIEW

The results of the interview with Nyack Laboratories are as follows.

Demand generator:	Nyack Laboratories
Major business:	Pharmaceuticals
Location:	Nyack Office Center Exit 11, NYS Thruway, Nyack, New York Two miles east of subject property
Number of employees at this location:	3,600
Types of visitation:	As the national headquarters, this facility is utilized for administrative meetings, sales training, recruiting and personnel, and worldwide purchasing. All of these functions generate transient visitation.
Administrative meetings:	A number of administrative meetings are held on a regular basis at this facility, ranging in size from an individual plant manager visiting a division vice-president to monthly Board of Directors' and annual stockholders' meetings. This demand is relatively price-insensitive, and most of these visitors are booked into the area's upscale lodging facilities, such as the Hilton Inn and the Ramada Inn. Average stays are approximately three nights, Monday to Thursday, year-round. Reservations are normally booked by the travel department in Nyack. Because neither the Hilton Inn nor the Ramada Inn are convenient to this facility (seven and eight miles distant, respectively), the subject property would have a definite competitive advantage.
Sales training:	All sales training for Nyack is performed at this facility. Training sessions generally

last two weeks, with attendees utilizing in-house classrooms, and relying on nearby lodging facilities for overnight accommodations. The company is somewhat price-sensitive at this administrative level, and requires most personnel to double up in hotel rooms. The Howard Johnson's and the Holiday Inn—Nanuet are presently utilized for this purpose. While these facilities are somewhat dated, they do offer special low rates as well as shuttle bus service to and from Nyack. Sales training accommodations are booked by the marketing department.

Recruiting and personnel:

All hiring and personnel functions are handled at this facility. Nyack is price-sensitive in this area also, and maintains the same accommodations arrangements as described above for sales training. Accommodations for recruiting and personnel are booked by the personnel department.

Worldwide purchasing:

All purchasing for Nyack is performed at this facility. As a result, hundreds of salespeople from various purveyors and vendors visit this office each week to make sales calls and presentations. Most salespeople stay in the area only one or two nights, and tend to utilize the entire range of lodging facilities available in the market. Convenience to the Nyack offices is a major consideration, as are good food and beverage facilities for entertaining.

Future trends:

Nyack appears to be a growing company, with increasing needs for nearby transient accommodations. It appears to generate a wide range of transient demand which varies between price-sensitive and price-insensitive.

LODGING ACTIVITY BUILD-UP APPROACH

Fieldwork and in-house market data have provided the basis for an estimate of the current annual occupancies for the properties considered competitive to the Spring Valley project. The total occupancy has been divided among each of three market segments according to the percentage of the total room-nights occupied that each segment represents. Based on the analysis of the Spring Valley hotel market, the following three demand segments have been defined:

- Segment 1 Commercial
- Segment 2 Meeting and convention
- Segment 3 Leisure

The number of room-nights occupied per year by each of the market segments has been calculated for a given hotel by multiplying the number of rooms available by 365 days, by the estimated occupancy, by the percentage allocated to each of the three segments. The number of room-nights occupied by segment on a per-room basis (room-nights per room per year) has been derived by dividing the number of room-nights

occupied per year by each segment by the number of rooms available. The result is the competitive index, which has been used to compare the relative competitiveness of each property. Table 1 sets forth these calculations for the subject property's competitors.

The total of the room-nights occupied per year for each of the competitive hotels represents the area's accommodated room-night demand.

TABLE 1
Market Segment and Occupancy Data for
Competitive Facilities

Hotel	Market segment	Percentage of total patronage	Room-nights occupied per year	Room-nights occupied per room per year (competitive index)
Howard Johnson's—Nanuet				
Rooms: 190	Commercial:	65%	34,259	180
Occupancy: 76%	Meeting:	5	2,635	14
	Leisure:	30	15,812	83
Sheraton Inn—Nanuet				
Rooms: 230	Commercial:	60%	35,259	153
Occupancy: 70%	Meeting:	30	17,630	77
	Leisure:	10	5,877	26
Holiday Inn—Nanuet				
Rooms: 200	Commercial:	55%	24,090	120
Occupancy: 60%	Meeting:	20	8,760	44
	Leisure:	10	10,950	55
Holiday Inn—Orangeburg				
Rooms: 260	Commercial:	65%	49,348	190
Occupancy: 80%	Meeting:	15	11,388	44
	Leisure:	20	15,184	58
Ramada Inn—Montvale				
Rooms: 220	Commercial:	60%	37,580	171
Occupancy: 78%	Meeting:	30	18,790	85
	Leisure:	10	6,263	28
Hilton Inn—Woodcliff Lake				
Rooms: 360	Commercial:	50%	49,275	137
Occupancy: 75%	Meeting:	40	39,420	110
	Leisure:	10	9,855	27
Holiday Inn—Suffern				
Rooms: 245	Commercial:	50%	29,063	119
Occupancy: 65%	Meeting:	35	20,344	83
	Leisure:	15	8,719	36
Secondary competition				
Rooms: 91	Commercial:	58%	12,329	135
Occupancy: 64%	Meeting:	15	3,189	35
	Leisure:	27	5,740	63

Market segment	Accommodated room-night demand
Commercial	271,203
Meeting and convention	122,156
Leisure	<u>78,400</u>
Total	471,759

Latent Demand

Latent demand is defined as demand that potentially exists in a market but for a number of reasons is not accommodated by the existing competitive supply of lodging facilities. Latent demand comprises both unaccommodated demand and induced demand.

The existing hotels in the Spring Valley area are unable to accommodate an estimated 5 percent of the current commercial demand, 4 percent of the meeting and convention demand, and 2 percent of the leisure demand. The following is a summary of estimates of the total current accommodated and unaccommodated demand for the Spring Valley market area.

Market segment	Accommodated room-night demand	Unaccommodated demand percentage	Unaccommodated room-night demand
Commercial	271,203	5	13,560
Meeting and convention	122,156	4	4,886
Leisure	<u>78,400</u>	2	<u>1,568</u>
Total	471,759		20,014

Table 2 lists the projected unaccommodated room-night demand for each market segment, based on historical trends and an analysis of the area's economic and demographic indicators.

The proposed subject property, with its extensive meeting and convention facilities, is expected to cause a significant amount of induced demand, i.e., additional room-night demand that currently does not exist in the market. It is estimated that with a strong marketing effort, the subject property should attract an additional 10,950 room-nights of meeting demand to be phased in 60 percent the year the subject opens, 90 percent the second year, and 100 percent the third year (see Table 3).

LODGING DEMAND ANALYSIS

**TABLE 2
Unaccommodated Demand**

	Historical	1988	1989	1990	1991	1992	1993	1994	1995	1996
Commercial segment										
Growth rate (percent)	—	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Unaccommodated demand	13,560	13,831	14,108	14,390	14,678	14,972	15,271	15,576	15,888	16,206
Meeting and convention segment										
Growth rate (percent)	—	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Unaccommodated demand	4,886	5,033	5,184	5,340	5,550	5,665	5,835	6,010	6,190	6,376
Leisure segment										
Growth rate (percent)	—	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Unaccommodated demand	1,568	1,584	1,600	1,616	1,632	1,648	1,664	1,681	1,698	1,715
Total										
Unaccommodated demand	20,014	20,448	20,892	21,346	21,810	22,285	22,770	23,267	23,776	24,297

**TABLE 3
Induced Demand**

	1988	1989	1990	1991	1992	1993
Phase in	0	0	60%	90%	100%	100%
Commercial	0	0	0	0	0	0
Meeting and convention	0	0	6,570	9,855	10,950	10,950
Leisure	0	0	0	0	0	0
Total	0	0	6,570	9,855	10,950	10,950

Accommodatable Latent Demand

A projection of total accommodatable demand has been made based on the number of new rooms expected to enter the market, areawide occupancy levels, and market segment characteristics. Total latent demand was then compared with total accommodatable demand in order to determine the lesser of the two, which is the total usable latent demand in the market area.

In June 1989, a 210-room TraveLodge will open for business. For the six-month period it is operational in 1989, a total of 38,325 (210 × 182.5) rooms will be available to absorb latent demand. Because the unaccommodated demand is the result of strong Monday-through-Thursday visitation, the total number of additional available rooms is reduced by the projected 1989 areawide occupancy of 73.88 percent. Thus, the total accommodatable latent demand is 38,325 × 73.88% = 28,314 room-nights. This accommodatable latent demand is allocated to each of the three market segments based on the percentage relationship of the unaccommodated demand for

a particular segment divided by the total unaccommodated demand. In 1989, this allocation is made as follows:

Commercial segment	Accommodatable latent room-night demand
$\frac{14,108}{20,892} = 67.5\% \times 28,314 =$	19,120
Meeting and convention segment	
$\frac{5,184}{20,892} = 24.8\% \times 28,314 =$	7,026
Leisure segment	
$\frac{1,600}{20,892} = 7.6\% \times 28,314 =$	$\frac{2,168}{28,314}$
Total	

Table 4 shows the various elements of demand projected for the market area in 1989. There will be no induced demand, so total latent demand will equal total unaccommodated demand. Total latent demand is smaller than the total accommodatable

TABLE 4
Elements of Demand in 1989

Market Segment	Total unaccommodated demand	Total induced demand	Total latent demand	Total accommodatable latent demand	Total usable latent demand
Commercial	14,108	0	14,108	19,120	14,108
Meeting and convention	5,184	0	5,184	7,026	5,184
Leisure	1,600	0	1,600	2,168	1,600
Total	20,892	0	20,892	28,314	20,892

TABLE 5
Total Usable Latent Demand

	Historical	1988	1989	1990	1991	1992	1993	1994	1995	1996
Commercial segment										
Unaccommodated demand	13,560	13,831	14,108	14,390	14,678	14,972	15,271	15,576	15,888	16,206
Induced demand	0	0	0	0	0	0	0	0	0	0
Latent demand	13,560	13,831	14,108	14,390	14,678	14,972	15,271	15,576	15,888	16,206
Latent demand	13,560	13,831	14,108	14,390	14,678	14,972	15,271	15,576	15,888	16,206
Accommodatable demand	0	0	19,120	60,420	55,800	55,463	56,913	58,396	59,916	61,469
Total usable latent demand	0	0	14,108	14,390	14,678	14,972	15,271	15,576	15,888	16,206
Meeting and convention segment										
Unaccommodated demand	4,886	5,033	5,184	5,340	5,550	5,665	5,835	6,010	6,190	6,376
Induced demand	0	0	0	6,570	9,855	10,950	10,950	10,950	10,950	10,950
Latent demand	4,886	5,033	5,184	11,910	15,355	16,615	16,785	16,960	17,140	17,326
Latent demand	4,886	5,033	5,184	11,910	15,355	16,615	16,785	16,960	17,140	17,326
Accommodatable demand	0	0	7,026	50,007	58,374	61,549	62,555	63,584	64,637	65,717
Total usable latent demand	0	0	5,184	11,910	15,355	16,615	16,785	16,960	17,140	17,326
Leisure segment										
Unaccommodated demand	1,568	1,584	1,600	1,616	1,632	1,648	1,664	1,681	1,698	1,715
Induced demand	0	0	0	0	0	0	0	0	0	0
Latent demand	1,568	1,584	1,600	1,616	1,632	1,648	1,664	1,681	1,698	1,715
Latent demand	1,568	1,584	1,600	1,616	1,632	1,648	1,664	1,681	1,698	1,715
Accommodatable demand	0	0	2,168	6,785	6,204	6,105	6,202	6,302	6,403	6,505
Total usable latent demand	0	0	1,600	1,616	1,632	1,648	1,664	1,681	1,698	1,715

latent demand for each market segment, so total latent demand will also equal total usable latent demand.

Table 5 shows the total usable latent demand from 1987 to 1996. In 1989, when the 210-room Travelodge will have been open for six months, all of the latent demand (unaccommodated and induced) will be absorbed. The subject property will open in 1990, creating the induced demand in the meeting and convention segment and additional supply, which increases the accommodatable latent demand.

Total Usable Room-Night Demand

Based on the same trends used to project the unaccommodated room night demand previously described, the following annual growth rates are assumed for the accommodated demand.

Market segment	Compounded yearly growth rate
Commercial	2%
Meeting and convention	3
Leisure	1

LODGING DEMAND ANALYSIS

**TABLE 6
Total Usable Room-Night Demand**

	Historical	1988	1989	1990	1991	1992	1993	1994	1995	1996
Commercial segment										
Growth rate (percent)	—	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Accommodated demand	271,203	276,627	282,160	287,803	293,559	299,430	305,419	311,527	317,758	324,113
Usable latent demand	0	0	14,108	14,390	14,678	14,972	15,271	15,576	15,888	16,206
Meeting and convention segment										
Growth rate (percent)	—	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Accommodated demand	122,156	125,821	129,596	133,484	137,489	141,614	145,862	150,238	154,745	159,387
Usable latent demand	0	0	5,184	11,910	13,355	16,615	16,785	16,960	17,140	17,326
Leisure segment										
Growth rate (percent)	—	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Accommodated demand	78,400	79,184	79,976	80,776	81,584	82,400	83,224	84,056	84,897	85,746
Usable latent demand	0	0	1,600	1,616	1,632	1,648	1,664	1,681	1,698	1,715
Total										
Commercial demand	271,203	276,627	296,268	302,193	308,327	314,402	320,690	327,103	333,646	340,319
Meeting & convention demand	122,156	125,821	134,780	145,394	152,844	158,229	162,647	167,198	171,885	176,713
Leisure demand	78,400	79,184	81,576	82,392	83,216	84,048	84,888	85,737	86,595	87,461
Total usable room-night demand	471,759	481,632	512,624	529,979	544,297	556,679	568,225	580,038	592,126	604,493

Combining the forecasted usable latent demand with the forecasted accommodated room-night demand results in the forecast of total usable room night demand shown in Table 6.

	Room-nights available	Room-nights available
Historical	655,540	1991 841,690
1988	655,546	1992 841,690
1989	693,865	1993 841,690
1990	841,690	1994 841,690

Room Supply

The total number of rooms available in the competitive properties is currently 1,796. In 1989, the addition of the 210-unit Travelodge Inn increases the number of rooms available to a total of 2,006. However, since the Travelodge will not open until June of that year, the effective addition to supply in 1989 is 105 rooms, for a total of 1,901. At the beginning of 1990, the addition of the subject property's 300 guestrooms will increase the number of available rooms to a total of 2,306. The following is the projected competitive supply of available rooms.

	Available rooms	Available rooms
Historical	1,796	1991 2,306
1988	1,796	1992 2,306
1989	1,901	1993 2,306
1990	2,306	1994 2,306

The annual room-nights available are calculated by multiplying the above annual room supply by 365, as follows:

Overall Competitive Occupancy

The overall occupancy for the competitive rooms within the market area can be calculated by dividing the total room-night demand by the room-nights available; the results are shown in Table 7.

**TABLE 7
Overall Competitive Occupancy**

Year	Room-night demand	Room-nights available	Overall competitive occupancy
Historical	471,759	655,540	72.0%
1988	481,632	655,540	73.5
1989	512,624	693,865	73.9
1990	529,979	841,690	63.0
1991	544,297	841,690	64.7
1992	556,679	841,690	66.1
1993	568,225	841,690	67.5
1994	580,038	841,690	68.9
1995	592,126	841,690	70.3
1996	604,493	841,690	71.8
1997	617,146	841,690	73.3