

PREPARED FOR:

Town of Brookhaven Industrial Development Authority
One Independence Hill
Farmingville, New York 11738

Reasonableness Assessment for Financial Assistance

MIDDLE COUNTRY MEADOWS PROJECT
MIDDLE COUNTRY MEADOWS, LLC.

UPDATED JANUARY 28, 2021

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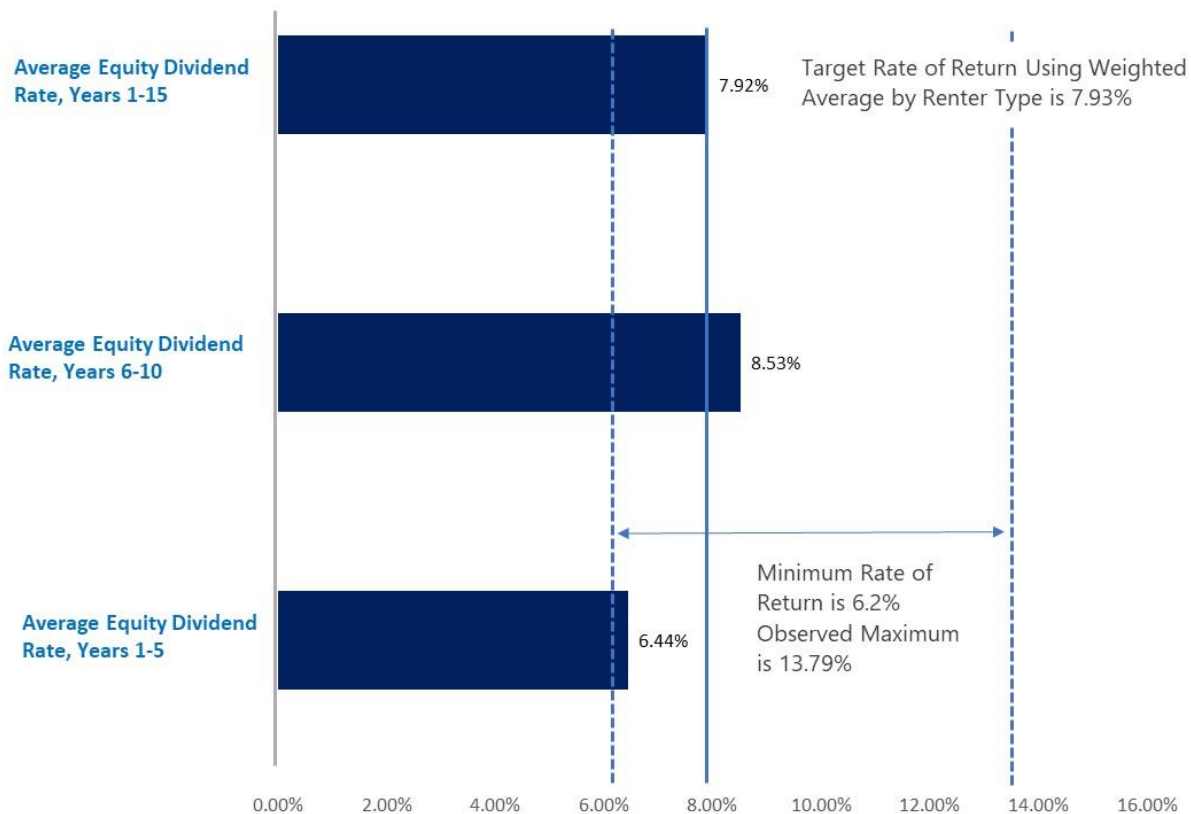
Summary of Results and Returns

Camoin 310 was commissioned by the Brookhaven Industrial Development Agency (IDA) to review the reasonableness of a request for financial assistance for the Middle Country Meadows senior housing project (Project), proposed by Middle Country Meadows, LLC. (Developer), located at 1277 Middle Country Road in Selden, and to recommend a PILOT structure for the IDA's review.

We conducted our analysis using assumptions that the Developer provided¹ and compared expenses and net operating income to current market benchmarks. We concluded that financial assistance is to the Project's viability, and developed a PILOT schedule for the IDA's review that reduces annual property tax expenses of the project enough to deliver a rate of return that is anticipated to be reasonable in the current market.

To develop a recommended PILOT, we calculated a target equity dividend rate of at or very near 7.93%, and adjusted the percent of full taxes paid each year to achieve two goals: (1) minimum debt service coverage in each year, and (2) an average equity dividend rate of 7.92% over 15 years. Returns and benchmarks are shown in the chart below. Details are shown in the tables on the next page.

Rate of Return and Benchmarks for Suburban Garden Apartments



¹ Developer projected a 7% vacancy rate, substantially in excess of benchmarks. Camoin 310 adjusted this to 3.28%.

The recommended PILOT is within the town's requested 15-year timeframe. Over the PILOT period, the Project will pay 44% of full taxes, on a present value basis. The town will receive more than \$4 million of net new taxes over 15 years, also on a present value basis.

Table 2

Equity Dividend Rate Targets			
Using Weighted-Average Based on Renter Type			
	Investment by		
	Units	Type	Target Return
Affordable	36	\$2,065,200	4.00%
Market Rate	<u>88</u>	<u>\$4,818,800</u>	<u>9.61%</u>
	124	\$6,884,000	7.93%

Benchmarks: RealtyRates. Calculations: Camoin 310

Table 1

PILOT Summary	
Term in Years	15
Taxes Owed if No PILOT	\$ 10,077,935
Less: PILOT Payments	\$ (4,459,756)
Value of Tax Exemption	\$ 5,618,179
Net New Town Tax Revenue	\$ 4,156,403

Discounted Present Value at 2%

Table 3

Summary of Investment Returns			
Measure	With PILOT	No PILOT	Benchmark
Project Cost	\$ 36,416,000	\$ 36,416,000	
Loan Amount	\$ 29,532,000	\$ 29,532,000	
Developer Investment	\$ 6,884,000	\$ 6,884,000	
Loan to Value (Loan / Project Cost)	81.10%	81.10%	75.00%
Equity as % of Project Costs	18.90%	18.90%	25.00%
<u>Equity Dividend Rates, Benchmark</u>			
Average Equity Dividend Rate Years 1-5	6.44%	0.00%	
Average Equity Dividend Rate Years 6-10	8.53%	1.32%	
Average Equity Dividend Rate Years 1-15	7.92%	3.09%	7.93%
Present Value Cashflow, Years 1-5	\$ 1,646,166	\$ (397,380)	
Present Value Cashflow, Years 1-15	\$ 6,419,465	\$ 1,077,565	
<u>Debt Service Coverage</u>			
Average	1.16	0.98	1.43
Range	1.11 to 1.29	0.93 to 1.18	1.10 to 1.86

Benchmarks: RealtyRates Investor Survey.

Average equity dividend rate calculated by Camoin 310 as the weighted average of affordable and market rate targets.

The Middle Country Meadows Project

Project Ownership, Description, and Tax Exemption Request

Middle Country Meadows, LLC. proposes to develop a 13-acre vacant parcel, building a 124-unit (36 or approximately 30% of units would be affordable²) active adult rental community at 1277 Middle Country Road in Selden, NY. It acquired the land for \$2,300,000 plus closing, site work, and other costs for a total of \$10,451,000. Construction costs and soft costs are estimated at \$25,965,000 for a total project cost of \$36,416,000³. The project is expected to take 30 months to complete⁴.

The Developer has requested a Payment-in-Lieu-of-Taxes (PILOT) agreement from the Town of Brookhaven IDA, as analyzed in this report. Mortgage recording tax and sales and use tax exemptions are also requested in the Project's Application to the IDA but are not analyzed in this report.

Camoin 310 Scope of Services

To assist with its evaluation of Middle Country Meadows LLC.'s request, Camoin 310 was commissioned by the IDA to:

- ◆ *Test Assumptions* by comparing rents, operating costs, and vacancy rates to real estate benchmarks for similar projects and noting any significant differences.
- ◆ Review the *Financing Plan* and perform an objective third-party evaluation of the estimated return on investment (ROI) to the Developer. We also analyze whether the terms of the long-term debt are within market benchmarks for bank financing.
- ◆ Prepare a *PILOT Recommendation* including a proposed schedule for the IDA's review that would result in a return that is within what would normally be anticipated in the current market for a similar project.

Camoin 310 prepares an XL workbook designed to collect key information about pro forma project cashflows, sources and uses of funds, and financing terms. This is sent to the developer or project owner by the IDA and the completed workbook is forwarded to Camoin 310 for use in our analysis.

Sources Consulted

- ◆ Cover Letter and Application dated July 23rd and July 24th, 2020, respectively.
- ◆ Project financing and annual cashflow workbook submitted and updated by the Developer in December, 2020.
- ◆ Real estate tax information and estimates received from the Town of Brookhaven, 12/4/20.
- ◆ RealtyRates.com's "Investor Survey" and "Market Survey," 4th Quarter 2020.

² Based on Developer Pro-Forma submitted in December 2020.

³ Ibid.

⁴ Based on Developer Application.

Testing of Assumptions

Project Operating Performance

We evaluated key assumptions used in the Developer's submitted project cashflows. Table 4 below presents the anticipated income and expenses in Year 5, when the construction is complete, and occupancy is stabilized.

The Project's operating costs were benchmarked against the costs of all apartments in the northeast, which encompasses both market rate and affordable units. We also examined the expected terms of the bank financing. We find these assumptions to be within an acceptable range of market benchmarks.

- ◆ The vacancy allowance of 7% is more than twice the expected rate for market rate apartments in the region (3.8%). The affordable units are in greater demand and a vacancy rate of 2% was estimated, for a weighted-average vacancy rate of 3.28% for the project.
- ◆ Effective Gross Income (EGI) is 97% compared with 94% for all apartments.
- ◆ Operating expenses as a percent of Effective Gross Income (EGI) are 18%, lower than the benchmark of 37%.
- ◆ Net Operating Income *prior to payment of debt service* is slightly higher than the benchmark.
- ◆ There is no benchmark for debt service, calculated as 62% of EGI.

Table 4

Comparison of Income and Expenses to Benchmarks			
	Stabilization, Year 5	% of EGI	Benchmark (1)
Income before Vacancy Adjustment	\$ 3,766,355	--	--
Vacancy Allowance	3.28%	--	3.34%
<u>Calculation of Net Operating Income and Expense Ratios</u>			
Effective Gross Income (EGI), Net of Vacancy	\$ 3,642,818	97%	94%
Operating Expenses and Reserve	\$ (643,304)	18%	37%
<u>Real Property Taxes</u>	\$ (165,031)	--	--
Net Operating Income	\$ 2,834,483	75%	63%
<u>Annual Financing Costs, Long Term Debt</u>			
Principal and Interest	\$ 2,269,176	62%	--

Source for Benchmarks: RealtyRates.

(1) Weighted Average Allowance using 2% for affordable and 3.34% for Market Rate

Rent

The table below presents the annual rental amounts for both market rate and affordable housing. The proposed development will consist of 88 two-bedroom market rate units, and 36 affordable two-bedroom units for households with income capped at 80% of Area Median Income⁵ for a total of 124 units.

Anticipated rents are shown in Table 5, below. Using the annual rent per unit, Camoin 310 calculated annual household income for the affordable units, assuming 30% of income is spent on rent. Market rate units are assumed to be rented by households earning the Median Household Income (MHI) for the Town of Brookhaven. At an MHI of \$101,031, the market rate units consume 30.8% of income.

Table 5

Annual Rental Income by Household Income				
	<u>Units</u>	<u>Income</u>	<u>Annual Rent</u>	<u>Rental Income Each Unit Type</u>
Affordable Income Range \$70,000 to \$99,999	36	\$ 81,040	\$ 22,320	\$ 803,520
Market Rate: MHI \$101,031	<u>88</u>	\$ 101,031	\$ 31,200	\$ <u>2,745,600</u>
Totals	124			\$ 3,549,120

Sources: MHI, US Census Quickfacts. Affordable Income Range, New York State.

Financing Plan

Sources and Uses of Funds

The Sources and Uses of Funds table shows the total project costs, including land acquisition and construction. It is worth noting that the loan-to-value ratio of 81% is higher than the market average of 70%.

Camoin 310 notes that the Developer states loan terms of 6% over 30 years with 12 payments per year, but also provides a fixed payment of \$2,269,176 per year. We calculate that such a payment assumes an interest rate closer to 6.5%. The Developer's debt service may be somewhat overestimated but is reasonable and is therefore used in this analysis. According to RealtyRates, interest rates range from a minimum of 2.06% to a maximum of 6.93%, and amortizations between 15 and 40 years, placing the loan terms within current benchmarks.

Table 6

Sources and Uses of Funds		
<u>Sources of Funds</u>		
Bank Financing	\$29,532,000	81%
Equity and Working Capital	<u>\$6,884,000</u>	<u>19%</u>
Total Sources	\$36,416,000	100%
<u>Uses of Funds</u>		
Real Property Acquisition and Site Work	\$10,190,000	28%
Soft and Transaction Costs	\$1,661,000	5%
Total Construction Costs	<u>\$24,565,000</u>	<u>67%</u>
Total Uses	\$36,416,000	100%

Source: Applicant

⁵ Based on Developer Pro-Forma inputs.

Estimation of Market Value

An estimated market value of the project was calculated for the purposes of this analysis only, as the Developer has not indicated a sale. We calculate the sale value using the Net Operating Income (NOI) method using current capitalization and tax rates⁶. Because the long term debt amortizes over 30 years, the outstanding principal is calculated and assumed to be repaid with sale proceeds net of a 2.5% sales commission rate.

Table 7

Calculation of Market Value at 5 and 15 Years		
<i>Assumes Sale Based on Projected Project Income without PILOT</i>		
	<u>5 Years</u>	<u>15 Years</u>
Pre Tax Net Operating Income (NOI)	\$2,999,514	\$3,656,391
Composite Capitalization Rate (Cap Rate)	10.11%	10.11%
Reversion (Sale) Value (NOI/Cap Rate)	\$29,668,782	\$36,166,079
Sale Commission Rate	2.50%	2.50%
Sale Commission Cost	(\$741,720)	(\$904,152)
Loan Payoff	<u>\$27,595,380</u>	<u>\$21,291,450</u>
Net Sale Proceeds	\$56,522,442	\$56,553,377

Source: Developer. Calculations: Camoin 310

Source for CapRate: Town of Brookhaven. Includes simple CapRate and an allowance for local tax.

PILOT Recommendation

Camoin 310 was asked to recommend a PILOT schedule that would reduce taxes sufficiently to support the project's financial viability, while enabling the Town of Brookhaven to meet its own revenue needs. We developed the PILOT schedule using the following steps:

1. *Determine the Project's need for assistance.* We created a comparison pro forma where full taxes were paid, and calculated that (1) the project would experience cash losses during the first six years; (2) the average return on equity of 3.1% was too low for the Project to be viable, and (3) the Project would not generate enough revenue to repay debt service until year 7 and would not meet the minimum coverage ratio of 1.10 until year 12, making it unlikely to obtain financing.
2. *Reduce the percent of taxes paid to achieve a reasonable rate of return for the Developer and still capture new tax revenues for the Town.* We created a schedule where the Developer pays an increasing percent of full taxes, starting with 10% in the first year and ending with 90% in year 15. In year 1, during construction, taxes are held at current levels plus a 2% escalator, and in year 2 as construction finishes, the PILOT assumes a phase-in of assessed value at 50%. In year 3 the Project is assessed at a completed value.

Increasing the percent paid provides the greatest benefit in the early years of the project when operations are beginning and fixed costs for debt service are a greater proportion of expenses. By paying 90% of full taxes in Year 15, the Developer avoids a large tax increase at the end of the PILOT.

The proposed 15-year PILOT schedule is presented in the table below.

⁶ $\text{NOI} \div \text{Capitalization Rate} = \text{Sale Value}$. Capitalization rate for this analysis is a market rate of 7% plus an additional 3.11% for the effects of the full real property taxes that would be paid by the next owner.

Table 8

Recommended PILOT Schedule for Middle Country Meadows
Total Estimated PILOT Savings to Project, Present Value: \$5,618,179
Net New Taxes with PILOT, Present Value: \$4,156,403

PILOT/ Tax Year	Land Tax	Improvement Tax	Total Tax (Land + Improvement)	Improvement Phase-In	Improvement PILOT as % of Total Tax	Improvement PILOT, Est. Payments	Total PILOT (Land + Improvement PILOT)	Project w/out PILOT at 2% increases	Estimated PILOT Saving	Property without Project at 2%	Net New Taxes from Project w/PILOT
<i>Current</i>	\$ 6,067	\$ 14,156	\$ 20,223								
PILOT/Tax Year 1	\$ 6,188	\$ 313,117	\$ 319,305	42%	10%	\$ 31,312	\$ 37,500	\$ 319,305	\$ 281,805	\$ 20,628	\$ 16,872
PILOT/Tax Year 2	\$ 6,312	\$ 373,001	\$ 379,313	50%	10%	\$ 37,300	\$ 43,612	\$ 379,313	\$ 335,701	\$ 21,041	\$ 22,572
PILOT/Tax Year 3	\$ 6,438	\$ 760,922	\$ 767,360	100%	20%	\$ 152,184	\$ 158,623	\$ 767,360	\$ 608,737	\$ 21,461	\$ 137,161
PILOT/Tax Year 4	\$ 6,567	\$ 776,140	\$ 782,707	100%	20%	\$ 155,228	\$ 161,795	\$ 782,707	\$ 620,912	\$ 21,891	\$ 139,905
PILOT/Tax Year 5	\$ 6,698	\$ 791,663	\$ 798,361	100%	20%	\$ 158,333	\$ 165,031	\$ 798,361	\$ 633,330	\$ 22,328	\$ 142,703
PILOT/Tax Year 6	\$ 6,832	\$ 807,496	\$ 814,329	100%	30%	\$ 242,249	\$ 249,081	\$ 814,329	\$ 565,247	\$ 22,775	\$ 226,306
PILOT/Tax Year 7	\$ 6,969	\$ 823,646	\$ 830,615	100%	30%	\$ 247,094	\$ 254,063	\$ 830,615	\$ 576,552	\$ 23,230	\$ 230,832
PILOT/Tax Year 8	\$ 7,108	\$ 840,119	\$ 847,228	100%	40%	\$ 336,048	\$ 343,156	\$ 847,228	\$ 504,071	\$ 23,695	\$ 319,461
PILOT/Tax Year 9	\$ 7,251	\$ 856,921	\$ 864,172	100%	40%	\$ 342,769	\$ 350,019	\$ 864,172	\$ 514,153	\$ 24,169	\$ 325,850
PILOT/Tax Year 10	\$ 7,396	\$ 874,060	\$ 881,456	100%	50%	\$ 437,030	\$ 444,426	\$ 881,456	\$ 437,030	\$ 24,652	\$ 419,773
PILOT/Tax Year 11	\$ 7,544	\$ 891,541	\$ 899,085	100%	50%	\$ 445,771	\$ 453,314	\$ 899,085	\$ 445,771	\$ 25,145	\$ 428,169
PILOT/Tax Year 12	\$ 7,694	\$ 909,372	\$ 917,066	100%	60%	\$ 545,623	\$ 553,318	\$ 917,066	\$ 363,749	\$ 25,648	\$ 527,669
PILOT/Tax Year 13	\$ 7,848	\$ 927,559	\$ 935,408	100%	70%	\$ 649,292	\$ 657,140	\$ 935,408	\$ 278,268	\$ 26,161	\$ 630,979
PILOT/Tax Year 14	\$ 8,005	\$ 946,111	\$ 954,116	100%	80%	\$ 756,888	\$ 764,894	\$ 954,116	\$ 189,222	\$ 26,685	\$ 738,209
PILOT/Tax Year 15	\$ 8,165	\$ 965,033	\$ 973,198	100%	90%	\$ 868,529	\$ 876,695	\$ 973,198	\$ 96,503	\$ 27,218	\$ 849,477
Totals	\$ 107,017	\$ 11,543,584	\$ 11,963,719			\$ 5,405,649	\$ 5,512,666	\$ 11,963,719	\$ 6,451,052	\$ 356,729	\$ 5,155,938
Present Value of Totals, 2% Discount	\$ 91,005	\$ 9,873,552	\$ 10,077,935			\$ 4,368,751	\$ 4,459,756	\$ 10,077,935	\$ 5,618,179	\$ 303,353	\$ 4,156,403
						Percent of Total Taxes Paid, Gross	46%	Percent Saving, Gross	54%		
						Percent of Total Taxes Paid, Present Value	44%	Percent Savings, Present Value	56%		

Attachment 1: Estimated Annual Cashflows

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
Operating Cash Flow															
Residential Income															
Gross Operating Income	\$ -	\$ 3,549,120	\$ 3,620,102	\$ 3,692,504	\$ 3,766,355	\$ 3,841,682	\$ 3,918,515	\$ 3,996,886	\$ 4,076,823	\$ 4,158,360	\$ 4,241,527	\$ 4,326,357	\$ 4,412,885	\$ 4,501,142	\$ 4,591,165
Less: Vacancy Allowance at Adjusted 3.28%	\$ -	\$ 116,411	\$ 118,739	\$ 121,114	\$ 123,536	\$ 126,007	\$ 128,527	\$ 131,098	\$ 133,720	\$ 136,394	\$ 139,122	\$ 141,905	\$ 144,743	\$ 147,637	\$ 150,590
Net Rental Income	\$ -	\$ 3,432,709	\$ 3,501,363	\$ 3,571,390	\$ 3,642,818	\$ 3,715,674	\$ 3,789,988	\$ 3,865,788	\$ 3,943,103	\$ 4,021,966	\$ 4,102,405	\$ 4,184,453	\$ 4,268,142	\$ 4,353,505	\$ 4,440,575
Effective Gross Income (EGI)	\$ -	\$ 3,432,709	\$ 3,501,363	\$ 3,571,390	\$ 3,642,818	\$ 3,715,674	\$ 3,789,988	\$ 3,865,788	\$ 3,943,103	\$ 4,021,966	\$ 4,102,405	\$ 4,184,453	\$ 4,268,142	\$ 4,353,505	\$ 4,440,575
Operating Expenses															
Salaries and Wages	\$ -	\$ 265,000	\$ 270,300	\$ 275,706	\$ 281,220	\$ 286,845	\$ 292,581	\$ 298,433	\$ 304,402	\$ 310,490	\$ 316,700	\$ 323,034	\$ 329,494	\$ 336,084	\$ 342,806
Repairs & Maintenance	\$ -	\$ 42,000	\$ 42,840	\$ 43,697	\$ 44,571	\$ 45,462	\$ 46,371	\$ 47,299	\$ 48,245	\$ 49,210	\$ 50,194	\$ 51,198	\$ 52,222	\$ 53,266	\$ 54,331
General and administrative		\$ 25,000													
Deposit to replacement reserve	\$ -	\$ 50,000	\$ 51,000	\$ 52,020	\$ 53,060	\$ 54,122	\$ 55,204	\$ 56,308	\$ 57,434	\$ 58,583	\$ 59,755	\$ 60,950	\$ 62,169	\$ 63,412	\$ 64,680
Contract services (landscape, Snow Refuse)		\$ 150,000													
Marketing		\$ 25,000													
Make ready cost		\$ 40,000													
Insurance	\$ -	\$ 99,200	\$ 101,184	\$ 103,208	\$ 105,272	\$ 107,377	\$ 109,525	\$ 111,715	\$ 113,950	\$ 116,229	\$ 118,553	\$ 120,924	\$ 123,343	\$ 125,810	\$ 128,326
Mgmt Fee	\$ -	\$ 150,000	\$ 153,000	\$ 156,060	\$ 159,181	\$ 162,365	\$ 165,612	\$ 168,924	\$ 172,303	\$ 175,749	\$ 179,264	\$ 182,849	\$ 186,506	\$ 190,236	\$ 194,041
Other misc		\$ 30,000													
Operating Expenses	\$ -	\$ 876,200	\$ 618,324	\$ 630,690	\$ 643,304	\$ 656,170	\$ 669,294	\$ 682,680	\$ 696,333	\$ 710,260	\$ 724,465	\$ 738,954	\$ 753,734	\$ 768,808	\$ 784,184
Pre-Tax Operating Income	\$ -	\$ 2,556,509	\$ 2,883,039	\$ 2,940,700	\$ 2,999,514	\$ 3,059,504	\$ 3,120,694	\$ 3,183,108	\$ 3,246,770	\$ 3,311,706	\$ 3,377,940	\$ 3,445,499	\$ 3,514,409	\$ 3,584,697	\$ 3,656,391
Real Property Taxes															
PILOT	\$ 37,500	\$ 43,612	\$ 158,623	\$ 161,795	\$ 165,031	\$ 249,081	\$ 254,063	\$ 343,156	\$ 350,019	\$ 444,426	\$ 453,314	\$ 553,318	\$ 657,140	\$ 764,894	\$ 876,695
Total Real Property Taxes	\$ 37,500	\$ 43,612	\$ 158,623	\$ 161,795	\$ 165,031	\$ 249,081	\$ 254,063	\$ 343,156	\$ 350,019	\$ 444,426	\$ 453,314	\$ 553,318	\$ 657,140	\$ 764,894	\$ 876,695
Net Operating Income (NOI)	\$ (37,500)	\$ 2,512,897	\$ 2,724,416	\$ 2,778,905	\$ 2,834,483	\$ 2,810,423	\$ 2,866,631	\$ 2,839,952	\$ 2,896,751	\$ 2,867,280	\$ 2,924,626	\$ 2,892,181	\$ 2,857,269	\$ 2,819,803	\$ 2,779,696
Financing Cash Flow															
Interest Payment	\$ -	\$ 1,929,261	\$ 1,907,055	\$ 1,883,399	\$ 1,858,197	\$ 1,831,348	\$ 1,802,746	\$ 1,772,275	\$ 1,739,814	\$ 1,705,232	\$ 1,668,390	\$ 1,629,142	\$ 1,587,330	\$ 1,542,787	\$ 1,495,333
Principal Payment		\$ 339,915	\$ 362,121	\$ 385,777	\$ 410,979	\$ 437,828	\$ 466,430	\$ 496,901	\$ 529,362	\$ 563,944	\$ 600,786	\$ 640,034	\$ 681,846	\$ 726,389	\$ 773,843
Debt Service	\$ -	\$ 2,269,176	\$ 2,269,176	\$ 2,269,176	\$ 2,269,176	\$ 2,269,176	\$ 2,269,176	\$ 2,269,176	\$ 2,269,176	\$ 2,269,176	\$ 2,269,176	\$ 2,269,176	\$ 2,269,176	\$ 2,269,176	\$ 2,269,176
Cash Flow After Financing and Reserve	\$ -	\$ 243,721	\$ 455,240	\$ 509,729	\$ 565,307	\$ 541,247	\$ 597,455	\$ 570,776	\$ 627,575	\$ 598,104	\$ 655,450	\$ 623,005	\$ 588,093	\$ 550,627	\$ 510,520
Annual Equity Dividend Rates		3.54%	6.61%	7.40%	8.21%	7.86%	8.68%	8.29%	9.12%	8.69%	9.52%	9.05%	8.54%	8.00%	7.42%
Debt Service Coverage Ratio (DSCR)	-	1.11	1.20	1.22	1.25	1.24	1.26	1.25	1.28	1.26	1.29	1.27	1.26	1.24	1.22

Appendix A: Benchmark Definitions

Internal Rate of Return (IRR): The return on an investment, calculated as the rate that reconciles the beginning value (or initial investment) with intermediate cashflows and the ending value. IRR assumes that all cashflows are reinvested in the project at the same rate of return. The rate of return is constant for the entire period being measured. (Source: RealtyRates.com)

Modified Internal Rate of Return (MIRR): Similar to the IRR, the MIRR is calculated as the rate that reconciles beginning value, ending value, and intermediate cashflows, producing a single rate of return for the entire period measured. Unlike the IRR, the MIRR assumes the intermediate cashflows are withdrawn and invested at some other rate (for example a US Treasury security) by the investor. This is considered a more accurate measure, since it recognizes that intermediate cashflows occur over time and do not actually earn the same rate of return as the initial investment. This reflects the actual market risk associated with intermediate cashflows. (Source: RealtyRates.com)

Equity Dividend Rate: This is calculated as the rate of return on the equity component of a project. It is calculated as follows: (Source: RealtyRates.com)

$$\text{Equity Dividend} / \text{Equity Investment} = \text{Equity Dividend Rate},$$

where $\text{Equity Dividend} = \text{Net Operating Income} - \text{Debt Service}.$

An Annual Equity Dividend Rate is calculated for each year's NOI. Camoin 310 also calculates average Equity Dividend Ratios at the end of 10- 15- and 20-year investment periods.

Debt Service Coverage Ratio (DSCR): The ratio of annual debt repayment, including principal and interest, to total Net Operating Income (NOI). (Source: RealtyRates.com)

Net Operating Income (NOI): Income net of all operating costs including vacancy and collection loss but not including debt service. Appraisers also typically expense reserves for repairs and replacements. However, because reserves are not usually reported along with other transaction data, RealtyRates.com tracks lender requirements but does not include them in calculations. (Source: RealtyRates.com)

Overall Capitalization Rate (OAR): Ratio of Net Operating Income to property value or sales price. (Source: RealtyRates.com)

$$\text{OAR} = \text{NOI} / \text{Property value or sales price}$$

Note: To derive a future sales price, Camoin 310 divides NOI by a Capitalization Rate using either a market benchmark for OAR or a client- or Developer-provided rate. This “reverses” the OAR equation to calculate a sales price based on investment return requirements for market conditions.



Leading action to grow your economy

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