

JAMES A. GRAASKAMP COLLECTION OF TEACHING MATERIALS

V. INDUSTRY SEMINARS AND SPEECHES - SHORT TERM

B. Assessors and Other Public Officials

6. "How Many Sticks in the Bundle of Rights or
What is a Taxable Interest in Real Estate?".
Presented to the Municipal Assessors
Institute, Wisconsin Rapids, WI.
September 13, 1984

"How Many Sticks in the Bundle of Rights"

Or

"What is a Taxable Interest in Real Estate?"

A Seminar Presented to

MUNICIPAL ASSESSORS INSTITUTE

Presented by

Professor James A. Graaskamp
University of Wisconsin School of Business

The Mead Inn
Wisconsin Rapids, Wisconsin

September 13, 1984

- I. The Appraisal of Commercial and Investment Property has become a difficult and exacting appraisal problem in recent years because of a number of major trends in business and municipal requirements. Solutions will require more craftsmanship on the part of legislators and assessors/appraisers.
 - A. The sources of complexity and appraisal dilemma:
 1. Creative accounting
 2. Creative financing
 3. Creative marketing of synergistic businesses
 4. Political pressure of rising mill rates
 5. Misplaced reliance on the equalization process
 6. Public confusion as to returns from the business and returns on the land and building in which the business is located
 - B. Any appraisal process is a model which must consider six components or elements in the selection and use of the model
 1. The precise question or issue to be answered
 2. The data available
 3. The hypothesis or assumptions used to focus the data on the question
 4. The ability of the analyst
 5. Trust and credibility with the client
 6. Cost effectiveness of the method
 - C. The appraisal process is a series of models which combine empirical information with deductive logical models
 1. Three approaches are models, although we may differ as to details
 2. Market, income, and cost
 3. Truth, beauty and chance
 4. Inference, simulation and normative

- D. Appraisal is the fulcrum or balancing point for many issues of equity including eminent domain, taxation, solvency of our financial institutions, and measurement of performance by our money managers. In each case, whatever model is chosen the rules must be applied consistently for fairness.
 - 1. Consistency means staying true to the logic of the model.
 - 2. Consistency without sensitivity to significant differences and complexities is unfair.
 - 3. Random error is acceptable but biased error can be a major element of unfairness.
- E. The elements of an appraisal model include:
 - 1. Definition of value
 - 2. Definition of perspective in time and viewpoint
 - 3. Definition of assets to be valued
 - 4. Definition of transaction terms
 - 5. Definition of decision system rules and assumptions
- F. Consider the definition of market value in the 8th edition of the Institute textbook in terms of prospective, rules and conditions and what is value. (See Exhibit 1).
- G. The single word knowledgeable assumes highest and best or most probable use of the property as improved. (See Exhibit 2).
 - 1. The English make the distinction in the appraisal assignment between an existing use of an appraisal and potential use appraisal.
 - 2. The English rule will be arriving in the U.S. within two years with the development of international appraisal and accounting standards.
- H. Fair market value of fee simple title subject to easements in gross to the public is the base for the unity rule but is the base point for estimating most probable price must then consider:
 - 1. Increments in price paid for seller financing
 - 2. Discounts caused by legal encumbrances including easements, building department liens, etc.
 - 3. Discounts in leasehold interests
 - 4. Discounts applied to recognize curable functional depreciation
 - 5. Premiums attributable to differential advantage of a captive buyer or subjective and personal values
- I. Accounting procedure has long recognized the need to properly allocate purchase prices to the assets purchased if balance sheets and income statements are to be representative of the financial condition of the enterprise. Therefore if a business is purchased, the purchase price is allocated in the following sequence.
 - 1. Cost attributed to financing and transaction costs of buyer
 - 2. Cost to replace tangible land and buildings
 - 3. Cost to replace tangible inventory, cash, bonds
 - 4. Cost to replace tangible equipment and fixtures
 - 5. Surplus, if any, is assigned to intangible personalty which can be identified such as franchises, copyrights, operating permits,

EXHIBIT 1

FAIR MARKET VALUE

The most probable price in cash, terms equivalent to cash, or in other precisely revealed terms, for which the appraised property will sell in a competitive market under all conditions requisite to fair sale, with the buyer and seller each acting prudently, knowledgeably, and for self-interest, and assuming that neither is under undue duress.

Fundamental assumptions and conditions presumed in this definition are

1. Buyer and seller are motivated by self-interest.
2. Buyer and seller are well informed and are acting prudently.
3. The property is exposed for a reasonable time on the open market.
4. Payment is made in cash, its equivalent, or in specified financing terms generally available for the property type in its locale on the effective appraisal date.
5. The effect, if any, on the amount of market value of atypical financing, services, or fees shall be clearly and precisely revealed in the appraisal report.

Source: American Institute of Real Estate Appraisers, The Appraisal of Real Estate, 8th ed., (Chicago: American Institute of Real Estate Appraisers, 1983), p. 33.

EXHIBIT 2

"Highest and best use: That reasonable and probable use that will support the highest present value, as defined, as of the effective date of the appraisal. Alternatively, that use, from among reasonably probable and legal alternative uses, found to be physically possible, appropriately supported, financially feasible, and which results in highest land value. The definition immediately above applied specifically to the highest and best use of land. It is to be recognized that in cases where a site has existing improvements on it, the highest and best use may very well be determined to be different from the existing use. The existing use will continue, however, unless and until land value in its highest and best use exceeds the total value of the property in its existing use. Implied within these definitions is recognition of the contribution of that specific use to community environment or to community development goals in addition to wealth maximization of individual property owners. Also implied is that the determination of highest and best use results from the appraiser's judgment and analytical skill, i.e., that the use determined from analysis represents an opinion, not a fact to be found. In appraisal practice, the concept of highest and best use represents the premise upon which value is based. In the context of most probable selling price (market value) another appropriate term to reflect highest and best use would be most probable use. In the context of investment value an alternative term would be most profitable use.

Real Estate Appraisal Terminology, Edited by Byrl N. Boyce, Ph.D., SRPA, Ballinger Publishing Co., Cambridge, Mass., 1975. (Emphasis added.)

- contracts for future business, patents, and patterns
- 6. Any remaining surplus is assigned to a balancing account called good will
- J. Since Wisconsin does have the same mill rate applied to realty as tangible personalty, there are fewer problems in this allocation than there are in the confusion of intangible personal property and real estate values.
 - 1. Contracts for the use of money are personalty
 - 2. Management fees and profit sharing as a management fee come before returns to land and buildings
 - 3. Contract for services not customarily provided
 - 4. Business guarantees provided by supplementary contract

II. Shopping Center Valuation Problems

The market approach is confused by creative financing; the income approach is confused by the cycle of revenues; and the cost approach is uncertain as to the add-on for value created by management.

- A. Consider the problem of a public/private rehab of a commercial building in a small town - Case 4 which forms Exhibit 3. (*missing*)
- B. Real estate commercial properties no longer have rents - they have revenues which consist of (See Exhibit 4):
 - 1. Base rent
 - 2. Adjustment of the base rent for inflation
 - 3. Common area maintenance expense plus the loading for management and banking functions
 - 4. Pass through pro rata increases in operating costs
 - 5. Percentage of sales bonuses based on marketing skills of landlord and tenant
 - 6. Recovery of tenant improvements bankrolled by the landlord
 - 7. Payment for special services not included in a standard lease
- C. Which of the above revenues are legally considered rents to which you could apply a gross rent multiplier; does the presence of all of these elements reduce the risk to the landlord so that net income should receive additional lower discount rate?
- D. On the other hand, if a 50% interest in the real estate is sold to a passive investor, is the value of the center two times the price or must the position of the remaining 50% be discounted at a higher rate to reflect the risk of giving the first investor a preferred rate of return?
 - 1. The unity rule forces you back to net rental income after deductions for management
 - 2. Where do you find straight cash deals for shopping centers?
 - 3. National standards of capitalization rate by property class is one way to recognize real estate values before equity owners confuse it. See American Council of Life Insurance Schedule M in Exhibit 5.

M a t t
Rent Roll and Lease Summaries
June 30, 1982

Page 2 of 2

Space No.	Tenant	No. of Twin City Stores	Tenant Rating	G.L.A. Sq. Ft.	Lease Term From	To	Year	Base Rental	Base Rental/ Sq. Ft.	2 Rent Formula	/Sq. Ft.
14.	Total Sports	3	National	10,000	11/1/78	1/11/94	15 yrs. Yr. 1-3 3 mo. Yr. 4-7 Yr. 8-10 Yr. 11-15	\$50,000 \$60,000 \$70,000 \$80,000	\$5.00 \$6.00 \$7.00 \$8.00	4% over \$1,250,000 (\$125) 4% over \$1,500,000 (\$150) 4% over \$1,750,000 (\$175) 4% over \$3,000,000 (\$200)	
17.	Oriental Arts, Inc.	1	Local	1,066	2/1/81	1/31/83	2 yrs. Yr. 1 Yr. 2	\$ 8,925 \$ 9,975	\$8.37 \$9.35	6% over \$148,750 (\$140) 1% over \$161,250 (\$151)	
18.	Unassigned	--	--	(1,232)	--	--	--	\$ 9,856	\$8.00	1% over \$166,250 (\$156) 6% over \$164,267 (\$133)	
19.	Unassigned	--	--	(449)	--	--	--	\$ 7,000	\$15.59	10% over \$70,000 (\$156)	
20.	Unassigned	--	--	(873)	--	--	--	\$12,000	\$13.75	5% over \$240,000 (\$275)	
21.	Photomill (3)	5	Local	1,536	10/1/78	1/31/89	10 yrs. Yr. 1-3 3 mos. Yr. 4-7 Yr. 8-10	\$ 6,144 \$12,288 \$18,432	\$4.00 \$8.00 \$12.00	6% over \$102,400 (\$671) 6% over \$204,800 (\$133) 6% over \$307,200 (\$200)	
22.	Murrah	8	National	1,632	2/1/79	1/31/89	10 yrs. --	\$11,424	\$7.00	6% over \$190,400 (\$177)	
23.		24	Reg.	4,966	11/1/78	1/31/94	15 yrs. -- 3 mos.	\$32,279	\$6.50	6% over \$537,983 (\$108)	
24.	Great	5	National	1,037	10/1/78	1/31/84	5 yrs. Yr. 1 3 mos. Yr. 2-5	\$10,000 \$15,000	\$9.64 \$14.46	8% over \$125,000 (\$121) 8% over \$187,500 (\$181)	
25.	The Book Center	1	Reg.	1,201	6/1/79	1/31/87	7 yrs. Yr. 1-2 8 mos. Yr. 3-8	\$ 9,608 \$12,010	\$8.00 \$10.00	6% over \$160,133 (\$100) 6% over \$200,167 (\$167)	
27.	Imports	1	Local	788	12/1/80	1/31/84	3 yrs. -- 2 mos.	\$10,200	\$12.00	6% over \$170,000 (\$261)	
Total				66,142							

(3) Assigned to Photomill as of April 1, 1981

Rental Summary

	G.L.A. - S.F.	
Leased Space	56,364	(85.2%)
Unassigned Space	9,778	(14.8%)
Totals	66,142	(100.0%)

Exhibit 4

13

pp. 6-12 Not found

M A L L

Tenant by Tenant Base Rent Projections
Including Lease Step-ups (1), and Reletting Activity (2)

Space No.	Tenant	Area Sq.Ft.	1982 6 mos.	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992 6 mos.
1.	Footwear	5,745	\$ 19,964	\$ 39,927	\$ 39,927	\$ 39,927	\$ 39,927	\$ 45,816	\$ 51,705	\$ 51,705	\$ 51,705	\$ 51,705	\$ 25,835
2.	Fabric	10,179	\$ 27,993	\$ 55,985	\$ 55,985	\$ 55,985	\$ 55,985	\$ 55,985	\$ 55,985	\$ 55,985	\$ 55,985	\$ 55,985	\$ 27,993
3.	Unassigned	813	\$ 3,862	\$ 7,724	\$ 7,724	\$ 7,724	\$ 7,724	\$ 7,724	\$ 9,858	\$ 9,858	\$ 9,858	\$ 9,858	\$ 4,929
4.	Cedrics	1,586	\$ 5,155	\$ 10,309	\$ 11,895	\$ 11,895	\$ 11,895	\$ 11,895	\$ 11,895	\$ 18,083	\$ 18,083	\$ 18,083	\$ 9,042
5.	Unassigned	2,100	\$ 7,875	\$ 15,750	\$ 15,750	\$ 15,750	\$ 15,750	\$ 20,101	\$ 20,101	\$ 20,101	\$ 20,101	\$ 20,101	\$ 12,827
6.	Unassigned	4,288	\$ 11,528	\$ 23,056	\$ 23,056	\$ 23,056	\$ 23,056	\$ 30,897	\$ 30,897	\$ 30,897	\$ 30,897	\$ 30,897	\$ 19,717
7.	Northwestern Book	5,495	\$ 13,738	\$ 27,475	\$ 27,475	\$ 27,475	\$ 33,068	\$ 38,660	\$ 38,660	\$ 38,660	\$ 38,660	\$ 38,660	\$ 24,670
8.	Body Shoppe	1,795	\$ 14,360	\$ 14,360	\$ 17,950	\$ 17,950	\$ 17,950	\$ 20,635	\$ 20,635	\$ 20,635	\$ 20,635	\$ 20,635	\$ 13,238
9.	Richards	1,612	\$ 6,045	\$ 12,090	\$ 12,090	\$ 12,090	\$ 15,430	\$ 15,430	\$ 15,430	\$ 15,430	\$ 15,430	\$ 19,693	\$ 9,846
10.	Unassigned	1,255	\$ 4,993	\$ 8,785	\$ 8,785	\$ 8,785	\$ 8,785	\$ 11,772	\$ 11,772	\$ 11,772	\$ 11,772	\$ 11,772	\$ 7,512
11.	House of Large Sizes	1,332	\$ 4,329	\$ 8,658	\$ 9,990	\$ 9,990	\$ 9,990	\$ 9,990	\$ 9,990	\$ 11,322	\$ 11,322	\$ 11,322	\$ 5,661
12.	Video	2,186	\$ 8,744	\$ 17,488	\$ 19,674	\$ 19,674	\$ 19,674	\$ 26,365	\$ 26,365	\$ 26,365	\$ 26,365	\$ 26,365	\$ 16,824
13.	Pizza	2,976	\$ 8,793	\$ 17,586	\$ 17,586	\$ 20,832	\$ 20,832	\$ 20,832	\$ 20,832	\$ 20,832	\$ 20,832	\$ 33,856	\$ 16,928
14.	Total Sports	10,000	\$ 30,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 70,000	\$ 70,000	\$ 70,000	\$ 80,000	\$ 80,000	\$ 80,000	\$ 40,000
17.	Oriental	1,066	\$ 4,988	\$ 10,412	\$ 10,412	\$ 10,412	\$ 10,412	\$ 10,412	\$ 13,290	\$ 13,290	\$ 13,290	\$ 13,290	\$ 6,645
18.	Unassigned	1,232	\$ 4,928	\$ 9,856	\$ 9,856	\$ 9,856	\$ 9,856	\$ 13,208	\$ 13,208	\$ 13,208	\$ 13,208	\$ 13,208	\$ 8,428
19.	Shirt	449	\$ 3,500	\$ 7,000	\$ 8,934	\$ 8,934	\$ 8,934	\$ 8,934	\$ 8,934	\$ 11,402	\$ 11,402	\$ 11,402	\$ 5,701

M A L L

Tenant by Tenant Base Rent Projections
Including Lease Step-ups (1) and Reletting Activity (2)

Space No.	Tenant	Area Sq.Ft.	1982 6 mos.	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992 6 mos.
20.	Diamond Center	873	\$ 6,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 16,885	\$ 16,885	\$ 16,885	\$ 16,885	\$ 16,885	\$ 23,759	\$ 11,880
21.	Photomill	1,536	\$ 6,144	\$ 12,288	\$ 12,288	\$ 12,288	\$ 12,288	\$ 18,432	\$ 18,432	\$ 20,016	\$ 20,016	\$ 20,016	\$ 10,008
22.	Hurrah	1,632	\$ 5,712	\$ 11,424	\$ 11,424	\$ 11,424	\$ 11,424	\$ 11,424	\$ 11,424	\$ 18,608	\$ 18,608	\$ 18,608	\$ 9,304
23.		4,966	\$ 16,140	\$ 32,279	\$ 32,279	\$ 32,279	\$ 32,279	\$ 32,279	\$ 32,279	\$ 32,279	\$ 32,279	\$ 32,279	\$ 16,140
24.	Great Day	1,037	\$ 7,500	\$ 15,000	\$ 17,868	\$ 17,868	\$ 17,868	\$ 17,868	\$ 17,868	\$ 22,804	\$ 22,804	\$ 22,804	\$ 11,400
25.	Book Center	1,201	\$ 6,005	\$ 12,010	\$ 12,010	\$ 12,010	\$ 12,010	\$ 18,347	\$ 18,347	\$ 18,347	\$ 18,347	\$ 18,347	\$ 11,700
27.	Imports	788	\$ 5,100	\$ 10,200	\$ 11,807	\$ 11,807	\$ 11,807	\$ 11,807	\$ 11,807	\$ 13,669	\$ 13,669	\$ 13,669	\$ 6,835
		66,142	\$233,396	\$451,662	\$466,765	\$470,011	\$493,829	\$545,698	\$556,599	\$592,153	\$592,153	\$616,314	\$333,063

- (1) Most lease anniversaries end 1/31 of any particular year. For cash flow projection purposes, we've assumed lease anniversary dates to be 12/31 of the preceding year. No material change results from this minor timing adjustment.
- (2) Relet rental rates assume a 5% annual growth over the average rent currently generated from the existing tenant.

M A L L

% Rent Computations

<u>Tenant</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>
Fabrica	\$40	--	622	3,192	5,967	8,965	7,703	11,198	14,975	19,052	23,546
Northwestern Book	--	--	--	551	1,396	--	--	--	2,500	5,813	--
Pizza	--	--	1,309	--	1,207	2,971	4,875	6,931	--	--	1,119
House of Large Sizes	--	--	--	--	--	578	1,424	2,337	1,991	3,056	4,206
Murrah	--	--	707	1,678	2,726	3,858	5,081	--	643	2,183	3,846
	--	--	1,793	4,518	7,462	10,642	14,075	17,784	21,789	26,114	30,785
Great	3,420	4,894	3,617	5,337	7,193	9,197	11,363	13,701	16,227	18,955	22,296

<u>Revenues</u>	<u>7/1 to 12/31</u> <u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1/1 to 6/30</u> <u>1992</u>
Base Rents (1)	\$233,396	\$451,662	\$466,765	\$470,011	\$493,829	\$545,698	\$556,599	\$592,153	\$ 592,153	\$ 616,314	\$ 333,063
Ground Rent (2)	\$ 14,453	\$ 28,907	\$ 28,907	\$ 33,243	\$ 33,243	\$ 33,243	\$ 38,229	\$ 38,229	\$ 38,229	\$ 43,964	\$ 21,982
1/2 Rent (3)	\$ 10,593	\$ 13,660	\$ 19,116	\$ 28,830	\$ 34,046	\$ 47,074	\$ 58,515	\$ 67,783	\$ 77,572	\$ 98,565	\$ 56,681
Real Estate Tax Recovery (4)	\$ 69,741	\$115,300	\$121,400	\$133,000	\$139,800	\$146,300	\$157,300	\$165,200	\$ 173,300	\$ 182,000	\$ 95,600
Recovered Exp. (5)	\$ 45,310	\$ 95,100	\$ 99,800	\$104,800	\$110,000	\$115,600	\$121,300	\$127,400	\$ 133,700	\$ 140,400	\$ 73,700
Total Gross Revenue	\$373,493	\$704,629	\$735,988	\$769,884	\$810,918	\$887,915	\$931,943	\$990,765	\$1,014,954	\$1,081,243	\$ 581,026
Less Vacancy (6)	\$ 43,935	\$ 59,307	\$ 61,775	\$ 42,566	\$ 44,889	\$ 50,081	\$ 39,200	\$ 41,900	\$ 44,500	\$ 45,500	\$ 24,700
Percentage	(17%)	(12%)	(12%)	(8%)	(8%)	(8%)	(6%)	(6%)	(6%)	(6%)	(6%)
Effective Gross Revenue	\$329,558	\$645,322	\$674,213	\$727,318	\$766,029	\$837,834	\$892,743	\$948,865	\$ 970,454	\$1,035,743	\$ 556,326
<u>Expenses</u>											
Real Estate Taxes (7)	\$ 84,000*	\$153,000**	\$138,000	\$144,500	\$152,000	\$159,000	\$167,300	\$175,700	\$ 184,400	\$ 193,700	\$ 101,700
Recoverable Exp. (8)	\$ 39,400	\$ 82,700	\$ 86,800	\$ 91,100	\$ 95,700	\$100,500	\$105,500	\$110,800	\$ 116,300	\$ 122,100	\$ 64,100
Mgmt. (5%) (9)	\$ 12,900	\$ 24,700	\$ 25,700	\$ 26,600	\$ 28,000	\$ 31,300	\$ 32,700	\$ 34,900	\$ 35,400	\$ 37,900	\$ 20,600
Reserves for Tenant Work (12)	0	\$ 3,300	\$ 1,500	0	\$ 6,700	\$ 4,600	\$ 800	\$ 6,600	0	\$ 3,200	\$ 7,500
Reserves for Repairs (10)	\$ 3,500	\$ 7,300	\$ 7,700	\$ 8,000	\$ 8,400	\$ 8,900	\$ 9,300	\$ 9,800	\$ 10,300	\$ 10,800	\$ 17,500
Leasing Fees (11)	0	\$ 10,300	\$ 4,500	0	\$ 20,800	\$ 14,200	\$ 2,200	\$ 19,700	0	\$ 9,000	\$ 21,200
Total Expenses	\$139,800	\$281,300	\$264,200	\$270,200	\$311,600	\$318,300	\$317,800	\$357,500	\$ 346,400	\$ 376,700	\$ 232,600
Net Operating Income	\$189,758	\$364,022	\$410,013	\$457,118	\$454,429	\$519,334	\$574,943	\$591,365	\$ 624,054	\$ 659,043	\$ 323,726

* includes specials of \$21,604.82

** includes specials of \$22,000.00

BASIC ASSUMPTIONS TO CASH FLOW PROJECTIONS

Revenues

1. In completing the financial analysis, we projected a ten-year (from July 1, 1982 to July 1, 1992) cash flow projection. Rental revenues are based upon actual leases giving full recognition to all step-up rental provisions. For vacant space, economic rents were estimated based upon rent levels at competitive properties. Upon reletting, rental rates are projected as increasing 5% per year over current levels. A five-year term was assumed for all new leases.
2. The ground rent is adjusted according to the CPI change for all cities every three years. For example, the 1982 rent is based upon the CPI change from February 1978 to February 1981 (see Exhibit D in addenda). A 5% annual rate of inflation is assumed for each subsequent rental adjustment.
3. For tenants in occupancy for a year or more, historical sales were used as a benchmark for projected sales. For tenants, the calendar years 1982 through 1992 sales volumes were escalated at 8% per year. Percentage rent was calculated on a tenant-by-tenant and year-by-year basis using the percentage rent formula outlined in each lease.
4. The standard lease provides for all tenants to pay their pro-rata share of taxes. Since the projected vacancy allowance varies, tenant reimbursement is as follows:

	<u>Vacancy</u>	<u>Tax Reimbursement</u>
1982 (6 mos)	17	83%
1983-84	12	88%
1984-87	8	92%
1988-91	6	94%

5. The standard lease provides for 100% of all recoverable expenses to be reimbursed to the landlord by the tenants, collectively. Unlike the tax clause, the pro-rata share each tenant contributes is allocated between the gross leased and occupied space; consequently 100% of all recoverable expenses are paid collectively by the existing tenants. A 15% administrative charge is added to all reimbursable expenses (per the leases). Furthermore, based upon experience, 75% of the "Reserves for Structural Repairs" are reimbursable expenses.
6. A discussion for vacancy allowance is detailed in Item #4.

Basic Assumptions to Cash Flow Projections - Continued

Expenses

7. Real estate taxes for 1982 are detailed on page 1 of this report. For 1983 and thereafter, taxes have been escalated at a 5% annual rate of increase.

Finally, in 1982 about \$43,000 of special assessments will be billed to Burnhaven, including interest payable at 8%. Approximately one-half of the \$43,000 is to be paid in 1982 and the balance in 1983 as scheduled in the cash flow projection.

8. Recoverable expenses for 1982 are shown in the 1982 annualized budget on the following page.
9. Property management expense is 5% of base, ground and percentage rents.
10. As per our discussions with [redacted] properties, reserves for structural repairs are estimated at \$.10 per square foot for the first three years and are increased at 5% per year thereafter.
11. For 1982, leasing fees are \$2.25 per square foot of leased space. The fee is increased 5% per year, consistent with the increase in base rents. Leasing fees are expensed in the year incurred.
12. According to [redacted] properties, tenant work is minimal for this type of mall. The cost is estimated at \$.70 per square foot for 1982 and escalated at 8% per year thereafter. Tenant work is expensed in the year incurred.

1982 RECOVERABLE EXPENSES ANNUALIZEDFor Mall,

Recoverable expenses for 1982 are shown below in the 1982 annualized budget:

Recoverable Expenses

Insurance		\$ 8,400
Utilities		
Electric	\$19,900	
Water and Sewer	\$ 3,200	
Gas	<u>\$ 3,200</u>	
		\$26,300
Maintenance Services		
Snow Removal	\$10,500	
Janitorial	\$12,600	
Parking Lot Sweep	\$ 3,000	
Trash	\$ 400	
Rodent Control	\$ 1,100	
Landscaping	\$ 3,800	
Mall Music	<u>\$ 300</u>	
		\$31,700
Overload Security		\$ 1,300
Supplies		
Maintenance	\$ 3,000	
Electric	\$ 600	
Landscaping	<u>\$ 1,300</u>	
		\$ 4,900
Repairs		
Electricity	\$ 3,100	
Equipment	\$ 2,500	
Plumbing	<u>\$ 600</u>	
		<u>\$ 6,200</u>
TOTAL RECOVERABLES		\$78,800

Recoverable expenses have been increased at 5% per year, compounded.

Discounted Cash Flow Analysis - Continued

		<u>Annual Cash Flow</u>		<u>Discount @ 17%</u>		<u>Present Worth</u>
Last 6 mos.	1982	\$ 189,758	x	.924500	=	\$ 175,431
	1983	\$ 364,022	x	.790171	=	\$ 287,640
	1984	\$ 410,013	x	.675360	=	\$ 276,906
	1985	\$ 457,118	x	.577230	=	\$ 263,862
	1986	\$ 454,429	x	.493359	=	\$ 224,197
	1987	\$ 579,334	x	.421674	=	\$ 244,290
	1988	\$ 574,943	x	.360405	=	\$ 207,212
	1989	\$ 591,365	x	.308039	=	\$ 182,163
	1990	\$ 624,054	x	.263281	=	\$ 164,302
	1991	\$ 659,043	x	.225026	=	\$ 148,302
1st 6 mos.	1992	\$ 323,726	x	.208037	=	\$ 67,347
	*Rev.	\$4,839,000	x	.208037	=	<u>\$1,006,000</u>
						\$3,247,652
						Rounded to
						\$3,200,000

* Projected 1992 Resale Price

The 1992 resale price was estimated by adding the last six months income of 1991 and the first six months income of 1992 and capitalizing the total income at 13-1/2%.

\$329,522	-	1991 (last six months)	
<u>\$323,726</u>	-	1992 (first six months)	
\$653,248	-	Capitalized @ 13-1/2%	\$4,838,866
		Estimated 1992 Sale Price	\$4,838,900

Commitments of \$100,000 and Over on Multifamily and Nonresidential Mortgages
Made by 20 Life Insurance Companies

American Council of Life Insurance
1850 K Street, N.W.
Washington, D.C. 20006
(202) 862-4000

Loan Size Class Within Major Property Type, First Quarter, 1984

Major Property Type Loan Size	No. of Loans	Amount Committed (\$000)	Loan Amount (\$000)	Interest Rate (by #)	Interest Rate (by \$)	Loan/ Value	Averages		Debt Coverage	Percent Constant	Maturity (Years/Months)
							Capitaliza- tion Rate				
APARTMENT - CONVENTIONAL	37	196,163	5,302	12.76%	12.59%	70.9%	10.9%		1.25	13.1%	9/4
\$1 million - \$3,999(000)	13	30,625	2,356	13.05	13.01	65.2	11.3		1.37	13.7	10/5
\$4 million - \$7,999(000)	18	103,288	5,738	12.71	12.68	73.8	10.8		1.17	12.8	8/7
\$8 million and over	6	62,250	10,375	12.27	12.21	74.2	10.5		1.14	12.3	9/6
COMMERCIAL RETAIL	45	263,554	5,857	12.67	12.74	69.6	11.0		1.31	13.1	9/6
\$1 million - \$3,999(000)	19	54,492	2,868	12.59	12.69	68.5	11.0		1.51	13.0	9/10
\$4 million - \$7,999(000)	19	105,312	5,543	12.67	12.67	70.4	10.8		1.12	13.1	8/10
\$8 million and over	7	103,750	14,821	12.87	12.85	70.2	11.4		1.27	13.1	10/7
OFFICE BUILDING	205	2,470,256	12,050	12.55	12.48	70.0	10.6		1.25	12.7	10/5
Less than \$1 million	5	3,875	775	12.78	12.76	75.8	10.8		1.13	13.2	9/5
\$1 million - \$3,999(000)	60	142,125	2,369	12.61	12.57	69.4	10.5		1.18	12.8	8/6
\$4 million - \$7,999(000)	59	340,826	5,777	12.59	12.59	68.7	10.8		1.33	12.6	10/1
\$8 million and over	81	1,983,430	24,487	12.48	12.45	71.0	10.5		1.24	12.6	12/0
COMMERCIAL SERVICE	16	101,925	6,370	11.57	11.88	71.8	11.1		1.24	12.0	12/1
Less than \$1 million	2	1,545	772	*	*	*	*		*	*	*
\$1 million - \$3,999(000)	4	8,895	2,224	11.25	10.89	71.9	10.7		1.28	11.6	11/3
\$4 million - \$7,999(000)	5	26,195	5,239	11.20	11.39	75.5	12.0		1.29	11.3	13/0
\$8 million and over	5	65,290	13,058	12.12	12.27	66.5	10.8		1.12	13.2	13/5
INSTITUTIONAL AND RECREATIONAL	1	7,400	7,400	*	*	*	*		*	*	*
INDUSTRIAL	39	217,100	5,567	12.60	12.71	72.3	10.8		1.30	12.8	7/10
Less than \$1 million	2	1,660	830	*	*	*	*		*	*	*
\$1 million - \$3,999(000)	16	40,025	2,502	12.55	12.52	70.8	10.7		1.26	12.6	7/10
\$4 million - \$7,999(000)	12	65,715	5,226	12.64	12.66	74.2	10.7		1.16	12.9	7/10
\$8 million and over	9	112,700	12,522	12.80	12.85	71.8	11.1		1.73	13.0	8/5
HOTEL AND MOTEL	13	215,950	16,612	13.26	13.16	69.1	12.4		1.33	13.6	12/0
\$1 million - \$3,999(000)	1	2,650	2,650	*	*	*	*		*	*	*
\$4 million - \$7,999(000)	3	14,000	4,667	13.25	13.25	60.7	11.9		1.47	14.1	10/4
\$8 million and over	9	199,300	22,144	13.27	13.16	72.2	12.6		1.27	13.4	13/2
MULTIPLE PROPERTY COMPLEX	1	10,000	10,000	*	*	*	*		*	*	*
TOTAL	357	3,482,348	9,754	12.59	12.55	70.3	10.8		1.26	12.8	10/0

*Data not shown for a limited number of loans.

Note: Averages for capitalization rate, debt coverage ratio, and percent constant may represent a fewer number of loans than the total for the specified category. Averages for interest rate are based on 338 loans. Nonrefundable fees were reported in connection with 21% of the total number and 29% of the amount committed. The comparable shares by property type ran 24% and 28% for apartments, 18% and 23% for commercial retail, 24% and 31% for office buildings, 6% and 10% for commercial services, 8% and 13% for industrial, and 31% and 38% for hotels and motels.

E. The Quaker Bridge Mall case

1. Developer franchised by land owner
2. Operating agreement provides unique business guarantee which is reflected in rent premium paid relative to free standing space
3. How much value is created by management? Is it recognized by actual leasing commissions and development fees?
4. Are tenant improvements fixtures or personalty and if there is a personal property tax the lease should control (the real estate is an industrial shell and the demising wall and sometimes the drop ceiling are standard issue. Everything else the tenant does is personalty for the life of the lease.)

F. The definition of economic rent attributable to the real estate:

1. Is income attributable to entitlements that go with fee simple title to the land and are point specific or to transportable permits?
 - a. For example--does liquor license go with the building? Is permit to build or maintain a dam assignable? Does right to management fee and brokerage fee go with general partnership or property?
2. Is the real estate income from retailing of space or from wholesaling of space?
 - a. Parking ramp lease versus parking space by the hour, observation deck versus ticket, condominium conversion fee versus apartment project investment.
3. Is the income for extraordinary services or intangible assets rather than customary?
 - a. Maid service versus janitorial, shopping center premium for proximity or for joint merchandising and risk management.
4. Ancillary to rather than integral with the project.
 - a. Can services be acquired off premises such as janitorial or utilities?
5. IRS classification as 1250 property (real) or 1231 property (personalty) and Section 453, 453A and B, or Section 38 (tangible) or Section 45 (intangible).
6. Is income attributable to governmental agencies in exchange for contractual entitlements of control or use to the public interest for the term of the contract?

G. Problem of defining or forecasting a reversion:

1. Pricing real estate for utilitarian purpose, to buy access to service sales, or speculate in long term demand/supply commodity relationships or long term commodity/money ratios.
2. Can the appraiser prove presence of necessary conditions for appreciation and amount of depreciation?
 - a. Rising net income
 - b. Falling interest rates
 - c. Falling investor expectations

3. When is appreciation speculative, non-vested, and excluded from fair market value?
 4. Can the appraiser simulate alternative speculative gains for most probable price?
 5. When a premium is paid anticipating syndication of condominium conversion, should there be an adjustment for purchase of a business opportunity? Does fair market value include management fees for conversion?
- H. As the ownership of shopping centers is concentrated in the hands of professional managers and markets are saturated with retail space, the shopping center industry will have time to review real estate tax questions and issues and cooperatively bankroll legal tests of the issues.
- III. Office buildings will provide assessors with increasing problems of equity and pacing of assessments, particularly new office buildings which take time to rent and older office buildings where leases are about to expire and parking and other amenities are no longer competitive. There is also the home office problem which never would be competitive.
- A. While the lag in assessments postpones the tax burden for the developer who can build and achieve full rental in less than 24 months, what discount is required for buildings that don't rent well?
1. James Wilson Plaza case suggests using the income approach to discount negative cash flows as well as future positive cash flows from the beginning of construction to a point of normal operations.
 2. Analogous to subdivision treatment in Wisconsin which assesses lots at a percentage based on absorption rates anticipated. A 5 year absorption leads to values at 20, 40, 60, 80 percent of retail price.
- B. The treatment of tenant improvements as personalty or realty
1. Is the revenue stream rent or repayment of a loan?
 2. Is financing of an energy retrofit through the escalator clause rental income or special assessments on the tenants for repayment of a loan?
 3. The problem is the real estate discount rate of .095 may be half the short term financing rate for equipment over a five year repayment at 18½%
- C. Tenants in the future will supply pannelized floor systems and acoustical movable wall panels with lighting for individual work space. The tenant will receive an investment tax credit and a three year write-off.
1. The base rent will be for space
 2. All operating expenses will be in a CAM account loaded for a 15 to 20% management fee
 3. Tenant HVAC systems will sustain landlord spaces but will be owned, maintained and replaced by the tenant as personalty

- D. Historical easements on the facade or public pedestrian walkway easements represent encumbrances to the benefit of the public for which the building owner is compensated by tax credits to recover a gift to the public. These values need to be subtracted from project costs as a form of incurable functional damage.
- E. Home office costs are an assessment headache. The State manual should set basic costs on a work station basis, i.e., so many square feet per employee at a specific cost. For illustration 250 sq. ft. per employee at \$50 per foot or 12,500. That is replacement cost for utility value to be served; everything else is redundancy for company image and ego and cannot be easily resold.
- F. The mini computer will permit testing of assessment conclusions for reasonableness in terms of investment and financial markets. (See Exhibit 6).

IV. Hotel/Motels

One of the toughest properties to appraise relative to real estate values, personal property values, and intangible properties are new hotel/motels. The real estate tax is to fall on land and buildings.

- A. Market sales prices are of going concern, not of land and buildings, therefore the price per room must be reduced by working capital, present value of room reservations, financing charges by the seller, good will, if any, and all personalty.
- B. In doing the income approach, it is necessary to factor out revenues attributable to management, furnishings, and a franchise before real estate taxes and after personal property taxes.
- C. See Exhibit 7.
- D. Management fees include a percentage of gross room, restaurant, and miscellaneous plus a percentage of house profit before debt service plus preferential payments on recovery of working capital loans. (See Exhibit 8).

- V. Creative financing has caused significant distortion of real estate sales prices and reported "values" for properties involved in syndication, financing with tax exempt revenue bonds and subsidized housing projects. Since these sales prices are reported in public documents many assessors use the nominal price report as the market price with out removing the increment in value required by the definition of fair market value.
 - A. The debate is the cash equivalency debate. Cash equivalency adjustments are the present value of the differences between the cost of conventional financing with a third party and the payments required by the seller periodically which are compensated for in the sale price.
 - B. Cash equivalency effects home prices as well as commercial property. In small communities the failure to eliminate a single exaggerated sale price in the computation of equalized value will mean thousands of dollars difference in as far as the communities share of broader tax district loads.

VALTEST - DEMONSTRATION 3

INPUT ASSUMPTIONS

1. ENTER PROJECT NAME ? SELL AT LOSS TEST
2. ENTER PROJECTION PERIOD ? 5
3. DO YOU WANT TO ENTER EFFECTIVE GROSS REVENUE INSTEAD OF NOI? Y
TO REPEAT PREVIOUS YEAR'S NOI/EGR FOR BAL OF PROJECTION ENTER 0

EFFECTIVE GROSS REVENUE YEAR 1? 13800
 EFFECTIVE GROSS REVENUE YEAR 2? 14210
 EFFECTIVE GROSS REVENUE YEAR 3? 1000
 EFFECTIVE GROSS REVENUE YEAR 4? 15080
 EFFECTIVE GROSS REVENUE YEAR 5? 15530

VAR OF EXPENSE (%) YEAR 1? 6
 VAR OF EXPENSE (%) YEAR 2? 5
 VAR OF EXPENSE (%) YEAR 3? 0

FIXED OP EXPENSE YEAR 1? 3700
 FIXED OP EXPENSE YEAR 2? 3920
 FIXED OP EXPENSE YEAR 3? 4160
 FIXED OP EXPENSE YEAR 4? 4410
 FIXED OP EXPENSE YEAR 5? 4670

4. ACQUISITION COST: ? 66000 .
5. DO YOU WANT TO USE STANDARD FINANCING? Y OR N?Y
MTG. RATIO OR AMOUNT, INT., TERM, NO PAY/YR ? 49500, .18, 25, 12
6. ENTER RATIO OF IMP #1/TOTAL VALUE, LIFE OF IMP #1? .25, 15
IS THERE A SECOND IMPROVEMENT? Y OR N? Y
ENTER RATIO OF IMP #2/TOTAL VALUE, LIFE OF IMP #2? .55, 15
ENTER REHABILITATION TAX CREDIT FOR IMP #2: 9075
IS STRUCTURE A CERTIFIED HISTORICAL LANDMARK? Y OR N?Y*
7. DEPRECIATION METHOD, IMPROVEMENT #1 ? 2
ENTER D.B. %: ? 175*
DEPRECIATION METHOD, IMPROVEMENT #2 ? 2
ENTER D.B. %: ? 175*
IS PROPERTY SUBSIDIZED HOUSING ? Y OR N ?N
IS PROPERTY RESIDENTIAL? Y OR N? N
8. IS OWNER A TAXABLE CORPORATION? Y OR N ?Y

CORPORATE FEDERAL ORDINARY TAX RATE COULD BE :
 17% - 46% (1978 LAW, EFFECTIVE 1979)
 16% - 46% (1981 LAW, EFFECTIVE 1982)
 15% - 46% (1981 LAW, EFFECTIVE 1983 & THEREAFTER)
 MAXIMUM CORPORATE CAPITAL GAIN ALTERNATIVE TAX RATE IS 28%

* FOR ILLUSTRATIVE
PURPOSES ONLY

(PLUS STATE RATE)

ENTER:

- 1) EFFECTIVE ORDINARY RATE 2) EFFECTIVE ORDINARY RATE (YEAR OF SALE)
? .4, .4
9. RESALE PRICE (NET OF SALE COSTS) ? 60000
10. IS THERE LENDER PARTICIPATION ?Y
ENTER CASH THROW-OFF (%), PROCEEDS BEFORE TAXES (%): 5, 5
11. ENTER OWNER'S AFTER TAX REINVESTMENT RATE (%)? ?
12. ENTER OWNER'S AFTER TAX OPPORTUNITY COST OF EQUITY FUNDS (%)? 9

LANDMARK
RESEARCH

DEMONSTRATION 3 - Continued

AFTER TAX CASH FLOW PROJECTION
 SELL AT LOSS TEST
 DATE 9/14/82

DATA SUMMARY

ACQUISITION COST: \$66,000. MTG. AMT.: \$49,500.
 NOI 1ST YR: \$9,272. MTG. INT.: 18%
 ORIG. EQUITY: \$16,500. MTG. TERM: 25. YRS
 CTD 1ST YEAR: \$258. DEBT SERVICE 1ST YEAR: \$9,014.
 MTG. CONST.: .1820916
 IMP. #1 VALUE: \$16,500. IMP. #1 LIFE: 15.
 IMP. #2 VALUE: \$36,300. IMP. #2 LIFE: 15.
 INC. TX RATE: 40%
 SALE YR RATE: 40% OWNER: CORPORATION

DEPRECIATION IMPROVEMENT #1 : 175% D.B.
 DEPRECIATION IMPROVEMENT #2 : 175% D.B.
 NON-RESIDENTIAL PROPERTY
 CERTIFIED HISTORICAL STRUCTURE
 LENDER PARTICIPATION: CASH THROW-OFF: 5% REVERSION: 5%

NO REPRESENTATION IS MADE THAT THE ASSUMPTIONS PROVIDED BY JEAN
 ARE PROPER OR THAT THE CURRENT TAX ESTIMATES USED IN THIS
 PROJECTION WILL BE ACCEPTABLE TO TAXING AUTHORITIES. NO ESTIMATE
 HAS BEEN MADE OF MINIMUM PREFERENCE TAX. CAPITAL LOSSES IN YEAR OF
 SALE ARE TREATED AS ORDINARY LOSSES (SECTION 1231 PROPERTY) AND
 ARE CREDITED AGAINST TAXES PAID AT THE
 ORDINARY RATE AT THE TIME OF SALE.
 FOR THE PURPOSE OF THE MODIFIED INTERNAL RATE OF RETURN (M.I.R.R.)
 CALCULATION, NEGATIVE CASH IN ANY ONE PERIOD IS COVERED
 BY A CONTRIBUTION FROM EQUITY IN THAT PERIOD

YEAR	NOI	MTG INT & LENDERS %	TAX DEP	TAXABLE INCOME	INCOME TAX	AFTER TAX CASH FLOW
1.	9272.	8914.	6160.	-5803.	-11397.	11643.
2.	9580.	8907.	5441.	-4770.	-1909.	2447.
3.	-3210.	8853.	4807.	-16870.	-6749.	-5475.
4.	9916.	8866.	4246.	-3197.	-1280.	2137.
5.	10084.	8837.	3750.	-2505.	-1003.	2019.
	\$35641.	\$44377.	\$24404.	\$-33145.	\$-22338.	\$12771.

NOTE: 1ST YEAR'S TAX REDUCED BY \$9,075. FOR TAX CREDIT (IMP #2)

DEMONSTRATION 3 - Continued

RESALE PRICE:	\$60,000.	1ST YR 24 TAX EQ DIV:	1.4851%
LESS MORTGAGE BALANCE:	\$48,670.	AVG DEBT COVER RATIO:	.7908
PROCEEDS BEFORE TAXES:	\$11,330.	AVG DEFAULT RATIO:	1.1581
LESS LENDER'S %:	\$567.		
NET SALES PROCEEDS			
BEFORE TAXES:	\$10,764.		

=====

RESALE PRICE:	\$60,000.
LESS LENDER'S %:	\$567.
NET RESALE PRICE:	\$59,433.
LESS BASIS:	\$41,598.
TOTAL GAIN:	\$17,838.
TAX DEPRECIATION:	\$24,404.
CAPITAL GAIN:	\$0.
ORDINARY GAIN:	\$17,838.

=====

TAX ON ORDINARY GAIN:	\$7,135.
TAX ON CAPITAL GAIN:	\$0.
PLUS MORTGAGE BAL:	\$48,670.
TOTAL DEDUCTIONS FROM	
NET RESALE PRICE:	\$55,805.

=====

NET SALES PROCEEDS	
AFTER TAX:	\$3,629.

=====

IF PURCHASED AS ABOVE, HELD 5 YEARS & SOLD FOR \$60,000.
 THE MODIFIED I.R.R. BEFORE TAXES IS -12.4772% AND AFTER TAXES IS 5.4951%
 ASSUMING AN AFTER TAX REINVESTMENT RATE OF 7%, AND OPPORTUNITY COST OF 7%

DEMONSTRATION 3 - Continued

DISTRIBUTION OF CASH THROW-OFF SELL AT LOSS TEST

YEAR	CASH THROW-OFF TOTAL	CASH THROW-OFF TO EQUITY	CASH BONUS TO LENDER
1.	258.	246.	13.
2.	566.	538.	28.
3.	-12224.	-12224.	0.
4.	902.	857.	45.
5.	1070.	1016.	53.
	-----	-----	-----
	-9427.	-9567.	140.

RESALE PRICE: \$60,000.
 LESS MORTGAGE BALANCE: \$48,670.
 PROCEEDS BEFORE TAXES: \$11,330.
 LESS LENDER'S %: \$567.
 NET SALES PROCEEDS
 BEFORE TAXES: \$10,764.
 =====

CASH THROW-OFF = 5% REVERSION = 5%

EQUITY ANALYSIS SELL AT LOSS TEST *****

BEFORE TAX EQUITY DIVIDEND					
YR	NOI	YR END EQUITY	AMOUNT	CASH RETURN	
				ORG EQ	CUR EQ
1.	\$9,272.	\$16,613.	\$246.	.0149	.0148
2.	9,580.	16,747.	538.	.0326	.0321
3.	-3,210.	29,131.	-12,224.	-.7408	-.1196
4.	9,916.	29,324.	857.	.0520	.0292
5.	10,094.	29,554.	1,016.	.0616	.0344

ORIGINAL EQUITY: \$ 16500

DEMONSTRATION 3 - Continued

MORTGAGE ANALYSIS SELL AT LOSS TEST

YEAR	NOI	MORT INT.	MORT AMORT	DEBT SERV	DCR	MTG. BAL.	DEFAULT RATIO
1.	9272.	8901.	113.	9014.	1.029	49387.	.981
2.	9580.	8879.	135.	9014.	1.063	49253.	.960
3.	-3210.	8853.	161.	9014.	-.356	49092.	13.224
4.	9916.	8821.	192.	9014.	1.100	48900.	.940
5.	10084.	8784.	230.	9014.	1.119	48670.	.931
AVG	\$7,128.				.791		1.156

REVENUE AND EXPENSE REPORT SELL AT LOSS TEST DATE 9/14/82

YEAR	EFF GROSS REV	% RATE	% VAR OP	\$ FIXED OP	NOI
1.	\$13,800.	6.2	\$628.	\$3,700.	\$9,272.
2.	\$14,210.	5.2	\$711.	\$3,920.	\$9,580.
3.	\$1,000.	5.2	\$50.	\$4,160.	\$-3,210.
4.	\$15,080.	5.2	\$754.	\$4,410.	\$9,916.
5.	\$15,530.	5.2	\$777.	\$4,670.	\$10,084.
	-----		-----	-----	-----
	\$59,620.		\$3,119.	\$20,260.	\$35,641.

DEMONSTRATION 3 - Continued

DEPRECIATION SCHEDULE

SELL AT LOSS TEST

IMPROVEMENT # 1

175% D.B.

NON-RESIDENTIAL

YEAR	TAX DEP.	S.L. DEP.	TAX DEP	BALANCE
1.	1925.0	1100.0	1925.0	14575.0
2.	1700.4	1100.0	1700.4	12874.6
3.	1502.0	1100.0	1502.0	11372.5
4.	1326.8	1100.0	1326.8	10045.8
5.	1172.0	1100.0	1172.0	8873.7
	-----	-----	-----	
SUB-TOTAL	7626.3	5500.0	7626.3	

DEPRECIATION SCHEDULE

SELL AT LOSS TEST

IMPROVEMENT # 2

175% D.B.

NON-RESIDENTIAL

YEAR	TAX DEP.	S.L. DEP.	TAX DEP	BALANCE
1.	4235.0	2420.0	4235.0	32665.0
2.	3740.9	2420.0	3740.9	28924.1
3.	3304.5	2420.0	3304.5	25619.6
4.	2919.0	2420.0	2919.0	22700.7
5.	2578.4	2420.0	2578.4	19122.2
	-----	-----	-----	
SUB-TOTAL	16777.8	12100.0	16777.8	
	=====	=====	=====	
TOTAL	24404.0	17600.0	24404.0	

Schedule of Projected Income and Expenses
For the Years Commencing May 1, 1974-78

Period Occupancy (163 rooms)	1974-75 68%	1975-76 70%	1976-77 71%	1977-78 72%	1978-79 73%
Revenue:					
Available Rooms	59,463	59,400	59,400	59,400	59,400
Occupied Rooms	40,463	41,580	42,174	42,768	43,362
Rate Average ¹	18.89	19.00	19.50	20.00	20.50
Room Revenue	764,450	790,020	822,390	855,360	888,920
Public Room Rental ²	7,116	7,200	7,200	7,200	7,200
Restaurant Rental ³	31,500	31,500	31,500	31,500	31,500
Telephone ⁴	(14,345)	(14,795)	(15,375)	(15,960)	(16,560)
Other Income ⁵	6,113	6,165	6,405	6,650	6,900
Room Service Commissions ⁶	1,635	1,850	1,920	1,995	2,070
Total Revenue	796,468	821,940	854,040	886,745	920,030
Operating Expenses:					
Payroll ⁷	166,180	164,390	170,808	177,349	184,006
Housekeeping ⁸	33,160	33,700	34,200	34,700	35,200
Adm. & Gen. ⁹	83,150	85,690	89,250	92,665	96,145
Adv. & Promotion ¹⁰	82,250	82,735	84,704	86,352	88,030
Utilities ¹¹	66,500	76,030	79,000	82,025	85,100
Repairs & Maintenance ¹²	16,550	13,500	13,500	13,500	13,500
Total Operating Expenses	447,790	455,245	471,462	486,591	501,981
House Profit	348,678	365,695	382,578	400,154	418,049
Misc. Interest Income	720	720	720	720	720
Gross Profit	349,398	366,415	383,298	400,874	418,769
Less: Insurance	10,314	9,926	9,926	9,926	9,926
Land Rental ¹³	7,680	7,680	7,680	7,680	7,680
Income to Furnishing ¹⁴	64,000	64,000	64,000	64,000	64,000
Income before RE Taxes and Debt Service to Land and Buildings	267,404	284,809	301,692	319,268	337,163

Sundback Realty, Inc.

Notes to Exhibit 7

1. Rate Average:

- The average room rate for the year ending April 30, 1975 was \$18.89. This was a \$.19 increase over the room rate for the period ending April 30, 1974, or about 1%. The increase was due in large part to standardizing room discounts for major clients and for functions requiring a large number of rooms.

2. Public Rooms:

- For the year ending April 30, 1975 the total dollar volume was \$7,116. In comparison, for the year ending December 31, 1974, the total volume was \$6,854. Public room rental was not found to be related to the level of occupancy or total revenues, thus it is assumed to be fairly fixed in character.

3. Restaurant Rental:

- The restaurant is leased to _____ for a minimum rent of \$31,500, plus 5% of the amount of gross receipts which exceeds 20 times the minimum rental.

4. Telephone:

- Telephone revenues have averaged 3.4% of room revenues, compared with an industry average of 3.6% (Lodging Industry, by Laventhal, Krekstein, Horwath, and Horwath).
- Annual equipment lease payment is \$12,764.40.
- Net losses have average 1.8% of revenues. With increased occupancy, losses should not exceed 1.5%, comparable to national averages in Laventhal, Krekstein, Horwath and Horwath.

5. Other Income:

- Includes valet and laundry, vending sales, sundry sales, and 10% commission on banquet food sales. Vending has averaged 1/2 of 1% of total revenues. The remainder accounts for 1/4 of 1% of total revenues.

6. Room Service Commissions:

- 2% commission on restaurant bills and room service charged through motel plus 20¢/room service ticket, thus variable with occupancy.

7. Payroll:

- Actual and target results are 20% of total revenues.

8. Housekeeping:

- Averages have ranged from \$33,157 (December 31, 1974 closing) to \$33,775 (April 30, 1975 closing), or 4.06% to 4.27% of total revenues. Dollar amounts are fairly constant within a narrower range of occupancies.
- Includes commissions to travel agencies.

9. Administrative and General:

- For the year ending December 31, 1974 the total amount was approximately \$82,750, or 10.45% of revenues. The totals are comprised of expenditures the majority of which are variable in nature.
- Includes a 3% fee for management services.

10. Advertising and Promotion:

Schedule

Outdoor Sign		1975-76
Sign Co.	\$1625.50/mo.	
Advertising Co.	31.50/mo.	
Less:	share	(275.00/mo.)
Total	\$1377/month X 12 =	\$16,524
Promotions		1,500
Publications		7,200
Franchise Fee (5% of gross room receipts plus public room rentals)		39,537
Manager Expense and Promotion		3,475
Miscellaneous Advertising		2,500
Reservation Charge to		<u>12,000</u>
Total		<u>\$82,736</u>

11. Utilities:

- The total is comprised of four elements: electric bulbs, electric current, fuel, and water. The total for the year ending December 31, 1974 was \$64,274 or 8.12% of total revenues.
- Interim rate increases by _____ commenced in June 1975. Electric increased 17.7% while fuel (gas) increased 7.33%. At present, additional proposed increases are being evaluated by the Public Service Commission which would become effective in 1976. Electric increases are proposed to be an additional 14.9% while gas is to increase 4.9%. Beyond 1976, increases are expected to be between 5% and 10% per year for both forms of energy.
- Utilities are not expected to exceed 9.23% of total revenues without a corresponding increase in room rates. Increases in utilities are expected to occur faster than any corresponding increase in room rates, thus it should be some time before the utility expense ratio will stabilize at approximately 9%.
- Year to date totals indicate the projections for 1975-76 are consistent with the above assumptions concerning the room revenue increase lag.

12. Repairs and Maintenance:

- Contracts

Sign Repair Contract	\$1,060
Westinghouse Elevator Contract	3,336
Wast Removal	738

- Actual For year ending December 31, 1974 was approximately \$16,550.

- For the year 1975-76, the year to date totals indicate a decrease in expenditure. Such expenditures should remain fairly constant over the next five years.

13. Land Rent:

Monthly rental charges	\$1000
Less: Recovery from leased property	<u>(360)</u>
Net land cost per month	640

14. Furnishings and Other Assets:

Furnishings and Equipment

Furnishings and Equipment	\$251,120
Carpeting	60,490
Two Autos	9,480
Signs	9,967
Leasehold Improvements	<u>5,778</u>
Total per Audit	336,835

Factors Attributed to Furnishings

Rate of Return	9.0%
Recapture	10.0%
Personal Property Tax	4.5%

Income Equivalent of Recapture and Return to Equity

$$336,835 + 336,835(9\% \times 10 \text{ years}) = 639,987$$

$$639,987 \div 10 = 63,999 \text{ or } \underline{\underline{64,000}}$$

**The Negotiation
and Administration of**

**Hotel Management
Contracts**

2nd edition

James J. Eyster

The Components of Bargaining Power

Quality of Operator Supervision

Although all operators emphasize the quality of their staff's management abilities during negotiations and rely heavily on this salesmanship to strengthen their bargaining power, only owners who have researched the operator's quality of supervision with other owners, lenders, and consultants can realistically assess operator claims. Experienced owners suggest that the quality of supervision an operator offers depends on several factors: the expertise of the operator's corporate and regional support staff; the number of properties each staff group supervises; and the support staff's distance from the property. These owners look for an experienced staff with minimal turnover, supervising fewer than eight properties, and so located that a staff member can reach the property within half a day by either ground or air transport. When evaluating independent operators, experienced owners tend to scrutinize the achievement record of the operator's chief executive officer, for that person is central to the organization and embodies the operating company's performance capability.

The Operator's Willingness to Contribute Equity

The extent to which an operator is willing to make an equity contribution and the type of equity contribution he makes have a considerable effect on his bargaining power. Owners view the operator's equity contribution as a sign of faith in the property's financial viability. Until recently, owners were at a disadvantage in asking operators to contribute equity because of the glut of new properties. In only a few cases did chain or independent operators agree to make equity contributions; in these cases, operators took the initiative toward equity contribution because they wanted to share in the profits from a lucrative project and protect their management interest by gaining a voice in ownership decision-making. To obtain a degree of control, several chain operators entered into joint ventures with developer-owners by contributing capital and jointly signing the mortgage with the developer-owners. A number of independent operators contributed equity with an eye to-

Operator Equity Contribution

Operator Equity Contribution

The following provision, which outlines the owner's responsibilities for opening inventories and working capital, is found in most management contracts. It reflects the position typically taken by chain and independent operators to the effect that they begin negotiations with no financial commitment to the project.

Opening inventories and working capital. Owner agrees to provide at its expense sufficient initial inventories of operating supplies and to provide and maintain all working capital required for the uninterrupted and efficient operation and maintenance of the property. (IV:B.1)

Exhibit II-3 summarizes the estimated prevalence of equity contributions (by type) made by operators participating in this study and illustrates the extent to which the above provision may be modified in negotiations. Chain operators are more willing to make equity contributions today than

EXHIBIT II-3: *Prevalence of operator equity contributions*

Percentage of properties managed in which operator equity contributions were made

Type of Equity:	Chain Operators	Independent Operators
Working capital	22%	14%
Pre-opening expenses	8	2
Furniture, fixtures; furniture, fixtures, and equipment	11	5
Joint ventures and partnerships	18	16
None	41	63
Total	100%	100%

Percentage by type of contribution made

Type of Contribution:	Chain Operators	Independent Operators
Outright	32%	47%
First take-out	51	16
Loan	17	37
Total	100%	100%

CHAPTER II — Provisions of Concern During Negotiations

EXHIBIT II-5: Management-fee structures

Fee Structure	Contract Between			
	Chain Operator and: Developer- Owner	Owner-in- Foreclosure	Independent Operator and: Developer- Owner	Owner-in- Foreclosure
Basic fee only:				
1. Percentage of gross revenues	3–5%	—	2–5%	3–4%
2. Percentage of room revenues and percentage of food and beverage revenues	—	—	3–5% rooms and 5% food and beverage	4–5% rooms and 3–5% food and beverage
3. Fixed fee	—	—	—	\$1,800–\$3,200 per month
Basic fee plus incentive fee:				
1. Percentage of gross revenues plus percentage of gross operating profit (GOP)	2–4% + 10% GOP; 3–5% + 20% GOP subordinated;* 2–3% + 25–40% GOP subordinated*	2–4% + 10% GOP	2–5% + 5–15% GOP; 3% + 10% GOP subordinated*	—
2. Percentage of gross revenues plus percentage of cash flow after debt service	3–5% + 10–40% cash flow	—	—	—
3. Percentage of room revenues and percentage of food and beverage revenues plus percentage of gross operating profit	—	—	2–3% rooms and 1–3% food and beverage + 10% GOP	—
4. Fixed fee plus percentage of gross operating profit	—	\$2,500–\$6,000 per month + 10% GOP	\$800–\$2,000 per month + 10–15% GOP	\$1,500–\$3,100 per month + 4–10% GOP
5. Fixed fee plus percentage of increase in gross revenues	—	—	—	\$1,600–\$2,000 per month + 2–4% increase in gross revenues
6. Fixed fee plus percentage of cash flow after debt service	—	—	\$2,500–\$3,500 per month + 20% cash flow	—
Basic fee or incentive fee, whichever is greater:				
1. Percentage of gross revenues or percentage of gross operating profit	3–3½% or 10–15% GOP	—	2–3% or 10% GOP	2–3% or 10% GOP
2. Fixed fee or percentage of gross revenues and percentage of gross operating profit	—	\$3,500–\$7,000 per month or 3% + 10% GOP	—	—
3. Fixed fee or percentage of gross revenues or percentage of gross operating profit	—	—	\$1,800–\$2,400 per month or 3% or 10% GOP	\$2,000–\$2,900 per month or 3% or 10% GOP
Incentive fee only:				
1. Percentage of gross operating profit	18–30% GOP	—	7½–20% GOP	—
2. Percentage of gross operating profit plus percentage of cash flow after debt service	10–12% GOP + 20–25% cash flow	—	6–10% GOP plus 15–30% cash flow	—
3. Percentage of gross operating profit plus percentage of cash flow after debt service and return on owner's equity	10–15% GOP + 20–40% cash flow after 8–10% return on equity	—	6–10% GOP + 20–25% cash flow after 7–10% return on equity	—

*Percentage of gross operating profit subordinated to cash flow available for debt service (subordination is a deferral of payment)

- C. The value of prepaid points by the seller or developer is explained in Exhibit 9.
- D. The error of using a seller finance price on an apartment project is demonstrated in exhibits demonstrating tax equivalency pricing in Exhibits 10, 11, and 12.
- E. The State Equalization Board does not recognize cash equivalency adjustments but will discard the transaction where it can be found that the condition surrounding the sale make it suspect as a fair market transaction. We have knocked out sales where its availability was never advertised on the market to meet the reasonable period of time element, where the employer financed the purchase for an executive transfer and where the syndicator or condominium converter was receiving a long term option by sharing the proceeds with the seller. The proceeds of conversion are returned to management and not real estate.
- F. Payments under industrial revenue bonds must be discounted at the market rate of interest to determine fair market value of the property and UDAG grants must be subtracted from real estate values. The law presumes a "but for" condition in the use of IRB's and UDAG's which takes the position that but for the public financing the private market would not have built the project. Therefore it follows that the interest advantage or the UDAG grant measures the superadequacy of the project relative to the market place.

VI. One class of property for investment found in more and more state tax jurisdictions is subsidized housing. It is confusing because it involves contract rents in excess of market rents, special financing not available in the market, and long term incumbrances on the management and resale of the property as well as limitations on annual cash dividends.

- A. The first problem results from the fact that the government sets allowable contract rents at a level necessary to build new housing and local market rents discourage construction for moderate income families. The law calls these rents fairmarket value rents because the hope of the legislation had been that subsidies would apply only to a small percentage of units in the project. Inflation and rising interest rates made that impossible.
- B. The State Assessment Manual has recognized the problem in the Assessment Manual, Volumn 1, Section 9, page 19 which is reproduced as Exhibit 13.
- C. However, the State has misstated the case relative to contract rent. HUD sets fair market rents for each district in the state and calls it fair market rent. If interest rates or inflated construction costs are recognized at the feasibility stage, HUD may permit contract rents to be 10 percent higher than their originally estimated FMR's. If at the time permanent financing is provided through tax exempt bonds, etc., interest rates have exceeded original estimates, rents can be increased by an additional 10 percent.

WHAT IS A POINT REALLY WORTH?

Daniel J. O'Connell

Many real estate professionals compile lists of personal rules of thumb. Ideally these rules of thumb serve to reduce effort and raise productivity in daily decision making—with minimal sacrifice in accuracy and quality.

One rule-of-thumb that seems to have made a lasting impression is that the payment of one loan point¹ should equate to an $\frac{1}{8}$ percent reduction in the loan interest rate. For example, a borrower choosing between a $12\frac{3}{4}$ percent loan with 2 points from ABC Mortgage Company and a 13 percent loan without points from the XYZ Mortgage Company would be indifferent as to the choice.² According to the rule-of-thumb, the two-point charge supposedly equates to the $\frac{1}{4}$ percent ($\frac{1}{8}$ percent per point) difference in interest rates. However, that may not be a valid rule, as can be seen when comparing the points and no-points alternatives.

A purchaser buys a house to be financed with a \$100,000, 30-year loan. Financing is available from ABC Mortgage at $12\frac{3}{4}$ percent plus 2 points (\$2,000), and is also available from XYZ Mortgage at 13 percent with no points. This is illustrated in Table 1.

Assume the borrower plans to hold the property for a period of only two years at which point the balance of the

loan will be paid. The difference in payments between the two loans is \$468.00 for the two-year period, favoring the lower interest rate loan:

2-year payments	
@ 13%	\$26,548.80
2-year payments	
@ $12\frac{3}{4}$ %	- 26,080.80
Payment savings with	
$12\frac{3}{4}$ % loan	\$ 468.00

The difference in remaining balances upon the loan pay-off must also be taken into account. Because the $12\frac{3}{4}$ percent loan will amortize faster, it will have a remaining balance that is \$34.71 lower than the 13 percent loan at the end of the two years. Adding this balance to the \$468.00 in reduced payments results in a savings of \$502.71 over the two-year life of the loan:

Payment savings with	
$12\frac{3}{4}$ % loan	\$468.00
Additional loan	
reduction	+ 34.71
Total savings with	
$12\frac{3}{4}$ % loan	\$502.71

The borrower, if choosing the $12\frac{3}{4}$ percent loan, saves \$502.71 in payments and additional amortization over the 13 percent loan, but has paid \$2,000 to do so. Obviously, the two-point fee does not always equate to the corresponding $\frac{1}{4}$

Table 1	ABC Mortgage Co.	XYZ Mortgage Co.
Loan	\$100,000	\$100,000
Interest rate	$12\frac{3}{4}$ %	13%
Monthly payments	\$1,086.70	\$1,106.20
Annual payments	\$13,040.40	\$13,274.40
Points	2	0
\$ Point charge	\$2,000	0

¹As used here, a point is defined as an additional, up-front charge made by a lender and paid by a borrower, that enables a loan to be made at a lower interest rate. A point is computed as 1% of the loan amount. More than one point may be charged, with

each point creating a corresponding decrease in the interest rate.

²Assuming the borrower has the available funds to pay the points.

percent ($\frac{1}{8}$ percent per point) decrease in interest rate; thus, the 1 point = $\frac{1}{8}$ percent interest rate reduction rule-of-thumb is highly suspect.

The two-year holding period may be somewhat short; a more popular concept has been that the average ownership length for a home is seven years. The following computations are based on the seven-year ownership (and loan holding period).

7-year payments on 13% loan	\$92,920.80
7-year payments on 12- $\frac{3}{4}$ % loan	-91,282.80
Payment savings with 12- $\frac{3}{4}$ % loan	\$ 1,638.00
Additional loan reduction	+ 149.09
Total savings with 12- $\frac{3}{4}$ % loan	\$ 1,787.09

Having paid \$2,000 in up-front costs, the home buyer realizes only \$1,787.09 in payment and amortization savings; the two-point charge is still too much to pay for the corresponding benefits. Table 2 shows that the benefits do not offset the cost until the latter part of Year 8: Clearly, the holding period has a heavy influence on the advisability of paying points. The point charge will outweigh the accompanying savings of the lower interest rate in the early years, with the benefits of lower loan payments and additional amortization surpassing the point charge at some point during the life of the loan.

Time weighting and tax considerations

Although an interesting demonstration, the preceding method of analysis can be criticized as being both too simple and too unrealistic an approach to the problem. This argument has some validity because the difference in tax savings between the two loans has not been taken into account and, because the benefits, which are realized in the future, have not been discounted³ back to the present. Using the same two loans, a discounted, after-tax comparison can be made for a series of holding periods based on the four following assumptions:

1. The borrower has a 37 percent marginal tax rate⁴, typical for a

³Discounting is a means of reducing a value to be received in the future into a smaller present value, thereby considering the time preference of money. It works much the same, and can be thought of, as annual compound interest in reverse.

Table 2

Payment and Amortization Savings with 12- $\frac{3}{4}$ % Loan

	1	2	3
Year	\$234 Annual Payment Savings (cumulative)	Difference in Loan Balances	Total Savings
1	\$234.00	\$16.65	\$250.65
2	468.00	34.71	502.71
3	702.00	54.29	756.29
4	936.00	75.44	1,011.44
5	1,170.00	98.26	1,268.26
6	1,404.00	122.80	1,526.80
7	1,638.00	149.09	1,787.09
8	1,872.00	177.13	2,049.13
9	2,106.00	206.96	2,312.96
10	2,340.00	238.51	2,578.51
15	3,510.00	416.98	3,926.98
20	4,680.00	589.40	5,269.40
25	5,850.00	601.55	6,451.55
30	8,493.15	0	8,493.15

borrower of this size home loan.

2. The point charge is considered solely as interest by IRS and is deductible in full in the year of payment.
3. The loan is to be paid off upon disposition of the property.
4. The net annual savings will be discounted back to the present at 8 percent per annum, which is based on the assumption that the incremental savings could be invested into an interest-bearing account or other investment earning that rate.

The feasibility of paying points is really a typical discounted cash flow exercise based on the differences in initial outflow (point charge) and future inflows (payments and pay-off reductions). Basing the analysis on the two-point, 12- $\frac{3}{4}$ percent loan, the three elements can be broken down as follows:

- **Outflow:** \$1,260 at time zero, which is the \$2,000 point payment less the inherent tax savings ($\$2,000 \times 37$ percent).
- **Inflows:** Cash inflows will be the annual after-tax difference between the 12- $\frac{3}{4}$ percent loan payments and

the 13 percent loan payments. The considerations involved are calculated in Table 3.

- **Reversion:** The reversion is the difference between loan pay-offs at disposition of the property. (See Columns 1 and 2 in Table 4.)

The borrower's analysis concludes with Table 4, Column 4, which is the combined effect of payment and pay-off savings. Not until Year 14 of the loan—twice the typical holding period—do the savings accumulate to the \$1,260 effective cost of purchasing those savings. This can be seen more clearly in

The feasibility of paying points is really a typical discounted cash flow exercise based on the differences in initial outflow (point charge) and future inflows (payments and pay-off reductions).

Figure A, a graphic representation of the present value of the after-tax savings to the borrower.

Making the choice

Frequently, the borrower will be faced with questions such as "What amount of points can I afford to pay for a decrease in interest rates?" or, conversely, "What

⁴The marginal tax rate is the percentage paid in taxes on the borrower's highest dollar of income. The marginal tax rate is used as the resulting incremental savings is considered to be an addition to the borrower's other income and thus placed into the top bracket.

Table 3**Discounted, after-tax payment savings with 12¾% loan**

	1	2	3	4	5
Year	Payment Difference	Tax Savings On 13% Loan	Annual After-Tax Payment Savings	Column 3 Discounted @ 8%	Cumulative Payment Savings
1	\$234.00	\$92.74	\$141.26	\$130.80	\$ 130.80
2	234.00	93.26	140.74	120.66	251.46
3	234.00	93.82	140.18	111.28	362.74
4	234.00	94.41	139.59	102.60	465.34
5	234.00	95.02	138.98	94.59	559.93
6	234.00	95.56	138.44	87.24	647.17
7	234.00	96.31	137.69	80.34	727.51
8	234.00	96.95	137.05	74.04	801.55
9	234.00	97.62	136.38	68.22	869.77
10	234.00	98.25	135.75	62.88	932.65
15	234.00	100.49	133.51	57.26	1,180.99
20	234.00	97.34	136.66	54.27	1,350.33
25	234.00	77.38	156.62	22.87	1,475.26
30	234.00	12.91	221.09	21.97	1,584.75

Column 1 is the annual difference in payments between the two loans with the advantage to the 12¾% loan.

Column 2 is the annual savings in taxes attributable to the 13% loan due to additional interest payments.

Column 3 is the combined effects of the first two columns: Column 1 minus Column 2 = Column 3.

Column 4 is Column 3 discounted to the present at 8% per annum.

Column 5 is the cumulative total of Column 4.

Table 4**Discounted, after-tax pay-off and combined savings with 12¾% loan**

	1	2	3	4
Year	Pay-Off Difference	Column 1 Discounted @ 8%	Cumulative Payment Savings (Table 3, Col. 5)	Combined Savings
1	\$ 16.65	\$ 15.42	\$ 130.80	\$ 146.22
2	34.71	29.76	251.46	281.22
3	54.29	43.10	362.74	405.84
4	75.44	55.45	465.34	520.79
5	98.26	66.87	559.93	626.80
6	122.80	77.38	647.17	724.55
7	149.09	86.99	727.51	814.50
8	177.13	95.70	801.55	897.25
9	206.96	103.59	869.77	973.30
10	238.51	110.48	932.65	1,043.13
11	271.70	116.53	990.61	1,107.14
12	306.38	121.67	1,044.06	1,165.73
13	342.37	125.89	1,093.37	1,219.26
14	379.38	129.16	1,138.90	1,268.06
15	416.98	131.45	1,180.99	1,312.44
20	589.40	126.45	1,350.33	1,476.78
25	601.55	87.84	1,475.26	1,563.10
30	0	0	1,584.75	1,584.75

interest rate spread must I receive in order to compensate for point charges?" Obviously, the holding period is of greatest consequence and a projection must be made as to how long the loan will be held and what will happen to it.

Suppose the borrower plans to keep the property for the typical seven years before selling or refinancing and thus, must again decide which loan to take. As both Table 4 and Figure A indicate, the present value of the benefits over the seven-year period is \$814.50 (after-tax)—about 1¼ points—to choose the lower interest rate loan. Conversely, if the lower interest rate loan carries a two-point (\$1,260 after-tax) charge, the borrower must plan to hold the property for approximately 14 years to make the two-point payment worthwhile.

IRS point treatment

The story can take on a different complexion depending on which method of point write-off the Internal Revenue Service allows. The full write-off in year of payment, as demonstrated in the preceding example, is one method. The IRS may require the point charge to be added to the basis, depending on whether it construes the charge as "interest" or a "loan processing fee." IRS Publication 17⁵ cites two examples involving personal residences. In the first example, a three-point "loan processing fee" is considered interest (solely for the use of money) and is deductible in full in the year of payment, just as assumed in our example. In the second example (a VA loan) the point charge is considered a "loan origination fee," not interest. In this case, the point may not be deducted but, rather, added to the basis of the residence,⁶ thereby negating any first year tax deduction and leaving the effective cost of the point at a flat \$2,000. A tax benefit would not be realized until disposition of the property when the capital gain would be reduced by \$2,000.

Based on the points being added to the basis and a consequent sale with reportable capital gain, Figure B graphically portrays the present value of the combined savings for the various possible holding periods. With an effective cost of \$2,000, the combined savings never reach the point charge and the wiser

Table 5

Lender's yield for ABC Mortgage Co. and point equivalency for 12¾%, 2-point loan			
	1	2	3
Year	Lender's Yield	Rule-Of-Thumb Point Equivalency (⅛%)	Lender's True Point Equivalency (per point)
1	14.92%	125%	1085%
2	13.90%	125%	575%
3	13.57%	125%	410%
4	13.40%	125%	325%
5	13.30%	125%	275%
6	13.24%	125%	245%
7	13.19%	125%	220%
8	13.16%	125%	205%
9	13.14%	125%	195%
10	13.12%	125%	185%
15	13.06%	125%	155%
20	13.04%	125%	145%
25	13.04%	125%	145%
30	13.03%	125%	140%

borrower would opt for the 13 percent loan.

Lender's standpoint

Obviously, the lender's purpose in charging points is to effectively increase the interest rate and obtain a higher yield. For instance, while XYZ Mortgage Co. is charging 13 percent interest without points (realizing a constant 13 percent yield), ABC Mortgage Co. charges only a 12¾ percent rate but receives two points up-front to increase the actual yield.⁷ (Table 5, Column 1.) At no time during the loan does the yield drop below 13 percent. Also, Column 3 of Table 5 shows that at a more typical loan life of seven years, the true point equivalency for ABC is closer to ¼ percent!

Conclusion

The 1 point = ⅛ percent interest rate reduction rule-of-thumb may not only be misleading, but the actual life of the loan has a dramatic effect on both the borrower and lender when point charges are involved. If the present value of the savings attributable to the decreased interest rate were equal to the point charge, the borrower would be theoreti-

cally indifferent as to choice. But since there can be substantial differences in savings benefits, it is certainly worthwhile for both the borrower and lender to analyze their respective positions. Even if the loan is restricted to one lender, the techniques displayed in this article may be used in decision making on point buy-down where a lender may trade an interest rate reduction in exchange for up-front points.

A definite conclusion as to point worth cannot be drawn because of the variables involved. To use a broad rule-of-thumb is erroneous. While the 1 point = ⅛ percent interest rate rule-of-thumb is not always applicable, it should now be clear why so many smart lenders have been charging points and are now including call options and early due dates. □



The author is an appraiser with the Los Angeles real estate and mortgage loan department of New York Life Insurance Company. He joined the firm in 1979 and before that was an appraiser for the multiple loan department of Home Savings & Loan, Los Angeles. He also served as regional chief appraiser for their conventional loan department.

⁵Your Federal Income Tax, Internal Revenue Service Publication 17, Washington, 1979, p. 87.

⁶Always consult a local tax authority on how to handle points as their treatment is subject to the established business practice in the particular area and the type of property involved.

⁷The lender's yield is computed as an internal rate of return exercise where the initial outflow is the amount of loan funding less the point charge and the inflows are the loan payments with the last payment including any remaining principal to be repaid.

Figure A

Present value of borrower's after-tax savings with up-front point deduction (TABLE 4)

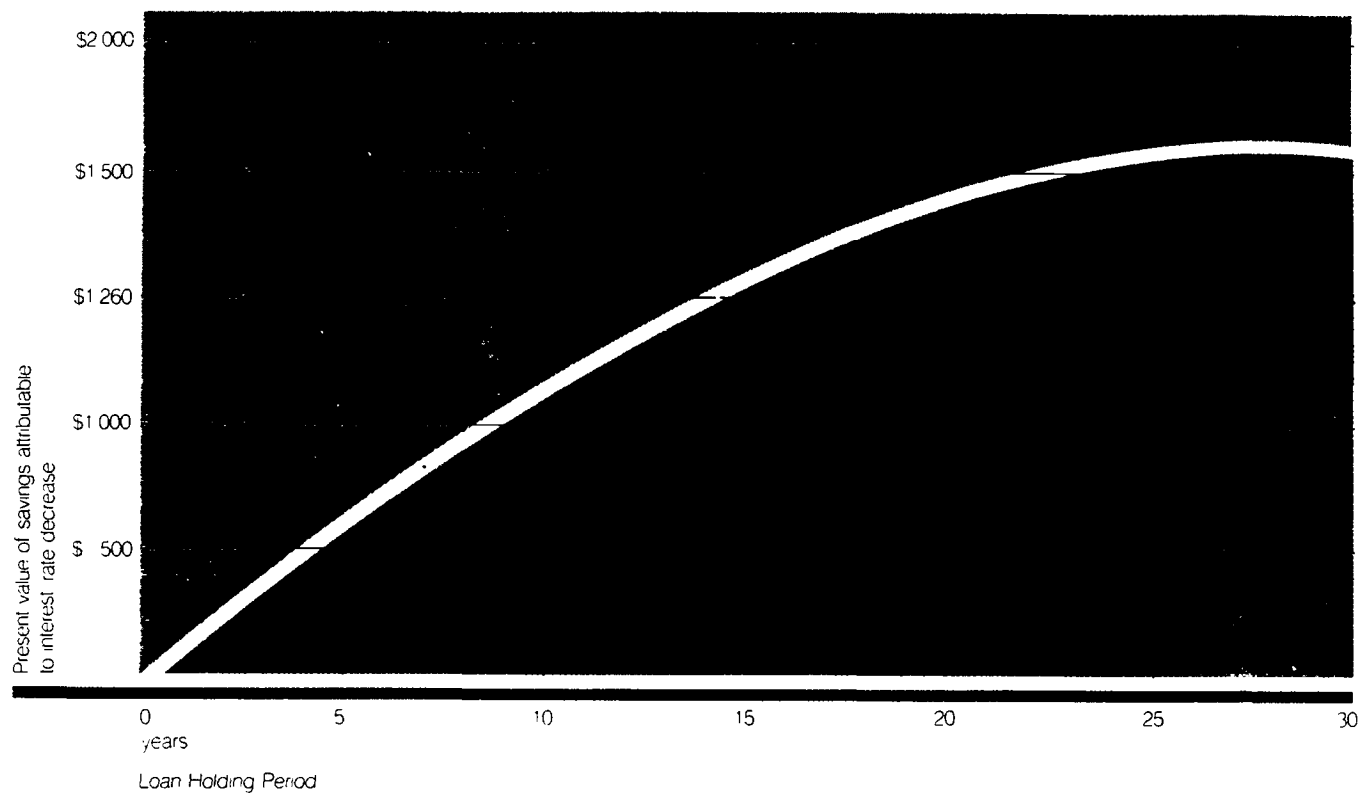
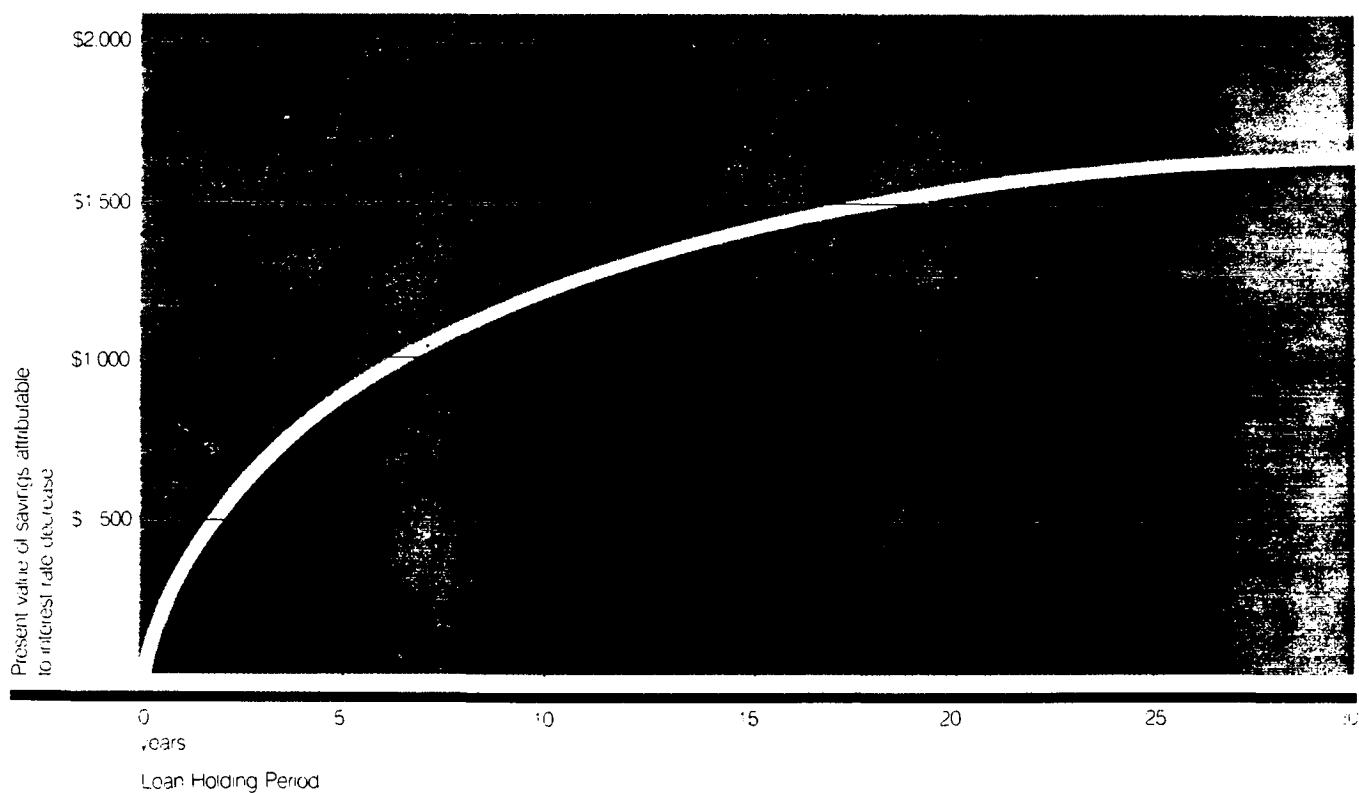


Figure B

Present value of borrower's after-tax savings with point charge added to basis



Example Problem: Cash Equivalent Price - Existing Mortgage plus
Purchase Money Mortgage

Given the following information, determine the cash equivalent
price of the transaction:

Sale Price	\$1,000,000
Existing Mortgage (assumed)	Balance \$682,052 Mo. Pmt. \$6,039.20 Contract rate 8.5% Expired Term 6 years Remaining Term 19 years
Purchase Money Mortgage	\$200,000 @ 10% Amortization over 20 years, balloon in 10 years
Current Financing	14.5%, 20 year amortization with 10 year balloon

- A. What is the equity investment?
- B. What is the balance outstanding on the existing (assumed)
mortgage in 10 years?
- C. What is the payment on the PMM?
What is the balance outstanding EOY 10?
- D. What is the cash equivalent price of the transaction?

Suggested Solution - II
Existing Mortgage plus PMM

A.	\$117,948
B.	\$454,781
C.	\$ 1,930 \$146,049
D.	Equity \$117,948
	Assumed Existing Mortgage
	PW \$6,039.20, 120 mos. @ 14.5%
	PW \$454,781, EOY 10 @ 14.5%
	Purchase Money Mortgage
	PW \$1,930, 120 mos. @ 14.5%
	PW \$146,049, EOY 10 @ 14.5%
	<u>\$ 34,558</u>
	Total (Cash Equivalent Price) \$763,581

IX. PROBLEM (CASH EQUIVALENCY)*

*Courtesy of A. Robert Parente, SREA, MAI.

An income producing property (special purpose) was resold by the Midland National Bank on a "workout." The terms of the sale were as follows:

Sale Price: \$1,178,808, no cash by purchaser, i.e., 100% debt financing

Terms of Financing: First year - interest only at a rate of 4-1/2% and payable monthly

Second year - interest only at a rate of 6% and payable monthly

For the next 23 years - principal and interest at 8-1/2%, payable monthly

The property (a 12,000 sq. ft., 3-year old restaurant building) was purchased on November 10, 1977 for \$1,178,808. Typical terms of financing at that time (11/77) were 9-3/4% interest for 25 years on a 75% loan-to-value ratio. It is estimated that equity required a 12-15% return.

Questions:

- A. What are the monthly interest costs in years 1 and 2?
- B. What is the constant on the amortized portion of the mortgage?
- C. What is the monthly payment on the mortgage?
- D. What is the unadjusted sales price per square foot for use in the DSC approach?
- E. What is the cash equivalent price assuming 100% financing were typical in the market?
- F. What is the cash equivalent price assuming an equity yield requirement of 12% 15%?
- G. What is the adjusted sales price per square foot under each of the conditions set forth above?

Suggested Solution - IX
Problem (Cash Equivalency)

A. Year 1: \$4,420.53
Year 2: \$5,894.04

B. $f = .09913$

C. \$9,737.97

D. $\$1,178,808 \div 12,000 = \$98.23/\text{sq. ft.}$

E. PW i Costs Year 1 @ 9-3/4% = \$ 50,347.92
PW i Costs Year 2 @ 9-3/4% = 60,918.28
PW Amortization payments
Years 3-25 @ 9-3/4% = 881,198.63

Cash Equivalent Price
(100% Financing) = \$992,464.83*

*\$186,343.17 less than face value of note

$\$992,464.83 \div 12,000 = \$82.71/\text{sq. ft.}$

F. Discount Rates given $Y = 12\%$, $Y = 15\%$, $m = 75\%$ $i = 9.75\%$

$Y = 12\%$

$Y = 15\%$

Mortgage $.75 \times .0975 = .073125$
Equity $.25 \times .12 = \underline{.03}$

$.75 \times .0975 = .073125$
 $.25 \times .15 = \underline{.0375}$

Discount Rate (r) = .103125

Discount rate (r) = .110625

PWCF @ 10.3125%

PWCF @ 11.0625%

Year 1 \$ 50,198.33
Year 2 60,399.42
Years 3-25 835,796.73

\$ 49,999.88
59,715.07
780,188.86

\$946,394.48**

\$889,903.81***

\$232,413.52 below face *\$288,904.19 below face

G. $\$946,394.48 \div 12,000 = \$78.87/\text{sq. ft.}$

$\$889,903.81 \div 12,000 = \$74.16/\text{sq. ft.}$

CASH EQUIVALENCY EXAMPLE

NAKOMA HEIGHTS
168 APARTMENT UNITS
SOLD NOVEMBER 1, 1979
NOMINAL SALES PRICE \$3,450,000

- A. One appraisal reviewed recently contained the following summary analysis. It is used as it probably parallels the Madison Assessor's Office perception of the transaction:

<u>Date</u>	<u>Price</u>	<u>Gross</u>	<u>Net</u>	<u>GIM</u>	<u>Income Expense</u>	<u>S.P. Unit</u>	<u>OAR</u>
7/79	\$3,450,000	\$449,249	\$196,548	7.68	56.3	\$20,536	5.7

- B. Cash Equivalency - Monthly payment differential

If 25% down with 75% L/V at 10.55 for 25 years

Down	862,000
Mortgage	<u>\$2,588,000</u>
	\$3,450,000

Monthly payment \$24,528; Annual payment \$294,335

1979 - 4/80	Conv. Mortgage	\$294,335	
	L.C. (9.25)	<u>272,875</u>	
		\$ 21,460/12	= \$1,788 (A)

4/80 - 4/81

\$2,950,000		Conv. Mortgage	\$294,335
<u>250,000</u>	L.C.		<u>249,750</u>
\$2,700,000	X .0925		\$ 44,585/12 = \$3,715 (B)

4/81

\$2,700,000			\$294,335
<u>250,000</u>			<u>226,625</u>
\$2,450,000	X .0125		\$ 67,710/12 = \$5,643 (C)

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NET PRESENT VALUE UNDER
L.C. FINANCING AND BALLOON PAYOUT
ACCORDING TO CONTRACT ON 12/31/85

	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982 - 84</u> <u>4 years</u>
Down Payment	\$500,000 <u>3,576 (2A)</u> \$503,576	\$250,000 5,364 (3A) <u>33,435 (9B)</u> \$288,799	\$250,000 11,145 (3B) <u>50,787 (9C)</u> \$311,932	\$ 67,710 (12C)
				Balance <u>2,450,000</u> <u>\$2,517,710</u>

NET PRESENT VALUE CONVENTIONAL LOAN

	<u>1979</u>	
Down Payment	\$862,000 --	Balance <u>2,404,022</u>

Cash year 1	\$503,576	\$288,799	\$311,932	
		<u>.884666</u>	<u>.796455</u>	
Cash year 2	255,491	\$255,491		
Cash year 3	248,440		248,440	
Cash year 4	48,551			\$67,710
Cash year 5	43,710			67,710
Cash year 6	39,351			67,710
Cash year 7	<u>\$1,317,332</u>			\$2,517.710
	\$2,456,451	Total Cash Equivalency (Versus \$3,450,000 nominal selling price)		

INCOME PREPORTED (Contract)	GROSS INCOME NET INCOME	\$499,249 <u>196,548</u>
--------------------------------	----------------------------	-----------------------------

MARKET RENT LEVELS

At least gross	\$450,000
Less 40% expense	<u>180,000</u>
NOI	\$270,000

$$\text{OAR} = \frac{270,000}{2,456,451} = .109915$$

$$\text{SP/Unit} = \frac{2,456,451}{168} = 14,622$$

PROPERTY ASSESSMENT MANUAL
FOR
WISCONSIN ASSESSORS

VOLUME I
Administrative, Procedural

Part 1

the property in harmony with the rest of the neighborhood?

Often apartments are valued through use of a Gross Rent Multiplier (GRM). Using this method, the assessor compares the subject with other properties that have sold to arrive at a market rent and an appropriate GRM for the property. The income approach may also be applied by arriving at a net income and capitalizing it into an estimate of market value.

The direct sales comparison approach may also be used in the valuation of apartment buildings. Using this method, market values are derived from a study of similar properties recently sold. The assessor estimates the market value of each type of apartment sold (i.e., efficiency, one bedroom, two bedroom, etc.), adjusts those values to arrive at a total value for the subject apartments, and then adds or subtracts for any overall adjustments, such as the lack or presence of a swimming pool. Because each property differs based on location; the number of efficiencies, one and two-bedroom apartments; the size of the rooms; the layout and condition of the building; and many other factors, numerous adjustments are often necessary, requiring careful examination and interpretation of the market data.

The cost approach can also be used to provide an estimate of market value. The main problem in using this approach, as is usually the case, is arriving at the estimate of depreciation. In newer apartments there should be little physical, functional, or economic depreciation and thus the cost approach may aid the assessor in arriving at a market value estimate. With older apartments; however, it is difficult to estimate functional obsolescence and there is the additional problem of trying to estimate the value added to a property as a result of remodeling.

HOTELS AND MOTELS

These properties are mainly engaged in the sale of rooms, food, and beverage. Hotels and motels are unique in that rooms are usually rented by the day or week. There is very little long-term rental. If a room is not sold for a day, that income is lost forever, whereas in a retail store, inventory can be sold tomorrow. This is especially true of resort type properties where the trade is seasonal. The hotels and motels either close down or operate at a reduced capacity during the off-season.

These properties are extremely sensitive to changes in the economy. For example, if the state of the economy would decline and people could not afford vacation trips the value of resort hotels and motels could be seriously affected. Also, an increase in winter sports activities can turn areas that are dormant into year-round enterprises with a higher value.

The use of the income approach for the valuation of hotels and motels is similar to its use for other types of properties in that the expenses are subtracted from the income to arrive at a net income figure which is capitalized into a market value estimate. The assessor may run into a problem in that the amount of income is substantially affected by the quality of management. Excellent management will often produce a higher return than average; while poor management produces a lower return. The assessor should be careful to make sure that only the real estate is being valued and not the quality of management or goodwill. The comparable sales approach is difficult to apply to the valuation of this type of property because individual properties may differ greatly in services, reputation, age, and location all of which can affect value. The cost approach can be used to estimate value but the assessor must be aware of the obsolete materials and styles used in construction of older hotels. Also, when dealing with chain motels often the same plans are used and thus the actual construction costs do not reflect an appropriate amount for architect's fees and possibly overhead and profit.

FEDERALLY SUBSIDIZED HOUSING

The purpose of subsidized housing, as defined by the Department of Housing and Urban Development (HUD) is to assist low income families in renting decent, safe, and sanitary housing of modest design with suitable amenities. In a subsidized housing project, the tenant pays rent that is less than market rent. This lower rent is available either because the mortgage on the project is subsidized by the Department of Housing and Urban Development or because HUD makes monthly payments to the landlord on behalf of the tenant.

Subsidized housing is regulated by the federal government with limitations on the contract rents, replacement costs, and amenities of such housing. These limitations are intended to permit production of suitable housing without excessive costs, design

factors, or amenities. Some of the controls imposed by HUD on subsidized housing projects include:

1. At least 30% of the families in all projects must be very low income families as defined by HUD.
2. The owner must maintain the subsidized units in safe, sanitary, and decent condition. HUD performs routine inspections to ensure that these standards are maintained.
3. HUD must approve the terms and conditions of financing for the project.
4. The project must comply with HUD minimum property standards. All building plans must be approved by HUD.
5. HUD must approve the site for any subsidized housing project. The site must be adequate in terms of size, contour, exposure, utilities, and streets to accommodate the number and type of units proposed. The site must also be free from adverse environmental conditions (i.e., flooding, pollution, vermin, etc.) and accessible to social, recreational, educational, commercial, and health facilities.
- * 6. Contract rents must compare reasonably to the rents of comparable unassisted units. Rents may exceed those determined by market comparison by no more than 20% and only when warranted by cost and expense data.
7. Marketing of units must meet the HUD approved Affirmative Fair Housing Marketing plan.
8. The property owner must submit audited financial reports to HUD each fiscal year and any other statements that HUD may require.

In addition to all of these requirements, HUD also regulates areas such as tenant selection, lease requirements, security deposits, management, maintenance, eviction, and rent adjustments.

The limitations and regulations for subsidized housing are spelled out in more detail in the Code of Federal Regulations, the Housing Assistance Payment Contract, and the Annual Contributions Contract between HUD and the property owner.

When a property owner enters into a contract with HUD, the contractual limitations become encumbrances on the title for the duration of the contract.

The property owner is unable to sell the property as if it were free and clear of encumbrances. Such a project has to be sold as a subsidized project with all federally imposed restrictions adhered to by the purchaser.¹ In addition, the owner of a project may not sell, transfer, or make any assignment of the contract without the prior consent of the Housing Authority. As a result, there are few arm's-length sales of subsidized housing projects.

Recognizing that the federal government does have an interest in the property for the duration of the contract, questions have been raised as to whether subsidy projects would qualify for a partial exemption based on that interest. Legal counsel of the Department of Revenue has determined that there is no authority for treating part of the property as exempt based on ownership by the federal government (Revenue Department Legal Opinion - March 12, 1982). The opinion states: "The entire property, including all interests in it, is assessed to the owner of the property. The rights of any person claiming an interest in the property subordinate to the fee, whether under lease, contract or otherwise, would be extinguished by a tax sale. The Legislature has not empowered assessors to assess leasehold interests against lessees and so divide up property for purposes of taxation."

Subsidized housing must be valued according to the value it would command if it were free and clear of encumbrances. That is, as if it were fee simple, subject only to the limitations of taxation, police power, escheat, and eminent domain.

Such projects must also be valued as if available to be put to the highest and most probable use. This will necessitate a thorough investigation of the highest and best use of the property as of the assessment date.

The highest and best use is that use which is probable, reasonable, and legal and will support the highest present value of the property. In addition to the present use, other uses to which the property may be adaptable must be considered. These alternate uses may have an effect on the market value of the property if the uses are legally permissible and financially feasible.

Given that such projects are to be valued as if unencumbered and available to be put to the highest and

¹Snow, Charles T. "Appraisal of Federally Subsidized Housing Projects," *Assessors Journal*, International Association of Assessing Officers, July, 1974, p. 13-17.

most probable use, the assessor would then proceed to use the best data available to arrive at an assessment. This would include consideration of the market, cost, and income approaches to value.

Where there are sales of subsidized housing projects, the sales must be analyzed to determine if they meet the criteria of market value. Such sales may be of a distressed nature and will include restrictions on the fee. As such, they cannot be relied upon when estimating market value. The assessor is not restricted to the use of only sales of subsidized housing to arrive at market value. Sales of comparable conventional apartment projects can be used, with adjustments made for differences in physical attributes and amenities. If a subsidized housing project were unencumbered, it would be conventional housing.

When using the cost approach, the assessor must be aware that as a result of the regulations and restrictions on subsidized housing, the projects will have a higher per unit cost than conventional projects. This is due to higher labor costs required by federal pay regulations and higher construction costs resulting from federal building regulations which are more strict than local regulations. CAUTION: Cost is not

necessarily equal to value. The added expense of meeting the federal building regulations will not generally cause the market value of such a project to increase by the same amount. The assessor must determine what additional value, if any, results from the expenditure of additional funds to meet federal building regulations.

* When using the income approach for the valuation of subsidized housing, market rents must be used, regardless of whether the contract rents are above or below market rent. When determining market rents, the assessor seeks to establish the rent that a tenant, utilizing the property to its highest and best use, is warranted in paying.

When analyzing data for the income approach, the assessor will find that operating expenses for subsidy projects are higher than those on conventional apartment projects due to reporting requirements and services beyond those required in the typical rental project. The operating expenses used in the income approach must be based on market data which reflects the actual experience of competitive conventional apartment projects.

1. The manual is in error in Chapter 9, page 20 when it states that rents may exceed those determined by market comparison by no more than 20 percent. The 20 percent should apply to the original HUD estimate of rent and not the real market rent.
 2. When a subsidized project is sold sinking funds and escrow amounts are sold with it so that these amounts must be deducted from the sale price.
- D. A discussion of contract rent versus market rent provided by IAAO is included in Exhibit 14.
- E. Excerpts from an appraisal of Section 8 housing are provided in Exhibit 15.

Improving Real Property Assessment

A Reference Manual

International Association of Assessing Officers

Chapter Eight

The Income Approach

The income approach to value provides an estimate of market value based on the income-producing capability of a property. The approach is based on the fundamental premise that the market value of a property is directly related to the amount, duration, and certainty of income associated with the property. The income approach must be regarded as the primary approach to the valuation of income-producing properties. The overall objective of this chapter is to aid in the understanding and application of the income approach. The chapter is particularly geared to application of the income approach on a mass appraisal basis. At the same time, however, pains have been taken to strengthen the income approach as a flexible alternative in the appraisal of unique, difficult-to-assess properties.

Section 8.1 provides an overview of the income approach. It emphasizes that, like both the cost and the sales comparison approach, the objective of the income approach is market value. The analysis of income and expense items is discussed. The section also introduces the fundamentals of income capitalization, which is the process of converting income figures into an estimate of value. Rates used in income capitalization can be derived by two general types of methods: direct sales analysis and indirect methods.

Section 8.2 deals with the collection of income and expense data, and section 8.3 suggests techniques for processing reported data into typical or "normalized" figures.

Section 8.4 discusses direct sales analysis as a method of deriving capitalization rates. Direct sales analysis involves the identification of typical relationships between income and value through the comparison of income figures and sales prices for sold properties. Where adequate sales information is available, direct sales analysis is viewed as the preferred method of deriving capitalization rates.

The remaining four sections, 8.5–8.8, deal with indirect methods of deriving capitalization rates and capitalizing the income stream. These methods involve the conversion of income into value through the estimation of certain variables or relationships. Section 8.5 introduces indirect methods of deriving capitalization rates. It discusses compound interest theory, annuity capitalization, perpetuity capitalization, straight-line capitalization, and estimation of the appropriate rate of discount. Section 8.6 discusses the various residual capitalization techniques: the building residual technique, the land residual technique, and the property residual technique. Section 8.7 introduces mortgage-equity analysis. Finally, section 8.8 deals with the application of these techniques to the appraisal of variable income streams.

Two appendixes are included. Appendix 8.1 describes the more significant income and expense reports that are periodically prepared by trade associations and others for various property types. Appendix 8.2 discusses the appraisal of partial interests.

8.1

Overview

8.1.1 Objective

In applying the income approach, it is helpful to distinguish two concepts of value: market value and investment value. The market value of an income-producing property is the expected sale price of the property under the assumption of typical financing and rent. The concept presumes that parties to the sale are rational, knowledgeable, and eager to come to agreement, although under no undue pressure to do so. The assumption of typical financing and rent make explicit that market value relates to the intrinsic nature of the property itself and is independent of atypical financing or rental arrangements. Specifically, market value is not affected by the ability of a purchaser to assume a mortgage at a favorable rate of interest, by the willingness of a seller to extend financing when a lending institution would not, or by the existence of a dated and atypical lease arrangement. While these factors will affect the expected sale price of the property, they should not be interpreted as affecting market value (see sec. 4.5 and Appendixes 4.1, 4.2, and 4.3). The assumptions of typical financing and rent allow the assessor to focus on the intrinsic income-producing capability of properties and avoid the complications associated with individual financial and lease arrangements. Although terminology and definitions vary widely, the concept of market value forms the legal basis of assessment in virtually every state.

Investment value is the monetary value of a property to a particular investor. Investment value reflects the goals, financial position, tax status, and required rate of return of individual investors. Thus a property may have many investment values although it possesses only one market value. In other words, investment value reflects the worth of a property to a particular investor, whereas market value reflects the consensus of typical buyers and investors. In addition, investment value is affected by financial arrangements peculiar to the property,

as well as by existing leases. Often a private appraiser is assigned the task of estimating the investment value of a property to his client in order to provide guidance in decisions to buy or sell. The assessor's interests, however, are limited to the concept of market value, which reflects typical investor behavior, financial arrangements, and anticipated rent.¹

8.1.2 Gross Income Estimation

Estimation of gross income is the first step in the income approach to value. Gross income estimation builds upon a concept that may be termed descriptively *normal unit rent*. Normal unit rent is that amount for which a property reasonably can be expected to rent or lease on a per unit basis under current market conditions and typical management. In general, normal unit rents should be expressed in units that conform to the basis upon which properties are leased or rented. Store properties, shopping centers, office buildings, and land often rent on a per square foot basis; apartment buildings on a per apartment basis; parking lots on a per stall basis; and mobile home parks on a per site basis.

In the case of shopping centers and office buildings, which generally lease on a per square foot basis, care should be taken in that some such leases tend to be expressed in gross leasable area (GLA), which includes common areas such as corridors, entranceways, and restrooms, while others are expressed in net leasable area (NLA), which includes only floor areas occupied by tenants. In order to permit comparisons among properties, normal unit rents for such properties should be defined consistently on either a GLA or an NLA basis, and actual rents converted accordingly.

Another problem arises in the case of percentage leases. A percentage lease is a lease that provides that rent payments be based on a percentage of income (gross or net), usually with a guaranteed minimum. When percentage leases are in effect,

1. Appendix 8.2 provides information on appraising leasehold, leased fee, and other partial interests.

rental income should be reexpressed in appropriate physical units (e.g., square feet). This practice has a number of advantages, including the facilitation of comparisons between properties that are subject to percentage leases and properties that are not.

It is important to emphasize that normal unit rents must reflect current market conditions, that is, current rent schedules and recently negotiated leases. Per unit rents stated in leases, however, often also vary with the term (duration) of the lease. In an inflationary economy, for example, a five- or ten-year lease is likely to call for higher per unit rents than a two- or three-year lease, reflecting the anticipated decline in purchasing power. In such cases normal unit rents should reflect the most typical lease terms currently being negotiated.² If, for example, the majority of leases recently negotiated on a particular type of property run ten years, then normal unit rents should reflect per unit rent provisions contained in such leases. Per unit rents contained in shorter- and longer-term leases are important in projecting anticipated income streams beyond the typical lease period, as discussed in section 8.8. The assessor's first concern, however, is to develop normal unit rents applicable in typical lease or rental agreements.

It should also be noted that some types of property can have more than one normal unit rent. In apartment buildings, for example, normal unit rents ordinarily will vary with the number of bedrooms and sometimes with other factors as well. Similar considerations apply with respect to hotels, motels, and certain other properties.

There are essentially two sources of information for estimating normal unit rents. The first is typical per unit rents commanded by similar properties. This approach tends to yield good results to the extent that at least several closely comparable properties with recently negotiated rents or leases can be identified. This approach has the major advantage of ensuring typical or average conditions

and management. The approach is particularly applicable to properties subject to percentage leases, since per unit rents earned on such properties can vary greatly with the quality of management.

The second source of information relating to normal unit rents is the rental history of the subject property itself. If the operation of the property as reflected in expense ratios, occupancy ratios, profit rates, and the like appears to reflect typical management, then current unit rent will tend to provide good evidence of normal unit rent. This approach has the advantage of reflecting the unique features of the subject property and accordingly is most useful when closely comparable properties do not exist. The approach provides little guidance when a dated or atypical lease is in effect or when typical management cannot be assumed. The approach is, of course, inapplicable in the case of properties that do not lease or rent, such as owner-occupied store properties.

In practice these two information sources tend to complement and reinforce each other. As one example, assume that a small-city assessor is developing normal unit rents for downtown commercial properties. Most of these properties have one story, with a floor area of 1,000–5,000 square feet, but they reflect a variety of construction types and physical conditions. Most of the properties are leased on a two- to five-year basis. Because of the differences in physical characteristics as well as location, the assessor is inclined to recognize differences in normal unit rents, although not large differences. Hence, where actual square-foot rents appear consistent and supportable, the assessor accepts actual figures as normal unit rents. On the other hand, where actual rents appear outdated, atypical, or otherwise unsupportable, the assessor bases his estimates on average figures. Similarly, average figures are used on owner-occupied properties and properties for which actual figures could not be obtained. On atypical properties, such as the local supermarket and two-story department store, the assessor is inclined to use actual figures, provided that they establish a general pattern of consistency. Obviously, the supportability of the

2. It is interesting to note that this is less of a problem with percentage leases. Nevertheless, it is just as important to ensure that percentage leases are current as it is in the case of fixed leases.

TABLE 8.1
INCOME AND EXPENSE ANALYSIS: XYZ APARTMENTS

Potential gross rent:	
12 units @ \$180 month.....	\$25,920
24 units @ \$200 month.....	57,600
12 units @ \$220 month.....	31,680
	<u>\$115,200</u>
Less allowance for vacancy and collection loss: $0.06 \times$ \$115,200 (rounded to nearest \$100).....	6,900
Normal gross rent.....	<u>\$108,300</u>
Plus other income:	
Clubhouse and pool.....	\$ 6,900
Laundry.....	1,200
Parking.....	3,500
	<u>\$ 11,600</u>
Normal gross income.....	<u>\$119,600</u>
Less allowable expenses:	
Insurance.....	\$ 2,400
Heat and utilities.....	20,500
Repairs and maintenance.....	14,000
Replacements.....	4,000
Management.....	16,000
Other.....	2,700
	<u>\$ 59,600</u>
Normal net income.....	<u>\$ 60,000</u>

assessor's final estimates of normal unit rents will reflect his ability to analyze, compare, and interpret data. Additional guidance in developing normal unit rents is contained in section 8.3.

Once the assessor has computed the normal unit rent of a property, his next step is to compute potential gross rent, which is the total rent that the property would produce if 100 percent occupied.³ This is accomplished by multiplying normal unit rent by number of units. In cases where normal unit rent varies with type of unit, several calculations will be involved. In table 8.1, for example, XYZ Apartments contains 12 one-bedroom apartments with a normal unit rent of \$180 per month, 24 two-bedroom apartments with a normal unit rent of \$200 per month, and 12 three-bedroom apartments with a normal unit rent of \$220 per month. Potential gross rent is calculated at \$115,200 as shown.

Potential gross rent must be adjusted for estimated vacancy and collection losses. This is best

3. The term *potential gross rent* is used in place of the more common *potential gross income*, since only rental income, not "other" income, is included at this stage of the analysis. In the special case where no other income is involved, the two terms are equally appropriate and descriptive.

accomplished through an analysis of the experiences of similar properties. To this end it is helpful to express vacancy and collection losses actually observed in the marketplace as a percentage of potential gross rent. The median, mean, or other representative figure based on these ratios can then be multiplied by potential gross rent of the subject property to provide an appropriate allowance for vacancy and collection losses. Assume, for example, that an analysis of five motel properties located on the western side of a city reveals the following:

Motel (1)	Potential Gross Rent (2)	Vacancy Rate (3)	Collection Losses (4)	Collection Loss Ratio [(4) ÷ (2)] (5)	Vacancy and Collec- tion Loss Ratio [(3) + (5)] (6)
A	\$110,000	.36	\$3,025	.03	.39
B	94,500	.42	3,500	.04	.46
C	180,000	.30	8,250	.05	.35
D	75,000	.31	2,900	.04	.35
E	203,800	.40	8,650	.04	.44
				Average	.40
				Median	.39

The median vacancy and collection loss ratio is 0.39, and the mean ratio is 0.40. Depending on his preference, the assessor might then multiply one of these figures by potential gross rents to obtain estimated vacancy and collection losses.⁴

In table 8.1 it is assumed that the assessor has calculated a vacancy and collection loss ratio of 0.06 based upon an analysis of similar apartment buildings. That figure multiplied by the potential gross rent of XYZ Apartments yields an allowance for vacancy and collection losses of \$6,900.

Potential gross rent less an allowance for vacancy and collection losses equals normal gross rent or market rent, which is the total gross rent that a

4. In actual practice, apart from hotel and motel properties, a number of factors associated with the timing of losses and recoveries make it difficult for property owners and agents, as well as assessors, to estimate collection losses. Rather than attempt to gather and analyze data on collection losses, therefore, it is acceptable to derive typical vacancy rates from actual figures and add an "appropriate" allowance for collection losses on the basis of the assessor's best judgment and perceptions.

property can be expected to produce under current market conditions and typical management. The figure reflects typical vacancy and collection losses. Normal gross rent for XYZ Apartments is computed at \$108,300.

Many properties produce other income in addition to rental income. This includes income from concessions, coin-operated laundries, and parking and recreational facilities. The amount of income from such sources should be based upon an analysis of the income history of the subject property itself as well as the experiences of properties with similar facilities. A straight projection based on averages is generally to be avoided, since such income sources tend to vary rather widely in nature and description from property to property. Other income for XYZ Apartments is the sum of that attributable to pool and clubhouse, laundry, and parking and totals \$11,600. Other income should not be adjusted to reflect vacancy and collection losses, since reported figures already will reflect such factors. An exception occurs, however, when property owners or agents are requested to estimate miscellaneous income on the basis of 100 percent occupancy.

The sum of normal gross rent and other estimated income equals normal gross income. Normal gross income for XYZ Apartments thus equals \$119,600. The term *normal gross income* is used in preference to the more common *effective gross income* to emphasize the fact that the gross income figure calculated for assessment purposes is anticipated or typical, not necessarily actual or realized.

In summary, gross income analysis proceeds as follows:

	Normal unit rent
<i>multiplied by</i>	Number of units
<i>equals</i>	Potential gross rent
<i>less</i>	Vacancy and collection losses
<i>equals</i>	Normal gross rent (market rent)
<i>plus</i>	Other income
<i>equals</i>	Normal gross income

8.1.3 Expense Analysis

The typical investor is crucially interested in anticipated income after expenses as well as before

expenses. Likewise, once the assessor has estimated normal gross income, he must turn to the estimation of normal expenses. Normal expenses are those that are necessary under typical management to operate and maintain the property and provide for replacements. Normal expenses include the costs of property insurance; heat, water, and other utilities; repairs and maintenance; reserves for replacement of such items as heat and air-conditioning systems, water heaters, built-in appliances, elevators, roofing, floor coverings, and other items whose economic life will expire before that of the structure itself; management; and other miscellaneous items necessary to operate and maintain the property. Normal expenses allowable for assessment purposes do not include depreciation charges, debt service, income taxes, and business expenses other than those associated with the property being appraised. In addition, property taxes are best treated as an adjustment to the capitalization rate rather than as an expense. This has the advantage of not requiring the assessor to estimate the amount of property taxes independently of his final estimate of value. Normal expenses for XYZ Apartments total \$59,600.

It must be emphasized that normal expenses, like normal gross incomes, must reflect typical management. Sometimes the assessor may be able to utilize reported expense figures, but often he will have to apply typical figures calculated from similar properties. If expense figures are being derived from income statements, the assessor must be careful to distinguish between those items allowable for income tax purposes and those allowable for assessment purposes. In addition, care should be taken to convert all expense items to an annual basis. Periodic expenditures for replacements should be prorated over an appropriate time frame.

Normal expenses subtracted from normal gross income yield normal net income. This is the figure that ordinarily is converted or capitalized into value. As in previous usage, the word *normal* emphasizes that the concept reflects typical conditions and expectations. The word *net* makes explicit

that the figure is net of allowable expenses. The word *income* recognizes that other income, in addition to rental income, may be included in the figure. Normal net income for XYZ Apartments is \$60,000. The reader should note that normal net income is income before debt service, depreciation allowances, and taxes. Other terms used synonymously with normal net income include *net operating income* and *net income before recapture*.

In review, normal net income is derived as follows:

	Normal unit rent
<i>multiplied by</i>	Number of units
<i>equals</i>	Potential gross rent
<i>less</i>	Vacancy and collection losses
<i>equals</i>	Normal gross rent
<i>plus</i>	Other income
<i>equals</i>	Normal gross income
<i>less</i>	Normal expenses
<i>equals</i>	Normal net income

8.1.4 Capitalization

After gross income estimation and expense analysis, the third stage in the income approach is capitalization. Capitalization is the process of computing the present value of future incomes or benefits. The relationship between income and value may be expressed either as a rate (the ratio of income to value) or as a factor (the ratio of value to income). It is customary to express the relationship between normal net income and value as a rate. If the rate applies to income attributable to the entire property, it is termed the *overall capitalization rate*, or simply the overall rate. If, for example, the normal net income of a property is \$10,000 and market value is \$80,000, then the overall rate is 0.125. In general,

$$R = I/V,$$

where R is the overall rate, I is normal net income, and V is value. Once the overall rate has been determined, it can be turned around to estimate the value of a property as follows,

$$V = I/R.$$

Hence, if the overall rate has been estimated at 0.125 and normal net income is \$20,000,

$$V = \$20,000/0.125 = \$160,000.$$

If the capitalization rate applies solely to normal net income and value attributable to the building, it is referred to as the *building capitalization rate*. Hence,

$$R_B = I_B/V_B, \quad V_B = I_B/R_B,$$

where R_B is the building capitalization rate, I_B is normal net income attributable to the building, and V_B is building value.

Similarly, if the capitalization rate applies solely to normal net income and income attributable to land, it is properly termed the *land capitalization rate*. Hence,

$$R_L = I_L/V_L, \quad V_L = I_L/R_L,$$

where R_L is the land capitalization rate, I_L is normal net income attributable to land, and V_L is land value.

On the other hand, it has become conventional to express the relationship between normal gross income and value as a factor, termed the *gross income multiplier*. Hence, if normal gross income is \$20,000 and market value is \$100,000, the gross income multiplier is 5.0. In general,

$$GIM = V/NGI,$$

where GIM is the gross income multiplier, NGI is normal gross income, and V is value. Once the gross income multiplier has been estimated, it can be used to predict value in accordance with the formula

$$V = GIM \times NGI.$$

Hence, if the gross income multiplier has been estimated to be 5.0 and normal gross income is \$40,000,

$$V = 5.0 \times \$40,000 = \$200,000.$$

Many appraisal texts prefer to discuss the gross income multiplier under the sales comparison approach to value rather than under the income approach. This is because proper use of the gross income multiplier requires considerable similarity

among properties. Nevertheless, application of the techniques bears as many similarities to the income approach as to the sales comparison approach, and it will be convenient for our purposes to discuss it under the income approach, partly because of the parallel considerations involved in the direct extraction of overall rates and gross income multipliers from sales data [8.4].

There are essentially two approaches to deriving capitalization rates or factors: direct sales analysis and indirect methods. Direct sales analysis involves the extraction of overall rates or gross income multipliers through a direct comparison of income data and sales prices for similar properties. Direct sales analysis has the advantage of being straightforward and directly reflective of market behavior. Its primary weakness is that it requires an adequate number of property sales possessing comparability in several key aspects. The techniques, strengths, and weaknesses of direct sales analysis are the subject of section 8.4.

Indirect methods of capitalization involve the conversion of income into value through the estimation or specification of several key variables. These variables vary with the particular method employed but include such factors as the required rate of return on investment, the remaining economic life of the property, an investment holding period, the income path, anticipated appreciation or depreciation, and reversionary value upon the termination of economic life. These will be explained later in the chapter. Indirect capitalization techniques all suffer the common weakness of requiring the assessor to specify or estimate these various factors. On the other hand, indirect capitalization techniques are more flexible than direct sales analysis, in that they can be used in the absence of comparable sales. At the same time, however, it should be emphasized that indirect capitalization methods, like direct sales analysis, are supportable only to the extent that they reflect typical investor expectations and market behavior. The various techniques, strengths, and weaknesses of indirect capitalization are discussed in sections 8.5–8.8.

8.2

Collecting Income and Expense Data

Successful application of the income approach to value is, of course, dependent upon adequate income and expense data. While such information is not required on each individual property, it is necessary to obtain sufficient data to estimate typical income and expense figures for various types of income-producing properties. In designing an income and expense data collection effort, the assessor should seek information on the number and type of rental units (apartments, square feet, and so on), per unit rents, vacancy ratios, collection losses (optional), miscellaneous income, and allowable expenses. Once collected, this information can be turned around to estimate normal unit rents, potential gross rents, normal vacancy and collection loss ratios, normal gross rents, normal gross incomes, normal expenses, and normal net incomes. There are at least five methods of gathering income and expense information: (1) mail questionnaires, (2) personal contact, (3) telephone, (4) assessment appeals, and (5) published studies and other third-party sources.

8.2.1 Mail Questionnaires

Many assessment jurisdictions have adopted the practice of mailing income and expense questionnaires prior to a reappraisal. Many of the guidelines that apply to sales questionnaires [4.2] also apply to income and expense questionnaires. The questionnaire should be as brief as possible while at the same time requesting all essential information. Specification of a time limit for return is a good policy. The questionnaire should be neat and easy to complete. The questionnaire should itself appear on official stationery or should be accompanied by a cover letter on official stationery. Either the questionnaire or the cover letter should briefly state the purpose and importance of the requested information, cite state statutes if applicable, and bear the assessor's signature.

Exhibit 15

C. Comparable Market Rents

A survey of current market rents in the greater Milwaukee area revealed the pattern of rents for one bedroom units found in Exhibit 6. Based upon this information, the rents found in recent comparable sales (see Exhibit 5), and rents for two-bedroom units as reported in the SREA Milwaukee County, Chapter 64 Apartment Rental Study 1983, the following market rents were estimated (See Exhibit 7.)

D. Estimate of Value Using the
Gross Rent Multiplier

Given the estimated potential gross rent of \$203,460 for the subject proeprty, the range in value, using the market comparison approach with a GRM, is estimated to be:

$$\$203,460 \times 6.3 = \$1,281,798 \text{ or } \$1,282,000$$

$$\$203,400 \times 6.5 = \$1,322,490 \text{ or } \$1,322,500$$

The sale (#5) believed to be most comparable to the subject by both the appraiser and the assistant assessor produced a GRM of 6.34; when applied to the subject, the value estimate is \$1,290,000. Since rents include use of refrigerators and stoves as well as outdoor furnishings, so does the value derive from the GRM. Therefore, the real estate value is the balance after deducting the personal property of \$40,000.

=====					MARKET RENTS POTENTIAL GROSS REVENUE - INCLUDES HEAT TENANT PAYS ELECTRICITY
UNIT SIZE (SF)	RENT/SF/MO	MONTHLY RENT PER UNIT	NUMBER OF UNITS	ANNUAL REVENUE	
535 - 1 bdrm	.560	\$300	3	\$ 10,800	
540 - 1 bdrm	.555	300	38	136,800	
543 - 1 bdrm	.555	300	6	21,600	
550 - 1 bdrm	.555	305	1	3,660	
561 - 1 bdrm	.555	310	2	7,440	
646 - 1 bdrm	.49	315	3	11,340	
706 - 2 bdrm	.46	325	2	7,800	
771 - 2 bdrm	.43	335	1	<u>4,020</u>	
TOTAL				\$203,460	

IV. INCOME APPROACH TO VALUE

In the absence of comparable sales the income approach is preferred (Dane County Circuit Court, Judge George R. Currie's instruction to the Madison Board of Review Case No. 140-201, Wild Inc., relator, relative to the VIP Plaza office building, now known as the James Wilson Plaza.) The cost approach is the least preferred method and is also difficult to apply as will be discussed in a later section of the appraisal.

As stated in the 1980 Wisconsin Property Assessment Manual, Volume I, page 9-4:

Value can be defined as "the present worth of anticipated future benefits." While this is true of all approaches to value, this definition is particularly useful in applying the income approach. The income approach is the conversion of anticipated future benefits (income) into an estimate of the present worth of the property. This conversion process is called capitalization. The income approach can be used when there are no comparable sales. It also can be used by the assessor because it represents the way investors think when they buy and sell income property in the market.

The eight steps in applying the income approach are:

1. Estimate potential gross income
2. Deduct for vacancy and collection loss
3. Add miscellaneous income
4. Determine operating expenses
5. Subtract operating expenses to derive net income
6. Select the correct capitalization method
7. Derive the capitalization rate

8. Apply the capitalization rate to net income to arrive at a value estimate

In all of these steps the assessor must be aware of what is happening in the market. All of the information needed for the income approach is either obtained or verified by what the assessor finds in the marketplace.

A. Estimation of Revenue and Expenses

The market rents obtained and verified in the market place are used to estimate the potential gross income of the subject property as shown in Exhibit 7.

A minimal vacancy rate of 1 percent is used to cover revenue lost due to turnover and collection losses.

Actual and projected operating expenses for the subject, a review of the Institute of Real Estate Management (IREM) operating expense ratios and our general knowledge of the operation of apartment buildings suggests an operating expense ratio of 45 percent of potential gross revenue including real estate taxes which are estimated to be 20 percent of gross

The net operating income for the subject property is \$110,780. See Exhibit 8 for a break-down of estimated operating expenses.

B. Financing Assumptions and Equity Requirement

The debt cover ratio is preferred over the loan to value ratio because the lender's first concern is to cover the debt

ESTIMATED OPERATING EXPENSES
Adjusted to Market Conditions

=====			
		Actual	Market
Administrative Expenses			
5% of gross revenue	[1]	\$27,778	\$10,173
Maintenance			
6% of gross revenue		12,651	12,651
Utilities			
10% of gross revenue	[2]	20,589	20,589
Property Insurance			
1.4% of gross revenue		2,836	2,836
Payroll Taxes & Insurance			
2.2% of gross revenue		<u>4,420</u>	<u>4,420</u>
Total Operating Expenses		\$68,274	\$50,669
Before Real Estate Taxes		(34% of gross before R.E. taxes)	(25% of gross before R.E. taxes)

[1] It is assumed that a market project would not have the intensiveness of management needed by the elderly.

Gross revenue is assumed to be \$203,460, based upon current market rents.

[2] has been advised by WHFA that \$20,589 is not an adequate allowance for utilities. The elderly use more heat than the typical renter and since the units are assumed to be market-rate units, no adjustment is made in the current utility costs estimate.

service with an adequate cash flow from operations. A debt cover ratio of 1.10 best replicates the current lender expectations for apartment projects.

A 12.5 percent interest rate for a 25 year is a most optimistic rate as of January 1, 1983, given the risk of a 1.1 debt cover requirement.

A modest return of 2 percent cash-on-cash expected in the market is a proxy for the tax shelter, inflation hedge, and other benefits, tangible and intangible, that the investor expects from purchase of the property. He would expect a higher cash-on-cash return immediately if these other benefits were not available.

Exhibit 9 combines the debt and equity requirements to arrive at an estimate of value of \$1,300,000, including income from refrigerators and stoves. The real estate value would be \$1,260,000.

INCOME APPROACH ESTIMATE OF VALUE

UNIT SIZE (SF)	RENT/SF/MO	MONTHLY RENT PER UNIT	NUMBER OF UNITS	ANNUAL REVENUE
535 - 1 bdrm	.560	\$300	3	\$ 10,800
540 - 1 bdrm	.555	300	38	136,800
543 - 1 bdrm	.555	300	6	21,600
550 - 1 bdrm	.555	305	1	3,660
561 - 1 bdrm	.555	310	2	7,440
646 - 1 bdrm	.49	315	3	11,340
706 - 2 bdrm	.46	325	2	7,800
771 - 2 bdrm	.43	335	1	<u>4,020</u>
POTENTIAL GROSS REVENUE				\$203,460
Less Vacancy @ 1%				<u>(2,030)</u>
Effective Gross Revenue				201,430
Operating Expenses (45% of gross)				<u>(90,650)</u>
Net Operating Income				\$110,780
Income Available for Debt Service (Assume debt cover ratio of 1.10)				100,700
Mortgage available @ 12.5% interest, 25 year term (constant = .13084)				\$769,700 =====
Cash Throw-Off (\$110,780 - \$100,700)				\$ 10,080
Cash on Cash Rate = 2%				
Equity Available				<u>504,000</u>
Value				\$1,273,700
Say				\$1,300,000 =====

V. THE COST APPROACH

The cost approach, based upon the principle of substitution, assumes a prudent, knowledgeable buyer will pay no more for a property than the cost of producing a comparable substitute. Although the cost approach is the least preferred method by the Wisconsin Courts, the cost analysis can serve as a rough check against the estimates of value derived via the income and the market comparison approaches.

The basic steps in the cost approach are:

1. Estimating the land value.
2. Estimating reproduction cost or replacement cost new as appropriate.
3. Estimating accrued depreciation, and functional/economic obsolescence, if any.
4. Subtract the accrued depreciation and loss in value due to obsolescence from the estimate of the cost new to arrive at the present value of the improvements.
5. Add the present value of the improvements to the estimated land value for the total property value.

To clarify the definition of replacement cost and reproduction cost and to establish the proper cost analysis methodology for a rehabilitated structure

the following quote is offered:

Reproduction cost represents the cost of an exact replica of the structure...This is not necessary when using replacement cost because the functional obsolescence is eliminated by using current materials, design and workmanship. [1]

The appraisal issue is the incompleteness of the cost approach used. The Assessor used a blend of the replacement cost new and the reproduction cost new. Some adjustment was made for the obsolete ceilings heights of 10, 12, and 16 feet found in the existing buildings which were rehabilitated. The Assessor solved for cost new using 10 foot ceilings throughout the building, both for the old and new wings. The wing built new in 1980-81 represents the more functional and new standard for ceiling heights of 9 and 8 feet; therefore, to eliminate all functional utility due to excessive ceiling heights in solving for replacement cost new, the Assessor should have used no more than 9 feet as the average ceiling height throughout for a new building designed to replace the old. If the Assessor was solving for reproduction cost new he should have determined the cost of a replica of the existing buildings and then deducted for the functional utility inherent in the excessively high ceilings.

The major flaw in the cost approach used by the Assessor is the use of the 48,782 square feet to solve for the replacement cost of a 56-unit apartment building which has a net leaseable area of 31,176 square feet. This represents a building efficiency ratio of 64 percent, a ratio well below industry norms for apartment buildings. a 36-unit apartment building, considered to be very comparable to the

subject property has a building efficiency ratio of 88 percent with a net leaseable area of 23,080 square feet and a gross building area of 26,140 square feet. Even with a less efficient ratio of 80 percent, would need a gross building area of only 38,970 square feet to accommodate 56 units with a total net leasable area of 31,176 square feet.

Because the linking of the buildings into one apartment building required excessive corridor space and stairwell and because HUD required a community room for the elderly, the present design of the rehabilitated building is not efficient and would not be replaced with the same design to achieve the same utility.

Assessor's reproduction/replacement cost new as the base, several adjustments must be done to arrive at an accurate and reliable estimate of the present value . To build 56 apartment units with a net leaseable area of 31,176 square feet or an average of 557 square feet per unit, the structure would need to have 38,970 square feet of gross building area to achieve a building efficiency ratio of at least 80 percent, a generous estimate. At 85 percent efficiency the gross building area would need to be only 36,678 square feet and if the efficiency of were to be matched, the gross building area would need to be only 35,427 square feet.

The following adjustments must be made to the Assessor's reproduction value new of \$1,617,276:

Functional Obsolescence

Low Building Efficiency Ratio

Cost to build a 48,782 SF building @ \$33.15/SF =	\$1,617,276	
Cost to build a 38,970 SF building @ \$33.15/SF =	<u>1,219,856</u>	
Functional obsolescence due to inefficient building		\$ 325,420

Excessive ceiling heights [1]

38,970 SF * 10' ceilings =	389,700	cubic	feet
38,970 SF * 9' ceilings =	<u>350,730</u>	"	"
Excess space due to ceiling heights	38,970	cubic	feet
Functional obsolescence @ \$1.50/square feet of excess space	<u>\$1.50</u>		\$ 58,185

[1] A building with costs of \$33.15 per square foot with 10 foot ceilings would have a cost per square foot of \$3.32. If the ceilings were reduced to 9', the cost savings, based upon \$3.32 per square feet would be \$129,380. Because the marginal utility of the next square foot is less than the average cost per square foot, an allowance of \$1.50 per square foot is used.

Physical Depreciation

Cost to build a 38,970 SF
building @ \$33.15/SF = \$1,291,856

Overall depreciation of
10% used by the Assessor -----10

\$__129,186

Total Deductions for
Accrued Depreciation and
Functional Obsolescence

\$ 512,791

Present Value of
Improvements

\$1,617,276 - \$512,791 =

\$1,104,485

or a \$28.34/SF for a 38,970 SF
building

SAY

\$1,104,500

To complete the value estimate using the cost approach, the present value of the building, and the site improvements are added to the land value.

Present value of the building \$1,104,500

Present value of site improvements
\$32,00 less 10% depreciation

28,800

Land Value

____166,700

Total Value of Land and Building

\$1,300,000

The cost approach theoretically represents the maximum value a buyer might pay to produce a comparable substitute. It should only be used as a check on the value estimates which take into consideration available financing, consumer preferences, and other factors which shape buyer behavior.