## Illustration of the Four Components of "Return on Investment"

## 1 Cash Flow

This first and perhaps most obvious component is "cash flow" - rental income minus expenses - or how much cash ends up in your pocket.

77,231 + Rental Income
22,452 - Operating Expenses
37,848 - Mortgage Payments
16,931 = Cash Flow
178,500 / Downpayment + Closing Costs
$9.5 \%=$ Return on Investment from Cash Flow

## 2 Appreciation

As the value of the property increases, your return on investment increases.
595,000 = Acquisiton Price
5\% * First Year Appreciation
$624,750=$ Value at the end of Year 1.
$29,750=$ Amount of Value Increase
178,500 / Downpayment + Closing Costs
$17 \%=$ Return on Investment from Appreciation

## 3 Equity Build-Up

Even if the property did not increase in value, Equity will increase solely from paying down the mortgage.
$446,250=$ Loan Amount at Closing
439,423 = Loan Amount at the end of Year 1
6,827 - Equity Build-Up in Year 1
178,500 / Downpayment + Closing Costs
$3.8 \%=$ Return on Investment from Equity Build-Up

## 4 Tax Benefits

One pays less income taxes on a real estate investment than on other investment vehicles.
$54,779=$ Cash Flow Before Loan Payments (rents less expenses)
16,858 - Depreciation (assumes 15\% land, 30 year recovery)
31,021 - Mortgage Interest
$6,900=$ Taxable Income Year 1
5,520 Less 20\% Exclusion for LLC Ownership under new tax law
37\% * Marginal Tax Rate
2,042.31 = Federal Income Tax
2,042 Federal Income Tax
16,931 / Cash Flow
$12.1 \%=$ Effective Tax Rate on This Investment
$6,265=$ Tax if Cash Flow came from a non-preferred investment vehicle
2,042 - Tax from this preferred investment vehicle.
4,222 = Income Tax Savings
2.4\% Return on Investment from Tax Savings

Total / Summary

| 1: | 16,931 | Cash Flow |
| ---: | ---: | :--- |
| 2: | 29,750 | Appreciation Year 1 |
| 3: | 6,827 | Equity Build Up Year 1 |
| 4: | 4,222 | Tax Savings Year 1 |
|  | 57,730 | Total Return from this Investment |
|  | 178,500 | Downpayment + Closing Costs |
|  | $32.3 \%$ | Total Return from this Investment |


| IIlustration of Internal Rate of Return over a 10-Year Holding Period 2654 MARYLAND AVENUE |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Purchase Price | 595,000 | $\underline{2025}$ | $\underline{2026}$ | $\underline{2027}$ | $\underline{2028}$ | $\underline{2029}$ | $\underline{2030}$ | $\underline{2031}$ | $\underline{2032}$ | $\underline{2033}$ | $\underline{2034}$ |
| Annual Rent | 4.0\% | 77,231 | 80,321 | 83,533 | 86,875 | 90,350 | 93,964 | 97,722 | 101,631 | 105,697 | 109,924 |
| Vacancy | 3.0\% | 2,317 | 2,410 | 2,506 | 2,606 | 2,710 | 2,819 | 2,932 | 3,049 | 3,171 | 3,298 |
| Effective Income |  | 74,914 | 77,911 | 81,027 | 84,269 | 87,639 | 91,145 | 94,791 | 98,582 | 102,526 | 106,627 |
| Expenses | 4.0\% | 22,452 | 23,350 | 24,284 | 25,256 | 26,266 | 27,316 | 28,409 | 29,545 | 30,727 | 31,956 |
| Exp as a percent of Annual Rent |  | 30\% | 30\% | 30\% | 30\% | 30\% | 30\% | 30\% | 30\% | 30\% | 30\% |
| Exp per unit | 3 | 7,484 | 7,783 | 8,095 | 8,419 | 8,755 | 9,105 | 9,470 | 9,848 | 10,242 | 10,652 |
| NOI | 0 | 52,462 | 54,561 | 56,743 | 59,013 | 61,373 | 63,828 | 66,382 | 69,037 | 71,798 | 74,670 |
| Debt Service | \$ 3,154 | 37,848 | 37,848 | 37,848 | 37,848 | 37,848 | 37,848 | 37,848 | 37,848 | 37,848 | 37,848 |
| Before Tax Cash Flow | $(178,500)$ | 14,614 | 16,713 | 18,895 | 21,165 | 23,525 | 25,980 | 28,534 | 31,189 | 33,950 | 550,628 |
| 19.6\% Internal Rate of Return |  |  |  |  |  |  |  |  |  |  |  |
| NOI |  | 52,462 | 54,561 | 56,743 | 59,013 | 61,373 | 63,828 | 66,382 | 69,037 | 71,798 | 74,670 |
| Less Interest |  | 31,021 | 30,528 | 29,999 | 29,431 | 28,823 | 28,170 | 27,471 | 26,720 | 25,916 | 25,053 |
| Less Depreciation |  | 15,867 | 15,867 | 15,867 | 15,867 | 15,867 | 15,867 | 15,867 | 15,867 | 15,867 | 15,867 |
| Taxable Income to Individuals |  | 5,574 | 8,166 | 10,878 | 13,715 | 16,684 | 19,792 | 23,044 | 26,450 | 30,016 | 33,750 |
| Pass Thru Entity | 20\% | $(1,115)$ | $(1,633)$ | $(2,176)$ | $(2,743)$ | $(3,337)$ | $(3,958)$ | $(4,609)$ | $(5,290)$ | $(6,003)$ | $(6,750)$ |
| Taxable Income | 0 | 4,460 | 6,533 | 8,702 | 10,972 | 13,347 | 15,833 | 18,435 | 21,160 | 24,013 | 27,000 |
| Tax @ * | 37\% | 1,650 | 2,417 | 3,220 | 4,060 | 4,939 | 5,858 | 6,821 | 7,829 | 8,885 | 9,990 |
| After Tax Cash Flow | $(178,500)$ | 12,964 | 14,296 | 15,675 | 17,105 | 18,587 | 20,122 | 21,712 | 23,360 | 25,066 | 454,963 |
| 16.4\% Internal Rate of Return |  |  |  |  |  |  |  |  |  |  |  |
| Purchase | 595,000 |  |  |  |  |  |  | Assume a Sale at End of Year 10 |  |  |  |
| L-V | 75\% |  |  |  |  |  |  | Annual Rent Roll |  |  | 109,924 |
| Loan | 446,250 |  |  |  |  |  |  | GRM |  |  | 8.4 |
| Down Payment | 148,750 |  |  |  | annual appreciation 4.5\% |  |  | Price |  |  | 919,901 |
| Cap Improvement | - |  |  |  |  |  |  | Sale Costs |  | 6\% | 55,194 |
| Closing Costs | 29,750 |  |  |  |  |  |  | Less: Basis |  |  | 436,333 |
| Initial Investment | 178,500 |  |  |  |  |  |  | Gain |  |  | 428,374 |
| Rate | 7.00\% |  |  |  |  |  |  | Tax @ |  | 20\% | 85,675 |
| Term | 25 |  |  |  |  |  |  | Mortgage Balance |  |  | 350,902 |
| P\&I | \$3,154.00 |  |  |  |  |  |  | Sale Proceeds Before Tax |  |  | 513,806 |
|  |  |  |  |  |  |  |  | Sale Proceeds After Tax |  |  | 428,131 |
| Mortgage Amortization |  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 446,250 | Beg Bal | 446,250 | 439,423 | 432,103 | 424,253 | 415,836 | 406,811 | 397,133 | 386,756 | 375,628 | 363,696 |
| 7.00\% | Prin | 6,827 | 7,320 | 7,849 | 8,417 | 9,025 | 9,678 | 10,377 | 11,128 | 11,932 | 12,795 |
| 25.0 | Int | 31,021 | 30,528 | 29,999 | 29,431 | 28,823 | 28,170 | 27,471 | 26,720 | 25,916 | 25,053 |
| 3,154 | Bal EOY | 439,423 | 432,103 | 424,253 | 415,836 | 406,811 | 397,133 | 386,756 | 375,628 | 363,696 | 350,902 |
| Cost Recovery / Depreciation |  | 595,000 | 595,000 | Building | 80\% | 476,000 | Land | 20\% | 119,000 | Life | 30 |
|  |  | 15,867 | 15,867 | 15,867 | 15,867 | 15,867 | 15,867 | 15,867 | 15,867 | 15,867 | 15,867 |
| Basis |  | 579,133 | 563,267 | 547,400 | 531,533 | 515,667 | 499,800 | 483,933 | 468,067 | 452,200 | 436,333 |
| * Tax rate of $35 \%$ applies to income of $\$ 200,001$ to $\$ 500,000$ for singles; $\$ 400,001$ to $\$ 600,000$ for married filing jointly. Marginal rate above $\$ 500 \mathrm{k} / \$ 600 \mathrm{k}$ is $37 \%$. |  |  |  |  |  |  |  |  |  |  |  |

