

Springbrook Apartments Explanations and Clarifications

The 5 Year Real Estate Pro Forma

The 5 year real estate pro forma (or Discounted Cash Flow Analysis) is a tool that allows investors to forecast future cash flows from specific real estate operations and make valuation judgements based on these forecasts. The pro forma assumes that the property in question will be held for 5 years and sold on year 6.

Equity Requirement

The percentage of the purchase price to be held as an equity interest by the investor.

Equity Requirement \$960,000.00

Net Operating Income (NOI)

The annual dividend produced by the property.
 $NOI = \text{Gross Operating Income} - \text{Operating Expenses}$

NOI \$358,638.24

Inbound Cap Rate

The relationship between the properties purchase price and income stream at the time of purchase. The properties annual yield.
 $\text{Inbound Cap Rate} = NOI / \text{Purchase Price}$

Inbound Cap Rate 0.0747163

Occupancy Rate

Percent of total units occupied and producing income.

Occupancy Rate 95%

Operating Expense Ratio

Percent of Gross Operating Income used to cover Operating Expenses.
 $\text{Operating Expense Ratio} = \text{Total Expenses} / \text{Effective Rental Income}$

Operating Expense Ratio 31.49%

Outbound Cap Rate

The outbound cap rate or 'Terminal Cap Rate' is the capitalization rate at the end of year 5 when the property is sold.
 $\text{Outbound Cap Rate} = \text{Year 6 NOI} / \text{Year 6 Sale Price}$

Outbound Cap Rate 0.07

Cash Flow

The cash flow is equal to the $NOI - \text{Annual Debt Service}$.

Cash Flow \$67,381.29

Cash on Cash Return

The cash on cash return or the 'Equity Dividend Rate' is the year by year return on the investors Equity Requirement (initial investment). $\text{Cash on Cash Return} = \text{Before Tax Cash Flow} / \text{Equity Requirement}$

Cash on Cash Return 7.02%

Net Present Value

The Net Present Value is the difference between the present value of cash inflows and the present value of cash outflows for years 1-6. The present value of cash inflows /outflows are derived by discounting the future dollar amounts by a *discount rate*.

Net Present Value \$576,818.76

Discount Rate

The discount rate is the rate of return that is foregone by the investor on an alternative investment of equal risk. Many times the discount rate will be derived by taking a 'riskless' investment such as the 10 year treasury bond and adding a 'risk premium'

Discount Rate 10.20%

Internal Rate of Return (IRR)

The Internal Rate of Return is equal to the discount rate that makes the net present value of the investment equal to zero. It is the total rate of return for years 1-6

IRR 21%

Debt Coverage Ratio (DCR)

A lenders measure of protection against NOI decline.
 $DCR = \text{Net Operating Income} / \text{Annual Debt Service}$

DCR 1.231346568

Break Even Occupancy Rate

Rate (%) of occupancy needed to cover OE & annual debt service.

Break Even Occupancy Rate 92.26%

Springbrook Apartments

Acquisition Summary	
Acquisition Price	\$4,800,000.00
Units	40
Price/Unit	\$120,000.00
	\$0.00
Price to Close	\$4,800,000.00
Equity Requirement %	20%
Equity Balance	\$960,000.00
Net Operating Income	\$358,638.24
Inbound Cap Rate	0.0747163
Occupancy Rate	95%

Income	Current
Scheduled Rental Income	\$467,160.00
Vacancy Loss 5%	\$23,358.00
Effective Rental Income	\$443,802.00
Commercial and Misc. Income	\$54,570.00
Gross Operating Income	\$498,372.00

Expense	Current
Real Estate Taxes	\$52,485.76
Gas & Electric	\$4,800.00
Water & Sewer	\$6,840.00
Lawn Care & Snow Removal	\$4,200.00
Advertising	\$4,800.00
Repairs & Maintenance	\$12,000.00
Management	\$22,608.00
Insurance	\$8,000.00
Cable & Internet	\$24,000.00
Total Expenses	\$139,733.76
Operating Expense Ratio	31.49%

Financing	
Price to Close	\$4,800,000.00
Loan To Value	80%
Equity Balance	\$960,000.00
Loan Amount	\$3,840,000.00
Interest Rate	6.50%

Sale Summary	
Outbound Cap Rate (Year 6 forward NOI)	0.07
Sales Price	\$6,049,605.39
Closing Costs (5%)	\$302,480.27
Net Sales Price	\$5,747,125.12
Loan Payoff	\$3,602,820.31
Proceeds	\$2,144,304.81
Cash Flow	\$462,459.81
Total Cash Flow	\$2,606,764.61
Effective Cash Flow	\$1,646,764.61

Cash Flow	Current	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Gross Operating Income	\$498,372.00	\$498,372.00	\$513,323.16	\$528,722.85	\$544,584.54	\$560,922.08	\$577,748.74
Operating Expenses	\$139,733.76	\$139,733.76	\$142,528.44	\$145,379.00	\$148,286.58	\$151,252.32	\$154,277.36
Net Operating Income	\$358,638.24	\$358,638.24	\$370,794.72	\$383,343.85	\$396,297.96	\$409,669.76	\$423,471.38
Debt Service	N/A	\$291,256.95	\$291,256.95	\$291,256.95	\$291,256.95	\$291,256.95	N/A
Cash Flow	-\$960,000	\$67,381.29	\$79,537.78	\$92,086.91	\$105,041.01	\$118,412.82	\$2,144,304.81
Principal Reduction	N/A	\$41,656.95	\$44,364.65	\$47,248.35	\$50,319.49	\$53,590.26	
Cash Flow/Principal Reduction	N/A	\$109,038.24	\$123,902.43	\$139,335.25	\$155,360.50	\$172,003.07	
Cap Rate	0.0747163	0.0747163	0.077240901	0.079863302	0.082562074	0.085347867	0.088223412
Cash On Cash Return	N/A	0.070188849	0.082851854	0.09592386	0.10941772	0.123346683	
Cash on Cash/Principal	N/A	0.1135815	0.12905027	0.14514089	0.161833857	0.179169869	

		1	1.03	1.03	1.03	1.03	1.03
Income	Current	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Scheduled Rental Income	\$467,160.00	\$481,174.80	\$495,610.04	\$510,478.35	\$525,792.70	\$541,566.48	\$557,800.32
Vacancy Loss	\$23,358.00	\$24,058.74	\$24,780.50	\$25,523.92	\$26,289.63	\$27,078.32	\$27,889.32
Effective Rental Income	\$443,802.00	\$457,116.06	\$470,829.54	\$484,954.43	\$499,503.06	\$514,488.15	\$529,911.00
Commercial and Misc. Income	\$54,570.00	\$56,207.10	\$57,893.31	\$59,630.11	\$61,419.02	\$63,261.59	\$65,159.39
Gross Operating Income	\$498,372.00	\$513,323.16	\$528,722.85	\$544,584.54	\$560,922.08	\$577,748.74	\$595,070.39
Expense		1	1.02	1.02	1.02	1.02	1.02
Real Estate Taxes	\$52,485.76	\$53,535.48	\$54,606.18	\$55,698.31	\$56,812.27	\$57,948.52	\$59,106.59
Gas & Electric	\$4,800.00	\$4,896.00	\$4,993.92	\$5,093.00	\$5,195.67	\$5,299.59	\$5,405.29
Water & Sewer	\$6,840.00	\$6,976.80	\$7,116.34	\$7,258.66	\$7,403.84	\$7,551.91	\$7,702.94
Lawn Care & Snow Removal	\$4,200.00	\$4,284.00	\$4,369.68	\$4,457.07	\$4,546.22	\$4,637.14	\$4,729.84
Advertising	\$4,800.00	\$4,896.00	\$4,993.92	\$5,093.00	\$5,195.67	\$5,299.59	\$5,405.29
Repairs & Maintenance	\$12,000.00	\$12,240.00	\$12,484.80	\$12,734.50	\$12,989.19	\$13,248.97	\$13,513.94
Management	\$22,608.00	\$23,060.16	\$23,521.36	\$23,991.79	\$24,471.63	\$24,961.06	\$25,460.29
Insurance	\$8,000.00	\$8,160.00	\$8,323.20	\$8,489.66	\$8,659.46	\$8,832.65	\$9,009.34
Cable & Internet	\$24,000.00	\$24,480.00	\$24,969.60	\$25,468.99	\$25,978.37	\$26,497.94	\$27,026.91
Operating Expense Ratio	31.49%	31.18%	30.88%	30.58%	30.28%	29.99%	
Financing		Year	Payment	Interest	New Loan Amount	Principal Reduction	
		1	-\$291,256.95	-\$249,600.00	\$3,798,343.05	-\$41,656.95	
		2	-\$291,256.95	-\$246,892.30	\$3,753,978.41	-\$44,364.65	
		3	-\$291,256.95	-\$244,008.60	\$3,706,730.06	-\$47,248.35	
		4	-\$291,256.95	-\$240,937.45	\$3,656,410.57	-\$50,319.49	
		5	-\$291,256.95	-\$237,666.89	\$3,602,820.31	-\$53,590.26	

Net Present Value / Internal Rate of Return (IRR)	
Initial Investment	-\$960,000.00
Discount Rate	10.20%
Present Value of Cash Flows	\$1,536,818.76
Net Present Value	\$576,818.76
Internal Rate of Return	21%

Amortization Calculator	
Loan Amount	\$3,840,000.00
Interest Rate	6.50%
Loan Term	30
Monthly	\$24,271.41
Yearly	\$291,256.95

Debt Coverage Ratio	
Year 1	1.231
Year 2	1.273
Year 3	1.316
Year 4	1.361
Year 5	1.407

Break-Even Occupancy Rate	
Year 1	92.26%
Year 2	90.15%
Year 3	88.10%
Year 4	86.10%
Year 5	84.16%