

How Much Is Your Place Worth Today?

STEPHEN RUSHMORE

James E. Gibbons Associates

A Property's Value Depends on Its Earning Potential

So you're fed up with uncertainties about occupancy and with rising costs for payroll, energy, food, supplies, repairs and maintenance, insurance, and a dozen other things, not to mention the daily aggravations of keeping your place running. Two fairly new inns in your region have gone through bankruptcy, one taking Chapter X and the other Chapter XI, but both have their doors open again. You're in better financial condition because your mortgage payments are comparatively lower.

Should you try to sell now in the belief that things may grow worse? Is your health a problem? If so, how much is your place worth in today's market: today's replacement cost? a ratio in comparison to sales of similar properties? a ratio of realistic gross income for the next few years?

Meanwhile, prospective buyers—if any—for your property are asking themselves similar questions. Would your place be a better investment for the future than putting money into short-term loans or simply leaving it in the bank drawing interest? It might be that a prospective buyer is more optimistic about your property than you are.

Set forth in this article by Stephen Rushmore are some guidelines you might consider before negotiating a sale. *The property used as the case subject is wholly hypothetical.*

Today's reader has the benefit of 20-20 hindsight when he views the January 1974 appraisal of this imaginary property as \$2,190,000. But in 1973, hotel-motel occupancy at higher rates followed the general pattern of preceding years so that gross income was up. Travel traditionally continues its flow as people's spending habits exhibit the same laws of inertia as a moving object in space—movement ceases only when the brakes are applied, which occurred during the Oil Embargo and the deepening economic recession of 1974. By January 1975, the subject property's economic value had dropped almost 50%. Unfortunately, the same lag takes place, as in objects at rest, to get things moving again.

As for your own property, let's hope you've kept gross income and net profits rising through constant attention to good marketing practices.—*Editor.*

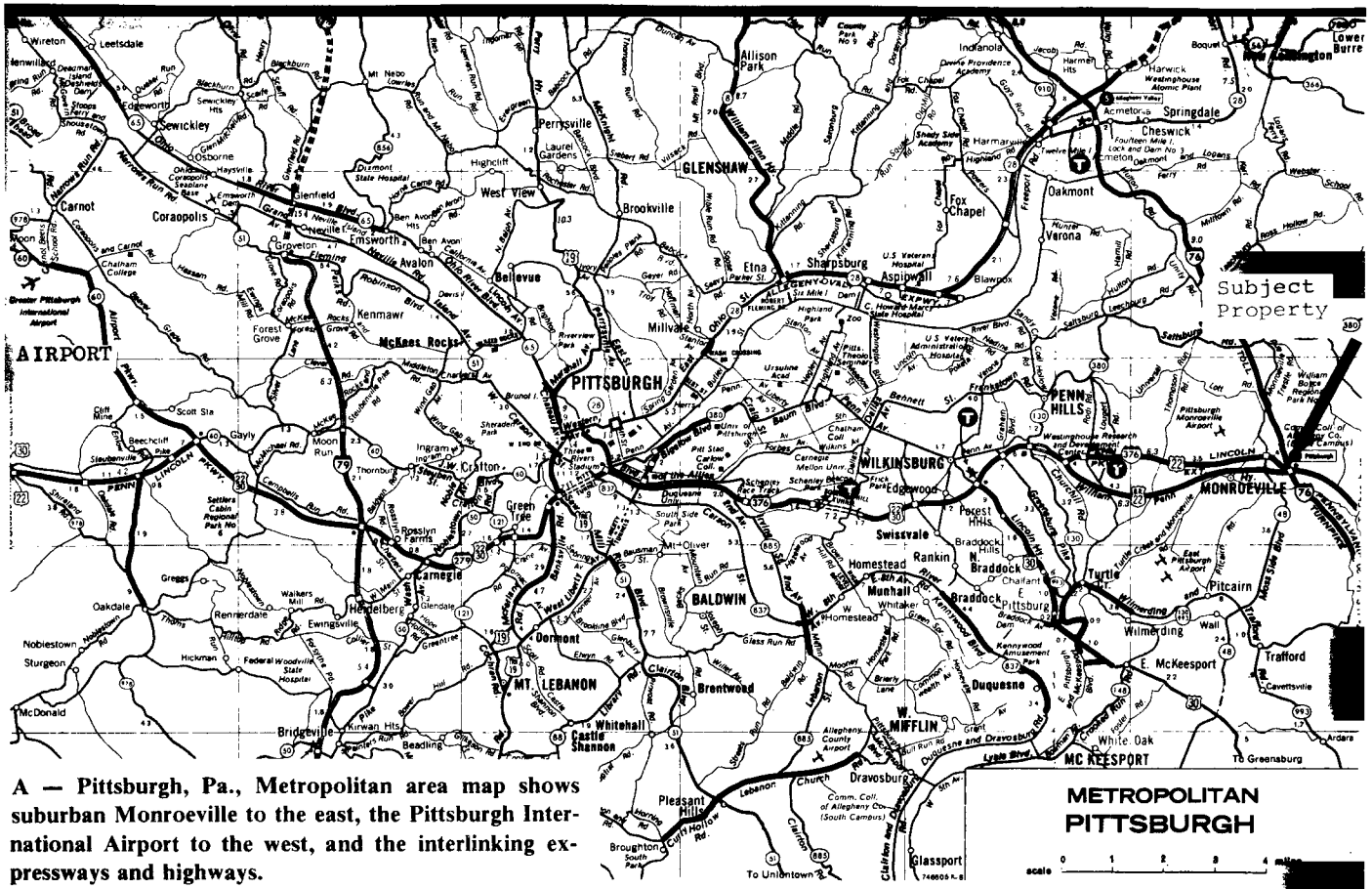
HOSTELRY FORECLOSURES AND BANKRUPTCIES have increased at an enormous rate in recent months. The lodging industry, reeling from the effects of the energy crisis, sagging national economy, proliferation of budget motels, and the general overbuilding of all types of lodging facilities, is experiencing a major shakeout of marginal operations.

Both owners and lenders are quickly learning that a brand new motor hotel that cost over \$20,000 per room to build two years ago can have an economic value now of less than \$10,000 per room.

The importance of accurate valuations for both developers of new properties and purchasers of existing

properties is essential. Numerous foreclosures have resulted from unfounded appraisals and feasibility studies that have led owners to spend more than they should have in developing or buying their hostels.

The hypothetical case study presented in this article is designed to demonstrate the basic theory of hotel-motel valuation. The study is divided into two sections: 1) a description of the subject property and related background information; and 2) the approach an appraiser might use in evaluating this information in order to obtain an estimate of the property's market value. The reader after reviewing this article, may wish to calculate the current value of his own property.



A — Pittsburgh, Pa., Metropolitan area map shows suburban Monroeville to the east, the Pittsburgh International Airport to the west, and the interlinking expressways and highways.

I — Property Description, Data, and Information

History. The 150-room American Motor Inn opened in the summer of 1960. During the early years, this popular motel was the pride of Monroeville and enjoyed good occupancy and an excellent reputation. In the mid-1960's, a 196-room Holiday Inn and a 161-room Hospitality Motor Inn opened nearby, adding over 250 rooms within an area that already had over 750 rooms. This created an over-supply of rooms.

The original owner became ill in 1966 and had to sell the motel. It was purchased by a local mortgage broker and almost immediately the American Motor Inn began to deteriorate. The inexperienced owner alienated the employees, cut back on maintenance, neglected housekeeping, and generally mismanaged the entire operation. The present owner purchased the motel from the mortgage broker in December 1968 and, through knowledgeable management, brought the operation from a 50% occupancy up to a 73% occupancy in 1973.

The American Motor Inn does not have a franchise or chain affiliation. Its rates are somewhat lower than those of competing motels, so that it attracts a loyal following of the business travelers who are on a per diem or pay their own travel expenses. During summer months, it draws a fair number of vacation travelers through extensive highway sign promotion. The motel has a good reputation within the local community and receives its proportionate share of the dining-out and banquet market.

Location and Topography. The American Motor Inn is located at Interchange 6 of the Pennsylvania Turnpike and

I — AMERICAN MOTOR INN (A Hypothetical Property)

Summary of Basic Facts

Affiliation:	None
Location:	Monroeville, Pennsylvania (12 Mi. from Pittsburgh)
Size:	150 Rooms
Restaurant:	140 Seats
Lounge:	100 Seats
Banquet Rooms:	1 Room of 1500 Sq. Ft. (150 seats) divisible into 2 rooms of 75 seats each
Recreation:	Swimming Pool
Parking:	200 Spaces
Land:	3.5 Acres
Age:	Opened 1960
Physical Condition:	Good
Financial Condition in 1973:	73% Occupancy \$16.00 Average Rate per Occupied Room \$206,960 Profit before Debt Service
Market:	Primarily commercial travelers, some vacationers.

Interstate 76 (I-76) in the Pittsburgh suburb of Monroeville, Pennsylvania. (See Exhibit A) The property fronts 354 feet on the William Penn Highway (U.S. 22 Business) a four-lane divided highway, and 246 feet on Moss Side Boulevard, a two-lane secondary street.

The topography of the site slopes slightly from front to back approximately three feet. Drainage appears adequate.

Area and Neighborhood Description

Pittsburgh and Allegheny County. Monroeville is located 12 miles east of the city of Pittsburgh and is, therefore, directly affected by the economic trends of the city's entire metropolitan area.

Pittsburgh is primarily an industrial city producing bituminous iron and steel, gas and steam engines, plate glass, aluminum equipment, linoleum and tile, and preserved foods. Numerous steel mills and manufacturing plants are located along the Allegheny and Monongahela Rivers, which converge at Pittsburgh to form the Ohio River. Pittsburgh, America's largest inland river port, is also a center for business and banking. A number of large companies such as Westinghouse, Gulf Oil, U.S. Steel, Alcoa, and Heinz Foods have their corporate headquarters in the city.

Once known as the "Smoky City," because of the pollution generated by the area's industries, in the 1950's, Pittsburgh benefited from a three billion dollar civic revitalization program that completely rebuilt its downtown area.

Many visitors to Pittsburgh arrive through the Greater Pittsburgh Airport, located west of that city. A number of motor hotels have been constructed in the airport vicinity and along Interstate 279 leading from the airport to downtown Pittsburgh. Since the American Motor Inn is located in Monroeville, situated on the opposite side of Pittsburgh from the airport (a 45-minute drive), the motel experiences difficulty in attracting out-of-town travelers arriving by air. As revitalization and urban renewal improve the city's business district, downtown hotels are becoming increasingly competitive with those at the airport and in the suburbs.

Pittsburgh's city-wide hostelry occupancy trend had been downward until 1973. Hotel men in the area believe there is an over supply of transient accommodations, although several new properties were under construction.

Monroeville. The Suburban Borough of Monroeville has grown steadily during the past decade. Much of the growth is attributed to improved highways and interstate expressways connecting Monroeville with downtown Pittsburgh and the greater metropolitan area. The availability of large tracts of land suitable for development has attracted several large industrial and residential projects.

A number of Pittsburgh's major corporations have established research and development centers in Monroeville. These include Westinghouse Corporation, Gulf Oil Company, and U.S. Steel. The presence of these large complexes has also attracted other smaller supporting industries and service

establishments. Approximately 60% of the American Motor Inn's occupancy is derived from out-of-town businessmen visiting local firms.

Monroeville is largely a residential community with many of its inhabitants commuting each day to work in downtown Pittsburgh. According to statistics published by the Monroeville area Chamber of Commerce, the population of Monroeville has shown a steady increase:

Year	Population
1940	4,675
1950	7,841
1960	22,446
1965	25,332
1970	29,011
1972	29,500

The population trend for the Greater Pittsburgh area is a movement from downtown Pittsburgh to the outlying suburbs, such as Monroeville. Local officials estimate that Monroeville has become almost 75% developed and the increase in population will gradually slow until the area is totally developed at 36,000.

The "per house" income in Monroeville in the late 1960's was \$13,547 per family. This figure is 20% greater than the average "per house" income in Allegheny County and some 28% more than the average "per house" income in the entire state of Pennsylvania. Over 57% of the families in Monroeville earn above \$10,000 per year.

Residential growth has not just been limited to single-family homes, which have increased tremendously in the past ten years. There also has been an influx of both high-rise, luxury type apartment buildings, as well as cluster-type townhouse developments. The result has been an extremely well-rounded cross section of middle- to high-middle income occupancy of both rental and owner-occupied single and multiple-family dwellings.

Commercial growth has been extensive along the William Penn Highway, west of the American Motor Inn. Within the last two years the highly successful Monroeville Mall opened. This 130-store, enclosed shopping mall features an indoor ice-skating rink. The Mall's Merchants Association estimates the Mall serves some 250,000 shoppers each week. In addition, there are numerous neighborhood shopping centers, automobile dealerships, fast food businesses, small motels, and other retail establishments strung in clusters along the William Penn Highway.

Tourism. Monroeville offers no significant tourist or recreational attractions that could motivate vacationers to stop for one or more days. It does not have a convention center or large gathering place that might draw regional meetings and conventions. But the town's location at the main Pittsburgh interchange of the Pennsylvania Turnpike makes it a convenient stopping point for people motoring through the area. During the summer months and on weekends in the winter, the American Motor Inn attracts highway travelers. Following are the traffic counts for vehicles at the Pennsylvania Turnpike Interchange:

Number of Employees Working in the Monroeville Area

Westinghouse Electric	2300
Gulf Oil Company	1100
U.S. Steel	1000
Koppers Company	272
Bituminous Coal Research	72
Pittsburgh Corning	24

Vehicles Entering

	Passenger	Commercial	Total
1969	2,698,956	363,572	3,062,528
1970	2,713,608	334,271	3,047,879
1971	3,160,006	325,006	3,485,012
1972	3,134,436	356,614	3,491,050

Vehicles Departing

	<i>Passenger</i>	<i>Commercial</i>	<i>Total</i>
1969	2,698,338	363,914	3,062,252
1970	2,716,083	331,814	3,047,879
1971	2,849,703	319,489	3,169,192
1972	3,096,999	350,307	3,447,306

Although officials claim the Turnpike has been adversely affected by the opening of I-80 (a free expressway), the usage of the Pittsburgh interchange has shown a general increase.

Conclusion. The business and industry located in the Monroeville area appear to generate good transient visitation. The population growth pattern has been impressive, as is the influx of the large research-oriented business complexes. The Turnpike access and highway network also help lodging facilities within the immediate area.

Hotelmen have only one concern about the future economy of Monroeville: Is there space for future growth? The industrial, commercial and population expansion has almost run out of room to expand. Land is practically fully utilized and no new industry has announced plans to move into the area. As long as the local supply of transient lodging facilities remains level, the demand should be sufficient to provide a good occupancy. If, however, several new hostleries were developed, the supply could quickly overtake the demand which might drive the older and/or marginal operations out of business.

The Competitive Market

The supply and demand for lodging accommodation in the Monroeville area is currently well balanced. A few years ago, overbuilding existed, but the recent influx of new commercial and research-oriented businesses has increased the demand for motel rooms and provided relief. Table II summarizes the local hostleries in the Monroeville area.

Highway, Access and Visibility

The American Motor Inn is well located with respect to the Pittsburgh highway system. The Pennsylvania Turnpike interchange for Pittsburgh is directly behind the motel. Intersecting this interchange is Interstate 76, which leads to downtown Pittsburgh and is one of the major routes into the city. William Penn Highway (Business Route 22) is a limited access, four-lane highway through Monroeville. Most of the traffic is local. The American Motor Inn is readily accessible to the highways described, as they converge at a complex interchange located directly behind its site.

The property's visibility from the various highways is mixed. Because the visibility from major highways is limited, The American Motor Inn established an effective highway signing program.

Highway	Visibility
Pennsylvania Turnpike:	No visibility in either direction.
Interstate 76 (east of Toll Booth) <i>Eastbound:</i>	Site is visible, but exit must be made immediately upon seeing the property.
<i>Westbound:</i>	Site is visible, but exit must be made immediately upon seeing the property.
U.S. 22 Bus:	Fully visible in both directions.

Physical Description

The American Motor Inn consists of three buildings arranged in a "U" around a patio swimming pool area. (See Exhibit B.) One building houses the motel's administrative, dining, and meeting areas. The other two buildings contain the guest rooms, an in-house laundry, and various mechanical, equipment, and other storage areas. Its overall design is

II — American Motor Inn's Competitive Market

Description of Other Hostleries in the Immediate Area.

* * * * *

Conley's Best Western Motel is one of several operated under the Conley name in the Pittsburgh area. A large interior courtyard has been recently enclosed, creating exhibit space, an indoor swimming pool, and inside putting green. The motel is convenient to office buildings on the William Penn Highway.

Holiday House Motel is known throughout Pittsburgh for its supper club and "name" entertainment and has 100 guest rooms.

Holiday Inn of Monroeville is located adjacent to the subject property and is popular among businessmen and vacationers.

Hospitality Motor Inn is a picturesque hotel located on I-76 approximately four miles from the subject property. It attracts many Westinghouse groups and has a popular weekend package for families.

Table II. SUMMARY of AREA HOSTELRIES

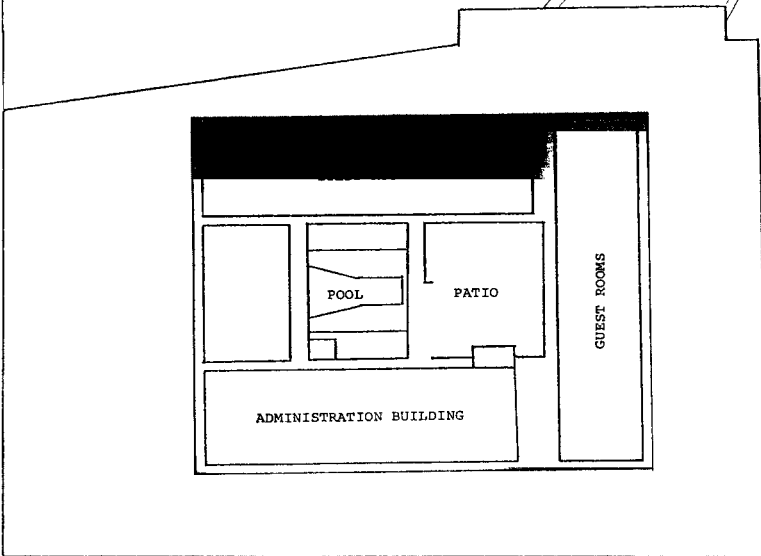
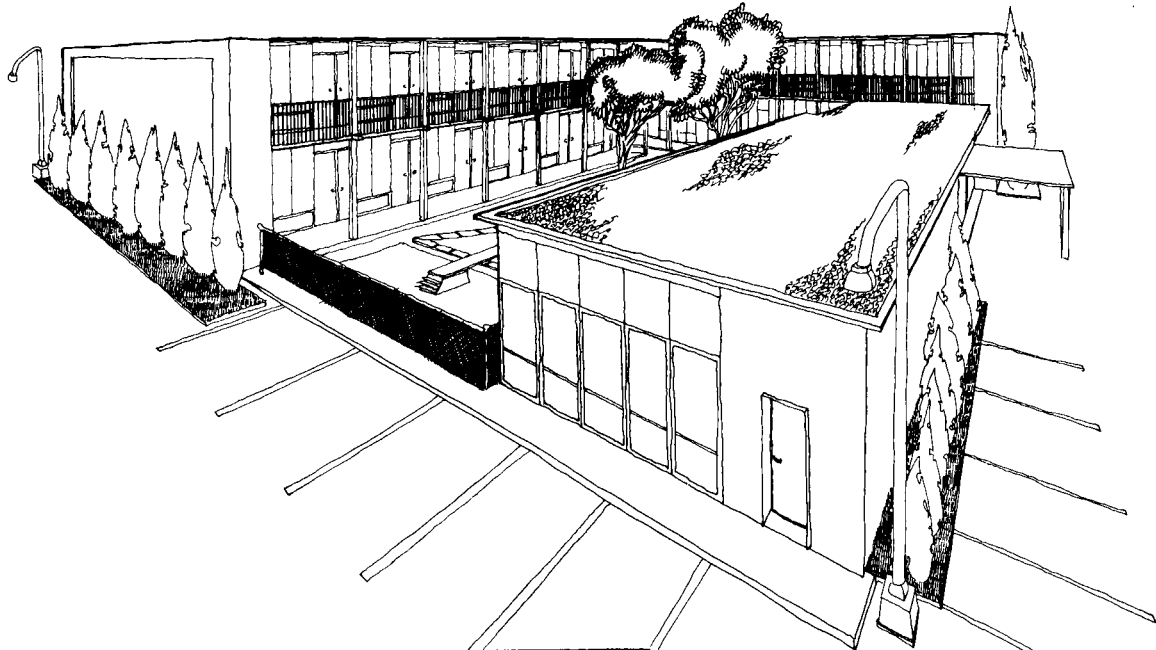
<u>Name</u>	<u>No. of Rooms</u>	<u>Single Rate</u>	<u>Double Rate</u>	<u>Meeting Space</u>
American Motor Inn (Subject Property)	150	\$13 - \$17	\$15 - \$20	150
Conley's Best Western Motel	222	\$16 - \$18	\$18 - \$22	500
Holiday House Motel	100	\$12 - \$14	\$14 - \$16	550
Holiday Inn	196	\$17	\$21 - \$23	230
Hospitality Motor Inn	161	\$17 - \$18	\$21 - \$22	425
Howard Johnson's Motor Lodge	185	\$17	\$20 - \$23	1300

Howard Johnson's Motor Lodge is located directly across Moss Side Boulevard from the subject motel. This high-rise motor hotel is far from a typical Howard Johnson property and includes the largest ballroom outside the downtown area (with carpeted walls), indoor swimming pool, a huge cocktail lounge, "his" and "hers" health clubs, marble lobby, and attractive guest rooms. This

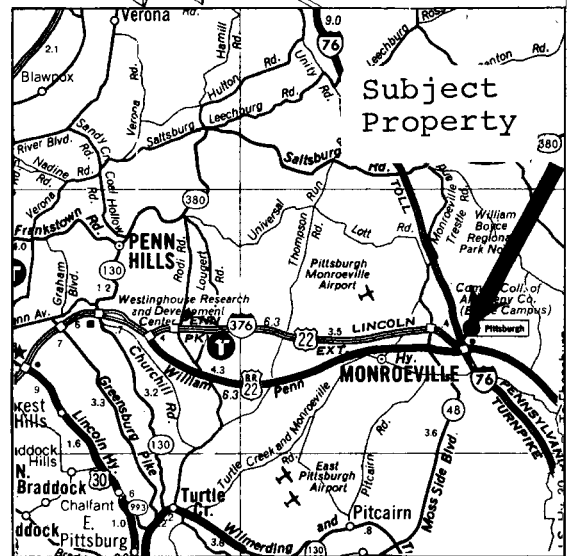
Howard Johnson's is a first-class facility with amenities comparable to any motor hotel in Pittsburgh.

Proposed Motels: The only proposed motel discussed by local hotelmen was an economy motel on Moss Side Boulevard one block east of the subject property. No one has any definite information on this property.

AMERICAN MOTOR INN



WILLIAM PENN HIGHWAY



B — An artist's rendering of the hypothetical American Motor Inn of Monroeville, Pa., its plot plan, and a map showing the site in relation to major highways and the local airport.

typical of the motels built in the late 1950's and early 1960's —two-story guest room sections of back-to-back guest room units, with exterior corridors. The three buildings are connected to each other by covered walkways.

In addition to the structures, the site is improved with 75,000 square feet of paved parking area. The perimeters are curbed, sodded and landscaped. There is a large identification sign along the William Penn Highway.

The motel's court area is well landscaped and concrete service walks provide pedestrian access to all buildings, including the pool area. The swimming pool, irregularly shaped, is approximately 50 feet in length and varies in width from 15 feet to 30 feet. It is equipped with a filtering system.

Administration Building: This one-story building contains the lobby, offices, dining, kitchen, banquet, meeting and restaurant facilities. The total floor area is 13,832 sq. ft. The building is constructed of face brick over concrete block back-up walls and glass display windows. The foundation is poured concrete. A built-up tar and gravel roof is supported by concrete columns and beams. The windows are plate glass in aluminum frames, while the floors are cement covered with various floor coverings and finishes. The drywall-

finished interior walls are covered with paneling, tile, and various combinations of other wall finishes. This building has an automatic central air conditioning system. The physical condition of the building is generally good and little deferred maintenance was observed.

The administration unit's floor plan consists of a lobby, including a reception area and a front desk. The reception area has two couches, several lounge chairs, and a large coffee table. The front desk area houses the accounting files and machines, a telephone switchboard, the key and mail rack, and safe deposit boxes. Directly behind the front desk are administrative offices.

Off the lobby is a 140-seat dining room, which has an Early American theme: a beamed ceiling, hardwood floors, antique-looking tables and chairs, and various rustic-looking wall hangings and pictures. A cocktail lounge also opens off the lobby, and, having its own entrance, it can be closed off from the restaurant with sliding partitions. The lounge seats 100—15 at a long bar and 85 at tables—and its decor is also Early American.

The banquet room has two entrances to the lobby. The room contains 1,500 square feet of space and is divisible into two rooms by sliding air doors. The total capacity is approximately 140, banquet style.

The dining room and banquet room have entrances directly to the main kitchen. As in many motels built during the early 1960's, the kitchen is somewhat cramped. The equipment is adequate of various ages. The walk-in coolers date back to original construction and will probably need replacement soon.

Guest Room Buildings. The two guest room buildings have similar construction: the exterior walls are brick supported by a concrete foundation, and the roofs are tar and gravel, supported by reinforced concrete columns and beams. The heating is a central hot water system, with individual controls in each unit. Air conditioning is also central, and individually controlled. An inhouse laundry contains washer, dryers and folding machines. The total floor area of one guest room building is 24,533 sq. ft., and of the other it is 23,933 sq. ft.

The 150 guest rooms include 120 rooms with two double beds and 30 rooms with one double bed. Fifty of the rooms are connecting. The sizes of the guest rooms vary, but the typical rooms measure approximately 12 by 14 ft. (excluding bath area). An additional 12 by 7 ft. includes the entry hall and lavatory areas.

The guest rooms are finished with carpet-covered concrete floors and smooth-finished plaster walls with vinyl wall covering. The bath areas have ceramic tile floors; ceramic tile (full in tub area and 3-1/2 feet wainscot) and vinyl covered walls, and suspended acoustical tile ceiling. Typical room furnishings include standard size double beds, combination bureau-desk, two upholstered chairs, a night stand, color television, wall lamps and a direct dial telephone.

The condition of the guest room buildings is good. Some of the carpeting and furnishings in the guest rooms are showing wear and will soon have to be replaced.

Land

A recent survey prepared by a local engineering firm shows the motel site contains about 152,460 sq. ft., or 3.5 acres. Within the past two years, several land parcels located on the William Penn Highway near the American Motor Inn have been sold. Following are details of these land sales:

Sale 1:

Location: 775 William Penn Highway, approximately 1½ miles west of the subject property.
 Size: 1.31 acres
 Consideration: \$79,910
 Price/Acre: \$61,010
 Subsequent Improvement: Restaurant

Sale 2:

Location: 521 William Penn Highway, approximately 1 mile west of the subject property.
 Size: 5.2 acres
 Consideration: \$231,790
 Price/Acre: \$44,575
 Subsequent Improvement: Automobile Dealer

Sale 3:

Location: 120 William Penn Highway approximately 3 miles west of subject property
 Size: 1.95 acres
 Consideration: \$109,073
 Price/Acre: \$55,935
 Subsequent Improvement: Drug Store

Financial History

Financial statements for the past five years (1969-1973) have been made available by the owner. They are summarized in Table III on the next page.

Real Estate Taxes

The American Motor Inn currently has an assessed value of \$950,000, divided as follows:

Land:	\$143,000
Improvements:	<u>807,000</u>
Total:	\$950,000

The 1973 rate was \$38.50 per \$1000 of assessed valuation. Real estate in Monroeville is reassessed on a three-year cycle on a basis of 50% of the Fair Market Value.

Construction Costs

The current construction costs for reproducing a motel in the Pittsburgh area of quality similar to the American Motor Inn are:

Construction, including foundations, utilities, heating, etc.	\$30.28/Sq. Ft.
Paving the parking lot	.33/Sq. Ft.
Swimming Pool	\$15,000
Furniture, Fixtures and Equipment, including kitchen equipment, front office machines, etc.	\$ 2,500/guest room

Table III

AMERICAN MOTOR INN
Monroeville, Pennsylvania

Statement of Income and Expenses
Years ended December 31, 1969-1973

	1969	1970	1971	1972	1973
PERCENT OCCUPANCY:	55%	65%	62%	70%	73%
AVERAGE RATE:	12.00	13.00	12.75	14.50	16.00
	\$	\$	\$	\$	\$
TOTAL SALES AND INCOME:					
Rooms	361350	462637	432798	555712	639480
Food	216810	268329	238038	288970	319740
Beverages	80529	99665	88414	107331	110760
Telephone	17344	23131	24341	26674	31055
Other Income	10132	10528	10786	11045	11500
Total	686165	864290	794377	989732	1120535
COST OF GOODS SOLD, DEPARTMENTAL WAGES AND EXPENSES:					
Rooms	102984	122598	120436	140039	157312
Food and Beverages	267605	329354	301285	345574	379302
Telephone	23587	31226	33590	35476	40992
Total	394176	483178	455311	521089	577606
GROSS OPERATING INCOME	291989	381112	339066	468643	542929
DEDUCTIONS FROM INCOME:					
Admin. & General	64499	80378	79845	83142	89315
Adv. & Sales	24701	27657	27803	30681	36977
Heat, Light & Power	31563	38028	38126	42558	48183
Repairs & Maint.	26074	36300	35647	42501	47062
Total	146837	182363	181421	198882	221537
HOUSE PROFIT	145152	198749	157645	269761	321392
Insurance	4200	4255	4300	4375	4500
Real Estate Taxes	35015	33954	34546	35125	36575
Management Fees	20584	25928	24625	31671	35857
Replacement Reserve	37500	37500	37500	37500	37500
Total	97299	101637	100971	108671	114432
NET INCOME	47853	97112	56674	161090	206960

Examples of Motel Sales

A motel broker has provided the details of three recent motel sales:

Sale 1:

Location: Williamsport, Pennsylvania

Description: A 185-unit, six-story Hilton Inn. Its facilities include: restaurant seating 175, cocktail lounge seating 150, a 350-seat banquet room, swimming pool and several retail shops. This 5-year old property caters primarily to regional convention groups and commercial travelers. Its banquet facilities are the largest in Williamsport and are locally popular. Occupancy, at the time of sale, was 78%.

Consideration: \$4,070,000

Sale 2:

Location: Youngstown, Ohio

Description: A 95-unit, one-story Best Western motel. This 20-year old property has a 30-seat coffee shop which serves light meals, a swimming pool and a small putting green. An interstate location makes this motel popular with vacationers. Occupancy at the time of sale was 63%.

Consideration: \$760,000

Above:**III—Financial History of the American Motor Inn for the 1969-1973 five-year period.****Sale 3:**

Location: Harrisburg, Pennsylvania

Description: A 175-unit, two story Holiday Inn. Its facilities include: 140-seat restaurant; 90-seat cocktail lounge and a 150-seat banquet room, swimming pool and sauna. This 3-year old property is located near several large office parks, as well as the State Administration buildings. Occupancy, at the time of sale, was 86%.

Consideration: \$3,062,500

Availability of Financing

In 1973, normal mortgage financing was available for motels similar to the American Motor Inn. Typical mortgage terms are:

Amount of the Loan: 80% of the Fair Market Value.

Interest Rate: 9¼%

Term: 20 Years

Constant: .1099

II. Estimating Market Value

Appraisal Nomenclature. The American Institute of Real Estate Appraisers defines "Market Value" as:

The highest price in terms of money which a property will bring if exposed for sale in the open market, allowing a reasonable time to find a purchaser who buys with knowledge of all the uses to which it is adapted and for which it is capable of being used.

The price at which a willing seller would sell and a willing buyer would buy, neither being under abnormal pressure.

The price expectable if a reasonable time is allowed to find a purchaser and if both seller and prospective buyer are fully informed.

In appraising real estate or estimating Market Value, the professional appraiser relies on three approaches:

1. Cost Approach
2. Market Data Approach
3. Income Approach

1. Cost Approach. The cost approach estimates market value by computing the current cost of reproducing a property and subtracting any depreciation from one or more of the following factors: physical deterioration, functional obsolescence and economic obsolescence.

The cost of reproducing a property is generally estimated on a square foot basis, using a construction cost manual published by a recognized cost reporting service. Added to the reproduction cost is the value of the land.

Depreciation is a loss in value caused by one or more of the following factors:

- A. *Deterioration*—the physical wearing out of the property.
- B. *Functional Obsolescence*—the lack of desirability in layout, style and design, as compared with that of a new property serving the same function.
- C. *Economic Obsolescence*—the loss of value from causes outside the property itself.

The cost approach provides a reliable estimate of value for new properties. However, as buildings and other forms of improvements increase in age and begin to depreciate, the resultant loss in value becomes increasingly more difficult to quantify.

2. Market Data Approach. This approach estimates the value of a property by comparing it with similar properties recently sold in the open market. To obtain an accurate estimate of value using the Market Data Approach, the sales price of the comparable property must be adjusted to reflect any dissimilarities between the subject and the comparable properties. Some of the adjustments considered are: age, location, construction, condition, layout, equipment, and date of sale.

The Market Data Approach provides a reliable estimate of value for properties like vacant land and single family homes, where the adjustments are few in number and relatively simple to compute. However, for larger and more complex properties, such as shopping centers, office buildings and motels, the adjustments are numerous and become more difficult to estimate accurately.

3. Income Approach. This approach divides a property's projected average net income by an appropriate capitalization rate to establish a value that will provide a sufficient return to the investor. The Income Approach is often selected as the preferred valuation approach for income-producing properties because it most closely reflects the investment thinking of knowledgeable buyers.

The accuracy of the Income Approach is dependent upon a sound evaluation of a project's future earnings potential. Average net income is generally developed by reviewing a property's operating history (income and expense statements) and projecting future trends based on anticipated economic conditions.

The equally important capitalization rate is the weighted average of several component rates. The most significant component is the mortgage constant: the yearly rate of both interest and amortization that will allow full payment of debt within a specific time period. Secondly, the capitalization rate contains a component that allows for an appropriate return on invested equity. Factors such as the type of investment, the availability of equity and debt capital, and various risk considerations interact in the formation of the different component rates.

To clarify the preceding definition, let's actually derive a capitalization rate to use in valuing the American Motor Inn. As stated under the heading "Availability of Financing," interest at 9¼% (typical in 1973 for motel mortgages) for a 20-year term, and a loan that amounts to approximately 80% of the property's Market Value. The mortgage constant for a 9¼%, 20-year loan, payable monthly, is .1099.

Since the mortgage will cover 80% of the motel's value, the owner must invest the remaining 20% from his own funds. Many types of investments are available to individuals with sufficient capital resources. The alternatives range from the risk-free purchase of government notes yielding 6% to 10% to highly speculative ventures such as oil exploration where a success can return many times the original investment. As motels are considered to have a higher risk than many other types of real estate investments, prudent motel investors look for a 15% to 20% equity return.

From the facts just presented, a capitalization rate can be calculated using a weighted average, or what appraisers term the "Band of Investment Technique." We know that 80% of the motel's value will be financed with a loan that carries a yearly constant of .1099. Furthermore, the equity invested, which amounted to 20% of the property's value, must return an assumed 16% to the owner. The weighted average is computed as follows:

	<i>Percent of Market Value</i>		<i>Return Demanded</i>		<i>Weighted Average</i>
Loan	80%	x	.1099	=	.088
Equity	20%	x	.16	=	.032
Capitalization Rate:					.12

The value of a motel with an average yearly net income of (say) \$120,000 is: $\frac{\$120,000}{.12} = \$1,000,000$

To prove this value, allocate the yearly net income according to the assumptions used in deriving the capitalization rate:

	<i>Percent of Market Value</i>	<i>Dollar Amount</i>	<i>Return Demanded</i>	<i>Allocation of Yearly Net Income</i>
Loan	80%	\$800,000	x .1099	= \$ 88,000
Equity	<u>20%</u>	<u>200,000</u>	x .16	= <u>32,000</u>
Totals:	100%	\$1,000,000		\$120,000

Essentially, the Income Approach, or capitalization process, works backwards to calculate a value that will fulfill the demands of the mortgage and equity investor using the income which is projected to be available.

Estimate of Market Value

With the three basic approaches defined, let's see which provides the most reliable estimate of Market Value for the American Motor Inn.

1. Market Value by the Cost Approach. This approach requires an estimate of each of the following:

- A. Reproduction Cost of Structures
- B. Land Value
- C. Depreciation

The reproduction cost can be estimated by totaling the various square-foot areas of the motel and applying the appropriate construction cost factor:

	<i>Sq. Ft. Area</i>	<i>Estimated Construction Cost Per Sq. Ft.</i>	<i>Total</i>
Administrative Bldg.	13,832	\$30.28	\$418,833
Guest Room Bldg.	24,533	30.28	742,859
Guest Room Bldg.	23,933	30.28	724,691
Parking Lot	75,000	.33	24,750
Swimming Pool	—	—	15,000
Furniture, Fixtures & Equipt.	—	—	<u>375,000</u>
Total Reproduction Cost:			\$2,301,133

Land value is generally estimated by the Market Data Approach using comparable sales. The following is a summary of the three land transfers described in the problem:

<i>Sale No.</i>	<i>Number of Acres</i>	<i>Sales Price/Acre</i>
1	1.31	\$61,010
2	5.2	44,575
3	1.95	55,935

It appears that the price per acre declines as the size of the parcel increases. Other factors that determine land value include: location, access, zoning, available utilities, and visibility.

Based on your inspection of each comparable plot and making the necessary adjustments, you believe the 3.5 acres of land under the American Motor Inn is worth \$50,000 per acre, or a total land value of \$175,000.

Thus far, we have estimated:

Total Reproduction Cost	\$2,301,133
Total Land Value	<u>175,000</u>
Total	\$2,476,133

This total figure would be the cost of a new motel built today. However, the American Motor Inn was constructed fifteen years ago. Even though the property has been well maintained, the various depreciation factors have, over the years, eroded value.

Areas of the subject property where depreciation is noticeable include:

- Old and obsolete mechanical equipment that requires frequent maintenance and operates at a low efficiency.
- A dated style of motel architecture that has exterior corridors, back-to-back guest rooms, separated buildings, small guest rooms, lack of storage and so forth. In addition, the building materials used for construction further give the appearance of a property built during the early 1960's.
- Economic conditions such as stiff competition from nearby franchised operations and a generally stable (vs. growing) local economy.
- Certain features offered by competitive motels but not by the American Motor Inn: heated swimming pool, sauna and health club, year-round combination of heat and air conditioning in the guest rooms, message light on telephone, maid status system and in-room movies.

The major disadvantage of using the Cost Approach for older properties now becomes apparent. How can a dollar value be attributed to the depreciation described above? Appraisers employ several methods for estimating depreciation. However, for properties as old as the American Motor Inn, any estimate of depreciation could only be a guess.

In theory, the Cost Approach should indicate the same value as either the Income or Market Data approaches. Some appraisers will "peg" their depreciation estimates as the difference between the reproduction cost plus land value and either the value resulting from the Income or Market Data approaches. Obviously, such a computation is meaningless.

In summary, the Cost Approach fails to provide a reliable estimate of market value for the American Motor Inn. It will, however, indicate the upper limit of value by showing that the cost to reproduce the property today would be about \$2,475,000.

2. Market Value by the Market Data Approach. Several comparable motel sales were illustrated in the problem to serve as a basis for the market data approach. These sales are summarized below.

<i>Sale</i>	<i>No. of Rooms</i>	<i>Age</i>	<i>Total Sales Price</i>	<i>Price Per Room</i>
1	185	5	\$4,070,000	\$22,000
2	95	20	760,000	8,000
3	175	3	3,062,500	17,500

When each of these motels is compared to the subject property, a number of dissimilarities becomes apparent. In order for the market data approach to provide a reliable estimate of value, adjustments must be made for all dissimilar factors.

To begin with, the total sales price for each motel has been equated by dividing it by the number of rooms to obtain the sales price on a per room basis. The range is from \$8,000 per room for Sale 2 to \$22,000 per room for Sale 1.

Some of the adjustments that must be made to each comparable sale for it to better reflect the market value of the subject property are:

Rationale	Adjust Comparable Sales Price Per Room
Sale 1: \$22,000/Rm.	
Comparable is newer	Downward
Comparable has superior location	Downward

Comparable has more banquet space	Downward
Comparable has larger swimming pool	Downward
Comparable has income from retail shops	Downward
Comparable has national franchise	Downward

Sale 2: \$8,000/Rm.

Comparable is older	Upward
Comparable has limited food service	Upward
Comparable has inferior location	Upward
Comparable has putting green	Downward

Sale 3: \$17,500/Rm.

Comparable is newer	Downward
Comparable is inferior in location	Upward
Comparable has a sauna	Downward
Comparable has national franchise	Downward

From the limited description of each sale, these are a few of the necessary adjustments. The results indicate the market value of the subject property should be somewhat less than \$17,500 per room and more than \$8,000 a room (\$9,500 range). In order to refine this range, a more complete list of adjustments must be compiled. Each adjustment must then be given a dollar value and equated to the subject property. Theoretically, if all adjustments are made perfectly, the adjusted sales price on a per room basis for each sale would equal the market value of the subject property. For properties with vast numbers of complex adjustments, this procedure approaches an unrealistic realm, which is similar to estimating elaborate depreciation during the Cost Approach.

In summary, the Market Data Approach produces an unreliable estimate of market value for the American Motor Inn because of the complexities involved in making the necessary adjustments.

Using Assessed Values. Under the heading of "Real Estate Taxes," it was stated that the American Motor Inn has a total assessed value of \$950,000, and that property in Monroeville is assessed at 50% of fair market value. Thus, one might logically assume the market value of the subject property is: \$950,000 x .50 = \$1,900,000.

This assumption, in many instances, is incorrect as assessed values do not always equate to market value. A primary reason is that property is seldom reassessed on a yearly basis, and therefore, may be two, three or more years old.

While the American Motor Inn may actually have a market value of \$1,900,000, the use of a property's assessed value to make this determination is unreliable.

3. Market Value by the Income Approach. The two essential components used in estimating value via the income approach are:

- Appropriate Capitalization Rate.
- Estimate of property's projected average net income.

The section describing the Income Approach showed how a capitalization rate was derived by combining the weighted average of the anticipated financing terms with the desired equity return. A 12% capitalization rate was shown to be appropriate in the current market for motels similar to the American Motor Inn.

Since the value of income-producing real estate is predicated on future earnings, an estimate must be made of the property's projected average net income. Past trends are helpful in predicting the future, but care must be taken to equate historical facts with future expectations.

The five-year income and expense statement for the American Motor Inn (Table III) shows the financial history of the motel, which is summarized below:

	1969	1970	1971	1972	1973
Occupancy	55%	65%	62%	70%	73%
Average Rate	\$12.00	\$13.00	\$12.75	\$14.50	\$16.00
Net Income	\$47,853	\$97,112	\$56,674	\$161,090	\$206,960

Except for the year 1971, the American Motor Inn has experienced an improving trend in occupancy, average rate, and net income through 1973. While this trend is upward, it appears to be increasing at a decreasing rate. Uncertainty caused by the city-wide decline in hotel occupancy, along with prospects for limited economic growth within Monroeville, indicate that the operating performance of the American Motor Inn had almost reached a peak in 1973.

With competent management and a stable national economy, it would have been reasonable in 1973 to expect the American Motor Inn to average 75% occupancy with a \$17.50 rate (in constant dollars) during the next four to seven years. The expense trends from the five-year income and expense statement (Table III), combined with the expected stabilized occupancy and average rate, result in a projected average net income of \$263,100 (Table IV).

Number of Rooms:	150
Percent Occupancy:	75%
Average Rate:	\$17.50
<u>Total Sales and Income:</u>	
Rooms	\$ 719,000
Food	350,000
Beverages	130,000
Telephone	35,000
Other Income	12,000
Total	<u>\$1,124,000</u>
<u>Cost of Goods Sold and Departmental Wages and Expenses:</u>	
Rooms	\$ 169,000
Food and Beverages	410,000
Telephone	46,000
Total	<u>\$ 625,000</u>
GROSS OPERATING INCOME	\$ 621,000
<u>Deductions from Income:</u>	
Administrative and General	\$ 95,000
Advertising and Sales	39,000
Heat, Light & Power	52,300
Repairs and Maintenance	52,000
Total	<u>\$ 238,300</u>
<u>House Profit:</u>	\$ 382,700
<u>Other Expenses:</u>	
Insurance	\$ 4,500
Real Estate Taxes	37,600
Management Fees	40,000
Replacement Reserve	37,500
Total	<u>\$ 119,600</u>
NET INCOME	\$ 263,100

But the national economy, starting with the Arab oil embargo of October 1973 which curtailed travel and the recession that deepened during 1974, shows signs of general business decline from 1972-1973 levels during the next two to three years.

For the purpose of presenting the Income Approach for establishing the value of hotel and motel properties, this report will first examine the apparent value of the American Motor Inn from the viewpoint of its 1973 record and then examine its value as of January 1975.

1973 Value. First, let us look at the projections made in 1973 that were based on the forecast that the American Motor Inn could expect 75% occupancy at a \$17.50 rate (in constant dollars) over the next four to seven years.

Capitalizing the projected average net income of \$263,100 (Table IV) by a 12% overall capitalization rate gives a market value via the Income Approach of \$2,192,500:

$$\frac{\$263,100}{12\%} = \$2,192,500$$

(say) \$2,190,000

The proof of this value, according to our assumptions, is:

80% Mortgage	(\$2,190,000 x .80)	=	\$1,752,000
20% Equity	(\$2,190,000 x .20)	=	438,000
			\$2,190,000

			<i>Return Demanded</i>			<i>Allocation of Yearly Net Income</i>
Mortgage	\$1,752,000	x	.1099	=		\$193,020
Equity	438,000	x	.16	=	70,080	

Projected Average Net Income: \$263,100

The summary below presents the various estimates of Market value for the American Motor Inn in January 1974:

	<i>Estimated Value</i>
Reproduction Cost (no depreciation) Plus Land Value:	\$2,476,133
Market Data (\$8,000/Rm to \$17,500/Rm):	\$1,200,000-\$2,625,000
Assessed Value:	1,900,000
Income Approach (1973)	2,190,000

1975 Value. The real estate market is characterized by change. Factors such as the money market, fiscal policy, investor's yield demand, the national economy, tax considerations, competition and operational efficiency levels are continuously changing and must be carefully analyzed each time value is estimated.

When the American Motor Inn was valued in early 1974, the full impact of the energy crisis, inflation and the coming

recession in the national economy had not yet been felt by the traveling public. By the end of 1974, the motel's occupancy dropped to 61% and the average rate, because of package-plan discounts, declined to \$15.90. Increased operating expenses further eroded profits resulting in a 1974 net income of \$145,000.

In some situations temporary declines in operating results have little effect on a property's value, because they are offset in subsequent years by above-average net incomes. If, however, declines turn into downward trends, the value will be adversely affected.

Assuming the American Motor Inn is partially dependent upon drawing business from the Turnpike and Interstate highway, the energy shortfall and higher gasoline prices may have a long-term consequence. If the lower 1974 net income accurately reflects an extended downward adjustment for fewer highway patrons, the 1975 value for the American Motor Inn might be:

$$\frac{\$150,000}{.12} = \$1,250,000$$

The \$940,000 difference between the \$2,190,000 value in early 1974 and the \$1,250,000 value in 1975 is primarily economic obsolescence created by the sudden adverse changes in the economy.

In some areas, motels are totally dependent upon highway traffic or have been significantly affected by other external factors such as the sagging national economy and the overbuilding of competitive hostelries. Many of these motels currently experience negative net incomes, and therefore have little or no value as motels under the Income Approach. Lenders who acquire hostelries through foreclosure are often forced to terminate operations until either the market conditions improve or another use can be found for the property. In several instances value has been recovered through conversion to other uses such as apartments, college dormitories, retirement homes and condominiums.

Summary

The Income Approach most realistically reflects the views of motel investors and, in this example, sufficient data was available for a reliable value estimate. Difficulty in calculating depreciation in the Cost Approach and in adjusting the comparables in the Market Data Approach decreased the accuracy of these two procedures. The assessed value generally cannot be relied on for an estimate of Fair Market Value.

While this case study provides the fundamentals for estimating Market Value for a particular motel, care must be taken to adjust the various factors to reflect each individual situation. As demonstrated in this last section, all factors—especially future trends—must be carefully evaluated. An experienced real estate appraiser, who is a qualified member of either the American Institute of Real Estate Appraisers or the Society of Real Estate Appraisers, can generally provide current data on market conditions and trends as well as offer invaluable assistance in formulating value estimates.

A reprint of "The Commercial Lodging Market" and of "How Much Is Your Place Worth Today?" is available at \$1.00. Quantity discounts are quoted on request.