REAL ESTATE CENTER

Evaluating an Income Property

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Evaluating an Income Property is a revision of *Evaluating an Income Property Syndication,* report 471 published in April 1985. This report reflects changes caused by the 1986 Tax Reform Act.

Summary

An evaluation of an income property involves the analysis of expected operations and expected appreciation—these are the determinants of the property's expected return. Investors who are considering an investment in income-producing real estate can collect the market data necessary to analyze a property's expected operations and potential for appreciation. Such analysis requires information about current rental rates, vacancy rates and operating expenses; these data can be used to test the projections being made by the offerer of the property, to forecast after-tax cash flow from operations and the expected sales price and to calculate the expected rate of return.

Some investors may be considering income-producing real estate as a means of diversifying their portfolios. They may be considering an investment property such as a duplex, small apartment, office or retail building. They may be considering investing alone or with others.

Whichever property type they choose and whether or not the investor is operating alone or with others, an analysis of the particular property provides essential information. Such an analysis will answer questions about the project's expected rate of return.

As these questions are asked, the investor necessarily will be addressing questions about risk. Risk exists in all projects, but some are more risky than others. The degree of risk depends on the difference between expected and actual outcomes. If the expected outcome is guaranteed, then the risk is negligible; if there is great uncertainty about the expected outcome, then the risk is high. For a single project, the best way to reduce risk is to improve the analysis of the variables that produce the project's expected rate of return. In this way, the spread between expected and actual outcomes can be minimized.

Expected Rate of Return

The expected rate of return from a real estate investment is determined by the expected benefits of the investment—after-tax cash flow and appreciation—and the cash required to purchase the property. A proper calculation of the rate of return involves the use of present value techniques so that the rate will reflect the timing of the cash inflows and outflows. Equally important, however, is the need for good data. Expected rate of return means nothing if the projected costs and benefits used in the calculation are not sound.

In this report, the basic factors that contribute to the project's economic success are considered. There is particular emphasis on the approach that a non-professional investor, who does not have access to a market research study or a project financial analysis, can take. After investment analysis techniques are discussed, the techniques will be applied to a hypothetical apartment building, a typical income-property investment.

Analysis of Operations

Any property must be a market success if it is to be a good investment. Therefore, the investor should ask this fundamental question: "Given the project's location and quality, will a high occupancy level be achieved at the estimated rental rate?"

Estimated rental rates and vacancy rates should be checked by comparing them with the current rents and vacancy rates of similar properties in the area. This can be done by checking with local brokers, apartment complexes and newspapers. If an annual rent increase is projected, the investor can calculate the rate of growth and evaluate its reasonableness by comparing it with the projected rate of inflation and the rate of past rental increases. **The investor should be aware that overstating the expected rate of growth of rents will substantially overstate the expected rate of return.** If no increase in rents is projected, this should be kept in mind as the investment analysis proceeds, particularly when evaluating the projected sales price. When no rent increase is expected, rising property values may be difficult to justify. On the other hand, if no rent increase is indicated for reasons of conservatism, the expected rate of return may be understated.

If it is concluded that the property is well located and the rent schedules and vacancy rates are reasonable in relation to the current and future demand for and supply of space, then the other operating projections for the expected holding period can be evaluated. Generally this can be done best by using the following formula to calculate the operating expense ratio:

$$\frac{\text{Operating Expenses}}{\text{Gross Rental Income}} = \text{Operating Expense Ratio}$$

This ratio can be compared with the operating expense ratio for similar properties. Typical operating expense ratios vary according to property type and geographical area so local brokers are a good source for this information. Calculating the rate at which operating expenses are projected to increase also provides insight into their adequacy as this growth rate can be compared with the inflation rate.

In some instances, the operating expenses may be "stopped," that is, the lease agreement includes a provision requiring the tenant to pay all operating expenses in excess of a specified amount. As a result, the developer knows that operating expenses will be limited and can use this maximum amount in the calculation. Triple net leases also are viewed favorably by lenders because such leases require the tenant to pay all operating expenses. If the tenant is a quality tenant, the income stream from a triple net leased property is highly predictable.

When total operating expenses are deducted from net rental income (gross rents less vacancies), the remainder is called net operating income (NOI). NOI is very important because it represents the pure income stream from the property before consideration of financing, depreciation or federal income tax. Generally, NOI projections are characterized by an increasing trend over time. This is because of the frequently made assumptions that rents will increase over time and operating expenses will have a constant relationship to rent. This assumption should be tempered by the likelihood that operating

expenses may increase as the property ages.

Estimating Before-Tax Cash Flow from Operations

Before-tax cash flow, sometimes called cash throw-off, is calculated by subtracting the mortgage payment from NOI. It is a measure of the cash remaining after all operating expenses and debt service have been paid from the expected rent. **Thus, before-tax cash flow is dependent on location, supply and demand for space, good management and financing terms.**

A useful ratio is the break-even occupancy ratio.

$$\frac{\text{Operating Expenses + Mortgage Payment}}{\text{Gross Rental Income}} = \text{Break-even Occupancy Ratio}$$

This ratio measures the occupancy level required to collect sufficient revenue to cover operating expenses and debt service. The lower the break-even occupancy required, the lower the risk. **Because the expected vacancy rate is derived from the market, it can be compared directly with break-even occupancy to indicate risk.** For example, with an expected vacancy of 5 percent and 80 percent occupancy required to break even, the project provides a comfortable safety margin.

The debt service coverage ratio is also useful. It is calculated as follows:

$$\frac{\text{Net Operating Income}}{\text{Annual Mortgage Payment}} = \text{Debt Service Coverage Ratio}$$

The debt service coverage ratio indicates the allowable decline in NOI without endangering the annual mortgage payment. Many lenders require a debt service coverage ratio of at least 1.25 to provide a margin of safety. With a ratio of 1.25, the project's estimated NOI will exceed the annual mortgage payment by 25 percent. Put another way, the NOI can decline by 20 percent before there will be insufficient cash to meet the mortgage payment. If the first year's NOI estimate is achieved and the future NOI is expected to be greater than the first year, the loan would appear to be an excellent one because the margin of safety will improve over time.

Applying these techniques to a typical investment property such as an apartment building will illustrate their use. Table 1 presents the original data supplied by the party offering the property. These data were used to estimate before-tax cash flow; these estimates are presented in Table 2a with the suggested ratios. The before-tax cash flow estimates presented in Table 2b result from the investor altering two of the offerer's assumptions. The changed assumptions are an increase in the vacancy rate from 0 to 5 percent and an increase in the operating expense ratio from 16 percent to 25 percent. Both of these could be based on information gathered from local brokers.

Estimating After-Tax Cash Flow from Operations

After-tax cash flow from operations is estimated by deducting the expected tax liability from before-tax cash flow. Taxable income is determined as follows:

Gross Income, Actual
- Operating Expenses
- Mortgage Interest Expense
- Depreciation Expense

Taxable Income

Tax liability exists when there is positive taxable income. If taxable income is zero or negative, there is no tax liability; the loss is carried forward until it is offset by positive taxable income. When this is the case, after-tax cash flow is equal to before-tax cash flow.

Tables 3a and 3b present the calculation of after-tax cash flow from operations. Table 3a reports estimates of annual

Table 1. Original Offering Data

Project Cost:		
Land	$	300,000
Building		2,500,000
Total		2,800,000
Project Financing		
Loan amount	$	2,220,000
Interest rate		11 %
Amortization period (years)		30
Initial Equity Investment	$	580,000
Holding Period: 5 years		
Operating Data		
Gross rent - year one	$	410,400
Vacancy rate		
Year one		0 %
Year two		0 %
Year three		0 %
Year four		0 %
Year five		0 %
Operating expense - year one	$	64,790
Growth Rates		
Gross rent		8 %
Operating expense		7 %
Resale Assumptions		
Resale price	$	4,509,428
Resale expense rate		5 %
Depreciation Method: Residential		
Investor's marginal tax rate		28 %
Investor's capital gains tax rate		28 %

Table 2a. Calculation of Before-Tax Cash Flow and Ratios Using Original Offering Data

Year	Gross Rent	Vacancy	Net Rent	Operating Expense	Net Operating Income	Mortgage Payment	Before-Tax Cash Flow
1	410,400	0	410,400	64,790	345,610	255,355	90,255
2	443,232	0	443,232	69,325	373,907	255,355	118,552
3	478,691	0	478,691	74,178	404,512	255,355	149,158
4	516,986	0	516,986	79,371	437,615	255,355	182,261
5	558,345	0	558,345	84,926	473,418	255,355	218,064

Ratios			
Year	Debt Coverage	Break-even Occupancy	Operating Expense
1	1.35	0.78	0.16
2	1.46	0.73	0.16
3	1.58	0.69	0.15
4	1.71	0.65	0.15
5	1.85	0.61	0.15

Table 2b. Calculation of Before-Tax Cash Flow and Ratios Using Adjusted Offering Data

Year	Gross Rent	Vacancy	Net Rent	Operating Expense	Net Operating Income	Mortgage Payment	Before-Tax Cash Flow
1	410,400	20,520	389,880	102,600	287,280	255,355	31,925
2	443,232	22,162	421,070	109,782	311,288	255,355	55,934
3	478,691	23,935	454,756	117,467	337,289	255,355	81,935
4	516,986	25,849	491,137	125,689	365,447	255,355	110,092
5	558,345	27,917	530,427	134,488	395,940	255,355	140,585

Ratios			
Year	Debt Coverage	Break-even Occupancy	Operating Expense
1	1.13	0.87	0.25
2	1.22	0.82	0.25
3	1.32	0.78	0.25
4	1.43	0.74	0.24
5	1.55	0.70	0.24

after-tax cash flow from operations for the five-year holding period using the offering data; there is a positive taxable income and a tax liability each year. The after-tax cash flows from operations in Table 3b were calculated using the adjusted operating projections. With a 5 percent vacancy estimate and a 25 percent operating expense ratio, the project is expected to produce a negative taxable income in years one and two. In these two years, there is no tax liability and the losses are carried forward. In the third and fourth years, the positive taxable income is offset by the losses carried forward from years one and two and, again, there is no tax liability. In year five, the positive taxable income is partially offset by the accumulated losses carried forward; the investor is taxed on the balance. Were the investment to be continued beyond year five and if there were a positive taxable income in those years, the income in those years would be fully taxed.

Evaluating the Project's Current and Future Market Value

The project's current and future market value are of particular concern because significant appreciation often is required to produce a satisfactory rate of return. By carefully examining the project's current market value (purchase price) and its expected future market value (projected sales price), the investor can estimate the appreciation potential of the property and the contribution of this component to the project's overall rate of return.

These evaluations can use the projected operating statements as there is a reasonably constant relationship between NOI and the value of the property. When this relationship is expressed as

$$\frac{\text{Net Operating Income}}{\text{Value}}$$

the result is known as the overall capitalization rate. When it is expressed as

$$\frac{\text{Value}}{\text{Net Operating Income}}$$

the result is known as the NOI multiplier. Using the purchase price and the estimated NOI for the first "normal" year—the year in which expected occupancy will be obtained—the overall capitalization rate and the NOI multiplier can be calculated. By comparing these with typical ratios for similar properties, the reasonableness of the price that the investor is paying for the property can be evaluated. For instance, if the property under consideration is offered for sale at 12 times its NOI while typical properties of a similar nature sell for 10 times their NOI, the investor should find the reason for this high price.

In Table 4a, the overall capitalization rate and the NOI multiplier are calculated from the offering data whereas the calculations in Table 4b are based on the revised operating data. When the offering data are used, the purchase price of the property is much "lower" than when the revised data are used. A price of 8.10 times the NOI is cheaper than 9.75 times the NOI. Once the potential investor decides the NOI amount anticipated, and the appropriate NOI multiplier for this type of property in this market is ascertained, then an evaluation of the purchase price can be made. For example, assuming the investor decides the appropriate NOI multiplier is 9 and is comfortable with the revised NOI, the appropriate price for the property would be $2,585,520 (9 x $287,280). At this point, the investor would need to determine whether or not the special qualities of the property justify the higher asking price of $2,800,000. A similar procedure would be used in applying the overall capitalization rate to the data.

Table 3a. Calculation of After-Tax Cash Flow from Operations Using Original Offering Data

Year	Net Operating Income	Depreciation	Interest	Taxable Income
1	345,610	87,000	244,200	14,410
2	373,907	91,000	242,973	39,934
3	404,512	91,000	241,611	71,901
4	437,615	91,000	240,099	106,516
5	473,418	91,000	238,421	143,997

Year	Taxable Income	Loss Carried Forward	Net Carry Forward	Net Taxable Income	Tax Due
1	14,410	0	0	14,410	4,035
2	39,934	0	0	39,934	11,181
3	71,901	0	0	71,901	20,132
4	106,516	0	0	106,516	29,824
5	143,997	0	0	143,997	40,319

Year	Before-Tax Cash Flow	Less Tax Due	After-Tax Cash Flow
1	90,255	4,035	86,221
2	118,552	11,181	107,371
3	149,158	20,132	129,025
4	182,261	29,824	152,436
5	218,064	40,319	177,744

Table 3b. Calculation of After-Tax Cash Flow from Operations Using Adjusted Offering Data

Year	Net Operating Income	Depreciation	Interest	Taxable Income
1	287,280	87,000	244,200	(43,920)
2	311,288	91,000	242,973	(22,685)
3	337,289	91,000	241,611	4,678
4	365,447	91,000	240,099	34,348
5	395,940	91,000	238,421	66,519

Year	Taxable Income	Loss Carried Forward	Net Carry Forward	Net Taxable Income	Tax Due
1	(43,920)	43,920	43,920	0	0
2	(22,685)	22,685	66,605	0	0
3	4,678	0	61,926	0	0
4	34,348	0	27,578	0	0
5	66,519	0	0	38,940	10,903

Year	Before-Tax Cash Flow	Less Tax Due	After-Tax Cash Flow
1	31,925	0	31,925
2	55,934	0	55,934
3	81,935	0	81,935
4	110,092	0	110,092
5	140,585	10,903	129,682

Table 4a. Evaluating Current Value Using the Offering Data

Net Operating Income / Purchase Price	=	345,610 / 2,800,000	=	0.12	=	Capitalization Rate
Purchase Price / Net Operating Income	=	2,800,000 / 345,610	=	8.10	=	NOI Multiplier

Table 4b. Evaluating Current Value Using the Adjusted Offering Data

Net Operating Income / Purchase Price	=	287,280 / 2,800,000	=	0.103	=	Capitalization Rate
Purchase Price / Net Operating Income	=	2,800,000 / 287,280	=	9.75	=	NOI Multiplier

Likewise, the projected selling price at the end of the five-year holding period can be estimated as follows:

NOI (year of sale) x NOI Multiplier
= Projected Sales Price

NOI (year of sale) ÷ Overall Capitalization Rate
= Projected Sales Price

The projected selling price should reasonably correspond to the purchase price calculated with the NOI multiplier or the overall capitalization rate. For example, if no rent increase is projected, this approach will make it difficult to justify an increase in the project's value over time. As was noted previously, however, annually increasing rents is a common assumption. Furthermore, a project that has operated successfully for several years may be considered less risky than a newer project. In this case, a lower capitalization rate or a higher NOI multiplier may be used to estimate the sales price than for newer projects.

Tables 5a and 5b illustrate this approach to estimating future value. Assuming that the investor has chosen 10 percent as an appropriate overall capitalization rate, the offerer's projected NOI produces an expected resale price of $4,734,180 as reported in Table 5a. However, the expected resale price based on the revised NOI is $3,959,400 as reported in Table 5b. These estimates are then compared with the projections made by the offerer—in this case the offerer is projecting a resale price of $4,509,428 as indicated in Table 1. Tables 5a and 5b also present similar calculations using the NOI multiplier approach.

A second approach to evaluating the projected resale price is to calculate the annual compound rate of growth necessary for the property to appreciate to the expected resale price. Does this rate of growth seem reasonable when compared to recently experienced growth rates of similar properties in the area? And, is it reasonable to assume that this rate of appreciation will continue in the market? Again, local brokers are a good source for obtaining this information.

The following growth rate results from analyzing the offering data in Table 1:

Purchase Price	Expected Resale Price in Five Years	Annual Growth Rate
$2,800,000	$4,509,428	10 percent

Table 5a. Estimating Resale Price Using the Offering Data

Net Operating Income / Capitalization Rate	=	473,418 / 0.10	= 4,734,180	= Projected Resale Price
Net Operating Income x NOI Multiplier		473,418 x 10.00		
Projected Resale Price		4,734,180		

Table 5b. Estimating Future Sales Price Using the Adjusted Offering Data

Net Operating Income / Capitalization Rate	=	395,940 / 0.10	= 3,959,400	= Projected Resale Price
Net Operating Income x NOI Multiplier		395,940 x 10.00		
Projected Resale Price		3,959,400		

Suppose, however, that an annual growth rate of 6 percent is believed to be more realistic than 10 percent. If this rate is applied to the purchase price of $2,800,000, the following results are obtained:

Purchase Price	Expected Resale Price in Five Years	Annual Growth Rate
$2,800,000	$3,747,032	6 percent

Finally, if the property's current value is only $2,585,520 (based on a NOI of $287,280 and a NOI multiplier of 9) and its value increases at 6 percent per year, the following expected resale price is obtained:

Purchase Price	Expected Resale Price in Five Years	Annual Growth Rate
$2,585,520	$3,459,426	6 percent

Obviously, there is more to the growth rate than its calculation. **If the original purchase price is too great, the investor must expect a smaller increase in the project's value because a future buyer cannot be expected to pay too much for the property also. Thus, a correct growth rate must be applied to the appropriate original value.**

Suppose the offerer made no projection of the future resale price. One can be made using the NOI multiplier or the overall capitalization rate or by using an appropriate compound growth rate. When a reasonable estimate of the future resale price is determined, the after-tax resale proceeds are estimated by subtracting the sum of estimated selling expenses, the unpaid mortgage balance at the time of the sale and the capital gains tax on the sale from the future resale price. Examples of these calculations are presented in Table 6. The resale prices are based on 6 percent and 3 percent growth rates.

Estimating the Rate of Return

The expected rate of return from the investment can be calculated after completing the estimates of annual after-tax cash flow from the property and the proceeds from the resale of the property. **While the rate of return results from the total of annual after-tax cash flows and resale proceeds, the relative importance of each source should be noted.** For example, a project's expected rate of return may be satisfactory even though after-tax cash flow is small. In fact, the annual

Table 6. Calculation of After-Tax Cash Flow from Sale Using Adjusted Offering Data

	6% Growth	3% Growth
Resale Price	3,747,032	3,245,967
- Selling Expense	187,352	162,298
- Mortgage Balance	2,150,531	2,150,531
- Capital Gains Tax	338,990	205,707
After-Tax Sale Proceeds	1,070,158	727,430

after-tax cash flow may be insufficient to recover the investment during the projected holding period. Because of this, the investor must carefully evaluate the projected appreciation and after-tax resale proceeds. If the appreciation does not materialize, the rate of return may be disappointing.

Cash-on-Cash Yield

The following ratio often is used in estimating the rate of return of an income property:

$$\frac{\text{Annual After-Tax Cash Flow}}{\text{Initial Equity Investment}} = \text{Cash-on-Cash Yield}$$

However, it is not a satisfactory measure of the rate of return, as it only indicates the percentage of the original investment that is recovered in cash each year. Until the equity investment has been recovered, the rate of return is negative. And, in many cases the rate of return will be negative without appreciation. In Table 7, for example, the cash-on-cash yield is calculated using each of the first-year after-tax cash flows from Tables 3a and 3b. In each case, the cash-on-cash yield is positive; however, in the case of 3b, the sum of the after-tax cash flows from operations for the total five-year period is less than the required cash investment.

Present Value Analysis

Present value analysis brings together all the variables that generate the project's rate of return. Specifically, this analysis may be used to estimate the project's internal rate of return. This estimate is used in the overall process of making investment decisions; it may also be used to perform sensitivity analyses. For example, how will the project's rate of return be affected by differing rents, operating expenses, financing arrangements and appreciation expectations?

The internal rate of return is often used as a measure of the profitability of an investment because it is based on both the after-tax cash flows and the after-tax resale proceeds. The internal rate of return on equity is defined as the discount rate which equates the present value of the after-tax cash flows from operations and the after-tax sale proceeds with the initial equity investment. For the purpose of calculating the internal rate of return, the equity investment is the total amount paid by the investor, including fees. (Note that an investor may be assessed a number of fees, some of which must be paid up front. These fees may include sales commissions, legal and accounting expenses, and organizational and mortgage-finding fees. Investors should determine which fees must be paid up front, keeping in mind that greater up-front fees mean less money left for buying property.)

Table 7. Calculation of the Cash-on-Cash Yield

	3.a	3.b
After-Tax Cash Flow / Equity Investment	86,221 / 580,000	31,925 / 580,000
= Cash-On-Cash Yield	0.15	0.06
After-Tax Cash Flow		
Year 1	86,221	31,925
Year 2	107,371	55,934
Year 3	129,025	81,935
Year 4	152,436	110,092
Year 5	177,744	129,682
Total	652,797	409,568
- Investment Required	580,000	580,000
Benefits > Cost	72,797	(170,432)

Table 8. Summary of Internal Rate of Return Calculations

	Offering Data	Adjusted Offering Data
6 % Appreciation	29.89%	23.06%
3 % Appreciation	24.02	16.48

Using the computer program, the internal rate of return on the investor's initial equity was calculated for the example apartment project using the original offering data and the revised data. Each set of data was evaluated using differing property growth rate assumptions. The results are presented in Table 8. They indicate that the internal rate of return for this investment is greatly affected by both the forecasts of the operating data and the expected rate of appreciation. Thus, the expected rate of return from the investment is affected by the expectations about operating performance.

Conclusion

A real estate investment may be a good way to diversify a portfolio, but the prudent investor will want to analyze the data provided by the offerer of the property. **One of the prime benefits of gathering the data required for analysis is what is learned about the investment under consideration. Estimating the rate of return may be secondary to the knowledge gained in gathering the information.**

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Appendix

Appendix

Holding period for property	5 years	
Resale expense rate	5%	
Annual gross income		$410,400
Gross income annual growth rate	8%	
Vacancy rate	5%	
Annual miscellaneous income		$0
Miscellaneous income annual growth rate	0%	
Annual operating expense		$102,600
Operating expenses annual growth rate	7%	
Investor's first year tax rate	28%	
Investor's last year tax rate	28%	

Depreciable assets		$2,500,000
Land cost		$300,000
Total assets (purchase price)		$2,800,000
Annual growth rate for combined assets	3%	
Total debt		$2,220,000
Initial equity (down payment)		$580,000

You requested a 5-year projection period. The information provided is based on a sale in any year up to and including the final year of the projection period. A sale that is assumed to take place prior to the final year of the projection would provide an investor with periodic income and resale proceeds up to the year of sale, not through the entire projection period. Consequently, all computations shown beyond the assumed year of sale would be irrelevant.

Description of Depreciable Assets

Asset #	Depreciation Index	Acquisition Cost ($)	Property Type
1	5	2,500,000	1

Depreciation Index Table

Index	Life
1	3-year straight line
2	5-year straight line
3	7-year straight line
4	10-year straight line
5	27 1/2-year straight line
6	31 1/2-year straight line
7	40-year straight line
8	3-year accelerated
9	5-year accelerated
10	7-year accelerated
11	10-year accelerated

Property Type Table

Index	Type
1	Residential buildings
2	Non-residential buildings
3	Personal property

Mortgage Descriptions(s)

Loan #	Principal	Variable Rate? (Y or N)	Initial Interest (%)	Payments Per Year	Term (Years)	Balloon Year (0 if none)	Interest Only (Y or N)
1	2,220,000	N	11.000	1	30	0	N

Year	Potential Gross Income	Vacancy Allowance	Misc. Income	Operating Expenses
1	410,400	20,520	0	102,600
2	443,232	22,162	0	109,782
3	478,691	23,935	0	117,467
4	516,986	25,849	0	125,689
5	558,345	27,917	0	134,488

Year	Net Operating Income	Interest Expense	Principal Amortization	Before-Tax Cash Flow
1	287,280	244,200	11,155	31,925
2	311,288	242,973	12,382	55,934
3	337,289	241,611	13,744	81,935
4	365,447	240,099	15,255	110,093
5	395,940	238,421	16,934	140,585

Year	Depreciation Expense	Taxable Income	Passive Loss Used	Passive Loss Carryover	Tax Paid (-Savings)	After-Tax Cash Flow
1	87,000	-43,920	0	43,920	0	31,925
2	91,000	-22,685	0	66,605	0	55,934
3	91,000	4,678	-4,678	61,926	0	81,935
4	91,000	34,348	-34,348	27,579	0	110,093
5	91,000	66,519	-27,579	0	10,903	129,682

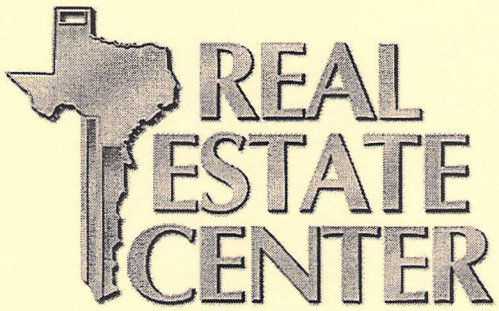
Sale Year	Selling Price Before Expenses	Selling Expenses	Selling Price After Expenses	Mortgage Balance	Adjusted Tax Basis
1	2,884,000	144,200	2,739,800	2,208,846	2,713,000
2	2,970,520	148,526	2,821,994	2,196,464	2,622,000
3	3,059,636	152,982	2,906,654	2,182,720	2,531,000
4	3,151,425	157,571	2,993,853	2,167,465	2,440,000
5	3,245,967	162,298	3,083,669	2,150,532	2,349,000

Sale Year	Passive Loss Released	Taxable Gain on Sale	Tax on Gain (-Savings)	After-Tax Resale Proceeds	Internal Rate of Return on Initial Equity
1	43,920	-17,120	-4,794	535,748	-2.13%
2	66,605	133,389	37,349	588,181	8.17%
3	61,926	313,727	87,884	636,090	12.28%
4	27,579	526,275	147,357	679,031	14.73%
5	0	734,669	205,707	727,430	16.48%

Sale Year	Overall Rate of Return	Debt Service Coverage Ratio	Before-Tax Cash Flow to Initial Equity	After-Tax Cash Flow to Initial Equity
1	10.260%	112.502%	5.504%	5.504%
2	10.794%	121.904%	9.644%	9.644%
3	11.355%	132.087%	14.127%	14.127%
4	11.944%	143.114%	18.981%	18.981%
5	12.564%	155.055%	24.239%	22.359%

Year	Gross Rent Multiplier	Break-Even Ratio
1	6.823	87.221%
2	6.507	82.380%
3	6.206	77.884%
4	5.918	73.705%
5	5.644	69.821%

	Net Present Value of Equity for Discount Rates of					
Year	5%	10%	15%	20%	25%	30%
1	-39,359	-63,933	-86,371	-106,939	-125,861	-143,328
2	34,636	-18,651	-65,195	-106,094	-142,226	-174,309
3	121,395	34,712	-37,832	-99,029	-151,034	-195,525
4	221,131	95,790	-4,887	-86,579	-153,486	-208,757
5	334,060	164,202	33,011	-69,590	-150,759	-215,659



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