

# Executive Summary



## Property Information

Type	Single-Family	No. of Units	12
Purchase Price	\$ 1,200,000	Price Per Unit	\$ 100,000
Appreciation Rate	2.00%	Total Square Feet	11,400
Fair Market Value	\$ 1,200,000	Price Per Sq. Ft.	\$ 105

## Financial Information

		<u>% of Asking</u>	<u>% of Cost</u>
Down Payment:	\$ 300,000	25.00%	25.00%
Initial Loan Balance:	\$ 900,000	75.00%	75.00%
<u>Loan Amount</u>	<u>Interest Rate</u>	<u>Term</u>	<u>Payment</u>
\$ 900,000	6.00%	20	\$ 6,448

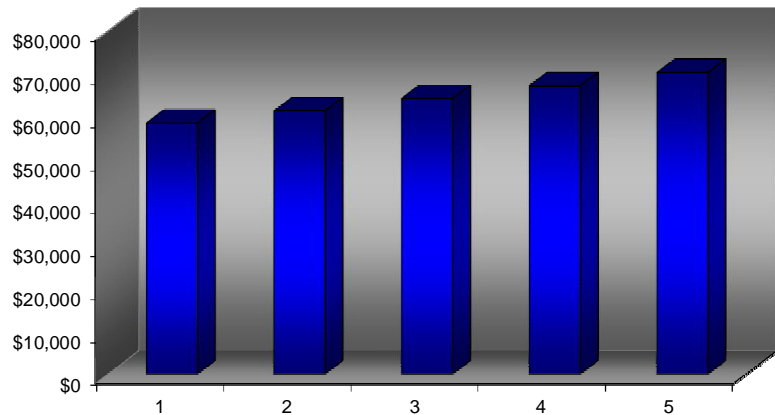
## Income & Expenses

Monthly Rents:	\$ 14,400
Annual Rents:	\$ 172,800
Annual Vacancy:	\$ (8,640)
Annual Expenses:	\$ (28,324)
Annual Debt Service:	\$ (77,375)
Net Operating Income (NOI)	\$ 135,836

### Assumptions:

Rental Growth Rate:	2.00%
Expense Growth Rate:	1.00%
Appreciation Rate	2.00%
Marginal Tax Rate:	34.00%
Capital Gain Tax Rate:	21.00%

## Projected Cash Flow Before Taxes



## Financial Measurements

Year 1      Year 3      Year 5

## Summary Description & Notes

Debt Coverage Ratio (DCR)	1.76	1.83	1.91
Loan-to-Value Ratio (LVR)	71.6%	64.7%	57.7%
Capitalization Rate Based on Cost	11.32%	11.80%	12.30%
Capitalization Rate Based on Resale Price	11.10%	11.12%	11.14%
Net Present Value (NPV) - B/ Taxes	4,220	107,319	183,426
Net Present Value (NPV) - A/Taxes	(1,899)	71,361	134,282
Cash on Cash Return - Before Taxes	19.49%	21.41%	23.42%
Cash on Cash Return - After Taxes	13.43%	15.04%	15.97%
Internal Rate of Return Before Taxes		27.66%	28.36%
Internal Rate of Return After Taxes		19.09%	20.39%
Modified Internal Rate of Return Before Taxes		23.89%	22.16%
Modified Internal Rate of Return After Taxes		17.08%	16.80%

Sample Cash Flow Analysis.

The Mandrell Company  
www.MandrellCo.com  
617-297-8641

**Disclaimer: All information presented is believed to be accurate.**

The information, calculations and data presented in this report are believed to be accurate but are not guaranteed. The information contained in this report shall not be considered as a substitution for legal, accounting or other professional advice. Please seek proper legal and tax advice as appropriate before making investments.

## Cash Flow Analysis

Rental Activity Analysis	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Potential Rental Income</b>	\$ 172,800	\$ 176,256	\$ 179,781	\$ 183,377	\$ 187,044
Less: Vacancy & Credit Losses	(8,640)	(8,813)	(8,989)	(9,169)	(9,352)
Less: Operating Expenses	(28,324)	(28,745)	(29,174)	(29,610)	(30,052)
<b>Net Operating Income (NOI)</b>	\$ 135,836	\$ 138,698	\$ 141,618	\$ 144,598	\$ 147,640
Less: Annual Debt Service	(77,375)	(77,375)	(77,375)	(77,375)	(77,375)
<b>CASH FLOW Before Taxes</b>	\$ 58,461	\$ 61,323	\$ 64,244	\$ 67,224	\$ 70,265
Income Taxes: Benefit (Expense)	(18,165)	(17,611)	(19,136)	(20,715)	(22,349)
<b>CASH FLOW After Taxes</b>	\$ 40,297	\$ 43,712	\$ 45,107	\$ 46,509	\$ 47,916

Property Resale Analysis	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Projected Sales Price</b>	\$ 1,224,000	\$ 1,248,480	\$ 1,273,450	\$ 1,298,919	\$ 1,324,897
Less: Selling Expenses	(61,200)	(62,424)	(63,672)	(64,946)	(66,245)
<b>Adjusted Projected Sales Price</b>	\$ 1,162,800	\$ 1,186,056	\$ 1,209,777	\$ 1,233,973	\$ 1,258,652
Less: Mortgage(s) Balance Payoff	(875,972)	(850,462)	(823,378)	(794,624)	(764,096)
<b>SALE PROCEEDS Before Taxes</b>	\$ 286,828	\$ 335,594	\$ 386,399	\$ 439,349	\$ 494,556
Income Taxes from Sale: Benefit (Expense)	787	(16,870)	(34,068)	(49,971)	(65,975)
<b>SALE PROCEEDS After Taxes</b>	\$ 287,615	\$ 318,724	\$ 352,331	\$ 389,378	\$ 428,581

Cash Position	Year 1	Year 2	Year 3	Year 4	Year 5
Cash Generated in Current Year	\$ 40,297	\$ 43,712	\$ 45,107	\$ 46,509	\$ 47,916
Cash Generated in Previous Years	n/a	40,297	84,009	129,116	175,625
Cash Generated from Property Sale	287,615	318,724	352,331	389,378	428,581
Original Initial Investment	(300,000)	(300,000)	(300,000)	(300,000)	(300,000)
<b>Total Potential CASH Generated</b>	\$ 27,912	\$ 102,733	\$ 181,448	\$ 265,003	\$ 352,122

Financial Measures	Year 1	Year 2	Year 3	Year 4	Year 5
Debt Coverage Ratio (DCR)	1.76	1.79	1.83	1.87	1.91
Loan-to-Value Ratio (LVR)	71.6%	68.1%	64.7%	61.2%	57.7%
Capitalization Rate Based on Cost	11.32%	11.56%	11.80%	12.05%	12.30%
Capitalization Rate Based on Resale Price	11.10%	11.11%	11.12%	11.13%	11.14%
Value of Property Using this Cap Rate	11.00%	1,234,873	1,260,888	1,287,437	1,314,531
Net Present Value (NPV) - Before Taxes	13.50%	4,220	59,620	107,319	148,301
Net Present Value (NPV) - After Taxes	10.00%	(1,899)	36,168	71,361	104,366
<b>Cash-on-Cash Return on Equity</b>	9.30%	26.01%	24.70%	23.72%	22.37%
<b>Cash-on-Cash Return - Before Taxes</b>	19.49%	20.44%	21.41%	22.41%	23.42%
<b>Cash-on-Cash Return - After Taxes</b>	13.43%	14.57%	15.04%	15.50%	15.97%
<b>Internal Rate-of-Return (IRR) - Before Taxes</b>	15.10%	25.18%	27.66%	28.33%	28.36%
<b>Internal Rate-of-Return (IRR) - After Taxes</b>	9.30%	16.84%	19.09%	20.03%	20.39%
<b>Modified Internal Rate-of-Return (MIRR) - Before Taxes</b>	15.10%	23.20%	23.89%	23.18%	22.16%
<b>Modified Internal Rate-of-Return (MIRR) - After Taxes</b>	9.30%	15.86%	17.08%	17.15%	16.80%

# Rent Roll Summary

Unit Description	Number of Units	Per Unit Sq. Ft.	Total Sq. Ft.	Percent of Total	Monthly Rev/Sq. Ft.	Rent Per Unit	Monthly Rent	Annual Rent
2 Bed, 1 Bath	12	950	11,400	100.00%		\$ 1,200	\$ 14,400	\$ 172,800
<b>Totals</b>	<b>12</b>	<b>950</b>	<b>11,400</b>	<b>100.0%</b>		<b>1,200</b>	<b>\$ 14,400</b>	<b>\$ 172,800</b>

# Annual Expenses

Expense Description	Annual Amount	Annual Increase	Per Unit	Per Sq. Ft.	% of Expenses	% of Revenue
Accounting	1,000	1.0%	83.33	0.09	3.5%	0.6%
Advertising	1,000	1.0%	83.33	0.09	3.5%	0.6%
Cleaning	2,000	1.0%	166.67	0.18	7.1%	1.2%
Landscaping	1,000	1.0%	83.33	0.09	3.5%	0.6%
Management Fee	13,824		1,152.00	1.21	48.8%	8.4%
Property Taxes	7,000	1.0%	583.33	0.61	24.7%	4.3%
Water	2,500	1.0%	208.33	0.22	8.8%	1.5%
<b>Total Annual Operating Expenses</b>	<b>\$ 28,324</b>		<b>\$ 2,360</b>	<b>11,400</b>	<b>100.0%</b>	<b>17.3%</b>

## Income Tax Analysis

Tax Analysis - Operations	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Net Operating Income (NOI) from CFA</b>	\$ 135,836	\$ 138,698	\$ 141,618	\$ 144,598	\$ 147,640
Tax Depreciation	(33,455)	(34,909)	(34,909)	(34,909)	(34,909)
Interest Expense - Mortgage #1	(48,956)	(51,991)	(50,426)	(48,764)	(46,999)
<b>Operating Taxable Income (Loss)</b>	<u>\$ 53,425</u>	<u>\$ 51,797</u>	<u>\$ 56,283</u>	<u>\$ 60,926</u>	<u>\$ 65,732</u>
Federal & State Tax Rate	34.00%	34.00%	34.00%	34.00%	34.00%
<b>Income Tax Benefit (Expense)</b>	<u>\$ (18,165)</u>	<u>\$ (17,611)</u>	<u>\$ (19,136)</u>	<u>\$ (20,715)</u>	<u>\$ (22,349)</u>
Subject to Suspended Loss Rules?	Yes				

Tax Analysis - Property Sale	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Adjusted Projected Sales Price</b>	\$ 1,162,800	\$ 1,186,056	\$ 1,209,777	\$ 1,233,973	\$ 1,258,652
Original Cost of Property	(1,200,000)	(1,200,000)	(1,200,000)	(1,200,000)	(1,200,000)
Gain (Loss) on Property	<u>\$ (37,200)</u>	<u>\$ (13,944)</u>	<u>\$ 9,777</u>	<u>\$ 33,973</u>	<u>\$ 58,652</u>
Accumulated Depreciation/Amortization	33,455	68,364	103,273	138,182	173,091
Total Accumulated Depreciation	<u>\$ 33,455</u>	<u>\$ 68,364</u>	<u>\$ 103,273</u>	<u>\$ 138,182</u>	<u>\$ 173,091</u>
<b>Taxable Gain (Loss) on Property Sale</b>	<u>\$ (3,745)</u>	<u>\$ 54,420</u>	<u>\$ 113,050</u>	<u>\$ 172,154</u>	<u>\$ 231,743</u>
Capital Gain & State Rate on Sale	21.00%	21.00%	21.00%	21.00%	21.00%
Income Tax Benefit (Expense)	787	(11,428)	(23,740)	(36,152)	(48,666)
Recapture Tax	-	(5,442)	(10,327)	(13,818)	(17,309)
<b>Income Tax Benefit (Expense)</b>	<u>\$ 787</u>	<u>\$ (16,870)</u>	<u>\$ (34,068)</u>	<u>\$ (49,971)</u>	<u>\$ (65,975)</u>

## Annual Property Operating Data

	Year 1	%	Year 2	%	Year 3	%	Year 4	%	Year 5	%
<b>Potential Rental Income</b>	\$ 172,800	105.26%	\$ 176,256	105.26%	\$ 179,781	105.26%	\$ 183,377	105.26%	\$ 187,044	105.26%
Less: Vacancy & Credit Losses	(8,640)	-5.26%	(8,813)	-5.26%	(8,989)	-5.26%	(9,169)	-5.26%	(9,352)	-5.26%
<b>Effective Rental Income</b>	<u>\$ 164,160</u>	100.00%	<u>\$ 167,443</u>	100.00%	<u>\$ 170,792</u>	100.00%	<u>\$ 174,208</u>	100.00%	<u>\$ 177,692</u>	100.00%
<b>Gross Operating Income</b>	<u>\$ 164,160</u>	100.00%	<u>\$ 167,443</u>	100.00%	<u>\$ 170,792</u>	100.00%	<u>\$ 174,208</u>	100.00%	<u>\$ 177,692</u>	100.00%
<b>Operating Expenses</b>										
Accounting	1,000	0.61%	1,010	0.60%	1,020	0.60%	1,030	0.59%	1,041	0.59%
Advertising	1,000	0.61%	1,010	0.60%	1,020	0.60%	1,030	0.59%	1,041	0.59%
Cleaning	2,000	1.22%	2,020	1.21%	2,040	1.19%	2,061	1.18%	2,081	1.17%
Landscaping	1,000	0.61%	1,010	0.60%	1,020	0.60%	1,030	0.59%	1,041	0.59%
Management Fee	13,824	8.42%	14,100	8.42%	14,382	8.42%	14,670	8.42%	14,964	8.42%
Property Taxes	7,000	4.26%	7,070	4.22%	7,141	4.18%	7,212	4.14%	7,284	4.10%
Water	2,500	1.52%	2,525	1.51%	2,550	1.49%	2,576	1.48%	2,602	1.46%
<b>Total Operating Expenses</b>	<u>\$ 28,324</u>	17.25%	<u>\$ 28,745</u>	17.17%	<u>\$ 29,174</u>	17.08%	<u>\$ 29,610</u>	17.00%	<u>\$ 30,052</u>	16.07%
<b>Net Operating Income (NOI)</b>	<u>\$ 135,836</u>	82.75%	<u>\$ 138,698</u>	82.83%	<u>\$ 141,618</u>	82.92%	<u>\$ 144,598</u>	83.00%	<u>\$ 147,640</u>	83.09%
Less: Annual Debt Service	(77,375)	-47.13%	(77,375)	-46.21%	(77,375)	-45.30%	(77,375)	-44.42%	(77,375)	-43.54%
<b>Cash Flow Before Taxes</b>	<u>\$ 58,461</u>	35.61%	<u>\$ 61,323</u>	36.62%	<u>\$ 64,244</u>	37.62%	<u>\$ 67,224</u>	38.59%	<u>\$ 70,265</u>	39.54%

# Terms & Definitions

**Net Operating Income (NOI)** is a property's gross rental income reduced by all expenses except for loan payments, income taxes, mortgage insurance premium (MIP) payments and sometimes funded reserves.

**Debt Coverage Ratio (DCR)** is a property's net operating income divided by the amount of debt payments. Lenders use this calculation to determine the remaining operating cash flow after the debt payments.

**Loan-to-Value Ratio (LTV)** is the outstanding debt divided by the value of the property. This ratio is used to determine the amount of leverage and property equity. The debt balance can be the beginning or end-of-year balance. The property value used can be the contract price or the fair market value at the end of the year.

**Capitalization Rate (Cap Rate)** is the net operating income (NOI) divided by either the property's contract purchase price or its fair market value.

**Cash-on-Cash Return** is the net cash flow divided it by the initial investment (down payment). The calculation does not take into account the time value of money or change in the property's equity.

**Cash-on-Cash Return with Equity Build-up** modifies the cash-on-cash return calculation by adding the property's net change in equity for that year to the numerator and adding all previously generated equity to the denominator of the cash-on-cash return ratio. The calculation calculates the return on the property equity, i.e. the return on the cash that is "tied up" in the property.

**Net Present Value (NPV)** converts future dollars into present-day dollars by discounting (reducing) the future cash flow of a property by a given rate or percentage. The initial investment (down payment) is subtracted from the discounted dollars to derive the NPV. A positive NPV means that the property will generate a higher return than the given rate or percentage used to calculate the NPV amount.

**Gross Rent Multiplier (GRM)** is a property's fair market value divided by its gross rental income.

**Mortgage Insurance Premium (MIP) Payments** are insurance premiums charged by a lender to protect that lender against loss from a mortgager's default. The rates are charged on the balance of the loan and may be paid annually, monthly, or in some combination of the two (split premiums).

**Internal Rate-of-Return (IRR)** is the most widely used method of valuing a property's annual cash flow stream. Since a property's cash flow is earned in the future, those future dollars must be converted to present-day dollars. The IRR calculation discounts (reduces) the property's future cash flow at a rate (i.e. percentage) so that the sum of all cash flow for a specified time period is equal to the initial investment. The rate or percentage needed to do that is the IRR. In other words, IRR is the discount rate at which Net Present Value (NPV) is zero.

**Modified Internal Rate-of-Return (MIRR)** modifies the IRR to avoid the drawbacks of the traditional IRR. The IRR implicitly assumes that all cash flow is either reinvested or discounted at the computed IRR rate. In reality, a property's cash flow probably will not be reinvested at the computed IRR rate, but rather earn zero or a small amount of interest. The MIRR eliminates the reinvestment assumption by utilizing user stipulated reinvestment and borrowing rates.



**Visit us: 572 Freeport Street, Suite B Boston, Mass 02122**

**Call us: 617-297-8641**

**Fax us: 617-849-5679**

**Visit us: [www.MandrellCo.com](http://www.MandrellCo.com)**

**Email us: [Contact@MandrellCo.com](mailto:Contact@MandrellCo.com)**

**Need a cash flow analysis for a property you own or are looking to buy? Contact us today !**