Multi-Family Affordable Rental Housing Financing
Advanced Course
National Community Development Lending School
March 25 – March 28, 2012
Seattle, WA

INTRODUCTION

There are many financing and structuring options available to developers of affordable housing these days. Cash or bond deal? Fannie and Freddie vs. FHA? Tax credits or conventional? In the multi-family affordable rental housing classes, we will discuss many of the key elements necessary in putting together an affordable transaction, and discuss the benefits and challenges associated with the myriad of structuring options. The Introductory class will work through the building blocks of affordable housing deals, culminating in a case study that puts all of the pieces together. The Advanced course will address the more complex world of tax-exempt bonds with a challenging case study that will allow students to directly apply what they have learned in the class.

OBJECTIVES

At the end of this course, students will be able to:

- Distinguish between an Operating Budget and a Development Budget, and independently prepare each for a transaction
- Know how to determine Gross Potential Rents on an affordable transaction with LIHTC restrictions and a HAP contract
- Understand how a tax-exempt bond transaction works, and be able to determine the interest rate and Negative Arbitrage for a bond transaction
- Assess the viability of an affordable housing transaction financed with tax-exempt bonds, and determine if it is worthwhile pursuing

INSTRUCTOR

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AGENDA

I. Introductions

II. Goals for the Class

III. Project Budget & Operating Budget – Knowing the Difference Between the Two

IV. Loan Sizing based on NOI

V. HAP Contracts –Project-Based Rental Subsidies and How They Impact Underwriting

Low Income Housing Tax Credits – A Brief Overview of How Tax Credits Work

Tax Exempt Bonds 101 – How Bond Deals Vary From 9% LIHCT Transactions

VI. Case Study: Edgewater Village as TE bond/4% tax credit deal

SAMPLE DETAILED OPERATING BUDGET

Nmbr	Type	Size	Mo. Rent	Stabilized	
60	2-BR/2BA	921	$ 800	$ 576,000	
60	2-BR/2BA	995	$ 830	$ 597,600	
56	3-BR/2-BA	1175	$ 895	$ 601,440	
Gross Rents				**$ 1,775,040**	
Other				$ 26,400	
Effective Gross Income				**$ 1,801,440**	
Vacancy	5.0%			(90,072)	
Net Rental Income				**$ 1,711,368**	
					PER UNIT
Legal/Accounting				$ 17,000	$ 97
Insurance				$ 18,000	$ 102
Real Estate Taxes				$ 149,400	$ 849
Repairs & Maintenance				$ 49,300	$ 280
Decorating/Turnover				$ 23,500	$ 134
Advertising				$ 18,000	$ 102
Trash Removal				$ 16,000	$ 91
Payroll				$ 175,500	$ 997
Utilities				$ 91,000	$ 517
Admin				$ 24,000	$ 136
Grounds				$ 26,900	$ 153
Management Fee				68,455	$ 389
TOTAL OPERATING EXPENSES				**$ 677,055**	**$ 3,847**
Reserves ($250/unit)				$ 44,000	$ 250
TOTAL EXPENSES				**$ 721,055**	**$ 4,097**
NOI				**$ 990,313**	
LOAN AMOUNT					
DEBT SERVICE (Assume 7%, 30 yrs)					
DCR				**1.20**	
Net Cash Flow					

SOURCES OF FUNDS		USES OF FUNDS	
Bank Debt	$ 10,335,000	Acquisition	$ 801,600
Tax Credit Equity	$ 7,850,000	Site Improvements	$ 2,689,800
DHCD	$ 950,000	Construction	$ 8,855,000
Interim Income	$ 940,460	Contingency (5%)	$ 577,240
Deferred Developers Fee	$ 355,959	Site Development Bonds	$ 45,000
		Payment/Performance Bond	$ 112,860
		Permits/Fees	$ 296,800
		Construction Interest	$ 1,626,009
		Insurance	$ 63,862
		Borrower A&E	$ 369,550
		Bank Architect	$ 18,000
		RE Taxes	$ 50,000
		Construction Consultant	$ 16,500
		Appraisals/Mkt Study	$ 40,000
		Title/Recording	$ 46,000
		Legal	
		- Bank	$ 25,000
		- Borrower	$ 222,500
		- Underwriter	$ 20,000
		- Prudential/FNMA	$ 65,000
		Loan Fees	$ 273,600
		Bank L/C Fee (30 mos)	$ 262,250
		45 Days Interest/Lag Deposit	$ 146,389
		Issuer Fees/COI	$ 537,800
		Bridge Loan Interest/Synd Fee	$ 260,000
		Marketing/Leasing	$ 185,000
		Misc.	$ 209,166
		Soft Conting	$ 115,000
		Developer Fee	$ 2,501,493
TOTAL	**$ 20,431,419**	**TOTAL**	**$ 20,431,419**

HAP Contract Tutorial

1. What they are

    a. Project-based section 8 contract whereby owner agrees to keep project affordable and only rent to tenants at 80% Ami or less and HUD will pay a portion of the each tenant's rent
    b. Subject to appropriations, HAPs guarantee rental payments to owners, so landlords are willing to participate in the program.
    c. Under the HAP, tenants pay 30% of their income in rent, and HUD pays the balance up to a market rent.
    d. No HAP has ever been cancelled for borrowers who were adequately managing their properties, but we are all trained to underwrite deals based on the scenario "what if the HAP went away".

2. How lender's underwrite these contracts and why

    a. Assuming a property has both a HAP contract and LIHTC restrictions, Lenders typically underwrite to the lesser of 1) HAP rent, 2) appraiser's rent, or 3) maximum allowable LIHTC rent. If HAP rent is less than the appraiser and max LIHTC, then that is exactly what HUD will pay so you need to use that figure in your pro-forma. If max LIHTC rent is lower than HAP or market, then that is the highest rent the borrower can charge the tenant should the HAP go away, so you should generally use that number in your pro-forma. If market rent is the lowest of the three, then if the HAP went away these lower market rents are the most the borrower can expect to achieve and so should be used in the pro-forma. It's conservative, but generally how the market is underwriting LIHTC projects with HAPs these days.

Type	HAP	Appraisal	Max LIHTC	Bank
2-BR/1-BA	$640	$ 625	$648	$625
3-BR/1.5BA	$860	$ 875	$875	$860
4-BR/2-BA	$955	$ 950	$930	$930

3. Transition reserve and why

    a. Most deals that have a HAP contract are required (by Fannie and Freddie) to have a transition reserve, typically sized at 6 months of debt service. The reason for the reserve is that should the HAP get cancelled, and tenants move out en masse, the funds will be used to prepare the units for re-leasing and cover any shortfalls in operations. Don't forget to include it.

4. Mark up/down to market

    a. When the HAP contract expires, owners can go in for a mark up to market so as to adjust the rent to market levels. HUD sets the rent based on a market study, and then gives annual increases based on a statewide average increase in operating costs at multi-family properties.
    b. When HAP rents are increased, this helps the developer but has no impact on the tenant – they continue to pay 30% of their income and HUD pays the balance. That's why mark-up-to-market projects don't lead to significant displacement.

Tax Credit Tutorial

1. What are they:

    a. The Federal Low Income Housing Tax Credit program was established to provide economic incentives for the private sector, primarily Corporate America, to invest in affordable housing projects.
    b. The LIHTC allows the holder -- be it an individual but more likely a corporation – to reduce their federal tax bill dollar-for-dollar by the amount of tax credits they hold for a 10 year period. If I have $20,000 in annual tax credits, and owe the IRS $50,000, I can pay just $30,000 and send the IRS verification of my tax credits and be done with my tax obligation for the year.
    c. Since Corporate America pays slightly less than $1 for each dollar worth of tax credit, there is an economic incentive to participate in the program – which drives cash into affordable housing development.
    d. The LIHTC environment has been from one end of the spectrum to the other in the past five years. Last time I taught this course in 2010,not a lot of companies had taxable income they were looking to shield and pricing had dropped to $0.70/credit. There were many good deals with no buyers at all. Now we are back at or over a dollar in strong markets (investors buying the losses) and as of today the high water mark I know of is $1.14/credit.
    e. CRA buyers skew the market and sometimes make uneconomical decisions to meet regulatory (CRA) needs.

2. How They Work – Big Picture

    a. Affordable housing developers compete for and are awarded tax credits on a competitive basis. States award tax credits to affordable housing projects based on a scoring system that tends to favor deeper affordability restrictions, projects with non-profit developers and projects with a social service component. This is spelled out in the annual Qualified Allocation Plan (QAP).
    b. In return for receiving this federal tax benefit, developers commit to create and maintain their apartment properties as affordable housing. Minimum affordability restrictions are 20%/50% or 40%/60%.
    c. However, while some developers could probably use the tax credit, their more immediate need is cash today to build their project. So they sell these credits to Corporate America and use the cash to subsidize their affordable housing project.
    d. Tax Credits => Sell to Syndicator or Direct => Cash => Affordable Housing

3. Availability of Tax Credits

    a. Each state is allocated a fixed amount of 9% tax credits based on population size. Currently, the allocation calculation is about $2.50/resident. NYC, Chicago and LA are exceptions – they get their own allocations separate from the state.
    b. In addition, each state and/or jurisdiction receives a set amount of tax-exempt Private Activity bonds it can issue, also calculated at approximately $2.50/resident. To the extent states use their Private Activity bonds to finance affordable housing transactions, these projects receive an automatic allocation of 4% tax credits.
    c. 9% credits and 4% credits both work in a similar fashion and provide equity to affordable housing projects. But as described below, 4%credits generate less equity than 9% credits.

d. Since 9% credits are more attractive to developers, and their supply is limited, there is typically fierce competition to win these credits from the state allocating agencies. This poses some substantial challenges to the developer – they need to have done significant due diligence, and spent a lot of money, to submit a competitive tax credit application, but there is no guarantee of success. Significant time and money – key developer resources – are at risk before learning if a tax credit application is successful.
e. Competition for tax-exempt bonds and in turn the 4% credit is generally less brutal. Most states have more bond capacity than is allocated during a given year so there is availability. However, because the equity raise is lower, certain projects won't work with just 4% credits. Further, among investors, there is a bias against 4% deals because of the higher debt amounts and assumption of less renovation. That said, since the 4% credits are as-of right, many developers only pursue projects that can work with bonds and credits.

4. Who's Who

a. As noted above, in return for the credits, developers promise to maintain their properties as affordable housing. This is generally tested annually by the syndicator through a formal audit, where tenant files are reviewed to verify that residents are not earning more than was noted in the original tax credit application or is allowed by the IRS. .
b. The tax credits flow to the investor – Corporate America – by virtue of their 99% ownership of the Limited Partnership that ultimately owns the real estate, and so long as the project maintains its affordability. If the developer fails to meet this test – even inadvertently – the IRS can demand a pro-rata repayment of the credits taken to date, generally with penalties and interest.
c. Because of this 'recapture' risk, corporate America tends to invest in LIHTC projects not directly but through syndicators – companies established to serve as the intermediary between the developer and the investor. The syndicator manages the reporting and oversight requirements of the tax credit project and generally makes sure the project is operated in compliance with tax credit laws.
d. With a syndicator in the deal, the investor is more confident that the project will run per plan and that the IRS won't come along and take back the tax credits. For this service, the syndicator is paid a fee.

5. Calculating the Tax Credits

a. The maximum tax credit award is a function of eligible project costs. Eligible costs are loosely defined as the costs necessary to acquire and build an affordable housing property: site acquisition, hard construction costs, construction period interest, some portion of developer fee and some financing costs. Speak to an accountant for more detail.
b. Depending on whether the developer is applying for 4% or 9% credits, that percentage is then multiplied by the total eligible basis. The result is the annual tax credit.
c. Since the low income housing tax credit is a 10-year benefit, the annual tax credit is then multiplied by 10 for the gross tax credit amount.
d. Gross Tax Credit Calculation Exhibit.

6. Calculating Net Equity

a. As noted above, the syndicator takes a fee for providing a host of oversight and back-office services. This fee is paid out of the gross equity amount.
b. In addition, these tax benefits are taken over the course of 10 years, so a dollar in benefits received in 2013 is worth less than a dollar in benefits received today.

As a result, the credits have a declining value over the 10-year award period, which is reflected in the investor's acquisition price for the credits.

c. In addition, the ultimate investor typically wants to pay less than $1 in cash for the $1 in tax benefits since most other investments that company would consider offer some sort of return. To incent the investor to purchase LIHTCs, there needs to be a return on this investment. They want to purchase the credits for below par.
d. For these reasons, most developers who sell their credits through syndicators receive about $0.90/$1.00 in today's market. Obviously this varies market by market – with CRA markets like NY, DC, SF commanding higher prices – but $0.90 is a good proxy for pricing

Calculating Tax Credit Basis and Gross Credit Amount - 9%

		Eligible	Amount	9% Credits	10 Years
USES OF FUNDS					
Acquisition	$ 4,750,000	Yes	$ 4,750,000	$ 427,500	$ 4,275,000
Rehab	$ 6,000,000	Yes	$ 6,000,000	$ 540,000	$ 5,400,000
Contingency	$ 600,000	Yes	$ 600,000	$ 54,000	$ 540,000
Architect and Engineer	$ 330,000	Yes	$ 330,000	$ 29,700	$ 297,000
Legal and Accounting	$ 60,000	Yes	$ 60,000	$ 5,400	$ 54,000
Bank Financing Fee (1%)	$ 100,000	Yes	$ 100,000	$ 9,000	$ 90,000
Construction Pd. Interest	$ 500,000	75%	$ 375,000	$ 33,750	$ 337,500
Insurance	$ 50,000	No	$ -	$ -	$ -
RE Taxes	$ 75,300	No	$ -	$ -	$ -
Developer Fee	$ 1,000,000	45%	$ 450,000	$ 40,500	$ 405,000
Title/Recording	$ 50,000	Yes	$ 50,000	$ 4,500	$ 45,000
Partnership Fees	$ 7,500	No	$ -	$ -	$ -
Marketing	$ 10,000	No	$ -	$ -	$ -
Transition Reserve	$ 430,000	No	$ -	$ -	$ -
Operating Reserve	$ 300,000	No	$ -	$ -	$ -
TOTALS	**$ 14,262,800**		$ 12,715,000	$ 1,144,350	**$ 11,443,500**

Calculating Net Tax Credits - 9%

		Eligible	Amount	9% Credits	10 Years
USES OF FUNDS					
Acquisition	$ 4,750,000	Yes	$ 4,750,000	$ 427,500	$ 4,275,000
Rehab	$ 6,000,000	Yes	$ 6,000,000	$ 540,000	$ 5,400,000
Contingency	$ 600,000	Yes	$ 600,000	$ 54,000	$ 540,000
Architect and Engineer	$ 330,000	Yes	$ 330,000	$ 29,700	$ 297,000
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Insurance	$ 50,000	No	$ -	$ -	$ -
RE Taxes	$ 75,300	No	$ -	$ -	$ -
Developer Fee	$ 1,000,000	45%	$ 450,000	$ 40,500	$ 405,000
Title/Recording	$ 50,000	Yes	$ 50,000	$ 4,500	$ 45,000
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Marketing	$ 10,000	No	$ -	$ -	$ -
Transition Reserve	$ 430,000	No	$ -	$ -	$ -
Operating Reserve	$ 300,000	No	$ -	$ -	$ -
TOTALS	**$ 14,262,800**		$ 12,715,000	$ 1,144,350	$ 11,443,500
					$0.90/$1.00 Credit Rate
					$ 10,299,150

Calculating Tax Credit Basis and Gross Credit Amount - 4%

		Eligible	Amount	4% Credits	10 Years
USES OF FUNDS					
Acquisition	$ 4,750,000	Yes	$ 4,750,000	$ 190,000	$ 1,900,000
Rehab	$ 6,000,000	Yes	$ 6,000,000	$ 240,000	$ 2,400,000
Contingency	$ 600,000	Yes	$ 600,000	$ 24,000	$ 240,000
Architect and Engineer	$ 330,000	Yes	$ 330,000	$ 13,200	$ 132,000
Legal and Accounting	$ 60,000	Yes	$ 60,000	$ 2,400	$ 24,000
Bank Financing Fee (1%)	$ 100,000	Yes	$ 100,000	$ 4,000	$ 40,000
Construction Pd. Interest	$ 500,000	75%	$ 375,000	$ 15,000	$ 150,000
Insurance	$ 50,000	No	$ -	$ -	$ -
RE Taxes	$ 75,300	No	$ -	$ -	$ -
Developer Fee	$ 1,000,000	45%	$ 450,000	$ 18,000	$ 180,000
Title/Recording	$ 50,000	Yes	$ 50,000	$ 2,000	$ 20,000
Partnership Fees	$ 7,500	No	$ -	$ -	$ -
Marketing	$ 10,000	No	$ -	$ -	$ -
Transition Reserve	$ 430,000	No	$ -	$ -	$ -
Operating Reserve	$ 300,000	No	$ -	$ -	$ -
TOTALS	**$ 14,262,800**		$ 12,715,000	$ 508,600	**$ 5,086,000**

Calculating Net Tax Credits - 4%

			Eligible	Amount	4% Credits	10 Years
USES OF FUNDS						
Acquisition	$	4,750,000	Yes	$ 4,750,000	$ 190,000	$ 1,900,000
Rehab	$	6,000,000	Yes	$ 6,000,000	$ 240,000	$ 2,400,000
Contingency	$	600,000	Yes	$ 600,000	$ 24,000	$ 240,000
Architect and Engineer	$	330,000	Yes	$ 330,000	$ 13,200	$ 132,000
Legal and Accounting	$	60,000	Yes	$ 60,000	$ 2,400	$ 24,000
Bank Financing Fee (1%)	$	100,000	Yes	$ 100,000	$ 4,000	$ 40,000
Construction Pd. Interest	$	500,000	75%	$ 375,000	$ 15,000	$ 150,000
Insurance	$	50,000	No	$ -	$ -	$ -
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Developer Fee	$	1,000,000	45%	$ 450,000	$ 18,000	$ 180,000
Title/Recording	$	50,000	Yes	$ 50,000	$ 2,000	$ 20,000
Partnership Fees	$	7,500	No	$ -	$ -	$ -
Marketing	$	10,000	No	$ -	$ -	$ -
Transition Reserve	$	430,000	No	$ -	$ -	$ -
Operating Reserve	$	300,000	No	$ -	$ -	$ -
TOTALS	**$**	**14,262,800**		$ 12,715,000	$ 508,600	$ 5,086,000
						$0.90/$1.00 Credit Rate
						$ 4,577,400

Tax Exempt Bonds 101

1. How does the structure work

- Jurisdictions receive a fixed annual allocation of tax-exempt bonds they can use for a variety of economic development projects. They often use them as a means of raising low-cost capital for affordable housing deals.
- Investors buy TE bonds because they offer a decent rate of interest, and the investors don't pay taxes on the interest earned. But these investors generally won't buy bonds if payment of principal and interest is contingent on RE performance.
- Borrowers approach Fannie Mae/Freddie Mac/Insurance companies to step in and provide a guarantee of payment to the bondholders, for a fee.
- With this guarantee – called credit enhancement -- from a highly rated public company (typically AAA), investors will buy the bonds – and at a fairly low interest rate because there is little risk that they won't get repaid.
- In terms of the deal mechanics, the jurisdiction issues/sells bonds to raise money to make the loan to an affordable housing project, and they then assign this loan to Fannie/Freddie. They take an up-front fee and typically an annual fee for allocating this limited resource of TE bonds to the project.
- The resulting loan has all the characteristics of a regular taxable loan you would get from a Bank – a certain interest rate, a fixed amortization and debt service payments.
- However, Fannie/Freddie typically do not take construction and lease-up risk.
- Commercial banks run letters of credit to Fannie/Freddie during construction/lease-up period. This means that if something goes wrong with the deal, and Fannie/Freddie have to repay some or all of the bondholders, they will then draw on the Bank's L/C and get reimbursed.
- Provided all goes right, Fannie/Freddie return the Bank's L/C at stabilization and conversion to permanent loan, and Fannie is the Permanent Lender for 30 years.
- **For affordable housing deals, the TE bonds automatically come with 4% tax credits. In general, 4% tax credits generate a little less than half the equity raised by 9% credits. Coupled with the low interest rate, this deal structure is a very powerful tool for financing affordable housing**.

2. Key parties to a bond deal not found in conventional deals:

- Issuer: The governmental body that is committing a share of its annual bond allocation to the transaction. EG – DCHFA, Maryland CDA. No risk.
- Underwriter: Prepares all documentation for, and carries out, the bond sale to the public market. They set up the amortizations schedules and cash flows. EG – BAML,
- Trustee: The trustee manages all of the funds after closing. After approval by the Bank and issuer, they pay out all construction draws. They also make all P&I payments based on the underwriter's schedule. EG - BONY
- Too many attorneys.

3. Negative Arbitrage

- Outside of the significant costs and line items that are included in a bond deal and not in a conventional one, lenders need to take a serious look at how the construction period interest is calculated.
- 100% forward funded, with unused portion parked in GIC.
- Borrower is paying interest on the full amount of the bonds from day one, even though they may be using only a portion of the proceeds. It's important to note the borrower has a constant payment obligation to the bondholders throughout the deal. They are paying interest on 100% of bonds.

- The borrower earns interest on the unused portion of the bond proceeds that are sitting in the GIC to offset the payments owed to the bondholders. These rates are extremely low today. Declining balance.
- **The net of these two – what you pay and what you earn – is your construction period interest that flows through to the sources and uses.**

4. As noted above, there are three moving parts to the Negative Arbitrage calculation:

   - Interest rate on bonds: What the borrower owes the bondholders
   - Interest rate on GIC: What the borrower earns on the unused bond proceeds. Subject to fluctuation. Very low right now – less than 1%.
   - Draw schedule: How fast the bond proceeds get withdrawn to pay project costs. This is truly subjective and requires considering:
     - What gets paid at closing, what are the sources to pay those costs and what's left over as your initial deposit in the GIC
     - How realistic is the borrower's draw projections? Will draws be even throughout or will the project start slow and then ramp up (more typical)? Be conservative.
     - Are there any equity payments due mid construction that may pay some project costs? If so, proceeds linger in the account longer and borrowers earn more interest.

Negative Arbitrage Tutorial

5. How do you determine the borrower's interest rates for a bond deal?

   - The rate is a build-up of various pieces. It starts with the rate on the tax exempt bonds and includes the fees that all of the involved parties need to get paid. The rate stack is as follows:
     - Bond rate: 30 year fixed or 18-year remarket will affect the note rate. Today rate for a 30-year bond is about 4.00%%
     - Add issuer fee – range widely, from 12.5 bps to 40 bps
     - Add trustee fee – 5 bps
     - Freddie guarantee and servicing fees – 115 bps depending on LTV/DCR/strength of deal
   - But there is a different rate during construction and perm because Freddie is not really in the deal during construction – all the risk is borne by construction lender. However, since most banks are only AA rated, they will charge something for the risk associated with having their AAA credit backstopped by only AA credit – typically 20 - 50 bps.
     - Bond rate
     - Add issuer fee bps
     - Add trustee fee
     - Add Fannie Mae 'credit risk'

Rate Stack Exhibit

6. What is an L/C Fee?

   - All bond deal budgets will have a line item for L/C fees. Remember that the Bank is providing an L/C to Fannie/Freddie during construction in case something goes wrong, and they need to be paid for this risk.
   - In a bond deal, all of the interest calculated above is being paid to the bondholders, not to the Bank since they don't technically have a loan out. The Bank is paid in L/C fees, now about 150 bps/year paid quarterly and in advance. This is built into a project budget in addition to an interest reserve.
   - The L/C Fee is in addition to the Origination Fee the Bank gets paid for underwriting the deal, getting it approved and providing a commitment to the borrower.

7. Appraisal Issues

- Fannie/Freddie allow for **up to** a 100 bps reduction in the cap rate to account for the favorable financing because the tax-exempt interest rate is below the market rate. Because the tax exempt financing goes with the real estate in foreclosure (assuming compliance with affordability requirements), this is considered to add value to the real estate.
- Fannie/Freddie is recognizing the net present value of the differential between the amount an owner would pay in debt service at a market rate of interest, and what they'll pay at the lower, favorable rate. As a short cut, the appraiser makes this adjustment to the cap rate but it cannot vary more than 100 bps from the market rate.
- In addition, Fannie will typically allow a loan of up to 90% LTV against TE bond-financed projects. As a result of these two factors, developers can borrower more money against the property and complete a more substantial rehab

Negative Arbitrage Tutorial - Base Case

INTEREST CALCULATION - GIC @ 6.36%, Bond @ 6.5%

Month	Begin CF Balance	Assumed Draw	Ending CF Balance	Interest Earned	Interest Paid	Net Interest Due
1	$ 9,500,000	$ 2,584,781	$ 6,915,219	$ 36,651	$ 51,458	$ (14,808)
2	$ 6,915,219	$ 176,831	$ 6,738,388	$ 35,713	$ 51,458	$ (15,745)
3	$ 6,738,388	$ 311,007	$ 6,427,381	$ 34,065	$ 51,458	$ (17,393)
4	$ 6,427,381	$ 345,340	$ 6,082,041	$ 32,235	$ 51,458	$ (19,224)
5	$ 6,082,041	$ 533,522	$ 5,548,519	$ 29,407	$ 51,458	$ (22,051)
6	$ 5,548,519	$ 814,374	$ 4,734,145	$ 25,091	$ 51,458	$ (26,367)
7	$ 4,734,145	$ 813,374	$ 3,920,771	$ 20,780	$ 51,458	$ (30,678)
8	$ 3,920,771	$ 867,212	$ 3,053,559	$ 16,184	$ 51,458	$ (35,274)
9	$ 3,053,559	$ 383,212	$ 2,670,347	$ 14,153	$ 51,458	$ (37,305)
10	$ 2,670,347	$ 898,045	$ 1,772,302	$ 9,393	$ 51,458	$ (42,065)
11	$ 1,772,302	$ 683,617	$ 1,088,685	$ 5,770	$ 51,458	$ (45,688)
12	$ 1,088,685	$ 457,183	$ 631,502	$ 3,347	$ 51,458	$ (48,111)
13	$ 631,502	$ 178,992	$ 452,510	$ 2,398	$ 51,458	$ (49,060)
14	$ 452,510	$ 214,568	$ 237,942	$ 1,261	$ 51,458	$ (50,197)
15	$ 237,942	$ 229,205	$ 8,737	$ 46	$ 51,458	$ (51,412)
16	$ 8,737	$ 8,737	$ -	$ -	$ 51,458	$ (51,458)
17		$ -	$ -	$ -	$ 51,458	$ (51,458)
18	$ -	$ -	$ -	$ -	$ 51,458	$ (51,458)
19	$ -	$ -	$ -	$ -		
TOTALS		**$ 9,500,000**		**$ 266,495**	**$ 926,250**	**$ (659,755)**

Net Interest to Project	**$ 659,755**

Negative Arbitrage Tutorial - Scenario 2

INTEREST CALCULATION - Same draw schedule and bond rate, different GIC rate (1%)

Month	Begin CF Balance	Assumed Draw	Ending CF Balance	Interest Earned	Interest Paid	Net Interest Due
1	$ 9,500,000	$ 2,584,781	$ 6,915,219	$ 5,763	$ 51,458	$ (45,696)
2	$ 6,915,219	$ 176,831	$ 6,738,388	$ 5,615	$ 51,458	$ (45,843)
3	$ 6,738,388	$ 311,007	$ 6,427,381	$ 5,356	$ 51,458	$ (46,102)
4	$ 6,427,381	$ 345,340	$ 6,082,041	$ 5,068	$ 51,458	$ (46,390)
5	$ 6,082,041	$ 533,522	$ 5,548,519	$ 4,624	$ 51,458	$ (46,835)
6	$ 5,548,519	$ 814,374	$ 4,734,145	$ 3,945	$ 51,458	$ (47,513)
7	$ 4,734,145	$ 813,374	$ 3,920,771	$ 3,267	$ 51,458	$ (48,191)
8	$ 3,920,771	$ 867,212	$ 3,053,559	$ 2,545	$ 51,458	$ (48,914)
9	$ 3,053,559	$ 383,212	$ 2,670,347	$ 2,225	$ 51,458	$ (49,233)
10	$ 2,670,347	$ 898,045	$ 1,772,302	$ 1,477	$ 51,458	$ (49,981)
11	$ 1,772,302	$ 683,617	$ 1,088,685	$ 907	$ 51,458	$ (50,551)
12	$ 1,088,685	$ 457,183	$ 631,502	$ 526	$ 51,458	$ (50,932)
13	$ 631,502	$ 178,992	$ 452,510	$ 377	$ 51,458	$ (51,081)
14	$ 452,510	$ 214,568	$ 237,942	$ 198	$ 51,458	$ (51,260)
15	$ 237,942	$ 229,205	$ 8,737	$ 7	$ 51,458	$ (51,451)
16	$ 8,737	$ 8,737	$ -	$ -	$ 51,458	$ (51,458)
17		$ -	$ -	$ -	$ 51,458	$ (51,458)
18	$ -	$ -	$ -	$ -	$ 51,458	$ (51,458)
19	$ -	$ -	$ -	$ -		
TOTALS		**$ 9,500,000**		**$ 41,902**	**$ 926,250**	**$ (884,348)**

Net Interest to Project	**$ 884,348**

Negative Arbitrage Tutorial - Scenario 3

INTEREST CALCULATION - Same GIC and bond rate as base case, different draw schedule

Month	Begin CF Balance	Assumed Draw	Ending CF Balance	Interest Earned	Interest Paid	Net Interest Due
1	$ 9,500,000	$ 3,000,000	$ 6,500,000	$ 34,450	$ 51,458	$ (17,008)
2	$ 6,500,000	$ 350,000	$ 6,150,000	$ 32,595	$ 51,458	$ (18,863)
3	$ 6,150,000	$ 500,000	$ 5,650,000	$ 29,945	$ 51,458	$ (21,513)
4	$ 5,650,000	$ 600,000	$ 5,050,000	$ 26,765	$ 51,458	$ (24,693)
5	$ 5,050,000	$ 800,000	$ 4,250,000	$ 22,525	$ 51,458	$ (28,933)
6	$ 4,250,000	$ 900,000	$ 3,350,000	$ 17,755	$ 51,458	$ (33,703)
7	$ 3,350,000	$ 800,000	$ 2,550,000	$ 13,515	$ 51,458	$ (37,943)
8	$ 2,550,000	$ 700,000	$ 1,850,000	$ 9,805	$ 51,458	$ (41,653)
9	$ 1,850,000	$ 600,000	$ 1,250,000	$ 6,625	$ 51,458	$ (44,833)
10	$ 1,250,000	$ 500,000	$ 750,000	$ 3,975	$ 51,458	$ (47,483)
11	$ 750,000	$ 400,000	$ 350,000	$ 1,855	$ 51,458	$ (49,603)
12	$ 350,000	$ 300,000	$ 50,000	$ 265	$ 51,458	$ (51,193)
13	$ 50,000	$ 50,000	$ -	$ -	$ 51,458	$ (51,458)
14	$ -	$ -	$ -	$ -	$ 51,458	$ (51,458)
15	$ -	$ -	$ -	$ -	$ 51,458	$ (51,458)
16	$ -	$ -	$ -	$ -	$ 51,458	$ (51,458)
17		$ -	$ -	$ -	$ 51,458	$ (51,458)
18	$ -	$ -	$ -	$ -	$ 51,458	$ (51,458)
19	$ -	$ -	$ -	$ -		$ -
TOTALS		**$ 9,500,000**		**$ 200,075**	**$ 926,250**	**$ (726,175)**

Net Interest to Project	**$ 726,175**

Negative Arbitrage Tutorial - Scenario 4

INTEREST CALCULATION - Same draw schedule and GIC rate as base case, different Bond rate @ 7%

Month	Begin CF Balance	Assumed Draw	Ending CF Balance	Interest Earned	Interest Paid	Net Interest Due
1	$ 9,500,000	$ 2,584,781	$ 6,915,219	$ 36,651	$ 55,417	$ (18,766)
2	$ 6,915,219	$ 176,831	$ 6,738,388	$ 35,713	$ 55,417	$ (19,703)
3	$ 6,738,388	$ 311,007	$ 6,427,381	$ 34,065	$ 55,417	$ (21,352)
4	$ 6,427,381	$ 345,340	$ 6,082,041	$ 32,235	$ 55,417	$ (23,182)
5	$ 6,082,041	$ 533,522	$ 5,548,519	$ 29,407	$ 55,417	$ (26,010)
6	$ 5,548,519	$ 814,374	$ 4,734,145	$ 25,091	$ 55,417	$ (30,326)
7	$ 4,734,145	$ 813,374	$ 3,920,771	$ 20,780	$ 55,417	$ (34,637)
8	$ 3,920,771	$ 867,212	$ 3,053,559	$ 16,184	$ 55,417	$ (39,233)
9	$ 3,053,559	$ 383,212	$ 2,670,347	$ 14,153	$ 55,417	$ (41,264)
10	$ 2,670,347	$ 898,045	$ 1,772,302	$ 9,393	$ 55,417	$ (46,023)
11	$ 1,772,302	$ 683,617	$ 1,088,685	$ 5,770	$ 55,417	$ (49,647)
12	$ 1,088,685	$ 457,183	$ 631,502	$ 3,347	$ 55,417	$ (52,070)
13	$ 631,502	$ 178,992	$ 452,510	$ 2,398	$ 55,417	$ (53,018)
14	$ 452,510	$ 214,568	$ 237,942	$ 1,261	$ 55,417	$ (54,156)
15	$ 237,942	$ 229,205	$ 8,737	$ 46	$ 55,417	$ (55,370)
16	$ 8,737	$ 8,737	$ -	$ -	$ 55,417	$ (55,417)
17		$ -	$ -	$ -	$ 55,417	$ (55,417)
18	$ -	$ -	$ -	$ -	$ 55,417	$ (55,417)
19	$ -	$ -	$ -	$ -		$ -
TOTALS		**$ 9,500,000**		**$ 266,495**	**$ 997,500**	**$ (731,005)**

Net Interest to Project	**$ 731,005**

Interest Rate Build
Fixed Rate Transactions

Permanent Rate

TE Bond Rate	4.00%
Freddie Guarantee	1.15% (depends on deal)
Servicing	0.25%
Issuer Fee	0.25%
Trustee	0.05%
All-In Rate	**5.70%**

Construction Rate

TE Bond Rate	4.00%
Freddie Guarantee	0.00%
Servicing	0.00%
Freddie Rating Risk	0.45% (assumes AA rate L/C provider)
Issuer Fee	0.25%
Trustee	0.05%
All-In Rate	**4.75%***

*** DON'T FORGET THE LOC FEES**

CASE STUDY – 4% TAX CREDITS

The Set-Up

Rick Gendron, President of South Side Development Corporation ("SSDC"), was recently contacted by a broker, Drew Fitch, who offered Mr. Gendron the option to purchase a 223-unit apartment property in Edgewood, Maryland called Edgewater Village. Mr. Fitch said the sales price was $4.75 million ($21,300/unit) and that he would agree to hold the property off the market for six weeks while Mr. Gendron considered the acquisition and spoke with several sources of financing about putting a deal together.

SSDC, a for-profit developer, was founded in 1995 to acquire and preserve affordable housing in select markets along the East Coast. To date, the firm has acquired over 2,000 units and has approximately 450 more in various stages of development. Even though SSDC had not previously worked in Maryland, Mr. Gendron knew this market well since he grew up nearby. Edgewood is a stable and growing suburban community located between Washington, DC and Philadelphia, with great access to both employment markets. Several large national retailers have central warehouses in this area from which they supply their stores from Boston to the Carolinas. In addition, several high-tech employers, including Broadcom and Microsoft, have large office campuses in the nearby town of Rising Sun.

For the past several years, the main focus of housing development in Edgewood has been single-family homes. Over this period, there has been virtually no new construction of rental units even though occupancy rates have remained above ninety five percent. The primary reason for this has been the lack of vacant land on which developers can build new housing. Multi-family development has consisted primarily of rehabbing existing properties and taking them up market. By the time Mr. Gendron got the call from Mr. Fitch, over 80% of the large apartment properties in Edgewood were characterized as market rate or upscale housing. This was forcing many of the area residents, employed in the nearby warehouses or other moderate wage occupations, to move out of Edgewood in search of cheaper rent.

Edgewater Village was an anomaly for the Edgewood community. The property was constructed to serve low and moderate income residents. The original developer secured HUD financing for the project in return for committing to target families earning no more than 60% of AMI. Further, Mr. Gendron knew that if his firm didn't buy the property, it would probably be sold to Mr. Richard Rich, who would pay off the HUD mortgage, kick out the tenants and convert the property to market rents.

The Real Estate

Edgewater Village consists of 43 1-BR/1-BA units, 156 2-BR/1BA units and 24 3-BR/2-BA units located in 18 buildings and surrounded by 250 parking spaces. Within walking distance of Edgewater Village there are three shopping complexes providing a variety of goods and services. Less than a half mile from the site is an elementary school and a commuter train station. Mr. Gendron found the site especially attractive because public schools, hospitals, shopping and major sources of employment were located within a relatively short distance from the site and were accessible by both car and public transportation.

The property was built in 1975 and had not experienced any significant renovation since construction. There was extensive deferred maintenance on site, and all of the units needed updating. The apartments had original kitchens and baths, dangerously outdated electrical service, single-pane windows and leaky roofs, among other issues.

Another defining feature of Edgewater Village Apartments was that 100% of the units were covered by a HAP contract (a HUD project-based Section 8 contract). Under a HAP contract, tenants pay 30% of their income in rent and the balance is paid by HUD. The current owner had been diligent about submitting his annual requests for rent increases based on rising expenses, but this hadn't really enabled him to keep pace with the market rents given the strong demand for housing in the area. Actual rents at the property were $600, $650 and $700 per month for 1BR, 2BR and 3BR unit types, but this was substantially below what other landlords were getting in the market. Mr. Gendron had seen a market study from the year before showing market rents at $700, $780 and $867 for these unit types.

Since the HAP contract was about to expire, Mr. Gendron knew he could go back to HUD for a mark-up-to-market in the HAP and get HUD to pay these higher market rents. Best of all, the increase would have no impact on the tenants – they would continue to pay 30% of their income in rent, and the balance would be paid by HUD. Further, these 'market' rents fell below the maximum tax credit rents in Edgewood because the AMI was $70,000 for a family of four. This was important because Mr. Gendron was aware he would need an allocation of Low Income Housing Tax Credits to make the deal work, and therefore rents at the property would be capped at the maximum LIHTC rents.

Mr. Gendron spent the next few days walking the site and completing a detailed unit-by-unit analysis of the deferred maintenance and rehab needs on site. He met with the Tenants Association to get their opinion of the property condition, and ultimately developed the following scope of work for the project.

- New kitchens and baths in all units, including fixtures ands appliances
- New site lighting
- New low flow toilets, sinks and faucets
- New hot water heaters and HVAC units
- New roofs and windows throughout
- Tuckpointing and sidewalk repairs
- New common doors in all buildings
- Extensive landscaping, including general upgrades to site and playground
- A new community building

Based on the scope of work, Mr. Gendron estimated that rehab/property stabilization would take 18 months. Based on this scope of rehab, Mr. Gendron was confident he could operate the property for $4,300/unit in annual expenses before $300/unit in replacement reserves.

The Financing

The next step was for Mr. Gendron to meet with his architect to put together a rehab budget based on the scope of work. Mr. Gendron met with three general contractors with whom he had worked in the past, in order to estimate construction costs. Mr. Gendron concluded, after meeting separately with the three contractors, that rehab costs would be $6,000,000 including contractor overhead and profit. Soft costs would be as follows:

Architectural & Engineering Fees	5.5% of Construction
Financing Fees	1% of loan amount
Title Insurance and Recording Fees	$ 50,000
Net Interest to Project	?
Insurance during Construction	$ 50,000
Real Estate Taxes during Construction	$ 75,300
Legal and Accounting Fees	$ 60,000
Marketing	$ 10,000
Partnership Management Fee	$ 5,000
Partnership Publication	$ 2,500
Transition Reserve (6 mos)	$ 430,000
Operating Reserve	$300,000
Developer Fee	10% of development costs, not to exceed $1MM
Contingency	10% of Construction

A week later, Mr. Gendron met with Maryland CDA and found out some bad news -- there were no 9% credits available for Mr. Gendron's deal. But before he could get too dispirited, CDA proposed an alternative. They were willing to allocate to him up to $13MM in tax-exempt bond cap to make his deal work. In addition, since the project would now be financed with tax-exempt bonds, it would also be entitled to receive 4% tax credits. Based on the project's eligible basis, the annual credit amount would be $220,000, or $2.2 million in gross tax credit equity. Before leaving, the director of CDA handed Mr.

Gendron a schedule of fees associated with tax-exempt bond/4% tax credit deals that he would have to pay in addition to the costs associated with a 9% LIHTC transaction. These included the issuer's upfront fee of 75 bps and the underwriter's fee of 50 bps, as well as $50M in attorney fees. The issuer (CDA) also noted that they would add 40 bps to the rate as their on-going fee, and the trustee would add 10 bps.

CDA also told Mr. Gendron that his project would be eligible for up to $500,000 in soft debt from the State if he could show a gap in his permanent Sources and Uses.

Before going any further, he decided it was time to engage a HUD-approved market study analyst to complete a rental survey. This would tell him the HUD approved current market rents for Edgewater Village Apartments, and if they were higher than he originally thought, perhaps he would be able to borrow some additional funds and help close this financing gap.

A week later, Mr. Gendron received a copy of both the HUD rent survey and the property appraisal that had been ordered by his lender. While the HUD market study analyst and the bank's appraiser did not conclude exactly the same rent structure, they were quite close. Further, their figures were better than Mr. Gendron had initially hoped.

Nmbr Units	Unit Type	Current Rents	Appraisers Mkt Rent	HUD Rents	Max. LIHTC Rents
43	1-BR/1-BA	$ 600	$ 750	$ 770	$ 930
156	2-BR/1BA	$ 650	$ 845	$ 840	$ 1,050
24	3-BR/1-BA	$ 700	$ 920	$ 915	$ 1,210

Armed with this information, Mr. Gendron met with a Fannie Mae lender to see if Fannie Mae would provide the necessary credit enhancement to publicly sell the bonds. Mr. Gendron sat down with the DUS lender for a few hours and talked through his pro-forma rents and expenses. He also stressed the importance of securing Fannie Mae's involvement in order to preserve this project as affordable housing. By the end of the meeting, Mr. Gendron had a preliminary indication that Fannie would provide the permanent credit enhancement on the deal assuming an 80% LTV, a 1.20x DCR and a 30-year loan amortization. The DUS lender would charge a 1% up-front fee to secure Fannie's commitment, and the borrower would be responsible for paying both Fannie Mae's and the DUS lender's legal fees, which added up to $50,000. When Mr. Gendron asked about interest rates, he was told that current Fannie-Mae enhanced tax exempt bonds were pricing at 4.25% and that Fannie's guarantee and servicing fee for this deal would be 1.25%. During construction, Fannie would charge 25 bps for the credit risk associated with the LOC bank.

Mr. Gendron then circled back with his friendly construction lender to confirm that they would provide a construction period letter of credit in lieu of a conventional construction loan. The lender told Mr. Gendron he would do the deal for a 1% up-front fee and 100 bps per year in L/C fees, and would use the same underwriting standards as the DUS lender. Mr. Gendron and his friendly banker then put together a pro-forma draw schedule and interest reserve calculation as noted below, which assumes that GIC earnings at 1%.

CASE STUDY – 4% TAX CREDITS

Month	Begin CF Balance	Assumed Draw	Ending CF Balance	Interest Accrued	Interest Paid
1			$ 8,523,250	$ 21,308	$ 63,021
2			$ 8,073,250	$ 16,819	$ 63,021
3			$ 7,573,250	$ 15,778	$ 63,021
4			$ 7,023,250	$ 14,632	$ 63,021
5			$ 6,423,250	$ 13,382	$ 63,021
6			$ 5,773,250	$ 12,028	$ 63,021
7			$ 5,073,250	$ 10,569	$ 63,021
8			$ 4,373,250	$ 9,111	$ 63,021
9			$ 3,673,250	$ 7,653	$ 63,021
10			$ 2,973,250	$ 6,194	$ 63,021
11			$ 2,373,250	$ 4,944	$ 63,021
12			$ 1,773,250	$ 3,694	$ 63,021
13			$ 1,273,250	$ 2,653	$ 63,021
14			$ 823,250	$ 1,715	$ 63,021
15			$ 373,250	$ 778	$ 63,021
16			$ -	$ -	$ 63,021
17		$ -	$ -	$ -	$ 63,021
18	$ -	$ -	$ -	$ -	$ 63,021

Assignment

- Develop an Operating and Development budgets based on the rental information noted above.
- Show the ‘rate stack’ for both the construction and perm rate
- Assume Mr. Gendron negotiates a deal with his syndicator for $0.75/credit dollar with 80% paid in at closing and the balance at conversion. Prepare a construction period and permanent period development budget.
- Describe the strengths and weaknesses of the deal?
- How would you value this property? Assume an 8% market cap rate
- What is the final LTV?
- Based on what you know now, would you do the deal?

Nmbr	Type	Size	Bank Rents	BANK PRO-FORMA
	1-BR/1-BA	706		$ -
	2-BR/1BA	860		$ -
	3-BR/1-BA	1032		$ -
				-

Preliminary Proforma Analysis

Edwater Apartments
Edgewood, Maryland

OPERATING			Stabilized
Total Gross Potential Rent			$ -
Vacancy/collection Loss		5%	$ -
EFFECTIVE GROSS INCOME			**$ -**
TOTAL OPERATING EXPENSE			-
	Per Unit		*$* -
Replacement Reserves			$ -
TOTAL EXPENSES			$ -
	Per Unit		*$* -
NET OPERATING INCOME			$ -
Term Loan			$ -
DSC			-
Cash Flow/Loss			$ -

EDGEWATER VILLAGE APARTMENTS

PROJECT BUDGET

SOURCES OF FUNDS		USES OF FUNDS	
Bank L/C	$ -	Acquisition	$ -
Tax Credit Equity	$ -	Rehab	$ -
MHA	$ -	Contingency	$ -
Deferred Fee	$ -	Architect and Engineer	$ -
		Legal and Accounting	$ -
		Bank Underwriting Fee (1%)	$ -
		Bank L/C Fee	$ -
		Net Interest to Project	$ -
		Insurance	$ -
		RE Taxes	$ -
		Developer Fee	$ -
		Title/Recording	$ -
		Partnership Fees	$ -
		Marketing	$ -
		Issuer Fee	$ -
		Underwriter Fee	$ -
		Issuer/Underwriter Legal	$ -
		Fannie Mae Loan Fee	$ -
		Fannie Mae/DUS Legal	$ -
		Transition Reserve	$ -
		Operating Reserve	$ -
TOTALS	**$ -**	**TOTALS**	**$ -**

PROJECT BUDGET

SOURCES OF FUNDS		USES OF FUNDS	
Bank L/C	$ -	Acquisition	$ -
Tax Credit Equity	$ -	Rehab	$ -
MHA	$ -	Contingency	$ -
Deferred Fee	$ -	Architect and Engineer	$ -
		Legal and Accounting	$ -
		Bank Underwriting Fee (1%)	$ -
		Bank L/C Fee	$ -
		Net Interest to Project	$ -
		Insurance	$ -
		RE Taxes	$ -
		Developer Fee	$ -
		Title/Recording	$ -
		Partnership Fees	$ -
		Marketing	$ -
		Issuer Fee	$ -
		Underwriter Fee	$ -
		Issuer/Underwriter Legal	$ -
		Fannie Mae Loan Fee	$ -
		Fannie Mae/DUS Legal	$ -
		Transition Reserve	$ -
		Operating Reserve	$ -
TOTALS	**$ -**	**TOTALS**	**$ -**