Property Assumptions

Property and purchase assumptions

Property size	35,000	sf
Premium space	25,000	sf
Premium rent	$22.00	psf
Secondary space	10,000	sf
Premium rent	$18.00	psf
Vacancy allowance	7.00%	
Operating expense ratio	45.00%	
Purchase price	$4,300,000	

Other assumptions

Required rate of return (discount rate)	13.00%
Terminal cap rate (comparable sales)	9.50%
Rent growth during holding period	5.50%
Income growth after terminal date	2.50%
Property value growth rate	5.00%

Pro Forma Operating Statement (First Year)

Potential gross income	$	730,000	= 25,000 sf x $22.00 psf + 10,000 sf x $18.00 psf
– Vacancy & collection @ 7.00%	$	51,100	
Effective gross income	$	678,900	
– Operating expenses @ 45.00%	$	305,505	
Net operating income	***$***	***373,395***	
Going-in capitalization rate		***8.68%***	= NOI ÷ purchase price

Future Year NOIs

Year 1 NOI	***$***	***373,395***	
Year 2 NOI	***$***	***393,932***	= $373,395 × (1 + 0.055)
Year 3 NOI	***$***	***415,598***	= $393,932 × (1 + 0.055)
Year 4 NOI	***$***	***438,456***	= $415,598 × (1 + 0.055)
Year 5 NOI	***$***	***462,571***	= $438,456 × (1 + 0.055)
Year 6 NOI	***$***	***474,135***	= $462,571 × (1 + 0.025)

Terminal Cash Flow Calculations

Terminal cap rate method

Year 6 NOI	$	474,135	= 373,395 x (1+0.055)^4 x (1+0.025)
÷ Cap rate at sale		9.50%	
Terminal value	***$***	***4,990,897***	

Constant income growth method

Year 6 NOI	$	474,135	= 373,395 x (1+0.055)^4 x (1+0.025)
÷ (r - g)		10.50%	r = 13.00% and g = 2.50%
Terminal value	***$***	***4,515,573***	

Growth over purchase price method

Purchase price	$	4,300,000	
× (1+G)^T		1.2763	= (1 + 0.05)^5
Terminal value	***$***	***5,488,011***	

Growth over initial value method

PV of NOI @ 13.00%	***$***	***1,446,953***	
× Multiplier	***$***	***3.2543***	= 1 / (1 – (1 + 0.05)^5 / (1 + 0.13)^5)
Initial Value	***$***	***4,708,822***	
× (1 + G)^T		1.2763	= (1 + 0.05)^5
Terminal Value	***$***	***6,009,783***	

Comparison of Terminal Value Assumptions

	V_0	V_T	NPV	IRR
Terminal cap rate method	*$ 4,155,812*	*$ 4,990,897*	*$ (144,188)*	*12.10%*
Constant income growth method	*$ 3,897,825*	*$ 4,515,573*	*$ (402,175)*	*10.41%*
Growth over purchase price method	*$ 4,425,625*	*$ 5,488,011*	*$ 125,625*	*13.76%*
Growth over initial value method	*$ 4,708,822*	*$ 6,009,783*	*$ 408,822*	*15.40%*

Note: NPVs and IRRs are calculated using the cash flow worksheet, with the following entries:

CF0 = – Purchase price
CF1 = NOI_1
CF2 = NOI_2
CF3 = NOI_3
CF4 = NOI_4
CF5 = $NOI_5 + V_T$