



SMITH TRAVEL RESEARCH

## Hotel Feasibility/Market Demand/Valuations and Appraisals

Reprint From 1997 HVS Newsletter By: Betsy MacDonald, MAI, AACI and Steve Rushmore, CRE, MAI, CHA.

**H**otel feasibility, market demand studies, valuations, and appraisals have long been used by lodging developers and owners to justify new projects and expansions of existing properties. Both mortgage lenders and equity investors rely on these reports to direct millions of dollars. For the most part, feasibility studies, market demand studies, and appraisals are well researched and professionally prepared. However, occasionally studies and appraisals are issued which may be termed a "stretch," or one that employs certain unusually aggressive assumptions to either render an unfeasible project marginally feasible, or a marginally feasible project more feasible.

The feasibility of a hotel development is based on its anticipated income generating capability, or a forecast of income and expenses. Any assumptions which tend to overstate revenue and/or understate expenses will make a project more economically viable or feasible, or provide a higher value.

Since opening in Canada, HVS International has been requested to review numerous feasibility studies, valuations, and appraisals prepared by other firms. Based on these reviews,

we have developed an awareness of potential areas where aggressive assumptions are sometimes employed to make a proposed hotel project more feasible, or give a higher value to an existing property. One of the most obvious problem areas is overstating competitive hotel room night demand.

A room night demand analysis is a process by which market demand is estimated by totalling the number of occupied hotel rooms within a market area and forecasting future changes to this level of demand. Any overstatement of the existing demand or the expected demand growth rate tends to inflate area occupancy levels and increase market potential for any proposed new lodging properties, or existing properties.

Aggressive feasibility firms will often go outside primary market areas and pad the base level of demand by including more existing properties in the competitive supply than would normally be considered competitive with the proposed or subject property. They may also overstate the annual percentage growth rate of room night demand.

For an example, consider a primary market area that has five properties

totalling 1,250 guestrooms. The area occupancy is 75%. Current room night demand is calculated as follows:

$$1,250 \text{ guestroom} \times 75\% \text{ occupancy} \times 365 \text{ days/year} = 342,187 \text{ room nights}$$

Now the feasibility firm wants to be aggressive and enlarges the primary market area to include in its base eight hotels with 2,500 guestrooms, operating at an average occupancy of, say, 71%. Current room night demand in this instance would be:

$$2,500 \text{ guestroom} \times 71\% \text{ occupancy} \times 365 \text{ days/year} = 647,875 \text{ room nights}$$

An analysis of the area's room night demand growth rate shows a 2% compounded annual increase to be reasonable. An aggressive firm might contend that a 6% growth rate is justified. Applying the 2% growth rate to the realistic base demand and the 6% to the aggressive base demand results in the four-year room night demand estimate shown in the table below.

Year	Room Night Demand Growth				
	Base	1	2	3	4
Realistic	342,187	349,031	356,011	363,132	370,394
Aggressive	647,875	686,748	727,952	771,629	817,927

## CANADIAN LODGING OUTLOOK HVS INTERNATIONAL - CANADA

Now, assume that the feasibility firm is evaluating a new 300-room hotel for the area. The calculation in the table at the top of page two shows the impact of a 300-room hotel in the area occupancy when it enters the market in year four. Under the realistic assumptions, the area occupancy declines from its current level of 75% to 65%. Under aggressive assumptions, the area occupancy actually increases from 71% to 80%.

room hotel is about to open and a 600-room hotel is proposed. These events are most likely going to affect a hotel's achievable occupancy and average room rate, and should definitely to be considered by an appraiser.

The same can be done with a hotel's average room rate. One of the leading problems we see with hotel appraisals, is that appraisers do not know the difference between rack rate (that

firms may again overstate the market average room rate by increasing the competitive rooms supply base, or by including hotels that are not really competitive but achieve higher room rates. Lets assume that our five hotels are a Holiday Inn, Ramada Inn, Clarion Inn, Best Western, and a Delta Hotel, running an average occupancy of 75% with an average room rate of \$80. Now we increase our competitive supply and add a Four Seasons, a Westin, and a Canadian Pacific Hotel. These hotels bring market occupancy down to 71%, but increase the average room rate to \$105. If the feasibility firm selects an average room rate below the market average, lets assume \$95, this would appear reasonable. However, when the primary competitive hotels are only averaging \$80, the estimated \$95 average rate may be the highest of the primary competitive hotels. We are always cautious of a proposed hotel which is expected to achieve an average room rate above the highest competitor is the market. This will not always be evident in a feasibility report, because they tend to only give averages, and never reveal actual numbers for specific properties. Therefore, lenders and investors are not aware that the proposed hotel is expected to achieve the highest average room rate in the primary competitive field.

Room Nights Available and Resultant Occupancy									
	Existing Rooms		New Rooms	=	Total Rooms	x	Days/ Year	=	Available Room Nights
Realistic	1,250	+	300	=	\$1,550.00	x	365	=	565,750
Aggressive	2,500	+	300	=	\$2,800.00	x	365	=	1,022,000

  

	Year 4 Room Night Demand	/	Available Room Night	=	Area Occupancy
Realistic	370,394	/	565,750	=	65 %
Aggressive	817,927	/	1,022,000	=	80 %

These two minor points - definition of market area and estimate of demand growth rates - can make a marginal property appear successful.

Now, where we see appraisers fail in this area, is when they stabilize a hotel's occupancy, and they have taken no consideration into additional new supply coming into a market. This can be for either an existing hotel, or a proposed hotel. Some appraisers just apply a capitalization rate to the stabilized net income, and take absolutely no consideration to the start up years of operation which commonly have a lower occupancy and average room rate, or the fact that a new 500-

quoted by the hotel at the front desk or through the reservations department), and the average room rate. The rack rates are invariably higher than the average room rate, which blends all the rates including discounted rates. A hotel appraiser who only looks at the rack rates, and states that a subject hotel or a proposed hotel can achieve an average room rate in the range of the stated or quoted rack rates, is definitely overstating potential income. This, of course, overstates the value.

Most hotel feasibility firms know the difference between average room rates and rack room rates. However, these

The inflation on the average room rate can also have a significant impact on a hotel's feasibility or value. Let's assume that a realistic average room rate is \$78 with an average growth rate of 2% annually for four years. Now, assume the aggressive feasibility study firm or appraiser uses the \$95 average room rate with a 5% inflationary growth factor. The following table summarizes the effects of these seemingly slight differences in the assumptions.

## CANADIAN LODGING OUTLOOK HVS INTERNATIONAL - CANADA

Estimated Growth in the Potential Average Room Rate

Year	Base	1	2	3	4
Realistic	\$78.00	\$79.56	\$81.15	\$82.77	\$84.43
Aggressive	\$95.00	\$99.75	\$104.74	\$109.97	\$115.47

As previously stated, an overstatement of revenue may lead to a more feasible project, or a higher value. Some feasibility and appraisal firms obtain revenue estimates from national averages, without knowledge of the facilities included in those averages. For example, food and beverage revenue achievable by a hotel with 30,000 square feet of meeting space should not be comparable to a hotel with only 5,000 square feet of meeting space. Revenue achievable at the facility with the larger facilities will most likely not be achievable by the smaller facility.

Understated expenses occur when an appraiser or a feasibility firm do not take into consideration that most operating expenses are both fixed and variable. At lower occupancies, in the start up years, expenses are commonly higher as a percentage of sales than at a stabilized occupancy. We have seen hotel appraisal reports which have just held expenses steady based on national averages, with no consideration of fluctuations in occupancy and average room rate.

One expense category which is of great debate, is the reserve for replacement for hotels. A number of firms do not take the reserve for replacement into consideration. We believe they are overstating income, and value, by not reflecting this expense. There was a study done in the United States on Hotel Capital Expenditures over a 25-year period. This study was conducted by the International Society of

Hospitality Consultants (ISHC), which found actual capital expenditures for hotels over a 25-year period were significantly higher than the normal 3% reserve for replacement used by feasibility firms and appraisers. In fact, the real cost over 25 years for a full-service hotel with 300 rooms was more like 6.9% of total sales. HVS now has major Canadian Financial Institutions requesting that we use a 5% reserve for replacement.

We have also seen appraisers reflect a reserve for replacement, but take a percentage of the income before debt, and not of total revenue. If followed in real life, this procedure would leave a hotel with insufficient capital for the replacement of furnishings and equipment. The textbook *The Appraisal Of Real Estate*, published by the Appraisal Institute of Canada, states that: "Replacement allowances are, however, relevant for certain types of properties that encounter very high periodic expenditures for replacements that have a limited economic life, such as the soft goods and furnishings associated with hotels and motels. The cost of replacements may reach \$20,000 per unit and require replacement every five years. Since replacement is usually accompanied by colour changes or patterns, a significant expenditure occurs periodically. These costs may be reflected in a reserve for replacement allowance, amortized or simply stabilized."

HVS International performs a feasibility analysis with every hotel appraisal. We do not believe you can appraise a hotel accurately, without looking at the current market and future supply and demand factors. Unlike some forms of real estate that are stabilized by long term leases,

hotels have to fill up daily. Any changes in the economy or the competitive supply can affect a hotel's value.

So, beware of firms and appraisers that are experienced in real estate, but have no thorough hotel experience, and vice versa. A hotel is not only real estate, but also has a business component. We recommend you use a professional with experience in both.

**CANADIAN LODGING OUTLOOK  
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March 2006	Number of Rooms	Occupancy Rate (%)		Average Room Rates (\$)		RevPAR (\$)		Room Supply % chg	Room Demand % chg
		2006	2005	2006	2005	2006	2005		
Nova Scotia Area	1,185	55.4%	49.0%	\$89.96	\$78.48	\$49.84	\$38.46	2.0%	15.4%
Halifax, NS	3,297	63.2%	59.7%	\$111.53	\$106.61	\$70.49	\$63.65	2.4%	8.4%
Montreal Downtown	8,901	57.5%	52.8%	\$135.98	\$130.41	\$78.19	\$68.86	0.1%	8.9%
Montreal Area	4,763	59.8%	59.8%	\$104.51	\$101.65	\$62.50	\$60.79	1.7%	1.9%
Quebec City, QC	3,701	52.0%	48.8%	\$111.82	\$105.85	\$58.15	\$51.65	1.1%	7.8%
Quebec Area	4,077	53.3%	57.0%	\$126.68	\$129.08	\$67.52	\$73.58	0.7%	-5.8%
Toronto Downtown	12,708	62.9%	60.8%	\$156.79	\$146.22	\$98.62	\$88.90	4.2%	7.8%
Toronto North/East	6,464	56.3%	51.7%	\$111.79	\$106.05	\$62.94	\$54.83	-4.3%	4.3%
Toronto Airport/West	7,253	64.9%	62.3%	\$114.42	\$109.68	\$74.26	\$68.33	7.7%	12.2%
Ottawa, ON	7,318	61.9%	55.3%	\$129.35	\$123.92	\$80.07	\$68.53	0.0%	12.1%
Ontario East	3,659	52.2%	47.1%	\$92.15	\$90.80	\$48.10	\$42.77	0.9%	11.8%
Windsor/ Ontario SW	2,860	53.5%	53.8%	\$98.90	\$97.10	\$52.91	\$52.24	0.0%	-0.6%
London/ Kitchener	5,898	57.5%	51.6%	\$100.54	\$97.12	\$57.81	\$50.11	0.8%	12.2%
Ontario North/ Thunder Bay	1,776	64.4%	62.2%	\$79.77	\$79.61	\$51.37	\$49.52	0.0%	3.5%
Ontario NC/ Sudbury	4,075	55.5%	51.8%	\$93.28	\$89.52	\$51.77	\$46.37	1.9%	9.2%
Niagara Falls, ON	8,044	43.8%	42.8%	\$113.55	\$106.01	\$49.73	\$45.37	0.7%	3.0%
Ontario Central	2,798	54.7%	51.3%	\$110.54	\$93.36	\$60.47	\$47.89	1.4%	8.1%
Mississauga, ON	5,247	55.0%	53.3%	\$111.19	\$104.81	\$61.15	\$55.86	8.2%	11.7%
Winnipeg, MB	3,940	61.6%	63.5%	\$94.08	\$89.52	\$57.95	\$56.85	0.0%	-2.9%
Regina/Saskatoon, SK	4,251	68.9%	63.2%	\$101.64	\$95.83	\$70.03	\$60.56	0.0%	9.0%
Calgary, AB	7,900	76.9%	63.6%	\$126.10	\$110.30	\$96.97	\$70.15	-0.5%	20.3%
Edmonton, AB	6,784	76.3%	69.4%	\$108.20	\$101.57	\$82.56	\$70.49	2.6%	12.7%
Alberta North Area	2,315	77.7%	77.8%	\$121.88	\$103.86	\$94.70	\$80.80	1.5%	1.5%
Alberta South Area	6,235	64.2%	61.2%	\$125.44	\$118.69	\$80.53	\$72.64	3.8%	8.8%
Vancouver Downtown	7,911	70.1%	61.4%	\$132.56	\$126.52	\$92.92	\$77.68	0.0%	14.2%
Vancouver/ Burnaby Area	2,328	67.5%	61.7%	\$98.39	\$91.58	\$66.41	\$56.50	0.0%	9.4%
Richmond-Surrey/ East Area	5,060	64.7%	60.7%	\$94.74	\$86.09	\$61.30	\$52.26	-1.0%	5.5%
British Columbia Area	5,694	62.1%	58.6%	\$184.58	\$186.49	\$114.62	\$109.28	1.4%	7.5%
Kamloops/ Kelowna Area	4,577	50.1%	49.6%	\$83.85	\$81.12	\$42.01	\$40.24	0.1%	1.3%
Vancouver Island	3,105	61.2%	64.5%	\$93.26	\$102.20	\$57.08	\$65.92	0.0%	-5.1%
<b>Provinces</b>									
Alberta	23,234	73.4%	66.5%	\$120.03	\$108.59	\$88.10	\$72.21	2.1%	12.9%
British Columbia	28,428	63.1%	59.3%	\$122.85	\$118.73	\$77.52	\$70.41	0.4%	6.9%
Manitoba	4,792	60.4%	61.7%	\$90.92	\$87.35	\$54.92	\$53.89	0.0%	-2.1%
New Brunswick	3,512	59.6%	59.8%	\$102.42	\$98.47	\$61.04	\$58.89	1.5%	1.0%
Newfoundland	1,808	50.5%	57.8%	\$108.51	\$108.36	\$54.80	\$62.63	4.1%	-9.1%
Nova Scotia	4,482	61.2%	56.9%	\$106.36	\$100.35	\$65.09	\$57.10	2.1%	9.7%
Northwest Territories	66	INS	INS	INS	INS	INS	INS	INS	INS
Ontario	67,138	57.3%	54.1%	\$118.89	\$112.54	\$68.12	\$60.88	1.8%	7.8%
Prince Edward Island	889	38.3%	39.6%	\$72.10	\$66.37	\$27.61	\$26.28	0.0%	-3.2%
Quebec	22,404	56.5%	54.1%	\$123.30	\$119.27	\$69.66	\$64.53	0.8%	5.2%
Saskatchewan	5,459	64.3%	59.9%	\$96.34	\$91.07	\$61.95	\$54.55	0.1%	7.4%
Yukon Territory	181	INS	INS	INS	INS	INS	INS	INS	INS
Canada	162,393	56.4%	54.2%	\$102.57	\$96.56	\$57.85	\$52.34	1.3%	5.3%

**CANADIAN LODGING OUTLOOK  
HVS INTERNATIONAL - CANADA**

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## CANADIAN LODGING OUTLOOK HVS INTERNATIONAL - CANADA

### DEFINITIONS

Occupancy:	Rooms sold divided by rooms available.
Room Revenue:	Total room revenue generated from the sale or rental of rooms.
Average Daily Rate (ADR):	Room revenue divided by rooms sold.
Room Revenue Per Available Room (RevPAR):	Room revenue divided by rooms available (occupancy times average room rate will closely approximate RevPAR).

*If you have any questions regarding this publication please send a message to [bmacdonald@hvsinternational.com](mailto:bmacdonald@hvsinternational.com)  
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