

Property Assumptions

Property and purchase assumptions

Property size	135,000	sf
Rent	\$4.00	psf
Vacancy allowance	2.50%	
Operating expense ratio	0.00%	
Purchase price	\$4,500,000	
Acquisition costs	2.00%	
Date property will be put in service	1/1/2006	

Loan assumptions

Maximum LTV ratio	70.00%	
Minimum debt-coverage ratio	1.25	
Mortgage interest rate	7.25%	
Amortization length	25	years
Loan term	7	years
Loan fees	1.50	points

Depreciation assumptions

Depreciable life	39.0	years
Tax assessor building value	\$3,000,000	
Tax assessor land value	\$1,000,000	
Appraised building value	\$3,500,000	
Appraised land value	\$1,500,000	

Tax assumptions

Ordinary income tax rate	28.00%
Capital gains tax rates	15.00%
Depreciation recapture tax rate	25.00%

Sale assumptions

Cap rate at sale	11.00%
Sale costs	4.00%
Date property will be sold	12/31/2010
Year 6 NOI	\$526,500

Operating cash flow assumptions

ATCF in year 2	\$195,010
ATCF in year 3	\$193,963
ATCF in year 4	\$192,839
ATCF in year 5	\$190,599

Other assumptions

Discount rate	13.00%
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Pro Forma Operating Statement (First Year)

Potential gross income	\$	540,000	= 135,000 sf x \$4.00 psf
– Vacancy & collection @ 2.50%	\$	13,500	
Effective gross income	\$	526,500	
– Operating expenses @ 0.00%	\$	-	
Net operating income	\$	526,500	
– Annual debt service	\$	273,221	
Before-tax cash flow	\$	253,279	
– Taxes from operations	\$	58,325	
After-tax cash flow	\$	194,954	

Capitalization rate	11.70%	= NOI ÷ purchase price
Cash-on-cash return	18.76%	= BTCF ÷ (purchase price – loan amount)

Mortgage Calculations

Property value	\$4,500,000	
Maximum loan-to-value ratio	70.00%	
LTV-based maximum loan amount	\$ 3,150,000	
Net operating income	\$ 526,500	
÷ Minimum debt coverage ratio	1.25	
Maximum annual debt service	\$ 421,200	
Maximum monthly payment	\$ 35,100	= Maximum ADS ÷ 12
DCR-based maximum loan amount	\$ 4,856,069	P/Y = 12, N = 25 x 12, I = 7.25%, PMT = –35,100, FV = 0
Maximum loan amount	\$ 3,150,000	= Minimum of LTV- and DCR-based calculations
Monthly payment	\$ 22,768	P/Y = 12, N = 25 x 12, I = 7.25%, PV = –3,150,000, FV = 0
Annual debt service	\$ 273,221	Monthly payment x 12
Debt coverage ratio	1.93	= NOI / ADS
Mortgage constant	8.67%	= ADS / loan amount
Total loan fees	\$ 47,250	= \$3,150,000 x 1.50 / 100

Tax Calculations

Taxable Income Calculations (First Year)

Net operating income	\$	526,500	
– Depreciation allowance	\$	84,591	
– Interest expense	\$	226,854	P1 = 1, P2 = 12
– Amortization expense	\$	6,750	
Taxable income	\$	208,305	
x Tax rate		28.00%	
Tax	\$	58,325	

Depreciation Calculations

Assessor's building value ratio	75.00%	= \$3,000,000 / (\$3,000,000 + \$1,000,000)	
Appraiser's building value ratio	70.00%	= \$3,500,000 / (\$3,500,000 + \$1,500,000)	
Purchase price	\$	4,500,000	
– Acquisition costs at 2.00%	\$	90,000	
Initial basis	\$	4,590,000	
x Percent of value in building		75.00%	Maximum of assessor and appraiser ratios
Depreciable basis	\$	3,442,500	
÷ Depreciable life		39.0	
Annual depreciation allowance	\$	88,269	Depreciation allowance when held full year
First year depreciation allowance	\$	84,591	Normal allowance × 11.5 ÷ 12
Last year depreciation allowance	\$	84,591	Normal allowance × 11.5 ÷ 12
Total straight line depreciation	\$	433,989	= 3 × \$88,269 + \$84,591 + \$84,591

Amortization Calculations

Loan amount	\$	3,150,000	
x Points		<u>1.50</u>	
Total loan fees	\$	47,250	
÷ Term of loan		<u>7</u>	
Annual amortization expense	\$	6,750	Amortized expenses when loan is held full year
First year amortized expenses	\$	6,750	Normal expense × 12 ÷ 12
Last year amortized expenses	\$	6,750	Normal allowance × 12 ÷ 12
Total loan fees	\$	47,250	
– Amortized expenses claimed	\$	<u>33,750</u>	= 3 × \$6,750 + \$6,750 + \$6,750
Unclaimed amortized loan fees	\$	13,500	

Sale Calculations

Sale Cash Flows

Year 6 NOI	\$	526,500
÷ Cap rate at sale		11.00%
Sale price	\$	4,786,364
– Costs of sale at 4.00%	\$	191,455
Net sale price	\$	4,594,909
– Mortgage balance due	\$	2,880,707
Before-tax equity reversion	\$	1,714,202
– Taxes from sale	\$	105,454
After-tax equity reversion	\$	1,608,748

P2 = 60

Adjusted Basis Calculations

Initial basis	\$	4,590,000
– Straight-line depreciation	\$	433,989
Adjusted basis	\$	4,156,011

Capital Gains Calculations

Net sale price	\$	4,594,909
– Adjusted basis	\$	4,156,011
Total gain on sale	\$	438,898
– Straight-line depreciation	\$	433,989
Gain due to appreciation	\$	4,909

Limited to the greater of the total gain or 0

Taxes from Sale

Depreciation recapture at 25.00%	\$	108,497	= \$438,898 × 25.00%
Capital gains at 15.00%	\$	736	= \$4,909 × 15.00%
Unclaimed amortization at 28.00%	\$	(3,780)	= \$13,500 × 28.00%
Total taxes from sale	\$	105,454	

NPV and IRR Calculations

Initial Cash Flow Calculations

Purchase price	\$	4,500,000
+ Acquisition costs at 2.00%	\$	90,000
– Mortgage loan proceeds	\$	3,150,000
+ Mortgage loan fees	\$	47,250
Total date 0 cash flows	\$	1,487,250

Cash Flow Analysis

<u>Year</u>	<u>Cash Flow</u>	
Date 0	\$ (1,487,250)	
Date 1	\$ 194,954	
Date 2	\$ 195,010	
Date 3	\$ 193,963	
Date 4	\$ 192,839	
Date 5	\$ 1,799,347	= \$190,599 + \$1,608,748

NPV @ 13.00% = \$ 67,309

IRR = 14.26%