

Commercial Real Estate Financial Analysis: Cash Flow Model

**California Association of REALTORS® Region 20
California Commercial Alliance (CCA)**

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Director, California Association of REALTORS®



**BRUBAKER Group
Commercial & Industrial Properties**

In commercial real estate
financial analysis, it's
customary to prepare a
“setup”

The “setup” is usually provided within the marketing package for a listed property

The setup typically includes cash flow and other financial analysis calculations and investment indices

Let's take a look at a
standard multifamily
residential income
property setup...it's the
easiest for us to develop
and understand a cash
flow model

Kingsley Arms

11 Units | 1234 Kingsley Ct Los Angeles, CA 90029

Summary	Current		Financing
Price:	\$1,650,000		Proposed Financing
Down Payment 35%	\$577,500		First Loan Amount: \$1,072,500
Number of Units:	11		Terms: 30-yr Fixed
Cost per Unit:	\$150,000		Interest rate: 5.00%
Current GRM:	10.85		Investment Highlights:
Current CAP:	5.57%		Central Hollywood
Approx. Age:	1957		Pitched roof
Approx. Lot Size:	7,884		On site laundry
Approx. Gross SF:	7,841		(2) units Section 8
Cost per Gross SF:	\$210.43		



Annualized Operating Data	Current Rents	
Scheduled Gross Income:	\$ 152,008	
Less Vacancy Rate Reserve:	\$ (4,560)	3.0% *
Gross Operating Income:	\$ 147,448	
Less Expenses:	\$ (55,563)	37% *
Net Operating Income:	\$ 91,885	
Less Loan Payments:	\$ (69,089)	
Pre-Tax Cash Flow:	\$ 22,796	3.9% **
Plus Principal Reduction:	\$ 15,464	
Total Return Before Taxes:	\$ 38,260	6.6% **

* As a percent of Scheduled Gross Income.
** As a percent of Down Payment.

Scheduled Income	Current Rents	Annualized Expenses
No. of Units	Approx Avg. Monthly Rent/ Unit	Monthly Income
10	0 \$1,110	\$ 11,100
1	0 \$1,478	\$ 1,478
1	0 \$0	\$ -
1	0 \$0	\$ -
1	0 \$0	\$ -
1	0 \$0	\$ -
1	0 \$0	\$ -
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Total Scheduled Rent:		\$ 12,578
Laundry:		\$ 89
Less Rent Concession		\$ -
Other Income:		\$ -
Monthly Scheduled Gross Income:		\$ 12,667
Annual Scheduled Gross Income:		\$ 152,008
		Taxes (est. 1.125%) \$ 18,563
		Other \$ 2,600
		Insurance \$ 3,000
		Repairs & Maintenance \$ 5,000
		Utilities \$ 8,800
		On-site Manager \$ -
		Reserves \$ 4,600
		Management \$ 13,000
		*Total Expenses: \$ 55,563
		Per Net Sq. Ft.: \$ 7.09
		Expenses Per Unit: \$ 5,051



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Work with a setup model
you like...your commercial
mortgage brokers can help
you with this

We'll start with
income...and then move to
expenses...then calculate
cash flow

Actual or current numbers
vs. “pro forma” or
“market” numbers

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Scheduled Gross Income
(SGI) = Total Monthly Income
“Annualized”

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Annual Scheduled Gross Income:			\$ 152,008			Per Net Sq. Ft.: \$ 7.09
						Expenses Per Unit: \$ 5,051

$$\begin{aligned} & \text{Vacancy Rate Reserve} \\ &= \text{Vacancy Rate \%} \times \text{SGI} \end{aligned}$$

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Gross Operating Income (GOI)
= SGI - Vacancy Rate Reserve

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Scheduled Income	Current Rents		Annualized Expenses

Total Expenses = Property
Taxes + Ordinary Expenses +
Capital Expense Reserves

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Annual Scheduled Gross Income:			\$ 152,008	Per Net Sq. Ft.:	\$ 7.09
				Expenses Per Unit:	\$ 5,051

We know what Ordinary Expenses are, but what are Capital Expenses?

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U.S. companies report
financials according to GAAP
(Generally Accepted
Accounting Principles), which
are established by FASB
(Financial Standards
Accounting Board)

Under GAAP, Ordinary
Expenses are “expensed”
during the year the cost was
incurred

Capital Expenditures add to the life of an asset and must be depreciated over a cost recovery period of years (useful life), so we reserve for these anticipated costs

Common examples of capital expenses:

- Roof
- Hot water boiler
- Elevator

The reserve is a financial analysis recognition of an anticipated capital cost...the owner doesn't actually put money into an account that gets transferred upon sale

Here's an example...


There's ten years of life left in the roof, and a new roof is \$60,000, what should be reserved each year for this anticipated cost?

$\$60,000 / 10 \text{ years remaining} =$
 $\$6,000 \text{ per year to be}$
 reserved

Net Operating Income
(NOI) = GOI - Expenses

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Scheduled Income		Current Rents	Annualized Expenses

$$\text{Pre-Tax } \underline{\text{Cash Flow}} \\ = \text{NOI} - \text{Loan Payments}$$

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This is called “positive” cash flow, and it’s very important

Total Return Before Taxes
= Pre-Tax Cash Flow +
Principal Reduction

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Total Rate of Return (ROR) =
Total Return / Down payment

(This is also called the
“Cash-on-Cash” Return)

The Cash-on-Cash Return
is the ROR based upon the
total return and the
investor's actual cash
outlay (down payment)

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Debt Service Coverage Ratio

$$\text{DSCR} = \text{NOI} / \text{Loan payments}$$

(The Debt Service is the total of the loan payments, principle + interest)

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In this example,

$$\text{DSCR} = \$91,885 / \$69,089$$

$$\text{DSCR} = 1.33$$

Capitalization Rate
(CAP Rate) = NOI/Price

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The CAP Rate is analogous to a ROR (Rate of Return), which is commonly used to rate the performance of many types of investments

For example, if you invest
\$100,000 into a CD
(Certificate of Deposit) and
your annual return
(interest) is \$10,000...what
is your ROR?

If your client invests
\$1,000,000 into an
apartment building and the
net operating income is
\$70,000...what is the CAP
Rate?

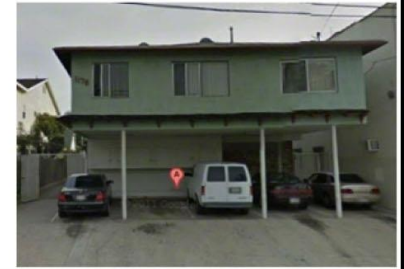
A building is listed for \$10M
and the net operating
income is \$500,000

What is the CAP Rate?

Get to know the average
“CAP Rates” within the
market areas you serve

Gross Rent Multiplier
(GRM) = Price/SGI

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Therefore, using
algebra...

$$\text{Price} = \text{GRM} \times \text{SGI}$$

Which means...the
Price is expressed by the
GRM in “multiples” or
“orders of magnitude” of
the annual income

GRM is a
function of:

- Price
- Income

CAP Rate is a
function of:

- Price
- Income
- Expenses

Investor Success



Questions?



BRUBAKER Group
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