CHAPTER 12

Revenue Forecast

12.01 INTRODUCTION

Forecasting the revenue of a lodging facility is best accomplished in a step-by-step fashion that follows the format set forth in the *Uniform System of Accounts for Hotels*.[1] In this system, sources of income are categorized and estimated separately before they are combined in one complete statement of both revenue and expense. Most hotels follow this uniform procedure, so it has become the standard format for forecasting.

The major categories of revenue in this system are room, food service, beverage, and telephone. A miscellaneous category of other income, in which smaller amounts of revenue from sources such as rentals, forfeited advance deposits, and vending machines are combined, is also usually forecasted.

The build-up cover approach and the fixed and variable component approach are the two most commonly used methods for projecting food and beverage revenue. The build-up cover approach is used only to forecast food and beverage revenue. The fixed and variable component approach is also used to estimate other types of revenue. Where possible, appraisers use both methods as a means of verifying the accuracy of a forecasted estimate.

The build-up approach forecasts food and beverage revenue by developing estimates of individual revenue components such as patronage, number of meals served, and average price per meal. The fixed and variable component approach is based on

[1] Hotel Association of New York City, Inc., *Uniform System of Accounts for Hotels* (8th ed.). HANYC Inc., 1986.

the anticipated relationship of food revenue to rooms revenue and beverage revenue to food revenue. The build-up approach requires knowledge of local market conditions, although it takes into account the specific facilities offered by the subject property. The fixed and variable component approach depends upon data from a directly comparable hotel, but can easily be adjusted to reflect differences in occupancy levels.

Although the fixed and variable component approach is actually the standard method for forecasting hotel operating expenses, it is also valuable for projecting revenue. This chapter explains the theory behind the fixed and variable component approach and demonstrates its application in revenue forecasts. Chapter 13 shows how it is used to make expense projections. The procedure used in the fixed and variable component approach is identical for both revenues and expenses.

The case study at the end of this chapter illustrates a typical revenue forecast.

12.02 ROOMS REVENUE

The estimated total rooms revenue is the most critical component of the overall revenue forecast because it is the major source of profit for any lodging facility. It is also important because it sets the benchmark from which other revenues are projected.

The actual procedure for forecasting rooms revenue is fairly straightforward. The appraiser simply multiplies the projected occupancy rate for the subject property as determined by the room-night analysis conducted earlier in the market study[2] by the forecasted average room rate.[3] The result is then multiplied by the room count of the property, which is in turn multiplied by 365 days. These computations yield the total rooms revenue.

12.03 FOOD AND BEVERAGE REVENUE

Most full-service lodging facilities provide both food and beverage outlets for the use of their guests as well as local residents. The primary outlets found within most lodging facilities are restaurants, lounges, bars, banquet rooms, and room service. These outlets generate two kinds of income: food revenue and beverage revenue.

Food revenue is defined as revenue derived from the sale of food, including coffee, milk, tea, and soft drinks. Food sales do not include meals charged on hotel employees' checks. Beverage revenue is defined as revenue derived from the sale of alcoholic beverages.[4] In addition to the revenue generated by the sale of food and beverages, hotels generally produce related income from meeting room rental, cover charges, service charges, and miscellaneous banquet revenue.

[1] Food Revenue

Table 12.1 lists the various revenue categories comprised in the food department of a hotel. The table also shows whether the category is relatively fixed, occupancy-

[2] See 10.03 supra.

[3] See 11.07 supra.

[4] Hotel Association of New York City, Inc., *Uniform System of Accounts for Hotels* (8th ed.). HANYC, Inc., 1986.

TABLE 12.1
Food Revenue

Source: Uniform System of Accounts for Hotels

			Variable revenue		
Category	Percent of sales	Fixed revenue	Occupancy-sensitive	Rate-sensitive	Food- and beverage-sensitive
Food	60–85	—	Moderately	—	Highly
Beverage	15–40	—	Moderately	—	Highly
Other income					
Public room rentals	0–2	—	Moderately	—	Slightly
Cover and minimum charges	0–2	—	Moderately	—	Highly
Sundry banquet income	0–2	—	Slightly	—	Highly
Total	100				

sensitive, rate-sensitive or food-sensitive. This information is useful when food revenue is projected utilizing a fixed and variable component approach.

Food revenue varies greatly depending on the number of outlets, management expertise, and the market orientation of each outlet. External factors such as the competitive environment, proximity to demand generators, and the market segmentation of a hotel also influence the revenue-generating potential of a food outlet.

Food revenue is calculated by multiplying factors for demand and average check. The unit of demand used to quantify food volume is the cover, which represents one meal served to one person. This term originates from the cover plate in each place setting that is removed just prior to the appetizer course. The restaurant manager determines the number of patrons served during each meal period by simply totaling the number of cover plates that were used. The average check is similar in concept to average room rate and is calculated by dividing the total food revenue for a period of time by the number of covers served. (Generally, the average check is calculated separately for food revenues and beverage revenues.)

[a] Build-Up Cover Approach

The build-up cover approach is a means of forecasting demand for food service by estimating the total number of covers a property is expected to sell. The forecast of food revenue is then determined by multiplying the total number of covers by the estimated average check. The appraiser can project demand (i.e., number of covers) by analyzing either restaurant activity or lodging activity.

The analysis of restaurant activity also involves multiplying turnover, which is the number of times a seat is occupied during a given meal period, by the number of seats available per meal period. By totaling the number of covers for each meal period for all of the food services of a property during the projection period, the appraiser can approximate total food demand.

Turnover is generally estimated by determining the actual past turnover experienced by the subject property if it has an operating history or, if not, by that of similar facilities in the market area.

If the appraiser has no operating history to refer to, data for similar outlets can be used. The necessary information can usually be obtained through discussions with the management of the hotels in which the outlets are operated or by actually surveying and counting the number of patrons served during specific meal periods in such outlets. Once the turnover is estimated for each of the food outlets, it is multiplied by the number of seats, meal periods, and business days to arrive at a forecast of the total number of covers the property will sell.

There are, however, two drawbacks to the analysis of restaurant activity. The first is that it can be difficult to obtain accurate turnover ratios from competitive facilities. The second is that adjustments must be made to the data that are needed to reflect the attributes of the subject property. This procedure requires a number of subjective decisions on the part of the appraiser and can become quite complicated.

Projecting food demand by the analysis of lodging activity is justified by the fact that the number of covers sold by a hotel is directly related to guestroom usage (room-night demand) and market segmentation.[5] Through statistical analysis and knowledge of the frequency with which each market segment makes use of a hotel's facilities, the total in-house demand can be estimated. The appraiser then combines the in-house forecast with a factor for demand created outside the hotel (i.e., meeting and banquet business) to forecast the total number of covers the property will sell.

The analysis of lodging activity takes into account the total house count (number of people occupying the guestrooms) and the patronage patterns of the different market segments into which the guests fall. Since in-house demand typically accounts for 60 to 80 percent of the food and beverage sales for a hotel (depending upon hotel type, location, and proximity to alternative dining facilities) the analysis of lodging activity generally produces a more supportable estimate of food demand than does the analysis of restaurant activity.

To project future total food revenue using an analysis of lodging activity, the appraiser must take the following steps:

1. Calculate the total house count by market segment using the projected occupancy and double occupancy estimates derived during the room-night analysis and the average room rate analysis.
2. Apply the percentage of each market segment that patronizes each of the proposed subject's food outlets by meal period to the total house count to yield the approximate future in-house food service demand in each of the market segments.
3. Estimate the out-of-house demand generated from non-hotel guests using a hotel's restaurant facilities either on a per cover basis or as a percentage of total demand to yield out-of- house restaurant demand.
4. Estimate total banquet covers served to non-hotel guests based on the product of the average number of banquets per week and the average number of covers per banquet or the average number of banquet covers per day.
5. Determine total food service demand by adding together in-house food service demand, out-of-house restaurant demand, and non-hotel guest banquet demand.
6. Estimate the average check for each meal period based on the operating history of either the subject property or similar competitive food facilities in the marketplace.
7. Multiply the average check for each meal period by the estimated total number of covers (per year) for that meal period to yield the total food revenue.

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[5] Guestroom usage is discussed at 10.03 supra; market segmentation is discussed at 11.07 supra.

[i] **House count.** The term "house count" refers to the number of guests that stay at a hotel over a specific period of time (usually one year). This quantity is used to determine the rate of double occupancy, which is the average number of guests occupying one guestroom. The double occupancy rate is calculated by dividing the house count for the year by the number of occupied rooms for the same period of time, as in the following example:

$$\frac{\text{House count}}{\text{Occupied rooms}} = \frac{85{,}252}{64{,}659} = 1.32$$

Thus, every guestroom sold within this hotel had an average of 1.32 occupants.

The commercial market segment is typically composed of individual business travelers, so as a whole, it has a low rate of double occupancy (1–1.4). Meeting and convention demand tends to have a higher rate. Commercial groups (i.e., business meeting attendees) tend to have a lower double occupancy rate (1.35 to 1.50) than social groups, which are sometimes more price-sensitive and thus produce a range of double occupancy of 1.5 to 2.0. Leisure travelers are typically families, for which the double occupancy rate is 1.7 to 2.5.

[ii] **In-house capture.** In-house capture is based on the propensity of each hotel guest to use the property's food outlets. Capture differs depending upon the market segment, meal period, and type of food facility available.

For example, commercial travelers exhibit a higher than average propensity to take breakfast at the property's facilities, especially from room service. The meeting and convention segment exhibits mixed propensities to dine at the subject's facilities, depending on whether the meeting or convention is held within the hotel, and whether a planned breakfast is provided to the group. Similarly, leisure travelers also show a mixed propensity to use in-house facilities. This segment tends to forgo breakfast on weekdays, but has a high tendency to order breakfast or brunch on the weekends.

In-house capture also varies by meal period. Most hotels see a fairly strong breakfast demand from guests, especially on the weekends if the restaurant offers brunch. Typically, the lunch meal period captures little in-house traffic. Few guests are in the hotel at midday, so lunch demand is predominantly local business people and shoppers, depending on the hotel's location and proximity to office buildings and retail outlets. The hotel's dinner demand usually depends on the dining alternatives in the local area. If suitable alternatives exist, commercial and leisure travelers do not usually dine at the hotel's food outlets. Meeting and convention guests often have planned functions at night and will therefore create little dinner demand.

[iii] **Out-of-house restaurant demand.** Food service patronage from local clientele (outside capture) includes demand generated by nearby residents, businesspeople, and transients passing through the area. Out-of-house restaurant demand can be calculated as a percentage of total food service demand excluding banquet patronage. Typical ranges of out-of-house demand percentages are as follows:

Meal period	*Percentage of total food demand excluding banquet patronage*
Breakfast	5 to 15%
Lunch	30 to 70%
Dinner	20 to 60%

Out-of-house restaurant demand is generally lowest during breakfast and highest at lunch. Dinner demand is variable depending on the quality of the facilities of the subject property and the local dining alternatives.

Most new hotels typically experience a high out-of-house restaurant demand during the initial year or two as local residents and businesspeople try out the new food outlets. As the appeal of the hotel's novelty subsides, out-of-house usage generally declines. Overall, the percentage of total food demand (excluding banquet patronage) remains constant albeit minimal for breakfast, but generally declines for lunch and dinner.

[iv] **Banquet demand.** Banquet covers are estimated separately based on the product of the average number of banquets per week multiplied by the average number of covers per banquet. Banquet covers are assumed to be out-of-house patronage. Use of banquet facilities by in-house meeting and convention patronage is included in estimates of overall food service use.

[b] Fixed and Variable Component Approach

The second approach that may be utilized to forecast food revenue is the fixed and variable component approach. The forecasting procedures used in this approach represent one of the most accurate models of hotel financial performance. With proper input, it can produce reliable forecasts of every category of hotel revenue and expense. The fixed and variable component approach forms the basis for most computerized hotel forecasting models employed by hotel appraisal and consulting firms as well as by a number of hotel companies, investors, lenders, and developers.

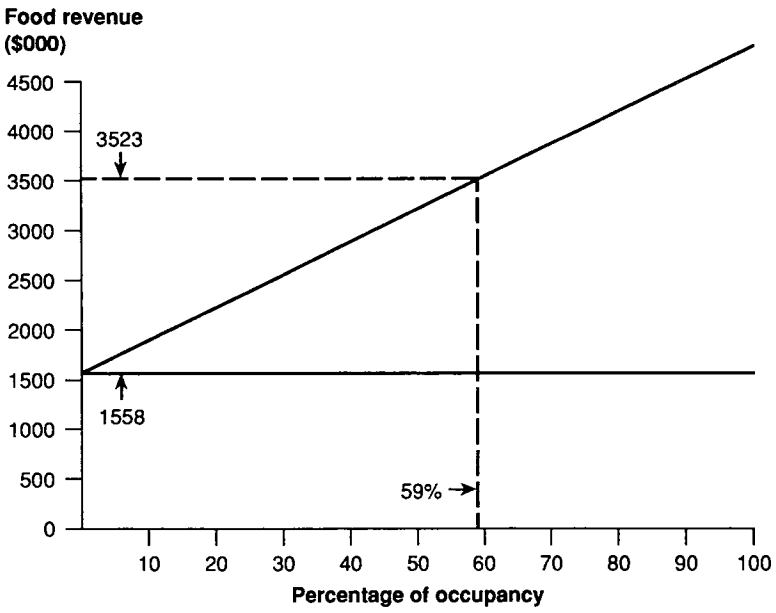
This approach is based on the concept that most items of revenue and expense within a hotel have a fixed component, which will not vary with a hotel's occupancy or other volume measure, and a variable component, which will change in direct relationship with occupancy or another measure of volume (e.g., total revenue). By estimating the food revenue for a specific level of occupancy and knowing what portion of the revenue is fixed and what portion is variable, the appraiser can calculate the revenue for other different levels of occupancy.

For an existing hotel, the estimate of food revenue at the specific occupancy level is based on past operating history. For a proposed facility, the food revenue estimate is derived from either the actual sales volume of a similar facility or the percentage relationship of food revenue to rooms revenue and beverage revenue to food revenue of a similar facility.

The graph in Figure 12.1 illustrates the theory and mechanics of the fixed and variable component approach. The horizontal (x) axis of the graph represents total food revenue; the vertical (y) axis measures guestroom occupancy. As a hotel's occupancy increases, so does the total food revenue. However, as shown by the graph, the food outlets in the hotel are expected to generate a positive amount of revenue, even at 0 percent occupancy. Therefore, the fixed component in this model is the food revenue generated by out-of-house restaurant patronage and part of the total banquet revenue. The diagonal line in the graph is the variable component, representing the food revenue that increases in direct proportion with occupancy.

To use the fixed and variable component graph, the appraiser first locates the projected occupancy level on the x axis. A vertical line is then extended upward from this point until it intersects the diagonal variable line. A horizontal line is then extended from this intercept to the y axis. The point at which this horizontal line

FIGURE 12.1
Fixed and Variable Graph for Food Revenue (1990)



intercepts the *y* axis represents the projected total food revenue for that level of occupancy.

The data plotted on the graph are projected for 1990 for the Spring Valley hotel described in the case study in Part II. At the projected 59 percent occupancy for that year, the total food revenue is expected to reach $3,523.

This same procedure can be used to project all categories of revenues and expenses found in a hotel's operating statement. It should be noted, however, that not all categories will vary directly with occupancy. For example, food departmental expense varies with food revenue, telephone expense varies with telephone revenue, administrative and general expense varies with total revenue, and energy cost varies with total revenue.

To use the fixed and variable component approach to make financial forecasts, the appraiser must complete the following steps:

1. Obtain actual income and expense data from the subject property for an existing hotel, or from similar properties for a proposed hotel.
2. Make any necessary adjustments to these data so that they reflect as closely as possible the individual characteristics of the subject property. These adjustments may include changing the average room rate, modifying income and expense ratios, and altering fixed charges. The end result of these changes should be a one-year profit and loss statement that expresses the undiscounted first year average room rate for the subject in current dollars, and income and expense ratios at a level appropriate for the given occupancy percentage. This profit and loss statement is called the base and will serve as the basis for calculating the fixed and variable component relationships.

TABLE 12.2
Fixed and Variable Percentages for Revenues and Expenses

Revenue and expense category	Percent fixed	Percent variable	Index of variability
Revenues			
Food	30–50	50–70	Occupancy
Beverage	0–30	70–100	Food revenue
Telephone	10–40	60–90	Occupancy
Other income	30–60	40–70	Occupancy
Departmental expenses			
Rooms	50–70	30–50	Occupancy
Food and beverage	35–60	40–65	Food and beverage revenue
Telephone	55–75	25–45	Telephone revenue
Other income	40–60	40–60	Other income revenue
Undistributed operating expenses			
Administrative and general	65–85	15–35	Total revenue
Management fee	0	100	Total revenue
Marketing	65–85	15–35	Total revenue
Property operation and maintenance	55–75	25–45	Total revenue
Energy costs	80–95	5–20	Total revenue
Fixed expenses			
Property taxes	100	0	Total revenue
Insurance	100	0	Total revenue
Reserve for replacement	0	100	Total revenue

3. Inflate (or deflate) the revenue and expense numbers in the base to a level that reflects current dollars for the forecast year. The average room rate utilized in the base comes from the average rate projection. Any discounting of the average rate is disregarded in developing the base for each projected year.
4. Estimate the fixed and variable percentages for each revenue and expense category. Table 12.2 lists typical ranges of fixed and variable percentages along with the index utilized to measure variable changes.
5. Calculate the fixed component by multiplying the appropriate base revenue or expense category for the projected year by the fixed percentage estimated in Step 4.
6. Calculate the variable percentage change. Variable revenues or expenses are assumed to vary directly with some index of variability. Table 12.2 shows the appropriate index of variability for each revenue and expense category. The variable expense change is calculated by dividing the projected index of variability by the base index of variability for the projected year.
7. Calculate the unadjusted variable component by multiplying the appropriate base revenue or expense category for the projected year by the variable percentage estimated in Step 4.
8. Adjust the unadjusted variable component for variability by multiplying it by the variable percentage change calculated in Step 6. The resulting product is the adjusted variable component.
9. Total the forecasted revenue or expense for that specific category, in the projected year, by adding the fixed component calculated in Step 5 to the adjusted variable component calculated in Step 8.

[c] Test for Reasonableness

After making a financial projection, the appraiser should evaluate the result for reasonableness. The appraiser must determine whether the result is sensible (i.e., whether it is supported by the results achieved by similar hotels), whether it is likely that the subject property can actually achieve the projected figures, and finally, whether the individual projection is in line with all of the other projections.

To evaluate financial operating information, the appraiser generally uses various categories of data, such as percentage of total revenue, percentage of rooms revenues, dollars per available room, and dollars per occupied room. These units of comparison put the financial data on a common base (e.g., amount per room) so that the operating results of many hotels can be compared and contrasted.

Each unit of comparison is better suited to certain revenue or expense categories than others. The applicability of certain units is due to specific relationships that cause various revenues and expenses to react differently to changes in occupancy, average room rate, and food and beverage volume. For example, if a revenue or expense category is primarily fixed, then greater emphasis should be placed on the dollars per available room as a unit of comparison, since it remains fixed even when revenues change. If the category varies in relation to changing occupancy levels or average room rates, the appropriate unit of comparison would be percentage of rooms or total revenue data, which will change in accordance with changes in revenues. Table 12.3 shows the primary units of comparison utilized in the analysis of hotel financial data along with the factors that affect the sensitivity of these units. Listed next to each unit of comparison are the revenue and expense categories best suited for the particular form of comparison.

[2] Beverage Revenue

Beverage revenue is derived through the sale of beverages (generally alcoholic) from a hotel's restaurants, lounges, banquet rooms, and room service. In accordance with the *Uniform System of Accounts for Hotels*,[6] beverage revenue should be given a category separate from food revenue (although it should share the same expense category).

Beverage revenue can be forecasted in a manner similar to food revenue by using either a build-up cover approach or a fixed and variable component approach. The main difficulty in preparing forecasts of beverage revenue is estimating the future success of an in-house bar or lounge. The bulk of beverage revenue generally comes from a lounge outlet, so the appraiser should have a clear understanding of the various dynamics that create success or failure in this type of business. Lounge customers tend to be fickle, so one year's "in" spot may be unpopular the next. Much of the success has to be attributed to the skills and expertise of management, which means there is a high degree of business risk (and opportunity) in operating a hotel lounge.

[a] Build-Up Cover Approach

The build-up cover approach for forecasting beverage revenue is handled in a manner similar to that for projecting food revenue. The appraiser first looks at the percentage of the business that will be generated by in-house guests and the percentage that will

[6] Hotel Association of New York City, Inc., *Uniform System of Accounts for Hotels* (8th ed.). HANYC Inc., 1986.

TABLE 12.3
Primary Units of Comparison

Unit of comparison	Sensitivity factors	Revenue and expense categories analyzed
Percentage of total revenue	Occupancy Average room rate Food and beverage revenue	Administrative and general Management fee Marketing Property operations and maintenance
Percentage of rooms revenue	Occupancy Average room rate	Food revenue Telephone revenue Other income Rooms expense
Percentage of food and beverage revenue	Food and beverage revenue	Food and beverage expense
Per available room	Fixed categories	Administrative and general Marketing Property operations and maintenance Energy Insurance Property taxes
Per occupied room	Occupancy	Food revenue Beverage revenue Telephone revenue Other income Rooms expense Energy

originate outside the property. If the hotel lounge has any degree of success, a substantial portion of the beverage revenue will come from patrons who are not hotel guests. In addition to the demand generated from the beverage outlets, a certain amount of beverage revenue originates from liquor consumption by in-house restaurant-goers.

[b] Fixed and Variable Component Approach

As with food revenue, the fixed and variable component approach is generally the preferred procedure for forecasting this category of income. Table 12.2 shows that beverage revenue is typically 70 to 100 percent variable and 0 to 30 percent fixed. Because of this high variability, which is attributable to the direct relationship between food and beverage revenues, an assumed 100 percent variable component is normally used.

12.04 TELEPHONE REVENUE

Telephone revenue is derived from fees paid by hotel guests for local and long distance calls and from out-of-house patrons' use of public telephones. As part of the deregulation of the telephone industry, hotels are now permitted to resell telephone

TABLE 12.4
Telephone Revenue

Source: Uniform System of Accounts for Hotels

Category	Percent of sales	Fixed revenue	Variable revenue: Occupancy-sensitive	Variable revenue: Rate-sensitive	Variable revenue: Food and beverage-sensitive
Local	25–60	—	Highly	—	—
Long distance	35–60	—	Highly	—	—
Service charges	0–20	—	Highly	—	—
Pay station	0–20	Somewhat	—	—	Somewhat
Total	100				

services to their guests at a reasonable profit. Prior to deregulation, hotels could only collect a 15 percent commission on long distance telephone calls, which was usually inadequate compensation, and many hotels suffered losses as a result of providing telephone service. At present, hotels have highly sophisticated telephone systems that incorporate automatic billing and posting to guest accounts, least-cost routing, and utilization of various providers of long distance services, such as AT&T, MCI, and US SPRINT. Hotel telephone departments are now more likely to show some profit, although revenues depend largely on the usage characteristics of the guests.

In recent years, long distance telephone charges billed by hotels to individual guests have decreased significantly because many long distance carrier services can be accessed by either a toll-free local call or an 800 number. Callers are generally charged merely an access fee rather than the normal long distance tariff. As a result, profits from telephone service have not grown as rapidly as the hotel industry had expected with telephone deregulation.

Telephone revenue tends to vary directly with changes in occupancy. A small portion is fixed, representing pay station revenue generated by out-of-house patronage of food and beverage outlets and meeting rooms. The appropriate units of comparison are a percentage of rooms revenue or an amount per occupied room. Table 12.4 lists the various categories of telephone revenue and describes their individual characteristics.

Telephone revenue is normally projected through the fixed and variable component approach with 10 to 40 percent of the revenue being fixed and 60 to 90 percent occupancy-variable. The fixed component represents the out-of-house use of pay phones as well as telephone service for meetings and conferences.

12.05 OTHER INCOME

Other income is revenue derived from sources other than guestroom, food and beverage, or telephone sales. The following is a list of the most common categories of other income with examples of specific sources.

- Rentals—stores, office space, concession space, showcases, clubs, and storage.
- Commissions—auto rental, photography, telegram, and vending services.
- Concessions—gift shops, barber shops, and beauty salons.

- Cash discounts earned—discounts from creditors' accounts for payment within the discount period (does not include trade discounts, which is a deduction from cost of goods sold).
- Electronic games and pinball machines.
- Forfeited advance deposits and guaranteed no-shows.
- Service charges—charges added to customer's account for service.
- Interest income—interest from monies invested.
- Salvage—revenue from the sale of old and obsolete items.
- Vending machines.

Other income is highly occupancy-sensitive and slightly food- and beverage-sensitive, which means that the appropriate units of comparison are a percentage of rooms revenue adjusted for any unusual food and beverage volume and other income per occupied room. Care must be taken when projecting other income to evaluate all the potential sources of revenue. Hotels with extensive retail space or recreational amenities should divide other income into several categories so as to recognize and properly account for significant revenue generators.

12.06 TOTAL REVENUE

Total revenue is the sum of the rooms revenue, food revenue, beverage revenue, telephone revenue, and other income for the subject property. Projected total revenue is an important data point because it will serve as a unit of comparison and an index of variability for several expense categories.

CASE STUDY Revenue Forecast

ROOMS REVENUE

Total rooms revenue is estimated by multiplying the average room rate by the projected occupancy by the property's room count by 365 days. The following calculation shows the projected rooms revenue for the proposed Spring Valley hotel:

	1990		1991		1992
Occupancy	59%		67%		72%
Average room rate	× $93.10	×	$103.07	×	$113.96
Room count	× 300	×	300	×	300
365	× 365	×	365	×	365
Rooms Revenue	$6,015,000		$7,562,000		$8,985,000

FOOD REVENUE—BUILD-UP COVER APPROACH

Double Occupancy

The range of the rate of double-occupancy bookings for the main market segments is as follows:

Market segment	*Range of double occupancy*
Commercial	1.0 to 1.4
Meeting and convention	1.3 to 2.0
Leisure	1.7 to 2.5

Based on these ranges, the following double occupancy rates were estimated for the subject property by market segment.

Market segment	*Estimated double occupancy*
Commercial	1.06
Meeting and convention	1.60
Leisure	1.80

House Count

The house count for the proposed Spring Valley hotel in each of the three projection years is shown in Table 1.

In-House Capture

The majority of the commercial guests are expected to take breakfast at the proposed subject property. It is anticipated that the bulk of the meeting and convention segment will eat at the various food functions hosted by their groups, as opposed to utilizing the hotel's food and beverage outlets. A limited number of leisure travelers are expected to have breakfast at the hotel.

Based on this information, analysis of dining alternatives, and the type of demand anticipated to utilize the various food and beverage outlets, the following are estimates of the subject property's in-house food service covers (demand) or capture of hotel guests by meal period expressed as a percentage of the house count by market segment.

TABLE 1
House Count by Segment

Year	Segment	Occupied rooms		Double occupancy		House count
1990	Commercial	36,293	×	1.06	=	38,471
	Meeting	21,387	×	1.60	=	34,219
	Leisure	6,979	×	1.80	=	12,562
	Total	64,659				85,252
1991	Commercial	37,667	×	1.06	=	39,927
	Meeting	27,222	×	1.60	=	43,555
	Leisure	8,030	×	1.80	=	14,454
	Total	72,919				97,936
1992	Commercial	39,583	×	1.06	=	41,958
	Meeting	30,586	×	1.60	=	48,938
	Leisure	9,144	×	1.80	=	16,459
	Total	79,313				107,355

TABLE 2
In-House Food Service Covers by Segment

Segment	House count		Food service utilization		In-house food service covers
1990					
Breakfast					
Commercial	38,471	×	80%	=	30,777
Meeting	34,219	×	80	=	27,375
Leisure	12,562	×	80	=	10,050
Total					68,202
Lunch					
Commercial	38,471	×	20%	=	7,694
Meeting	34,219	×	70	=	23,953
Leisure	12,562	×	50	=	6,281
Total					37,928
Dinner					
Commercial	38,471	×	25%	=	9,618
Meeting	34,219	×	40	=	13,688
Leisure	12,562	×	30	=	3,769
Total					27,075
1991					
Breakfast					
Commercial	39,927	×	80%	=	31,942
Meeting	43,555	×	80	=	34,844
Leisure	14,454	×	80	=	11,563
Total					78,349
Lunch					
Commercial	39,927	×	20%	=	7,985
Meeting	43,555	×	70	=	30,489
Leisure	14,454	×	50	=	7,227
Total					45,701
Dinner					
Commercial	39,927	×	25%	=	9,982
Meeting	43,555	×	40	=	17,422
Leisure	14,454	×	30	=	4,336
Total					31,740
1992					
Breakfast					
Commercial	41,958	×	80%	=	33,566
Meeting	48,938	×	80	=	39,150
Leisure	16,459	×	80	=	13,167
Total					85,883
Lunch					
Commercial	41,958	×	20%	=	8,392
Meeting	48,938	×	70	×	34,257
Leisure	16,459	×	50	=	8,229
Total					50,878
Dinner					
Commercial	41,958	×	25%	=	10,489
Meeting	48,938	×	40	=	19,575
Leisure	16,459	×	30	=	4,938
Total					35,002

Meal period	*Commercial*	*Meeting and convention*	*Leisure*
Breakfast	80%	80%	80%
Lunch	20	70	50
Dinner	25	40	30

Multiplying the house count by these in-house food service utilization rates yields the total number of food service covers generated from in-house guests by meal period and market segment (see Table 2). This is referred to as in-house food service demand. It should be noted that some of the food service demand generated by the meeting and convention segment will utilize the banquet facilities within the hotel.

TABLE 3
Out-of-House Restaurant Demand Capture Rates

Year	Meal period	Percentage of total food demand (excluding banquet percentage)
1990	Breakfast	10.0
	Lunch	37.0
	Dinner	30.0
1991	Breakfast	10.0
	Lunch	35.1
	Dinner	26.0
1992	Breakfast	10.0
	Lunch	34.2
	Dinner	21.9

Out-of-House Restaurant Demand

The Spring Valley area has experienced moderate residential development that has increased the local resident population base. As most of the housing is considered to be middle- to upper-income, these residents constitute a growing market that the hotel's food and beverage outlets should be able to penetrate. In addition, the subject property is located near several major office parks containing numerous businesses. The local businesspeople should patronize the subject property's restaurants and lounges, especially during the lunch period and, to a limited extent, the breakfast and dinner hours. Because of the considerable demand created by the office complexes, a number of new restaurants are currently under construction or in the planning phases. Nonetheless, a significant shortage of quality restaurants exists in the subject property's neighborhood, and the new entrants are not anticipated to inhibit the subject's ability to generate strong local patronage.

Based on an analysis of the local restaurant market, competitive lodging facilities, and typical out-of-house restaurant demand percentages, the out-of-house restaurant demand capture rates shown in Table 3 were estimated for the subject property.

Applying these percentages to the projected in-house food service covers produced the estimate of

TABLE 4
Food Service and Restaurant Covers

Year	Meal period	In-house food service covers	Out-of-house restaurant demand: percentage of total covers	Total out-of-house restaurant covers
1990	Breakfast	68,202	10.0	7,578
	Lunch	37,928	37.0	22,276
	Dinner	27,075	30.0	11,603
1991	Breakfast	78,349	10.0	8,705
	Lunch	45,701	35.1	24,717
	Dinner	31,740	26.0	11,152
1992	Breakfast	85,883	10.0	9,543
	Lunch	50,878	34.2	26,444
	Dinner	35,002	21.9	9,815

TABLE 5
Banquet Covers

Year	Average number of banquet covers per day		Days per year		Banquet covers per year
1990	175	×	365	=	63,875
1991	175	×	365	=	63,875
1992	175	×	365	=	63,875

TABLE 6
Total Food Service Demand

Year	Service segment	Breakfast	Lunch	Dinner	Banquet
1990	In-house food service covers	68,202	37,928	27,075	—
	Out-of-house restaurant covers	7,578	22,276	11,603	—
	Banquet covers	—	—	—	63,875
	Total	75,780	60,204	38,678	63,875
1991	In-house food service covers	78,349	45,701	31,740	—
	Out-of-house restaurant covers	8,704	24,717	11,152	—
	Banquet covers	—	—	—	63,875
	Total	87,053	70,418	42,892	63,875
1992	In-house food service covers	85,883	50,878	35,002	—
	Out-of-house restaurant covers	9,543	26,444	9,815	—
	Banquet covers	—	—	—	63,875
	Total	95,426	77,322	44,817	63,875

the number of out-of-house restaurant covers shown in Table 4.

Banquet Demand

Table 5 shows the results of an analysis of comparable hotels and local catering facilities regarding the number of banquet covers that the subject property can be expected to generate.

Total Food Service Demand

Totaling all the food covers by meal period results in the total projected food service demand for the subject property shown in Table 6.

Average Food Check

Taking into account the pricing norms established for comparable food and banquet facilities in the Spring

TABLE 7
Average Food Check

Meal period	1987	1990	1991	1992
Breakfast	$ 5.00	$ 5.79	$ 6.08	$ 6.38
Lunch	10.00	11.58	12.16	12.76
Dinner	17.00	19.68	20.66	21.70
Banquet	22.00	25.47	26.74	28.08

Valley market, the results of other similar lodging facilities nationwide and the subject property's forecasted market mix, Table 7 sets forth the estimated average check by meal period between 1987 and 1992. These estimates have been increased at a 5 percent annual growth rate.

Total Food Revenue

Table 8 shows the subject property's total forecasted food revenue determined by the build-up cover approach. This amount was calculated by multiplying the number of covers sold by the average check per cover for each meal period.

FOOD REVENUE—FIXED AND VARIABLE COMPONENT APPROACH

Compilation of Data

The subject property has no operating history, so income and expense data from similar hotels were used as a basis for financial forecasts. A sorting process was used to screen out data that would not provide an appropriate comparison for the subject property. The first search of the data base isolated all of the income and expense statements for hotels with average room rates similar to the subject property. Once a pool of hotels with similar average room rates had been created, the next step was to locate all of the hotels with similar room counts. In the case of the Spring Valley property, hotels with room counts within 75 rooms of the subject property's room count were used.

All properties with similar levels of occupancy were then selected from the pool that had been compiled. As the final step, additional searches were made to identify hotels with similar facilities and geographic locations. Table 9 shows the composite operating statement that was developed for the proposed Spring Valley hotel based on the sorting process.

The composite operating statement in Table 9 is arranged in five columns. Column 1 contains each revenue and expense category arranged in accordance with the *Uniform System of Accounts for Hotels*; Column 2 contains the composite dollar amount for each category; Column 3 contains the dollar amount expressed as a percentage of total revenue, or, in the case of departmental expenses, a percentage of departmental revenue; Column 4 is the amount per available room, which is the room count (299.8 rooms); and Column 5 is the amount per occupied room (occupancy × room count). These key ratios, along with the

TABLE 8
Total Food Revenue

Year	Meal period	Total covers		Average food check		Food revenue
1990	Breakfast	75,780	×	$ 5.79	=	$ 438,621
	Lunch	60,204	×	11.58	=	696,939
	Dinner	38,678	×	19.68	=	761,151
	Banquet	63,875	×	25.47	=	1,626,753
	Total					$3,523,464
	Rounded					$3,523,000
1991	Breakfast	87,053	×	$ 6.08	=	$ 529,076
	Lunch	70,418	×	12.16	=	855,931
	Dinner	42,892	×	20.66	=	886,302
	Banquet	63,875	×	26.74	=	1,708,090
	Total					$3,979,399
	Rounded					$3,979,000
1992	Breakfast	95,426	×	$ 6.38	=	$ 608,955
	Lunch	77,322	×	12.76	=	986,839
	Dinner	44,817	×	21.70	=	972,391
	Banquet	63,875	×	28.08	=	1,793,495
	Total					$4,361,680
	Rounded					$4,362,000

TABLE 9
1987 Composite Operating Statement

Number of rooms	299.8
Occupancy	70.20%
Average rate	$90.10

	(000)	Percentage of gross	PAR	POR
Revenues				
Rooms	6,921	55.10	23,085	32,885
Food	3,391	27.00	11,312	16,114
Beverages	1,492	11.90	4,977	7,090
Telephone	345	2.70	1,150	1,638
Other income	420	3.30	1,400	1,994
Total	12,569	100.00	41,924	59,721
Departmental Expenses				
Rooms	1,579	22.80	5,267	7,503
Food and beverage	3,600	73.70	12,008	17,105
Telephone	311	90.20	1,037	1,478
Other income	252	60.00	840	1,197
Total	5,742	45.70	19,152	27,283
Departmental income	6,827	54.30	22,772	32,438
Undistributed Operating Expenses				
Administrative and general	1,040	8.30	3,469	4,942
Management fee	377	3.00	1,258	1,792
Marketing	627	5.00	2,091	2,979
Property operations and maintenance	600	4.80	2,000	2,849
Energy	510	4.10	1,701	2,423
Total	3,154	25.20	10,519	14,985
Income before fixed charges	3,673	29.10	12,253	17,453
Fixed Charges				
Property tax	390	3.10	1,301	1,853
Insurance	120	1.00	400	570
Resource for replacement	377	3.00	1,258	1,792
Total	887	7.10	2,959	4,215
Net income	2,786	22.00	9,294	13,238

Ratios	
Food to Rooms	49.00%
Beverage to Food	44.00
Food and beverage to Rooms	70.56
Telephone to Rooms	4.98
Other income to Rooms	6.06

ratios at the bottom of the statement, are used to compare various financial operating results.

Composite Data Adjustments

The composite statement reflects a property that is dissimilar to the subject property in the following areas:

	Composite property	*Subject property*
Number of rooms	299.8	300
Stabilized occupancy	70.2%	72.0%
Average room rate	$90.100	$89.355

The difference in room count is so insignificant, however, that no adjustment is necessary. (Generally, an adjustment is only necessary if the composite property is 20 to 30 percent larger or smaller than the subject property.) The difference in occupancy levels will be adjusted automatically during the fixed and variable component procedures, so the only adjustment necessary for this composite data is to account for the difference in average room rate. As a rule, any adjustments the appraiser makes should be made to the composite property, making it more similar to the subject property.

Table 10 contains the composite operating data and the 1987 base statements that have been adjusted to reflect the difference in the composite data of the proposed Spring Valley hotel. The columns in Table 10 are arranged in the same manner as in Table 9.

The following list outlines the adjustments that have been made to the composite data.

- ☐ *Rooms revenue*—Room count increased to 300 available rooms, average room rate decreased to $89.355 based on market conditions.
- ☐ *Food revenue*—Maintained at 49 percent of rooms revenue.
- ☐ *Beverage revenue*—Maintained at 44 percent of food revenue.
- ☐ *Telephone and other income revenue*—No change.
- ☐ *Rooms expense*—Increased $1,000 because the number of occupied rooms will increase when the assumed room count changes from 299.8 to 300.
- ☐ *Food and beverage expense*—Decreased $14,000 due to anticipated lower volume.
- ☐ *Administrative and general expense*—Decreased from $1,040,000 to $1,036,000 due to lower total revenue, thus reducing credit card commissions. Offsetting the lower volume, however, is a greater number of occupied rooms.
- ☐ *Management fee*—Remains at 3 percent of total revenue.

TABLE 10
1987 Composite and Base Operating Statements

COMPOSITE

Number of rooms	299.8
Occupancy	70.20%
Average rate	$90.10

	$000	Percentage of gross	PAR	POR
Revenues				
Rooms	6,921	55.10	23,085	32,885
Food	3,391	27.00	11,312	16,114
Beverages	1,492	11.90	4,977	7,090
Telephone	345	2.70	1,150	1,638
Other income	420	3.30	1,400	1,994
Total	12,569	100.00	41,924	59,721
Departmental Expenses				
Rooms	1,579	22.80	5,267	7,503
Food and beverage	3,600	73.70	12,008	17,105
Telephone	311	90.20	1,037	1,478
Other income	252	60.00	840	1,197
Total	5,742	45.70	19,152	27,283
Departmental income	6,827	54.30	22,772	32,438
Undistributed Operating Expenses				
Administrative and general	1,040	8.30	3,469	4,942
Management fee	377	3.00	1,258	1,792
Marketing	627	5.00	2,091	2,979
Property operations and maintenance	600	4.80	2,000	2,849
Energy	510	4.10	1,701	2,423
Total	3,154	25.20	10,519	14,985
Income before fixed charges	3,673	29.10	12,253	17,453
Fixed Charges				
Property tax	390	3.10	1,301	1,853
Insurance	120	1.00	400	570
Reserve for replacement	377	3.00	1,258	1,792
Total	887	7.10	2,959	4,215
Net income	2,786	22.00	9,294	13,238

Ratios	
Food to Rooms	49.00%
Beverage to Food	44.00
Food and beverage to Rooms	70.56
Telephone to Rooms	4.98
Other income to Rooms	6.06

BASE

Number of rooms	300
Occupancy	70.20%
Average rate	$89.355

	$000	Percentage of gross	PAR	POR
Revenues				
Rooms	6,869	55.00	22,895	32,615
Food	3,366	27.00	11,219	15,981
Beverages	1,481	11.90	4,936	7,032
Telephone	345	2.80	1,150	1,638
Other income	420	3.30	1,400	1,994
Total	12,480	100.00	41,600	59,260
Departmental Expenses				
Rooms	1,580	23.00	5,267	7,502
Food and beverage	3,586	74.00	11,953	17,028
Telephone	311	90.10	1,037	1,477
Other income	252	60.00	840	1,197
Total	5,729	45.90	19,097	27,204
Departmental income	6751	54.20	22,503	32,056
Undistributed Operating Expenses				
Administrative and general	1,036	8.30	3,453	4,919
Management fee	374	3.00	1,247	1,776
Marketing	623	5.00	2,077	2,958
Property operations and maintenance	600	4.80	2,000	2,849
Energy	550	4.40	1,833	2,612
Total	3,183	25.50	10,610	15,114
Income before fixed charges	3,569	28.70	11,893	16,942
Fixed Charges				
Property tax	375	3.00	1,250	1,781
Insurance	120	1.00	400	570
Reserve for replacement	374	3.00	1,248	1,778
Total	869	7.00	2,898	4,129
Net income	2,699	21.70	8,995	12,813

Ratios	
Food to Rooms	49.00%
Beverage to Food	44.00
Food and beverage to Rooms	70.56
Telephone to Rooms	5.02
Other income to Rooms	6.11

TABLE 11
Projected Base Operating Statement

Year	1987	1988	1989	1990	1991	1992
Number of Rooms	300	300	300	300	300	300
Occupancy	70.20%	70.20%	70.20%	70.20%	70.20%	70.20%
Average rate	$89.355	$93.82	$98.51	$103.44	$108.50	$113.96
	$000	$000	$000	$000	$000	$000
Revenues						
Rooms	6,869	7,212	7,573	7,951	8,340	8,760
Food	3,366	3,534	3,711	3,896	4,091	4,295
Beverages	1,481	1,555	1,633	1,714	1,800	1,890
Telephone	345	362	380	399	419	440
Other income	420	441	463	486	511	536
Total	12,480	13,104	13,759	14,447	15,161	15,921
Departmental Expenses						
Rooms	1,580	1,659	1,742	1,829	1,920	2,016
Food and beverage	3,586	3,766	3,954	4,152	4,359	4,577
Telephone	311	326	342	359	377	396
Other income	252	265	278	292	306	322
Total	5,729	6,015	6,316	6,632	6,963	7,311
Departmental income	6,751	7,089	7,443	7,816	8,198	8,610
Undistributed Operating Expenses						
Administrative and general	1,036	1,088	1,142	1,199	1,259	1,322
Management fee	374	393	413	433	455	478
Marketing	623	654	686	721	757	794
Property operation and maintenance	600	630	662	695	729	766
Energy	550	578	606	637	669	702
Total	3,183	3,342	3,509	3,684	3,869	4,062
Income before fixed charges	3,569	3,747	3,934	4,131	4,329	4,548
Fixed Charges						
Property tax	375	394	413	434	456	479
Insurance	120	126	132	139	146	153
Reserve for replacement	374	393	413	433	455	478
Total fixed charges	869	913	959	1006	1057	1110
Net income	2,699	2,834	2,976	3,125	3,272	3,438

- ☐ *Marketing expense*—Reduced from $627,000 to $623,000 due to lower rooms revenue, thus reducing the franchise fees.
- ☐ *Property operations and maintenance expense*—No change.
- ☐ *Energy expense*—Energy costs are geography-specific expenses and should not be derived from a nationwide composite sample.
- ☐ *Property taxes*—Property taxes are geography-specific.
- ☐ *Insurance expense*—No change.
- ☐ *Reserve for replacement*—Remains at 3 percent of total revenue.

Inflation Adjustments

Table 11 shows the projected base income and expense for the Spring Valley hotel. An assumed inflation rate of 5 percent has been applied to every category. The average room rate is taken from the average rate analysis and represents the undiscounted average room rate. The average room rate during the projection year does not always increase at the rate of inflation, particularly if the composition of the demand segments change.

The purpose of this step is to adjust for inflation so that the fixed and variable estimates are expressed in current dollars and the index of variability calculation represents real changes, unaffected by inflation.

Fixed and Variable Percentages Estimate

Table 12 contains the percentages of fixed and variable components of each revenue and expense category that was considered appropriate for the proposed subject property.

TABLE 12
Fixed and Variable Percentages

Revenue and expense category	Percent fixed	Percent variable
Revenues		
Food	40	60
Beverage	0	100
Telephone	10	90
Other income	50	50
Departmental Expenses		
Rooms	65	35
Food and beverage	55	45
Telephone	60	40
Other income	50	50
Undistributed Operating Expenses		
Administrative and general	70	30
Management fee	0	100
Marketing	70	30
Property operations and maintenance	60	40
Energy	90	10
Fixed Charges		
Property taxes	100	0
Insurance	100	0
Reserve for replacement	0	100

Fixed Component

The fixed component of the food revenue is calculated by taking the base food revenue in each projected year and multiplying it by the 40 percent fixed component of food revenue contained in Table 12. This calculation is made as follows for each of the three projected years.

	1990	*1991*	*1992*
Base food revenue	$3,896,000	$4,091,000	$4,295,000
Percent fixed	40%	40%	40%
Fixed component food revenue	$1,558,000	$1,636,000	$1,718,000

Variable Percentage Change

Food revenue is occupancy-variable to the extent that revenue exceeds the fixed component because of changes in occupancy. The variable percentage change for each projected year is calculated by dividing the projected occupancy by the base ocupancy, as follows.

	1990	*1991*	*1992*
Projected occupancy / Base occupancy	59.0% / 70.2% = .8405	67.0% / 70.2% = .9544	72.0% / 70.2% = 1.026

Unadjusted Variable Component

The unadjusted variable component is calculated by multiplying the base food revenue in each projected year by the 60 percent variable percentage from Table 12. Food revenue was estimated to be 60 percent occupancy-variable. The following calculation illustrates the derivation of the unadjusted variable component for each projected year.

	1990	*1991*	*1992*
Base food revenue	$3,896,000	$4,091,000	$4,295,000
Percent variable	60%	60%	60%
Unadjusted variable component of food revenue	$2,338,000	$2,455,000	$2,577,000

Adjustment of Unadjusted Variable Component

The next step for the appraiser is to multiply the unadjusted variable component by the variable percentage change attributed to differing levels of occupancy, as follows:

	1990	*1991*	*1992*
Unadjusted variable component of food revenue	$2,338,000	$2,455,000	$2,577,000
Variable percentage change	.8405	.9544	1.026
Adjusted variable component	$1,965,000	$2,343,000	$2,644,000

Total Food Revenue Estimate

The fixed component of food revenue and the adjusted variable component of food revenue for each projected year are combined to determine the estimate of total food revenue.

	1990	*1991*	*1992*
Fixed component of food revenue	$1,558,000	$1,636,000	$1,718,000
Adjusted variable component of food revenue	1,965,000	2,343,000	2,644,000
Total food revenue	$3,523,000	$3,979,000	$4,362,000

BEVERAGE REVENUE

The proposed subject property will have extensive beverage facilities, and is accordingly expected to draw a strong local patronage. In fact, based on an analysis of comparable lodging facilities, beverage revenue is estimated to average approximately 44 percent of food revenue. Beverage revenue is expected to be 100 percent variable based on

changes in food revenue. Therefore, beverage revenue is projected by multiplying the forecasted food revenue by 44 percent as follows:

	1990	1991	1992
Food revenue	$3,523,000	$3,979,000	$4,362,000
Percent of food revenue	44%	44%	44%
Beverage revenue	$1,550,000	$1,751,000	$1,919,000

To evaluate the reasonableness of the projection of beverage revenue, the unit of comparison commonly used is beverge revenue per occupied room, which yields:

	1990	1991	1992
Beverage revenue per occupied room	$23.99	$23.87	$24.34

The projected beverage revenue per occupied room is within industry norms for hotels with active beverage outlets.

TELEPHONE REVENUE

Telephone revenue is largely occupancy-variable, so it is normally projected using the percent of rooms revenue or the occupied room as the unit of comparison. Based on the analysis of hotels comparable to the proposed subject property, it was estimated that telephone revenue for the Spring Valley hotel would run approximately 5 percent of rooms revenue, or $4.50 per occupied room in 1987 dollars. This equates to a 1987 base of $345,000, assuming the 70.2 percent occupancy level. Telephone revenue for the proposed subject property is projected to originate largely from in-house guest usage with very little out-of-house demand. Therefore, a 10 percent fixed component and a 90 percent occupancy-variable component will be utilized. Table 13 illustrates the fixed and variable calculations for projecting telephone revenue.

To evaluate the reasonableness of the projection of other income, the projected other income has been expressed as a percentage of rooms revenue and on a per occupied room basis, as follows:

	1990	1991	1992
Percent of rooms revenue	5.7%	5.3%	5.0%
Per occupied room	$5.29	$5.48	$5.71

These units of comparison are within industry norms and appear reasonable for the proposed subject property.

TABLE 13
Telephone Revenue

	1990	1991	1992
Base telephone revenue	$399,000	$419,000	$440,000
Percent fixed	10%	10%	40%
Fixed component of telephone revenue	$ 40,000	$ 42,000	$ 44,000
Base telephone revenue	$399,000	$419,000	$440,000
Percent variable	90%	90%	90%
Unadjusted variable component of telephone revenue	$359,000	$377,000	$396,000

Variable Percent Change

	1990	1991	1992
Projected occupancy / Base occupancy	59.0% / 70.2% = .8405	67.0% / 70.2% = .9544	72.0% / 70.2% = 1.026

	1990	1991	1992
Unadjusted variable component	$359,000	$377,000	$396,000
Variable percent change	.8405	.9544	1.026
Adjusted variable component	$302,000	$360,000	$406,000
Fixed component of telephone revenue	$ 40,000	$ 42,000	$ 44,000
Adjusted variable component of telephone revenue	302,000	360,000	406,000
Total telephone income	$342,000	$402,000	$450,000

OTHER INCOME

The proposed subject property will have a typical hotel gift shop, recreational amenities, and other sources of other income. This category is largely occupancy-variable, so it is normally projected using the percent of rooms revenue or the occupied room as the unit of comparison. Based on an analysis of comparable lodging facilities, other income represented approximately 6 percent of rooms revenue, or about $5.46 per occupied room in 1987 dollars. Using this as the base and projecting out for inflation, Table 14 shows how other income is forecasted by employing the fixed and variable component approach. Fifty percent of other income was considered fixed and 50 percent was occupancy variable.

To evaluate the reasonableness of the projection of other income, the projected other income has been expressed as a percentage of rooms revenue and on a per occupied room basis, as follows:

	1990	1991	1992
Percent of rooms revenue	7.4%	6.6%	6.0%
Per occupied room	$6.92	$6.80	$6.89

TABLE 14
Other Income

	1990	1991	1992
Base other income	$486,000	$511,000	$536,000
Percent fixed	50%	50%	50%
Fixed component of other income	$243,000	$255,000	$268,000
Base other income	$486,000	$511,000	$536,000
Percent variable	50%	50%	50%
Unadjusted variable component of other income	$243,000	$255,000	$268,000

Variable Percent Change

	1990	1991	1992
Projected occupancy / Base occupancy	59.0% / 70.2% = .8405	67.0% / 70.2% = .9544	72.0% / 70.2% = 1.026

	1990	1991	1992
Unadjusted variable component	$243,000	$255,000	$268,000
Variable percent change	.8405	.9544	1.026
Adjusted variable component	$204,000	$244,000	$275,000
Fixed component of other income	$243,000	$255,000	$268,000
Adjusted variable component of other income	204,000	244,000	275,000
Total other income	$447,000	$499,000	$543,000

TABLE 15
Total Revenue

	1990	1991	1992
Rooms	$ 6,015,000	$ 7,562,000	$ 8,985,000
Food	3,523,000	3,979,000	4,362,000
Beverage	1,550,000	1,751,000	1,919,000
Telephone	342,000	402,000	450,000
Other income	447,000	499,000	543,000
Total revenue	$11,877,000	$14,193,000	$16,259,000

These units of comparison are within industry norms and appear reasonable for the proposed subject property.

TOTAL REVENUE

Table 15 shows the projected total revenue for the Spring Valley hotel.

Over the first three projection years, rooms revenue becomes an increasingly larger part of the total revenue while food and beverage revenue as a percentage of the total declines. New lodging facilities typically experience a rapid initial growth in food and beverage revenue while rooms revenue grows more gradually.