# REAL ESTATE BY THE NUMBERS A Complete Reference Guide to DEAL ANALYSIS

J Scott and Dave Meyer



## EARLY PRAISE FOR REAL ESTATE BY THE NUMBERS

"J and Dave are two of the best analytical minds in real estate. Together, they have put together a book that is both highly detailed and easy to understand—a perfect combination for novice and experienced investors alike."

#### -Joshua Dorkin, Founder of BiggerPockets.com

"When people ask me if they should buy a certain property they've identified, I often reply, 'Let the numbers be your guide.' However, many new investors don't know how to analyze the numbers and are left guessing...This book changes all that. You'll be able to make decisions like a pro and easily determine which deals meet your unique financial goals. A big shout-out to J and Dave for sharing their brilliance!"

#### -Kathy Fettke, Cofounder of the RealWealth Network

"If financial literacy and real estate investing are ever taught in schools, this should be the textbook! Everyone should know how to build a personal financial statement, read a balance sheet, and create a profit and loss statement. J and Dave break down these concepts with easy-to-understand examples and charts. This book should be required reading for every high school student and up!"

—Henry Washington, Cohost of the BiggerPockets *On the Market* podcast

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#### Real Estate by the Numbers: A Complete Reference Guide to Deal Analysis

J Scott and Dave Meyer

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## CHAPTER 4 EXAMINING A CASH-FLOWING PROPERTY

Chapter 4 will help answer the questions:

- What is the income potential of my property?
- What expenses should I expect?
- How much is my property cash-flowing?

The next step in preparing for the key metrics and concepts we'll be discussing throughout the book is to understand how cash-flowing real estate is analyzed. While we'll dig more into deal analysis in Part 5, in this chapter we're going to review how a typical cash-flowing property (whether a single-family property, a commercial property, or anything in between) is analyzed.

In the last chapter, we discussed the profit and loss statement (P&L). If you recall, the P&L is a financial statement used to measure the performance of a business. A cash-flowing property is itself a business. It's often a very small business, but a business nonetheless. And when we analyze a cash-flowing property, we can use the same methodology that we used when creating a P&L for a business.

That said, while the methodology is largely the same as what we covered earlier, some of the terms used will change when analyzing real estate deals in particular.

As with a business, the P&L for a cash-flowing asset is broken down by income and expenses.

#### **GROSS OPERATING INCOME (GOI)**

The first part of our analysis focuses on the income being generated by the property, known as the gross operating income (GOI). The GOI is the actual income the property expects to collect in a single year. In the previous chapter, when looking at a business P&L, we called this the gross profit; when analyzing a real estate deal, we call it GOI.

The GOI is calculated as follows:

#23	<b>Gross operating income (GOI)</b> GOI = Gross potential rent – Rent loss + Other income
	INCOME

INCOME	
Gross Potential Rent	-
Rent Loss	-
Other Income	-
GROSS OPERATING INCOME:	-

#### **Gross Potential Rent**

The gross potential rent is the total possible income the property can generate in a year, assuming every unit is leased and generating the full amount of projected rental income. To calculate gross potential rent, multiply the number of units by the market rent by 12.

#### #24

#### Gross potential rent

Gross potential rent = Number of units × Market rent × 12

For example, if we were considering buying an eight-unit property with market rents of \$1,250 per month, gross potential rent would be \$120,000:

#### Gross potential rent = Number of units × Market rent × 12

Gross potential rent = 8 × \$1,250 × 12 = \$120,000

#### Quick Tip | Market Rent

It's important to note that gross potential rent is based on *market rent*, which is the going rate for similar units in the market. If one of your units could command \$1,000 per month in rent, but you are renting it for \$900, the gross potential rent calculation would assume the market rent of \$1,000, not the \$900 current rent.

#### Rent Loss

Rent loss is the amount of gross potential rent not being collected, for one reason or another. There are five common reasons for rent loss.

1. **Vacancy:** Vacancy is the result of units physically not being occupied. For example, with a single-family rental property, you can expect that the average tenant will live in the property between one and two years. When that tenant moves out, you will spend time "turning over" the unit—performing routine maintenance, finding a new tenant, etc. During this turnover period, the property is not generating income, and the owner is losing money.

For multifamily properties and commercial properties with multiple units, vacancy represents the fact that not every unit will always be occupied. For example, if a hundred-unit self-storage facility expects to only have ninety units rented at a given time, the vacancy rate can be said to be 10 percent.

- 2. **Concessions:** Concessions are the incentives that owners provide to tenants to entice them to move into or stay in their units. For example, in a competitive housing market, an apartment complex may need to provide a move-in special—say, \$99 for the first month—to encourage new renters. If a complex offers a \$99 first-month move-in special on a unit that rents for \$1,000 per month, that's lost rent of \$901 in the first month.
- 3. Loss to lease: Loss to lease is any amount of rent being collected that's less than the market rent. Two common situations lead to loss to lease. First, there is the case of an occupied unit where the rent is renewed at less than market rent to encourage a tenant not to leave. And second, a unit can be in a fast rent-growth market where the market rent increases during the lease period, leaving the tenant paying lower than market rent for the remainder of their lease term.
- 4. **Bad debt:** Bad debt is rent that isn't being collected due to a tenant's non-payment, often resulting in eviction.
- 5. **Model units:** For multifamily residential and commercial properties, it's not uncommon for one or more of the units to be used as an office, a storage facility, or as free housing for staff. These units could potentially be generating income, but aren't.

#### Other Income

Other income is the additional income that is collected for things other than rent. Common examples of other income include parking income (e.g., covered parking spaces tenants can rent), storage income (e.g., on-site storage lockers that tenants can rent), and laundry income (e.g., paid laundry machines on-site).

In addition, other income can result from common leasing practices and lease terms. For example, late fees due to late rent payments can contribute to other income, as can application fees paid by prospective tenants and pet fees charged to tenants with pets.

#### Gross Operating Income Example

To tie this all together, let's look at an example of how to calculate GOI using a fictitious investor, Catherine. Catherine is considering purchasing an eight-unit residential apartment building. Each unit is 800 square feet, with two bedrooms and two bathrooms. Speaking with a local property management company, Catherine is informed that market rents for such units in this area are \$1,250 per month.

With that information, Catherine can calculate gross potential rent as:

#### Gross potential rent = Number of units × Market rent × 12

Gross potential rent = 8 × \$1,250 × 12 = \$120,000

Looking at the financial statements provided by the previous owner, Catherine sees that the total rent collected in the past twelve months is \$108,000. Assuming she can expect the same collections for the foreseeable future, Catherine determines that the rent loss is the difference between the gross potential rent of \$120,000 and the \$108,000 in actual rent collected—for a total rent loss of \$12,000. That's a 10 percent rent loss (\$12,000 ÷ \$120,000).

When Catherine talks to her local property management company, they confirm that rent loss for similar properties in the area is 9–11 percent, so she's comfortable with this assumption.

Finally, looking at the financial statements provided by the previous owner, Catherine sees that the building was generating an extra \$250 per month in combined income from the laundry facility in the basement of the building and monthly pet fees.

That's other income of 3,000 per year ( $250 \times 12$ ).

From here, Catherine can calculate her GOI as \$111,000 per year.

#### **GOI = Gross potential rent – Rent loss + Other income** GOI = \$120,000 - \$12,000 + \$3,000 = \$111,000

INCOME	
Gross Potential Rent	\$120,000.00
Rent Loss	\$(12,000.00)
Other Income	\$3,000.00
GROSS OPERATING INCOME:	\$111,000.00

#### **OPERATING EXPENSES**

Now that we have calculated the income portion of the P&L, it's time to jump into the expenses. We start with our operating expenses, which are those expenses incurred during the ordinary course of renting the property.

#### #25

**Operating expenses** (in real estate) are expenses associated with the basic functions and operations of the property, such as insurance, repairs and maintenance, and taxes.

Operating expenses for a rental complex could look like this:

EXPENSES	
Property Taxes	-
Insurance	-
Property Management	-
Turnover	-
Repairs & Maintenance	-
Utilities	-
Lawn Care	-
Snow Removal	-
Dumpster/Trash Removal	-
Grounds Cleanup	-
Office Costs	-
Legal	-
Accounting	-

Depending on the type of property and how you manage it, you may find that some of these expenses don't apply. But take care to account for all expenses that might



## CHAPTER 42 ANALYZING TRANSACTIONAL DEALS

Chapter 42 will help answer the questions:

- How is a transactional deal different from a deal that generates residual income?
- How do I determine the profit potential of a transactional deal?

As you saw from the chart in the previous chapter, the returns for transactional deals generally fall into just one of the four return-generating categories: appreciation.

Remember, there are two types of appreciation: market appreciation and forced appreciation. Market appreciation is the result of holding an asset long enough for inflation and other market forces to drive the price up. Forced appreciation is the act of increasing the value of an asset through knowledge and effort—specifically, by buying an asset below market value or by adding value to the asset before you resell.

We often see this forced appreciation in the real estate investing world with wholesalers and house flippers. Wholesalers buy properties below market value and resell them to investors at a marked-up price, keeping the difference as their profit. House flippers do renovations to increase the value of a property, and then resell to homeowners at a higher price, keeping anything above their costs as profit.

Keep in mind that transactional deals don't just apply to physical properties. Note investors will often buy a note below market value—or even "rehabilitate" a note by working with the borrower—and then resell the note at a profit. Nearly any asset can

be used to generate profit if you can buy it below market value and/or add value before resale.

Long story short, most transactional deals generate returns through forced appreciation. This is why when we analyze transactional deals, we typically start with *profit* as our key return metric. But profit is just one metric, and it doesn't tell the whole story. We also have to take into account the cost and time that will be expended on the project.

Once we determine our expected profit, we can then apply other common return metrics to determine whether the profit justifies the cost of the deal—metrics such as return on investment (ROI), average annual return (AAR), and internal rate of return (IRR). If you don't remember these terms, we would suggest going back to Part 3 of this book and brushing up on these metrics.

#### **DETERMINING PROFIT**

As we mentioned, when analyzing transactional deals, we will generally start by determining the profit (or expected profit) of the deal. Without knowing the expected profit, we won't be able to apply the other metrics that will tell us whether the time and money we spend is worth the profit we're receiving.

The expected profit on any transactional deal can be computed as follows:

	<b>Profit</b> Profit = Sales price – Purchase price – Expenses
#75	<ul> <li>Where</li> <li>Sales price is the conservative estimate of what you can sell the property for at sale.</li> <li>Purchase price is the expected cost to acquire the property.</li> <li>Expenses are the expected total costs associated with buying, renovating, holding, and then reselling the property.</li> </ul>

In this definition, we are assuming that the deal is being considered, and we are estimating our sales price, purchase price, and expenses; if a deal has already been completed, then the actual costs of those items should be used.

Sales price and purchase price should be pretty straightforward. But we want to dig into the expenses a bit more, as many investors (even seasoned investors) often fail to account for all the expenses associated with a deal.

Expenses fall into four categories; let's look at each of these in a bit more detail.

#### PURCHASE COSTS

Purchase costs refer to those fixed expenses that contribute to the purchase of a property. The major contributors to purchase costs include:

- **Inspection costs.** If you hire a property inspector before or after purchase, that cost would be factored in here.
- **Closing costs.** Each purchase comes with a fixed set of closing costs paid by the buyer. This might include title search fees, attorney fees, state-specific transfer taxes, mailing fees, and recording fees.
- Lender fees. Lenders often charge up-front costs for providing financing for a deal. These costs might include a loan origination fee, appraisal, underwriting fee, flood certification, document preparation fee, processing fee, and credit report fee.

Even if the deal doesn't involve a physical property (for example, buying a note or a contract), there may be other due diligence costs associated with making that purchase.

#### **RENOVATION COSTS**

If you are planning to renovate the property during your hold period, you will likely incur the following two sets of costs:

- Labor costs. These are the costs for paying contractors to perform renovations on your property.
- **Material costs.** These are the costs of the materials purchased for use during your renovation.

Again, even if the asset being purchased and sold isn't a property, there still may be some rehabilitation costs associated with the deal.

#### HOLDING COSTS

Holding costs refer to those expenses that add up between the time you acquire the property and the time you sell the property. Here are a few of the most common:

- **Mortgage payments.** If you've financed the purchase, you likely have monthly principal and interest payments to your lender.
- **Property taxes.** You will pay property taxes for the period in which you hold the property. These taxes may be paid in advance at purchase, during the hold period, or at sale.
- **Utilities.** Assuming you need utilities at the property during your hold period, you will incur the monthly utility costs.
- **Insurance.** Will you insure your property during the hold period? Make sure you factor in this cost.

#### SELLING COSTS

Selling costs refer to those fees and commissions that are paid as part of the disposition (sale) of the property. The most common costs associated with property sale are:

- **Commissions.** If you're using a listing agent to sell your property, or plan to sell to a buyer represented by an agent, you will likely incur a cost of between 3 percent and 6 percent of the sales price to compensate the agent(s).
- **Closing costs.** Each sale may come with a set of closing costs paid by the seller. This might include title search fees, attorney fees, state-specific transfer taxes, mailing fees, and recording fees.

#### Quick Tip | Estimating Expenses

Estimating expenses is a key step in analyzing a transactional real estate deal. Estimating rehab costs is particularly important and can also be very tricky, especially for newer investors. There's too much to cover on that topic in this book, but luckily, J has written *The Book on Estimating Rehab Costs*, which covers that topic in detail. In this book, we're going to stick to the formulas and concepts that will help you analyze deals like a pro. But pick up J's rehab estimation book if you'll be doing any renovations/ remodeling over your investing career.

Let's look at a couple of examples.

#### ANALYZING A FIX-AND-FLIP DEAL (USING LEVERAGE)

Perhaps the most common type of transactional deal in the real estate world is the fix-and-flip. This is where an investor purchases a property—generally at a discount to the market value—renovates the property, and then resells it to a homeowner or another investor.

Since many house flippers don't have hundreds of thousands of dollars lying around, the house flipper often will rely on debt (a loan) to make the project feasible. In this example, we will assume that the house flipper is getting a loan as part of the transaction.

A good house flipper will run through an analysis of the deal *before* they decide to move forward, in order to determine whether the deal makes sense from a financial standpoint. Let's assume we are house flippers looking at a potential deal and we want to determine whether or not it's a deal that makes sense.

For this potential deal, let's make the following assumptions:

- The property would be purchased for \$100,000 on January 1.
- The investor would get an interest-only loan against the property for 80 percent loan-to-cost (LTC), or \$80,000.

- The property would require \$40,000 in renovations and can be resold for \$200,000.
- The property would be sold on April 30. (So the entire process, from purchase through sale, would take four months.)

In order to calculate the profit that would be generated by this deal, we need the three pieces of information from our profit formula: purchase price, sale price, and expenses.

- **Purchase price:** We know the purchase price to be \$100,000.
- **Sale price:** We know the sale price to be \$200,000.
- **Expenses:** For each investor and each situation, the expenses will be different, but here's a sample breakdown of expenses that many house flippers might encounter:

PURCHASE COSTS	
Appraisals	(\$450.00)
Loan origination costs	(\$1,750.00)
Inspections/surveys	(\$500.00)
Closing costs	(\$1,000.00)
TOTAL	-\$3,700.00
REHAB COSTS	
Contractor/labor	(\$24,000.00)
Materials	(\$16,000.00)
TOTAL	-\$40,000.00
HOLDING COSTS	
Interest payments	(\$2,000.00)
Property taxes during hold	(\$350.00)
Insurance	(\$500.00)
Utilities	(\$250.00)
Lawn care	(\$200.00)
TOTAL	-\$3,300.00
SELLING COSTS	
Commission to agents	(\$12,000.00)
Closing costs	(\$1,000.00)
TOTAL	-\$13,000.00
TOTAL EXPENSES	(\$60,000.00)