Real Estate Investment Metrics[1]
Quick Sheet[2]

Revenue and Expense Factors

Potential Rental Income = PRI = Total Units x Average Rent per Unit *(assumes 100% occupancy)*

Vacancy Adjustment = an adjustment to the PRI for the expected vacancy rate of the subject property

Other Income = the sum of all potential Parking, Laundry, Vending net incomes, Pet Income, Utility Reimbursements, etc.

Effective Gross Operating Income = EGI = PRI - Vacancy Adjustment + Other Income

Operating Expenses = Property Taxes + Insurance + Maintenance & Repair + Management Fees + Marketing + Accounting + Legal + Replacement Reserves, any other applicable expenses required to operate and maintain property. Some of these expenses may be expressed as nominal values (dollar amounts) and others may be expressed as percentage of Effective Gross Income (EGI)

Net Operating Income (NOI) = EGI - Operating Expenses

Below the Line Items = Asset Management Fees, Capital Expenditures (aka CapEx or Net Capital Spending), Debt Service

Debt Service = Principle and Interest payments

Debt Service Coverage Ratio = DSCR = $\frac{NOI}{Debt\ Service}$

Before Tax Cash Flow = BTCF = $NOI - Debt\ Service$ *Also referred to as Pre-Tax Cash Flow*

Floor Area Ratio (FAR) Floor area ratio (FAR) is the measurement of a building's floor area in relation to the size of the lot/parcel that the building is located on. FAR is expressed as a decimal number, and is derived by dividing the total area of the building by the total area of the parcel (building area ÷ lot area)

Capitalization and Return Factors

Capitalization Rate = Cap Rate = $\frac{NOI}{Purchase\ Amount\ (Price)}$

Multiple on Invested Capital MOIC can be conceptualized two different ways: 1) based on total dollar amount invested (equity) and 2) based on Peak Investment

$Total\ Dollar\ Invested:$ $\frac{Distributions + Realized\ Value + \ Unrealized\ Value}{Total\ Dollar\ Amount\ Invested}$

$$\text{Peak Investment: } \frac{Net\ Levered\ Cash\ Flows}{Peak\ Investment}$$

Internal Rate of Return (IRR) — Conceptually, IRR is the interest rate (r) that sets the net present value (NPV) of cash flows (CF) to zero. Calculation of IRR is an iterative process using a changing rate staring with a guess and repeating the process until NPV = 0. $\mathbf{NPV} = 0 = \sum_{i=1}^{N} \frac{CF_i}{(1+r)^t}$

Net Present Value = $\qquad$ $\mathbf{NPV} = \sum_{i=1}^{N} \frac{CF_i}{(1+r)^t}$

XNPV and XIRR — These measures take into account date specific elements of NPV and IRR and provide more accurate values when cash flows occur irregularly or at multiple times during a given period

XNPV = $\qquad$ $\sum_{i=1}^{N} \dfrac{P_i}{(1+r)^{\frac{d_i - d_j}{365}}}$

XIRR — Is the actual return on investments. XIRR stands for Extended Internal Rate of Return is a method used to calculate returns on investments where there are multiple transactions happening at different times. Like IRR it is an iterative process. XIRR is the date specific IRR resulting when $\mathbf{XNPV} = 0 = \sum_{i=1}^{N} \dfrac{P_i}{(1+r)^{\frac{d_i - d_j}{365}}}$

Peak Investment = $\qquad$ $\sum_{MAX} Equity\ Investor\ Capital\ Contributions_i$

This is equal to the highest level of investment from equity investors. It is the likely the amount equity investors have contributed before beginning to see cash flows returned to them

Total Exit Proceeds = $\qquad$ *Exit Sales Price – Closing Commissions – Selling Costs*

Net Unlevered Cash Flows = $\qquad$ *NOI – (Acquisition Costs + Capital Expenditures + Asset Management Fees + Tenant Improvements) + Total Exit Proceeds*

Net Levered Cash Flows = $\qquad$ *Net Unlevered Cash Flows – Debt Service – Loan Origination & Appraisal Fees*

Cash-on-Cash Return — Cash-on-Cash Return is the return an investor may achieve based on their receipt of the investment's proportional cash flows as a percentage of the equity (cash) they invested in a given project. It may be calculated for a specific period or on an average annual basis

Period Specific Cash-on-Cash Return = $\dfrac{Annual\ Pre-Tax\ Cash\ Flow}{Total\ Equity\ Invested}$

Average Annual Cash-on-Cash Return = $\dfrac{\frac{Total\ Pre-Tax\ Cash\ Flow}{Project\ Duration\ (yrs)}}{Total\ Equity\ Invested}$