LAS VEGAS
REAL ESTATE INVESTMENT GROUP
Positive Cash Flow Properties Since 2006

Estimating Return

The two most popular metrics for profitability are ROI and cash flow. You need to consider the following when you make decisions based on ROI or cash flow:

- ROI, cash flow and other such metrics are only a snapshot in time. These metrics only predict how a property is likely to perform today. These metrics in no way indicate how the property is likely to perform in the future. With a 10 to 20 year hold period, investigating how a property is likely to perform in the foreseeable future is critical. This paper however will not discuss methods for estimating future performance. That topic is discussed in another white paper.
- There are many ways to calculate return. Some formulas do not include all recurring costs while others include principal reduction and other unrealized gains. The formulas used can produce significantly different results. We urge you to be very conservative in your selection of formulas and to use the same formula for all property comparisons.
- No matter which formulas you choose to use, they are only effective for comparing properties; not for estimating your actual return. Actual return is heavily impacted by factors like taxes so if you want to estimate your actual return, create a financial model that accurately represents your current financial situation and then measure the actual impact of adding an investment property to the calculations.

Formulas for Comparing Returns

The formulas we use for comparing properties are listed below. Note that we do not include a provision for rehab, vacancy or maintenance when we are comparing properties because these factors are dependent upon the specific property. Also, if a constant were added to a formula, the difference between the formulas remains unchanged. Additionally, we do not take into account personal income taxes, which generally increase effective return.

ROI = (Income - DebtService - ManagementFee - Insurance - RETax - PeriodicFees) x (1 - StateIncomeTax) / (DownPayment + ClosingCosts)

Cash Flow = (Income - DebtService - ManagementFee - Insurance - RETax - PeriodicFees) x (1 - StateIncomeTax)

The variables are all annual amounts: one year of rent, one year of taxes, one year of HOA, etc. Below is an explanation of the variables:

- Income: The monthly rent x 12.
- DebtService: 12 x the monthly mortgage payment (principle and interest).
- ManagementFee: Management fee percentage x annual rent.
- Insurance: Estimated annual landlord insurance.
- RETax: Annual property tax.
- PeriodicFees: This is the sum of all periodic fees including: HOA, Master Plan, SIDs/LIDs, assessments, etc. amortized to a monthly basis.
- StateTax: Nevada has no state income tax so this is always zero. However, if you were comparing a property in Nevada to one in another state you would use the appropriate tax rate for that state.
- DownPayment: For a financed purchase, we default to 20% x purchase price. For cash purchases, it is the total purchase price.
- ClosingCosts: We use 3% x purchase price for financed properties and $2000 for cash purchases.

So you can see how it all fits together below is an example based on the following property:

- Purchase price: $150,000
- Rent: $1,000/Mo. or $12,000/Yr.
- Financing: 30 year, fixed rate of 4.5%, with 20% down. The payment would be approximately $608/Mo. or 7,296/Yr.
- Management fee is 8% x annual rent or $12,000 x 8% = $960
- Landlord insurance: $450/year
- Property tax rate: 0.77% or $150,000 x 0.77% = $1,155/Yr.
- HOA fee is $20/Mo. or $240/Yr.
- State income tax rate: 0%
- Down payment: 20% x purchase price or: $150,000 x 20% = $30,000.
- Closing costs: 3% of purchase price: $150,000 x 3% = $4,500

If we plug the above values into the formulas:

ROI = (12000 - 7296 - 960 - 450 - 1155 - 240) x (1 - 0) / (30000 + 4500) = 5.5%

Cash Flow = (12000 - 7296 - 960 - 450 - 1155 - 240) x (1 - 0) = 1899/Yr

Comparing Properties in Different Locations

Below are the two properties we will use in this example:

Property Location	Austin	Las Vegas
		
MLS # and Address	1551927 - 204 Joshua Tree Cir	1851544 - 7354 Divine Ridge St
Asking Price	$252,500	$255,000
Estimated Rent	$1,700	$1,490
SqFt	2,068	2,033
Beds	4	3
Baths	3	3
Stories	2	2
Monthly Fees	$41	$0 *
Annual Property Tax	$6,022	$1,511
Insurance	$1,625	$450
MLS Data Sheet	Link	Link

Notes:

* The Las Vegas property has no association fee but we will use the same monthly fee as the Austin property to make the properties more “equal”.

Additional assumptions:

- 20% down
- 4.5% rate
- 30 year term
- 3% closing cost
- 8% property management
- 0% state income tax. Neither Texas or Nevada have a personal state income tax.

We pasted the formulas for ROI and cash flow below:

ROI = (Income - DebtService - ManagementFee - Insurance - RETax - PeriodicFees) x (1 - StateIncomeTax) / (DownPayment + ClosingCosts)

Cash Flow = (Income - DebtService - ManagementFee - Insurance - RETax - PeriodicFees) x (1 - StateIncomeTax)

Below are the calculations for the Austin property:

ROI = (1700 * 12 - 1024 * 12 - 1700 * 12 * 8% - 1625 - 6022 - 41 * 12) / (3% * 252500 + 20% * 252500) = -2.9%

Cash Flow = (1700 * 12 - 1024 * 12 - 1700 * 12 * 8% - 1625 - 6022 - 41 * 12) = -1659/Yr. or -139/Mo.

Below are the calculations for the Las Vegas property:

ROI = (1490 * 12 - 1033 * 12 - 1490 * 12 * 8% - 450 - 1511 - 41 * 12) / (3% * 255000 + 20% * 255000) = 2.7%

Cash Flow = (1490 * 12 - 1033 * 12 - 1490 * 12 * 8% - 450 - 1511 - 41 * 12) = 1600/Yr. or $133/Mo.

The following is a table comparing the two properties:

Assumptions	Austin	Las Vegas
Purchase Price	252500	255000
Rent (Mo)	1700	1490
Fees (Mo)	41	41
Insurance (Yr.)	1625	450
Property Tax (Actual)	6022	1511
Management (%)	0.08	0.08
Closing Cost (%)	0.03	0.03
Loan Rate (%)	0.045	0.045
Loan Term (Yrs.)	30	30
Down (%)	0.2	0.2
Acquisition Cost		
Down Payment	50500	51000
Closing Cost	7575	7650
Total	58075	58650
Recurring Expenses (Mo)		
Debt Service	-1024	-1034
Insurance	-135	-38
Property Tax	-502	-126
Fees	-42	-42
Total	-1703	-1239
Income (Mo)		
Rent	1700	1490
Management	-136	-119
Net Rent	1564	1371
Return		
Cash Flow (Mo)	-139	132
ROI	-0.029	0.027

Summary

When you are evaluating the potential return of any property you must include all significant recurring costs. Failing to include all the costs in your calculations will provide invalid results. In the previous example, property taxes and insurance differences resulted in a 5.5% difference in return. Simple comparison tools like rent to price ratio (Austin: 8.1%, Las Vegas: 7.0%) might make the Austin property look like the better investment but once you include all the major recurring costs the reality is very different.

ROI, cash flow and other such metrics are only a snapshot in time. Investigating how a property is likely to perform in the foreseeable future is critical.