The LIHTC Program and Considerations for Guarantors of Affordable Housing Funds

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1. INTRODUCTION

1.1 Biographical Information

William J. Guthlein, CPA, CFA

Mr. Guthlein is an investment professional experienced with affordable housing investments, particularly the guaranteed yield and secondary market. He is employed by DQE Financial Corporation and is President of North Shore Affordable Housing, an indirect subsidiary of DQE, Inc. Mr. Guthlein received his J.D. cum laude from Suffolk Law School in 1985, Masters in Business Administration from Harvard Business School in 1977 and Bachelor of Science degree from Pennsylvania State University in 1974.

Prior to joining DQE, Inc., Mr. Guthlein was the Chief Financial Officer of Chancellor Corporation, a publicly traded financial services company that had assets under management in excess of $700 million. Mr. Guthlein was responsible for credit analysis in support of underwriting and syndication.

Since joining DQE, Inc. in 1997, Mr. Guthlein has been responsible for achieving profit and volume goals and expanding into related markets, by selecting, managing and selling affordable housing investments and guarantees to maximize return on capital.

His accomplishments currently include selling a nine figure affordable housing portfolio after benchmarking the current market yield against the company's opportunity cost of capital; evaluating third party yield guarantee business using Monte Carlo simulation and Risk Adjusted Return on Capital (RAROC); and developing business plans targeting different investment niches and the review/monitoring of investment procedures and compliance practices.

Kevin M. Bingham, ACAS, MAAA

Mr. Bingham is an Associate of the Casualty Actuarial Society and a Member of the American Academy of Actuaries. He is employed by Deloitte & Touche LLP in Hartford Connecticut, as a Senior Manager. Mr. Bingham received his Bachelor of Science degree from Clarkson University in 1992 and recently passed the CFA Level 1 exam.

Prior to joining Deloitte & Touche LLP, Mr. Bingham was employed by a major Hartford based insurance company where he worked in Corporate Actuarial, Commercial Lines, and Reinsurance Assets Management.

Since joining Deloitte & Touche LLP in 1998, Mr. Bingham has served numerous clients in the public and private sectors. Work for these clients has included: analysis of loss reserves, reinsurance and insurance pricing reviews, demutualization, dynamic financial analysis and the modeling and pricing of affordable housing funds. Mr. Bingham co-authored the papers *Implications of Dynamic Financial Analysis on Demutualization* with Mr. Jan Lommele and *Strategic Insurance Purchasing in the 21st Century* with Mr. John Slusarski. Mr. Bingham has also been a frequent guest speaker, including presentations for organizations such as the Casualty Actuarial Society (CAS) ratemaking, reinsurance and dynamic financial analysis special interest seminars, Chartered Property Casualty Underwriters (CPCU) Society, Casualty Actuaries of New England (CANE), American Association of State Compensation Insurance Funds (AASCIF), state insurance departments and other public and private companies.

1.2 Acknowledgements

The authors would like to thank Mr. Russell Bingham and Mr. Stephen DiCenso for their time and effort in reviewing and commenting on this paper. We would also like to thank DQE Financial and Deloitte & Touche for their valuable support in developing this paper. Lastly, we would like welcome Kevin's new daughter Nicole Bingham into the world of actuarial science. Rumor has it, she is planning on sitting for part one of the CAS actuarial exams in 2021.

1.3 Abstract

The Low Income Housing Tax Credit Program (LIHTC) was created by the Tax Reform Act of 1986 and was first utilized by the real estate development community during 1987. Section 42 of the Internal Revenue Code (IRC s. 42), as amended, is the federal law that governs the LIHTC Program. Each year the IRS allocates tax credits to each state based on population as defined in IRC s. 42. Under the LIHTC Program, developers of rental housing must meet certain affordability tests and the property must remain in compliance with the low income tenant set aside and rent restriction requirements for a period of not less than 15 years from the first taxable

year of the credit period. Depending upon the state, property rent restrictions can last for 30 years or more.

Tax credits are currently allocated to developers by each state's housing development authority. From the inception of the program in 1987 through 2000, each state historically received an annual allocation of $1.25 times the state population (subject to a minimum allocation). During 2000, Congress increased the limit by 40% to address the impact of inflation since the inception of the program. The 2001 limit is $1.50 times the state population and will increase to $1.75 times the state population in 2002. Beginning in 2003, the limit will be adjusted annually for inflation.

The affordable housing investment process is usually initiated by property developers who structure projects in order to receive tax credit awards from state housing agencies. Property developers bring together all aspects of a project: land, permits, architect plans, construction team, financing, legal, and property management. Property developers also negotiate equity investment agreements with individual investors (often community development banks) or with syndicators. In these negotiations, the syndicator usually acquires a 99% limited partnership interest in the operating partnership that owns the LIHTC property, while the property developer acts as general partner. The terms of the negotiation include price, payment benchmarks, developer guarantees, and residual interest splits.

Syndicators bundle multiple properties in a limited partnership and sell interests in the partnership (usually referred to as a Fund) to either investors or guarantors. Investors receive tax credits, taxable losses (or income), and cash distributions from the underlying Fund investment. Guarantors establish partnerships (called the guaranteed partnership) to purchase the unguaranteed Fund. Limited partnership interests in the guaranteed partnerships are then sold to guaranteed investors. The amount of the investment made by the guaranteed investors less the cost of the underlying Fund investment represents the guarantee fee earned by the guarantor.

In exchange for the guarantee fee, a guarantor assumes virtually all of the risks that threaten the realization of the investor's guaranteed yield except for risks associated with a future change in

the tax law and the individual investor's specific tax capacity. A guarantor's risks can be categorized as follows:

- Sponsor Risk
- Specification Risk
- Construction Risk
- Lease up Risk
- Operation Risk
- Tax Compliance Risk
- Legal Risk
- Reinsurance Risk
- Sponsor Risk and Fee Sharing Risk

Guarantors have a strong incentive to manage and mitigate each of the above risk factors that could result in a guarantee fund not achieving its projected yield and a guarantor making cash payments to the investor to cover any shortfall in the guaranteed yield. In addition, guarantors also face pressure from independent auditors, rating agencies and regulatory bodies reviewing their guaranteed affordable housing risk exposure. Given these challenges, the Chief Risk Officer and senior management team of the guarantor often look for the most innovative way to manage the impact of guarantee related earnings volatility on their organization's financials.

1.4 Background

DQE Financial began investing in affordable housing funds in 1993 and became a yield guarantor in 1995. There was little operating data to assess the guarantee opportunity, but the business justification for becoming a guarantor was nevertheless simple and powerful:

> *"If we're willing to invest in affordable housing funds, we should be willing to guarantee yields to others. The risks taken are the same, the rewards are different but attractive."*

Five years later, with a book of guaranteed obligations in excess of $250 million and sufficient internal and external operating data to undertake a detailed analysis, DQE Financial retained Deloitte & Touche's Actuarial & Insurance Consulting Group to help evaluate the risk associated

with the current portfolio and to assess the attractiveness of new guarantee volume at the then lower guarantee fee levels.

Deloitte & Touche and DQE Financial worked together to build and parameterize a model focused on the evaluation of key risk factors facing affordable housing guarantee transactions. The model used Monte Carlo simulation in order to develop distributions of outcomes for statistics such as loss ratios, expense ratios and operating ratios helpful in assessing the risk/ return tradeoff associated with guarantee transactions. The results of the modeling were also used to perform a cost/benefit analysis of alternative reinsurance solutions and risk/fee sharing agreements with sponsors. Using insurance industry underwriting standards, Deloitte & Touche concluded that the then lower market premium/guarantee fee of approximately 10% of guarantee volume still represented a very attractive opportunity for DQE Financial.

Although today's premiums are substantially higher than the pricing assumed in Deloitte & Touche's 2000 report, DQE Financial's parent company has decided that affordable housing investments no longer fit within the utility holding company's strategic plan. Consequently DQE Financial has decided not to originate new yield guarantees. Even with this decision, the authors feel that the maturation of the LIHTC program since its inception and the dramatic growth in demand for guaranteed products presents a very attractive business opportunity for guarantors and innovative insurance/reinsurance companies during the next few years.

With all the pressures guarantors face on a daily basis, we believe the guarantee community currently has a strong interest in developing a reliable source of insurance/reinsurance protection. This partnership with insurers/reinsurers would provide guarantors with the following benefits:

- Ability to limit the guarantor's overall exposure within limits that the Board of Directors find satisfactory;
- Ability to limit the guarantor's overall exposure within limits that rating agencies find satisfactory; and
- Ability to increase the implicit rating of the guarantor's guaranteed fund transactions since a higher rated fund decreases the yield sold to the guaranteed investor which increases the guarantor's risk premium (partially paying for the cost of reinsurance).

At the same time, we believe the most responsive and innovative insurers will likely gain a substantial niche premium by promptly addressing current market demand and by developing strong relationships with the top-tier sponsors and guarantors in the industry who drive the most profitable business through due-diligence and experience.

With the above in mind, the objectives of this paper are to:

1. Provide a brief background on the history of the LIHTC program;
2. Introduce the reader to affordable housing terminology and flow;
3. Discuss the risk factors facing affordable housing investments and possible mitigation strategies;
4. Provide the reader with some simplified guarantee transaction examples;
5. Introduce insurance terminology and possible coverage options; and
6. Highlight for the guarantor and insurance/reinsurance communities that a profitable business opportunity exists for those willing to form a strategic partnership and capitalize on the roughly $135 - $180 million of annual guarantee fees available in the guaranteed affordable housing investment market.

Fasten your seat belts and enjoy the ride.

2. LOW INCOME HOUSING TAX CREDIT PROGRAM

2.1 Tax Reform Act of 1986

The Low Income Housing Tax Credit (LIHTC) Program was created by the Tax Reform Act of 1986 and was first utilized by the real estate development community during 1987. Section 42 of the Internal Revenue Code (IRC s. 42), as amended, is the federal law that governs the LIHTC Program[1].

Under the LIHTC Program, developers of rental housing must meet certain affordability tests under Section 42(g)(1) of the Internal Revenue Code:

1. 20% or more of the residential units in such project are both rent restricted and occupied by individuals whose income is 50% or less of area median gross income (medium income as established by the U.S. Department of Housing and Urban Development), or
2. 40% or more of the residential units in such project are both rent restricted and occupied by individuals whose income is 60% or less of area median gross income (medium income as established by the U.S. Department of Housing and Urban Development).

States allocate LIHTCs to individual properties, usually through a competitive bidding process that includes a rigorous financial examination by the state. Successful LIHTC applicants are awarded a ten-year stream of federal tax credits (refer to Section 42(f)(1) of the IRS Code) which are used to offset federal tax liability. Property developers who are awarded LIHTCs typically cannot apply all of the tax credits they earn on a project against their own tax liability. As a result, the tax credit syndication market evolved. Through syndication, retail and institutional investors with limited real estate expertise can invest in a diversified portfolio of LIHTC properties managed by the syndicator. Investors provide equity funding for the LIHTC properties in exchange for future expected tax credits and tax losses. The LIHTC thus

[1] Copy of IRC s.42 is available from www.uscode.house.gov.

effectively substitutes equity for debt, reducing debt payments sufficiently so that the property can be operated and maintained at reduced rent levels.

Under Section 42 (I)(1) of the IRS Code, the property must remain in compliance with the low-income tenant set aside and rent restriction requirements for a period of not less than 15 years from the first taxable year of the credit period. Depending upon the state, property rent restrictions can last for 30 years or more.

2.2 Allocation of Tax Credits to State

Tax credits are currently allocated by each state's housing development authority. From the inception of the program in 1987 through 2000, each state historically received an annual allocation of $1.25 times the state population (subject to a minimum allocation). During 2000, Congress increased the limit by 40% to address the impact of inflation since the inception of the program. The 2001 limit is $1.50 times the state population and will increase to $1.75 times the state population in 2002. Beginning in 2003, the limit will be adjusted annually for inflation. Tax credits available for low-income housing projects financed with tax-exempt debt were also increased by a similar percentage.

The increase in the limit should help to relieve the current under supply of low-income housing projects. The National Council of State Housing Agencies estimates that over 100,000 low-cost apartments are demolished, abandoned or converted to market rate use every year[2]. Table 1 displays the 2000 allocation of LIHTC apartment units and tax credit dollars for the top ten states. As one can see from the allocation of LIHTC apartments, the total for all states is approximately 60,000 units, well short of the 100,000 low-cost apartments eliminated each year:

[2] From NCSHA's "Housing Credits for Low Income Renter Apartment Development - Program Description".

TABLE 1

2001 ALLOCATION

STATE	APARTMENT UNITS	%	STATE	TAX CREDIT DOLLARS (000s)	%
CALIFORNIA	5,141	8.6%	CALIFORNIA	51,140	13.5%
TEXAS	4,464	7.5%	TEXAS	25,609	6.8%
MICHIGAN	4,137	6.9%	NEW YORK	23,563	6.2%
FLORIDA	4,035	6.8%	FLORIDA	19,138	5.1%
NEW YORK	3,100	5.2%	ILLINOIS	18,094	4.8%
PENNSYLVANIA	2,638	4.4%	PENNSYLVANIA	17,004	4.5%
VIRGINIA	2,204	3.7%	MICHIGAN	14,537	3.8%
ILLINOIS	1,918	3.2%	OHIO	14,167	3.7%
GEORGIA	1,812	3.0%	GEORGIA	10,493	2.8%
NORTH CAROLINA	1,781	3.0%	NEW JERSEY	10,218	2.7%
	31,230	52.4%		203,962	53.9%
ALL OTHER	28,371	47.6%		174,787	46.1%
TOTAL	59,601			378,749	

The ten most populous states are allocated over 50% of the LIHTC apartment units and tax credit dollars. Table 1 also illustrates the disparate impact of local housing costs. For example, California received 13.5% of LIHTCs which supported only 8.6% of total apartments created by the program. Appendix D displays the above information graphically for all states.

2.3 Statistics from the GAO Report on the LIHTC Program

The General Accounting Office (GAO) report GGD/RCED-97-149 titled "Tax Credits: Opportunities to Improve Oversight of the Low-Income Housing Program" was prepared in March of 1997 for Mr. Bill Archer, Chairman, Committee on Ways and Means and Ms. Nancy L. Johnson, Chairman, Subcommittee on Oversight Committee on Ways and Means[3]. The report was created in response to the Committee on Ways and Means request to determine the characteristics of the residents and properties that have benefited from the LIHTC program and to assess the Internal Revenue Services (IRS) and state controls over the LIHTC program operations. The report also recommended program improvements to the IRS and the Office of Management and Budget (OMB).

[3] From UncleFed's Tax*Board web-site www.unclefed.com/GAOReports.

Some key statistics are presented in the lengthy report that help lay the groundwork for a deeper understanding the LIHTC program. The report focuses on tax credit qualified units that were placed in service in the continental United States between 1992 and 1994 (approximately 172,000 qualified units and $6.1 billion in tax credits for the three year period). The GAO highlighted the following results:

- The present value of the average tax credit cost per unit was approximately $27,310.
- The average cost of developing a tax credit unit was approximately $60,000. Project development costs include items such as land and building acquisition, construction cost, builder's profit and financing costs.
- The 1996 average annual income of households in LIHTC units was about $13,300.
- The average monthly rent was about $450 (including rental subsidies/federal housing assistance) for the LIHTC units.
- Roughly $300 million in new credits are made available nationally each year (see above discussion for changes in limits). Since tax credits are allocated over a 10-year period, this translates into approximately $3 billion in aggregate costs to the federal government if project owners remain eligible each year (i.e., maintain tax code compliance).
- Investor equity associated with the $6.1 billion in tax credits was approximately $3.1 billion. This equates to an equity yield[4] (a/k/a tax credit price) of $0.51 per dollar of tax credit.

Mr. James R. White, Associate Director, Tax Policy & Administration Issues, General Government Division, pointed out in his testimony on report GGD/RCED-97-149 to the Committee on Ways and Means and Subcommittee on Oversight Committee on Ways and Means[5] that:

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[4] The equity yield is defined as the ratio of investor equity raised to housing tax credits generated. For those who are accustomed to return on equity (ROE) statistics in the insurance industry, equity yield should not be confused with yield calculations using equity (surplus) in the denominator.

[5] From UncleFed's Tax*Board web-site www.unclefed.com/GAOReports.

"States generally relied on the market to determine the yield obtained from a project's tax credit award. The tax credit yield or price has gone up over time, from about $0.45 in 1987 to over $0.60 in 1996, according to several major syndicators and state allocating agency officials."

As we will discuss later, the tax credit price has spiked as high as $0.80 in the last few years.

For those interested in comments and suggestions on IRS and state controls, please refer to the full GAO report at www.unlcefed.com/GAOReports for further details about project costs, compliance monitoring and tax credit allocation issues.

2.4 LIHTC Market

There are currently 5-10 national sponsors (e.g., Lend Lease, The Richman Group, Boston Capital, Related) and 10-20 regional sponsors (e.g., Alliant Capital, Red Capital, WNC & Associates) of affordable housing funds that account for much of the approximately $3.4 billion in LIHTC equity during 2000. There is strong demand by investors for funds offering guaranteed investment returns. According to an estimate by Dresdner, the demand for guaranteed affordable housing investments exceeds $900 million per year[6]. Guarantee demand is often driven by investors looking to transfer real estate risk into investment grade credit risk, thereby eliminating the need for real estate expertise and costly due diligence. Some investors report that guaranteed investments deliver a higher return than unguaranteed investments, despite the lower yield. Measurement systems used by these investors recognize the lower risk associated with investment grade investments (compared to a real estate investments) and the corresponding reduction in their cost of capital charges.

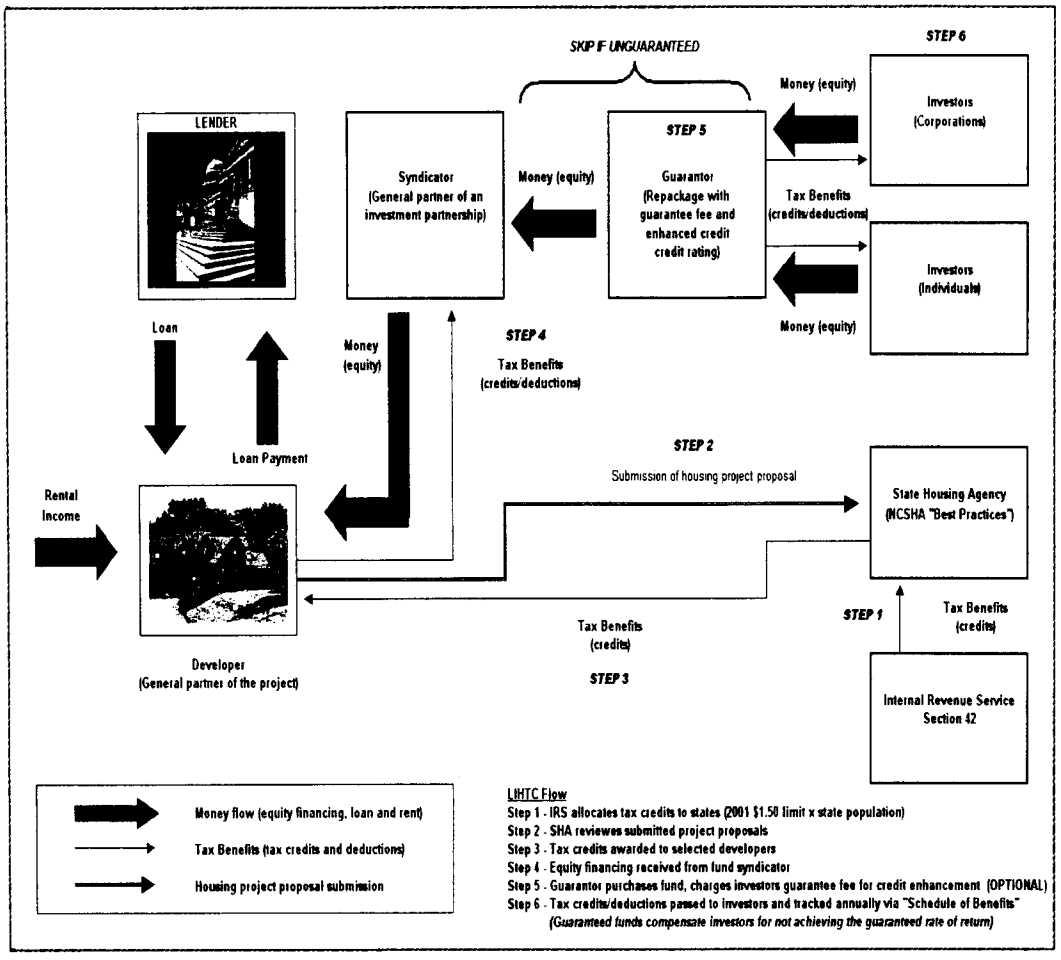
The estimated guarantee demand, combined with rising guarantee fees and the lack of supply in the guarantee market (e.g., reduction in volume by some guarantors and exit by others due to credit problems and ownership changes), bodes well for those interested in guaranteeing affordable housing investments. With 2001 guarantee fees in the 15%-20% range, this translates into annual guarantee fee premiums of roughly $135 - $180 million.

[6] Dresdner presentation to Affordable Housing Investors Council (March 2001).

3. FLOW OF THE LIHTC PROGRAM

This section provides a detailed flow chart and subsequent discussion of the affordable housing process.

THE LOW INCOME HOUSING TAX CREDIT PROGRAM
FLOW CHART



INITIAL SOURCE www.unclefed.com/GAOReports/gaot97-149.and GAO testimony before Congress. Adjusted by authors to include guarantor

3.1 Internal Revenue Service and State Housing Agency (Step 1)

Each year the IRS allocates tax credits to each state based on population as defined in IRC s. 42 (refer to Section 2.2). Each state housing agency (SHA) is responsible for awarding the credits to individual properties. Typically, a SHA will develop a set of criteria or some sort of scoring system (in addition to the necessary attributes for qualifying under IRC s.42) for evaluating and ranking proposals submitted by developers. In recent years, a number of states have successfully imposed additional policy requirements because the demand for tax credit awards has greatly exceeded the supply in most states. As noted in the GAO report discussed above, most states also use discretionary judgment for amending or bypassing their allocation process.

3.2 SHA and Property Developer (Steps 2 and 3)

The property developer will structure a project in order to receive a tax credit award from the SHA. The property developer brings together all aspects of the project: land, permits, architect plans, construction team, financing, legal, and property management. The property developer then submits its proposal for evaluation by the SHA after organizing the project. If successful, the property developer is awarded tax credits by the SHA and the property is constructed.

3.3 Syndicator and Property Developer (Step 4)

During the process, the property developer negotiates an equity investment agreement with either the actual investor or with a syndicator[7]. The syndicator usually acquires a 99% limited partnership interest in the operating partnership that owns the LIHTC property. The property developer acts as general partner. The terms of the negotiation include price (usually discussed in terms of tax credit price (i.e., cents per tax credit dollar in the affordable housing industry)), payment benchmarks, developer guarantees, and residual interest splits. A syndicator acquires LIHTC properties, bundles multiple properties in a limited partnership, and sells interests in the partnership to investors.

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[7] The equity investment allows the property developer to reduce the monthly debt payments so that the property can be operated and maintained at the reduced rent levels required by IRC s.42. This in turn assists the property developer in meeting the minimum debt service coverage ratio (DSC) requirements. The DSC is defined as the ratio of a property's net operating income to foreclosable, currently amortizing debt service obligations. A DSC of 1.10 implies that the property is generating $1.10 in income for every $1.00 paid out as debt service.

3.4 Syndicator and Guarantor / Unguaranteed Investor (Step 5)

The syndicator typically places 10 to 20 properties into a limited partnership (often called a "Fund") in which the syndicator is the general partner. Limited partnership interests are then sold to one or more investors. In the flow chart, the investor in the unguaranteed Fund can be either a guarantor or an unguaranteed investor. A guarantor would resell the investment to a guaranteed investor whereas the unguaranteed investor would use the tax credits and tax losses to reduce their future tax liability. The unguaranteed investor would shoulder any risk of tax credits being delayed or lost due to the risks identified in Section 1.3 and discussed in detail in Section 5.

3.5 Guarantor and Guaranteed Investor (Step 6)

The guarantor establishes a partnership (called the guaranteed partnership) to hold the unguaranteed investment. A limited partnership interest is sold to the guaranteed investor. The amount of the investment made by the guaranteed investor less the cost of purchasing the underlying investment represents the guarantee fee earned by the guarantor. The guaranteed investor receives tax credits, taxable losses (or income), and cash distributions from the underlying Fund investment. The guarantor promises that the guaranteed investor will receive a minimum after tax yield. If, on the measurement date 17 or more years in the future, the guaranteed investor has not received the minimum yield, the guarantor will make a cash payment necessary so that the minimum guaranteed yield is met.

Assuming proper due diligence is performed by the guarantor, the guarantor will receive a very healthy risk premium (currently in excess of 15% of the equity invested). The guaranteed investor will also earn a rate of return commensurate with the guaranteed Fund's level of risk while at the same time satisfying Community Reinvestment Act (CRA) requirements. All in all, a win-win proposal for both parties.

4. CURRENT GUARANTEE ENVIRONMENT

The LIHTC Program has come a long way since the program was first utilized by the real estate development community in 1987. A number of organizations have increased their focus on developing and maintaining industry standards for the LIHTC Program. The National Council of State Housing Agencies (NCSHA) board of directors established a task force to develop Recommended Practice standards to help each state's Housing Credit administration promote uniform procedures such as: the adequacy of housing needs assessments; the need for property market studies; appropriate use of state agency discretion in allocating credits; need for independent third party cost certifications; the adequacy of debt service ratios, operating and replacement reserves, operating expenses; quality of management expertise; and adequacy of compliance and safeguards. Members of NCSHA represent the state agencies that allocate LIHTC credits to developers. Consequently NCSHA recommendations have a high likelihood of being adopted as public policy. A complete copy of the NCSHA's report can be found on the web site www.ncsha.org.

The National Association of Home Builders (NAHB) has also established a certification process for the tax credit professional that includes a rigorous training and educational program, including continuing education. Please refer to the web site www.nahb.com or the Home Builders Institute web site www.hbi.org, which is the educational arm of the NAHB.

The Affordable Housing Investors Council (AHIC) is a non-profit organization which developed the following mission statement:

> *"The mission of the Affordable Housing Investment Council is to increase knowledge and awareness of the benefits of investing in affordable housing tax credit properties, to educate corporate investors on all aspects of affordable housing, and to discuss issues of importance to investors within the industry."*

AHIC currently facilitates the sharing of information and insights regarding important issues concerning affordable housing tax credit properties and investing. AHIC has also developed and

recommended industry standards for items such as investment criteria, yield calculations, financial reporting, property tracking and operating efficiencies. Please refer to the web site www.ahic.org for further information.

Mr. Wendell Johns, Fannie Mae vice president of multifamily affordable housing also discussed the maturation of the housing credit industry in his article "Low-Income Housing Tax Credit Investments: From the Boutique to the Mainstream – A Decade of Change"[8]:

> *"As the housing credit industry has matured, its focus has broadened from production to include asset management and compliance monitoring. We are seeing an increase in reviews from the IRS and state authorities seeking to ensure that developments receiving tax credits remain in compliance with applicable regulations concerning the number of affordable units, rental rates, and tenant income levels. Such compliance was virtually nonexistent ten years ago."*

Similar to the evolution and maturation of the U.S. stock market, through the Securities and Exchange Commission and organizations such as the Chartered Financial Analyst Program, the LIHTC Program is evolving and maturing through the IRS and organizations such as the NCSHA, NAHB and AHIC. The increased focus on LIHTC Program "best practices" from organizations such as the NCSHA, NAHB and AHIC, and increased reviews from the IRS and state authorities should continue to focus all parties on guarantee fund transactions that are more financially sound than was possible in the earlier years of the program.

Current and prospective guarantors are currently facing a number of unique economic developments and industry considerations when deciding whether to enter/continue writing guarantee business. Guarantee pricing is affected by a number of factors, including:

- Market Interest Rates
- Entry and Exit of Guarantee Competition

[8] From the Multifamily Business News section of FannieMae's web site www.fanniemae.com. The article titled "Low-Income Housing Tax Credit Investments: From the Boutique to the Mainstream – A Decade of Change" was reprinted from page 78 of The Real Estate Finance Journal, Volume 14, Number 4 (Spring 1999).

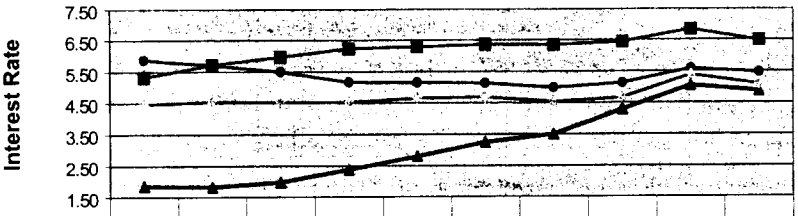
- Market Yields for Unguaranteed Affordable Housing Funds
- Guaranteed Risk Premiums/ Changing Finance Structures
- Eroding Deal Terms with Developers

Each of these factors will be discussed in detail below.

4.1 Market Interest Rates

The graph below displays the treasury yield curve by maturity as of year-end 1998, year-end 1999, year-end 2000 and through November 5, 2001[9].

TREASURY YIELD CURVE

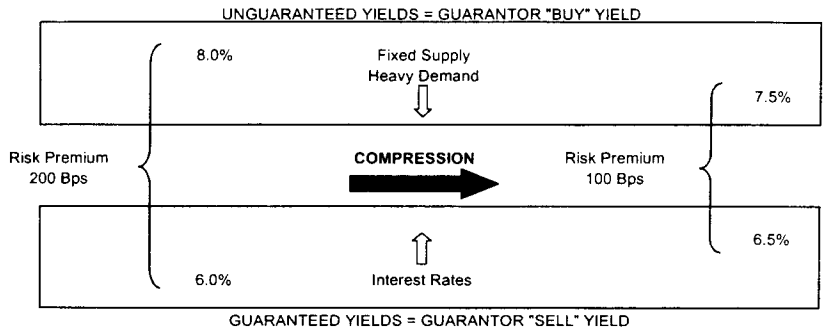


	90 DAY	180 DAY	1 YR	2 YR	3 YR	4 YR	5 YR	10 YR	20 YR	30 YR
11/5/01	1.85	1.82	1.97	2.37	2.80	3.25	3.50	4.28	5.04	4.87
YE 2000	5.88	5.70	5.50	5.17	5.15	5.13	4.99	5.12	5.58	5.46
YE 1999	5.32	5.71	5.96	6.24	6.29	6.36	6.34	6.44	6.83	6.48
YE 1998	4.46	4.54	4.53	4.53	4.65	4.69	4.54	4.66	5.38	5.09

Maturity

As noted earlier, interest rates rose considerably during 1999, increasing almost 180 basis points on the ten year treasury bond. Market yields for guarantee funds are sensitive to shifts in long term market interest rates. The dramatic rise in interest rates in 1999 drove guaranteed yields upward, while unguaranteed yields offered by sponsors moved downward driven by fixed supply and increased demand by investors (discussed below). This compression of the guarantor's "buy" and "sell" yields resulted in a dramatic drop in guarantee risk premiums when compared to prior years.

[9] Data from "Useful Resources" section of Stocktrader.com web site www.stocktrader.com.



The reverse process is occurring in 2001. Guaranteed yields have declined modestly with long-term market interest rates since 2000 (As of 11/5/2001, interest rates have dropped almost 220 basis points on the ten year treasury bond since year-end 1999). However, unguaranteed yields are increasing, countering the market trend due to specific industry factors. As mentioned earlier, there is a 40% increase in new tax credits in 2001 versus the prior year. Adding to supply, several institutional investors have sold or are selling nine figure LIHTC portfolios. Estimates of secondary market volume in 2001 range as high as $1 billion. On the demand side, many investors have discontinued investing because of low yields and tax capacity issues. As a result of widening spreads, a AA/AAA guarantor can expect guarantee fees in the range of 15-20% of the amount invested in an affordable housing fund.

In the authors' view, guaranteed yields will fluctuate closely with long-term market interest rates in the future. The guarantee of an investment grade firm effectively eliminates real estate risk for the investor. The investor will receive a return on capital in the form of tax benefits unless both the underlying LIHTC fund and its guarantor fail. Therefore, the investor's after tax return is really only at risk in the event of tax law changes or changes in the investor's ability to use tax benefits.

From the guarantor's perspective, their risk premium is determined as the difference in the "buy" yield (i.e., unguaranteed fund's rate of return) and "sell" yield (i.e., guaranteed fund's rate of return). As investors perceive more risk in the affordable housing sector, the risk premium

should rise; conversely, the risk premium should shrink as investors become more comfortable with the risks. However, our market observation is that supply and demand plays a much larger role in determining the risk premium than would be estimated using the traditional approaches (e.g., the Capital Asset Pricing Model[10]) which equate risk premiums simply to levels of risk. Consequently, it is difficult to assess the risk premium needed to compensate the investor for the risk associated with investing in affordable housing fund projects and the value of the guarantee using traditional capital market pricing models.

4.2 Entry and Exit of Guarantee Competitors

The guarantee market can be divided into sponsor guarantors and third party guarantors. Both segments have been a revolving door for guarantors. SunAmerica (now part of AIG) is a long-standing sponsor guarantor. Other periodic participants are Zurich Insurance, Keycorp, Fannie Mae, Bank One, Edison Capital, Hartford Insurance, and DQE Financial. In mid 2001, Ambac Financial entered the market with its first guaranteed fund. There are also industry rumors that two to three third party guarantors and one bank sponsored guarantor are attracted by the high yields and strong historical performance of the LIHTC investments. Some of these participants may enter the guarantee market in late 2001/early 2002.

4.3 Market Yields for Unguaranteed Affordable Housing Funds

The trend in market yields was best summarized in 1999 by Mr. Johns, Fannie Mae vice president of multifamily affordable housing, who concluded that more competition and lower yields are the trend for LIHTC projects. According to Mr. Johns:

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[10] The investor's rate of return (R_g – guaranteed/R_u - unguaranteed) could be estimated using the Capital Asset Pricing Model (CAPM):

$R_g = R_f + B \times$ (Market risk premium)
R_f = Risk free rate of return
B = Beta of Guaranteed Fund

The CAPM formula defines the investor's guaranteed/unguaranteed rate of return using the risk free rate of return (e.g., yield on a 10 year U.S. Treasury), the Beta of a guaranteed/unguaranteed fund (e.g., a Beta of 0.50 implies that for every 2% increase in market rates, guaranteed/unguaranteed rates will increase 1%) and the market risk premium (e.g., expected return of the market portfolio – the risk free rate of return).

"In looking at tax credit activity in the decade from 1988 to 1999, it's clear that the housing tax credit now is recognized both as an effective way to create affordable housing for lower-income Americans, and as a desirable investment vehicle for corporations and other investors. Competition for tax credit investments has increased dramatically. In 1988, reservations for credits generally were issued on a first-come, first-served basis, and there were a number of states that did not use all of their allotment of credits. That year, only 67 percent of the available tax credits were used nationwide, according to Leventhal. In contrast, 97 percent of the available tax credit authority was allocated in 1995, and credits have been oversubscribed in subsequent years."

Mr. Johns further states:

"Competition for credits is more intense today because of two layers of demand – a strong demand from project developers to have their properties awarded credits, and demand from corporate and institutional investors seeking to reduce their federal (and state) tax burdens in strong economic times, or to meet the ever-increasing Community Reinvestment Act (CRA) commitments."

"This competition has resulted in higher pricing and lower yields for tax credit investments. Housing credit prices rose 52 percent, in real terms, from 1987 to 1997, according to the Leventhal study. In 1987, a dollar of housing credit raised approximately $0.42 in net equity for housing development; in 1996, that same dollar leveraged an average of $0.65 in investor equity, according to Leventhal. In 1998, based on Fannie Mae's market experience, the amount of equity raised for each dollar of housing credit rose into the $0.80."

In 2001 the trend in market yields has reversed, creating some havoc in the industry. Investors are now receiving higher yields which has reduced the amount of equity property developers receive on their projects. A property developer who may have been expecting a tax credit price of $0.80 on a project may only receive $0.70, equating to a loss in financing of $0.10 for every tax credit dollar awarded by the state. This in turn impacts the amount of credits necessary for

the completion of a successful project and limits the state's ability to impose other restrictions as a condition to being awarded tax credits. There is also an unknown volume of projects in the pipeline that will either have to be restructured, abandoned, or sold at a loss because of the current lower tax credit price environment (i.e., investors demanding higher unguaranteed rates of return).

4.4 Guaranteed Risk Premiums/Changing Financing Structure

During 1999, guarantee fees achievable on new guarantee business dropped approximately 250 basis points. This drop was driven by the reduction in yields offered by sponsors and the rise in guaranteed yields which squeezed the guarantor's risk premium. Mr. Johns and Fannie Mae observed the same trend in yields:

> *"As the equity raised from each housing credit dollar has increased dramatically, yields have fallen accordingly, from the highs of 18 percent in 1990 to about 8 to 9 percent in 1998 on an after-tax, all cash, internal rate of return basis."*

> *"While returns are less spectacular, the tradeoff is that deals generally now have safer financing structures. As pricing has improved, the amount of leverage used in the typical deal has decreased, reducing some of the risks involved. In 1988, a typical tax credit transaction might include 30 to 60 percent debt and 30 – 40 percent equity, while other sources, such as "soft" debt, might make up 30 percent of a deal. In 1998, deals typically include about the same percentage of hard debt, 30 percent, but the amount of equity in these deals now is at least 50 percent, and the portion of a project's financing attributable to "soft" debt is down to 20 percent or less."*

The safer financing structure found in today's competitive environment should assist guarantors in mitigating (or reducing considerably) some of the risk factors its guaranteed funds faced historically. The mitigation of historical risk factors may help to explain the long-term drop in risk premiums achievable by guarantors. Additionally, as sponsors and other parties involved (e.g., developers, architects, investors) become more experienced and knowledgeable about LIHTC projects, the amount of risk associated with each project becomes considerably less. The

reduction in LIHTC project risk, combined with increasing investor awareness, further helps to explain the dramatic drop in guarantee fees. Experienced investors, with over a decade of LIHTC information available, are considerably less likely to consider historical guarantee fees in excess of 10% of guarantee volume reasonable, given the recent trends and information available regarding LIHTC projects. Mr. Johns addresses the impact of increased competition and the consolidation of investors and syndicators below:

> *"The intense competition for tax credit investments, and a focus on doing the business in the best way, has resulted in a major consolidation among tax credit investors and syndicators. In recent examples, Arcand was acquired by PNC, and Pacific Harbor Capital was acquired by LNR."*

> *"Expertise has become a critical element of tax credit investing. Participants in 1988 were independent operators that managed to navigate the then new tax credit arena despite their limited experience. Today, tax credit investors must have a considerable amount of expertise to understand the intricacies of pay-in terms, return on investment calculations, compliance and monitoring issues, and other factors necessary to make the most of investment opportunities."*

Mr. Johns further states:

> *"Investors also have determined that they underestimated the need for some functions, such as asset management. Quickly realizing the high costs associated with investments that don't perform as expected, companies now must heavily invest in asset management personnel, systems and consultants, so that problems can be cured before reaching the foreclosure state, or to come up with creative solutions for under performing or over leveraged assets."*

Monte Carlo simulation analysis performed by the authors indicates that guarantee fees of 15%-20% attainable in 2001 present guarantors with an extremely attractive profit opportunity. Furthermore, our modeling and review of industry results to date indicate that guarantee fees

below the cyclical low of about 10% achieved in 1999-2000 for a A/Aaa rated guarantors still provide attractive returns for guarantors. With nominal losses simulated in the range of 1% to 2% of guarantee volume for a well-diversified portfolio, this translates into loss ratios in the range of 5% (1%/20%) to 20% (2%/10% cyclical low) of guarantee fee premium (excluding the time value of money). Including the time value of money associated with the 17-year payout period significantly enhances the profitability of the transaction for the guarantor.

In our view, pricing history indicates that the supply of guarantee product influences pricing more than the underlying risk/reward tradeoff between guaranteed and unguaranteed funds. Bank investors with CRA requirements and constrained real estate investment capacity cannot switch between guaranteed and unguaranteed products. Banks may also be constrained by limited in-house real estate expertise, regulatory limits and corporate mandates to avoid real estate risk.

4.5 Eroding Deal Terms with Developers

An area of potential concern for guarantors and investors generally is the trend towards more concessions to developers. Mr. Johns notes:

> *"Consequently, in classic supply and demand fashion, investors and intermediaries gradually have been forced to offer many more concessions to developers offering tax credit deals. In 1998, investors could require more in the way of developer or general partner guarantees over long time periods. Today, investors are under increasing pressure to reduce their demands for operating deficit guarantees, credit adjusters, completion and rent-up guarantees and large reserve requirements."*

This trend may increase the risk exposure assumed by guarantors depending upon the terms that are negotiated in any new guarantee partnership agreements. Guarantor cash payments to the investor would increase in the event of increased foreclosures due to reduced operating deficit and other guarantees made by developers, since the guarantor makes up any shortfall in the guaranteed yield.

5. RISKS FACING GUARANTORS

5.1 Identification of Risks

A guarantor of the affordable housing investments assumes virtually all of the risks that threaten the realization of the investor's guaranteed yield except for risks associated with a future change in the tax law (i.e., investor specifically assumes that risk) and the individual investor's specific tax capacity (i.e., availability of taxable income for using tax credits). A guarantor's risks can be summarized as follows:

- Sponsor Risk – If the sponsor (a/k/a the syndicator) fails to properly underwrite properties or is overly optimistic in forecasting tax benefits, the fund will perform adversely versus projections. The guarantor makes cash payments to the investor sufficient to make up any shortfall versus the guaranteed yield.

  The sponsor is primarily responsible for underwriting properties, projecting tax benefits, overseeing the management of the properties (referred to as "asset management", as distinct from property management, which is the responsibility of the developer), monitoring tax compliance and reporting to investors using the Schedule of Benefits exhibit.

- Specification Risk – If the sponsor fails to accurately estimate the yield or timing of the actual property specified, then that property, and possibly the fund will not achieve the projected yield. The sponsor forecasts future property selection and projects future tax benefits commencing at a certain date as displayed on the original Schedule of Benefits. If the sponsor overestimates the yield and timing of future properties, and as a consequence the fund misses its projected yield, then the guarantor makes cash payments to the investor sufficient to make up any shortfall versus the guaranteed yield.

- Construction Risk – The developer fails to complete the construction according to plan, ultimately delaying the commencement of tax benefits and adversely affecting the yield. The developer generally is fully responsible for construction delays.

- Lease up Risk – The developer fails to lease the credit units to schedule under Section 42(g)(1) of the Internal Revenue Code, ultimately delaying the commencement of tax benefits and adversely affecting the yield. The developer generally is fully responsible for lease up delays.

- Operation Risk – The developer fails to maintain a cash break even on the property. Upon mortgage default, the lender can force settlement and/or take over the property and receive the tax benefits. The loss of credits will reduce the yield and may require the guarantor to make a payment. The developer is generally responsible for making up negative operating cash flow for a period of time (three to five years from lease up) up to a maximum amount.

- Tax Compliance Risk - The general partner of the operating partnership fails to maintain the property as qualified for tax credits. Tax credits are earned only if the property meets all requirements of Section 42 of the Internal Revenue Code. Failure to meet eligibility requirements could result in the recapture of some or all credits previously reported. To the extent IRS audit adjustments reduce the actual yield to below the guaranteed yield, the guarantor would be required to make a payment.

- Legal Risk – Failure of some agreements that relate to each property in the fund, and the fund itself, to be legally binding or inconsistent with the business terms summarized in the fund prospectus.

- Reinsurance Risk – Failure of the insurer or reinsurer to make good on its promise to pay their portion of the reinsurance agreement purchased by the guarantor. The guarantor is fully responsible for reinsurance recoverability issues.

- Sponsor Risk and Fee Sharing Risk – Failure of the sponsor to make good on its promise to pay its portion of the first dollar loss of a fund. The guarantor is fully responsible for sponsor recoverability issues.

5.2 Mitigation of Risks

Guarantors have a strong incentive to manage and mitigate each of the above risk factors that could result in a guarantee fund not achieving its projected yield and a guarantor making cash payments to the investor to cover any shortfall in the guaranteed yield. Guarantors should mitigate risk through the professional due diligence of the sponsor, the fund partnerships and the properties themselves. They should also mitigate a significant portion of their risk through protections within the operating agreement and by diversifying their exposure. Mitigation by risk category is summarized as follows:

- Sponsor Risk – Guarantors should perform a due diligence review on each new sponsor to determine if the sponsor has the experience, systems, and financing to be successful. Since the guarantor is promising the investor it will receive the sponsor's projected yield, the most important function of sponsor level due diligence is to evaluate the sponsor's forecasting methodology, including a review of the sponsor's historical track record with respect to achieving promised fund performance.

  Since the fund projections are basically a roll up of projections of each property in the fund, most of the evaluation of fund projections is done during the property due diligence (discussed later in this article). However, the sponsor's policy with respect to adjusting consolidated numbers is reviewed. In some cases, sponsors build in buffers to the simple consolidation thereby projecting a lower yield but increasing the likelihood the projected yield will be achieved or exceeded.

  The sponsor's inflation assumptions used for assessing future variability of the project should be reviewed as well. The industry standard today is an annual inflator of 2.0% and 3.0% for rental income and operating expenses, respectively. The fact that expenses are assumed to increase faster than revenues adds some conservatism to

the future projections. Fannie Mae recently reported that multifamily market rents are increasing at a 2.5% to 3.5% annual rate[11], consistent with recent trends in the Consumer Price Index (CPI).

The sponsor's underwriting standards should also be reviewed in detail. The sponsor's underwriting review is divided into two areas: first, a review of the developer and the parties in the transaction (contractor, architect, property manager and general partner); and second, a review of the property. Over his career, Mr. Guthlein has observed a high level of consistency among the sponsors with respect to underwriting standards. As discussed above, the NCSHA's Recommended Practice standards and AHIC's underwriting standards have contributed to an increase in consistency among sponsors in underwriting standards. The NCSHA's task force was comprised of 20 state representatives that allocate approximately two-thirds of all the housing credits each year.

The sponsor's underwriting review process of key parties in a transaction must include:

- A review of each party's experience with affordable housing;
- A credit investigation of each party with an important role;
- A litigation check of the developer; and
- A review of the financial statements of the developer and guarantor (often the owner of the developer) for ability to meet obligations under the partnership agreement.

The sponsor's underwriting review process of the property must include:

- A review by or commission of an independent market study that indicates sufficient rental demand for the contemplated project (*Exception*: some sponsors (e.g., Lend Lease) maintain an in-house group that performs market studies for its own funds and for others on a fee basis);

[11] From FannieMae's affordable housing information on their web site www.fanniemae.com.

- A review by a construction professional of the building plans that confirms the suitability of the plans for the type of tenants and also that estimated construction costs are reasonable;
- A review of operating revenue and expenses for reasonableness. Rent levels should be compared with the market study for reasonableness. Expenses should be tied to "hard" data (e.g., the property tax budget matches the tax rolls);
- Verification that the project meets key tax and solvency tests such as the debt to service coverage ratio (DSC). Most sponsors require a DSC of 1.15, while Fannie Mae requires a DSC of 1.10[12] which is consistent with NCSHA's recommended DSC[13]. A DSC ratio is irrelevant if all debt is "soft" (i.e., interest and principal is due only if operating cash flow is positive);
- Verification that there is a fixed rate permanent debt commitment and a construction loan commitment;
- A collection and review of all tax credit related documentation;
- A collection and review of land title and title insurance; and
- Phase I environmental test. Must have no issues or acceptable Phase II evaluation to proceed.

Another focus of sponsor due diligence is asset management. Asset management includes construction and post-construction activities. Basically, a guarantor must determine if the sponsor can identify problems early and fashion solutions that have a meaningful effect on the operational soundness of a property. In the construction phase, the quality of the sponsor's construction review and the amount of time spent at the construction site is considered. A monthly visit by a construction expert is generally acceptable. In order to reduce expenses, the sponsor will often qualify and then rely on the construction lender's expert. However, third parties hired by the developer are never relied upon because of independence issues.

[12] From FannieMae's affordable housing information on their web site www.fanniemae.com.
[13] From NCSHA's "Standards for Allocating and Underwriting Housing Credits" on their web site www.ncsha.org.

Post-construction asset management is concerned with the initial lease up of the property and the ongoing management thereafter. A suitable asset management system (e.g., ACS) and a staff experienced in dealing with developers are required.

The sponsor's policies with respect to site visits, "Watch List" criteria and tax compliance are also reviewed. "Watch List" criteria typically represents occupancy rates below 90% to 93% and a DSC ratio below 1.10 to 1.15. Please refer to Appendix C for a sample listing of AHIC's "Watch List" criteria.

National sponsors routinely visit large properties annually and smaller properties every two or three years. Small sponsors typically visit each property every year. All sponsors should include a review of approximately 10% to 20% of current lease files for proper low income qualification; a walkthrough of the property looking for deferred maintenance, security issues, etc.; and a meeting with the property management company to discuss the local rental market, in general, and the marketing and management of the property, specifically.

- Specification Risk – Funds have different levels of specification risk. The best-known sponsors have the highest level of specification risk while newer sponsors must be fully specified and have most properties closed before an institutional investor will commit to the fund. Therefore, the market demands that funds offered by new sponsors have less specification risk. A guarantor can reduce its exposure to specification risk somewhat by having the ability to defer the investor's capital contribution in line with the sponsor's deferral, eliminating the negative arbitrage associated with holding the investor's funds in money market instruments while guaranteeing a higher yield.

  Specification risk is similar to the guaranteed investment contract ("GIC") risk faced by life insurance companies in the late 1980s. In the case of GICs, life insurance companies guaranteed yields that became unachievable when interest rates dropped.

Both risks are timing risks which can be reduced by appropriate measures such as deferment and proper due diligence.

- Construction Risk and Lease Up Risk – The operating partnership agreement between the sponsor and the developer requires the developer to deliver a project eligible for tax credits at a fixed price with credits commencing by an agreed date. Credits commence when a property has received a certificate of occupancy and each unit has a qualifying low-income tenant. Otherwise, the developer must reimburse the Fund an amount that approximates the time value of the delay. These reimbursements are called "credit adjusters." The developer is paid its fee as construction and lease up benchmarks are achieved. Consequently the sponsor retains a cash holdback that can be used to collect the credit adjuster.

  Credit adjusters will typically compensate an investor or guarantor for 85% to 90% of the impact of timing delays or loss of credits. Therefore the fund will experience yield deterioration to the extent projects are not leased up on time. Projects that are slow to lease up will likely experience negative cash flow. If seriously under-performing, the partnership may require additional cash for operations. The developer is responsible for these shortfalls either under a Completion Guarantee or an Operating Deficit Guarantee.

  In the event the problems are the result of the developer or the property manager, the partnership agreement provides for the removal of the general partner and the termination of third party providers. This contractual leverage is often used by sponsors to effect remedial actions short of removing the general partner.

  Third party consultants specializing in LIHTC transactions are available to evaluate construction risk and lease up risk.

- Operation Risk – Once a property is stabilized (generally defined as leased up with permanent fixed rate debt in place), the principal risk remaining is operational. If the

property experiences negative cash flow, there is a risk of loss of credits in the event of foreclosure. The risk of foreclosure is always present but is most likely early in the life of the property.

Fannie Mae has published its experience with multifamily housing overall, including its tax credit equity investments. Fannie Mae credit losses as a percentage of its portfolio outstanding has been below .05% since 1996 but has been as high as .30% in 1991, the first period covered in the analysis.

Research found no statistics available with respect to debt defaults or foreclosures specific to affordable housing. The presence of "soft" debt and reasonably conservative leverage of 30% "hard" debt financing to 50% equity financing suggests that foreclosure is less likely in the affordable housing sector. However, Fannie Mae reported 18-20% of its tax credit portfolio operates below break-even operations, indicating that cash flow is an ongoing issue and that debt default and foreclosure is possible.

The risk of foreclosure is mitigated at both the property level and the fund level. Developers provide an operating deficit guarantee. The terms of this guarantee are negotiated as to both the term and amount. Fannie Mae's standard is a maximum guarantee equal to 50% of the developer's fee for three years. In Fannie Mae's structure, the guarantee commences 90 days after break even operations with the developer responsible for all shortfalls prior to break even.

Fund level reserves are also available to help troubled properties. A fund level reserve of 3 to 4% of the amount of capital raised is established at the inception of the fund. Sponsors will use the reserve as necessary to solve problems, usually leveraging the new capital with an additional contribution by the developer or obtaining favorable financing terms from the lender in the event of a workout.

If the fund is unable to solve a problem, the sponsor may ask the investor to make a capital contribution to preserve the flow of tax credits. Alternatively, in certain circumstances, allowing foreclosure and realizing a tax loss may be the best mitigation strategy.

Although operation risk exists, it has not proven to be a significant risk. Even if one were to assume the highest level of multifamily defaults in ten years (0.3%) was actually experienced in every year of a fifteen-year affordable housing program, the total loss of 4.5% (15 x 0.3%) of the amount invested would still be lower than the expected guarantee fee received at the beginning of the transaction.

- Tax Compliance Risk - Tax compliance risk is taken seriously by sponsors and is scrutinized regularly by institutional investors in the Funds. Some tax compliance matters can be evaluated before the investor or guarantor has an investment at risk, but many of the risks are incurred after the investor or guarantor is at risk.

  Prior to having an investment at risk, the investor or guarantor can often determine whether: the property has received a credit allocation from the state; the property has passed the 10% carryover basis test (i.e., at least 10% of costs must be incurred in the year of credit allocation); there is an expectation that debt will be repaid, and other real estate tests that can affect the allocation of income, deductions and credits; and any deferred developer fees and overhead allocations are likely to be sustained upon audit. The ability to verify these facts or conduct the analyses discussed above depends on the status of the properties in the fund prior to an investment commitment (e.g., none of the above can be performed for a non-specified property).

  However, the key area of tax compliance review occurs after the investment is committed (i.e., review of tenant files, particularly the initial tenant). Credits commence once a unit is occupied by a qualifying low-income tenant. Most sponsors perform a 100% audit of all initial tenant files. Some sponsors receive and evaluate the files as processed by the property manager, thereby identifying compliance issues

before the applicant becomes a resident. The national sponsors usually sample 10 to 20% of subsequent tenant files.

- Legal and Compliance Risk – A guarantor should retain a qualified law firm to represent it with respect to Fund and guarantee documents and to assess the property level documents for enforceability, completeness and for keeping the business terms within industry norms. In this category we include important "due diligence" items such as confirming there is good title and (usually) title insurance backstopping the title report. An environmental study should be reviewed and found acceptable or additional work performed. Earthquake and flood risks should be assessed and as appropriate, insurance obtained. The sponsor should be able to demonstrate that adequate insurance is in place. Insurance renewals should be tested during periodic sponsor due diligence visits. Also, in most cases, both a construction loan and a permanent loan commitment should be available for review.

- Reinsurance Risk – Guarantors use reinsurance to limit the company's overall exposure within limits that the Board of Directors finds satisfactory, to limit the guarantor's overall exposure within limits that rating agencies find satisfactory and to increase the implicit rating[14] of their guaranteed fund transactions. Failure of the insurer or reinsurer to make good on its promise can be mitigated by reviewing the insurance company's A.M. Best rating[15], Risk Based Capital (RBC) requirements, experience with financial guarantees and overall knowledge of the affordable housing investment sector.

- Sponsor Risk and Fee Sharing Agreement (RFSA) Risk – Guarantors use RFSAs to promote the sharing of risk between the sponsor and the guarantor. Similar to the

[14] A higher rated fund decreases the yield sold to the guaranteed investor which increases the guarantor's risk premium (determined by the spread between the unguaranteed yield offered by the fund syndicator and the yield sold to the guaranteed investor).

[15] For A.M. Best ratings, refer to www.ambest.com or their annual publication "Best's Insurance Reports – Property-Casualty - United States" for insurance company ratings, the rationale behind the selected A.M. Best ratings, key company financial indicators and other important company information such as business written and reinsurance programs in place. Other rating agencies are Standard & Poors at www.standardandpoors.com, Moody's Investors Service at www.moodys.com and Fitch at www.dcrco.com.

use of coinsurance by a reinsurer to provide risk management incentives to insureds, a RFSA agreement provides additional incentive to sponsors for controlling the quality of projections, underwriting and asset management. The sponsors, who would retain a portion of the first dollar losses of a guaranteed fund under the agreement, would be much more likely to ensure that the fund performs according to expectations.

The guarantor remains "at risk" if the sponsor is financially unable to honor its commitment. Guarantors should perform a due diligence review on each new sponsor to determine if the sponsor has the experience, systems, and financing to be successful over the entire period of the fund's 17-year life (comprising 15 years of tax compliance and approximately 2 years for winding down the fund).

5.3 Residual Events

After the 15-year compliance period, sponsors usually will begin to dispose of the properties in the fund over a two-year period. Guarantors recover any cash proceeds before the guaranteed investor to reimburse amounts paid on the guarantee obligation, plus interest. Residual cash flow is not a projected benefit when a guarantee fund is underwritten nor is it considered as an offset to guarantee obligations in modeling fund risks.

It is the industry consensus that positive residual events are less likely in more recent affordable housing funds. As noted earlier, the trend towards more concessions to developers, the push from SHA's towards investing in more financially depressed areas with less appreciation potential, and longer rent restrictions periods (e.g., 99 years in a California deal) reduces the likelihood of cash distributions in the future. Nonetheless, some residual upside is likely, although speculative, in current affordable housing funds. Mr. Guthlein has reviewed special "ad hoc" sponsor residual cash flow forecasts that indicate cash distributions in excess of 50% of the original cash basis investment. Since industry practice is not to forecast cash distributions unless payments are near certain, this cash flow represents a "hidden" offset to potential guarantee losses.

5.4 Other Risk Mitigation Considerations

The LIHTC Program was created by the Tax Reform Act of 1986 and was first utilized by the real estate development community during 1987, at the tail end of the "Reagan Era" economic expansion period of 1982 to 1990. The "Reagan Era" expansion saw the economy grow for 92 straight months. Although there was a minor recession in 1990 that lasted approximately nine months, the current economic expansion (which we believe has come to an end) represents the longest in U.S. history[16].

Even though there could be a possibility that a depression economy (e.g., early 1930's), a recession economy (e.g., 1944 post-World War II) or a stagflation economy (e.g., 1970's) could occur at any time over the life of a newly guaranteed fund, we feel a number of factors help to insulate guarantors from the above risk factors:

- Guarantors can terminate the writing of new guaranteed partnership transactions if economic conditions or the due diligence performed on sponsors and developers indicates inadequate risk/return trade off.
- The guarantor's guaranteed yield does not include the impact of changes in tax law such as changes in the availability of tax credits, depreciation allowances and tax rates.
- A guarantor may buy out the limited partner (i.e., investor) in situations where a guaranteed fund may incur losses without proactive intervention. Early intervention by a guarantor eliminates the compounding effect of the investor's guaranteed return.
- Although a recession or depression may increase the number of current "dead beat" tenants, the supply of qualifying tenants (i.e., tenants that satisfy Section 42(g)(1) of the IRS Code) would increase. The increase in qualifying tenants would decrease the lease up risk and tax compliance risk faced by a guarantor related to the 15 year IRS

[16] From the National Bureau of Economic Research web-site www.nber.org. Other record economic expansion periods measured from trough to peak: February 1961 through December 1969 (106 months), November 1982 through July 1990 (92 months), June 1938 through February 1945 (80 months) and March 1975 through January 1990 (58 months).

compliance period regarding set aside and rent restrictions (i.e., Section 42(I)(1) of the IRS Code).

- A number of the properties contained within the guarantor's guaranteed partnership transactions utilize "soft" debt, where interest and principal payments are only due if the property's operating cash flow is positive.

- State and Federal rental subsidies would continue for the lowest income renters irregardless of the economic environment. In a depression or recession economy, more tenants would be eligible for State and Federal rental subsidies, which represents a guaranteed source of rental income for the LIHTC properties.

- There is ever increasing public scrutiny and federal agency supervision of depository institutions in good and bad economic times regarding the Community Reinvestment Act.[17] The CRA is intended to encourage depository institutions to help meet the credit needs of the communities in which they operate, including low-income and moderate-income neighborhoods. The law does not require that institutions make high-risk loans that jeopardize their safety. To the contrary, the law makes it clear that an institution's CRA activities should be undertaken in a safe and sound manner. Transactions such as a guarantor's guaranteed partnership agreements represent a safe and sound way for institutions to satisfy their CRA requirements.

- Institutions are looking for low correlation investments to add to their current portfolio. Given the recent stock market turmoil (e.g., recent NASDAQ decline, World Trade Center bombing), investors are attempting to diversify away and reduce their current investment risk. Transactions such as a guarantor's guaranteed partnership agreement represent a safe and sound way for institutions to diversify their current investment portfolio while reducing correlation between assets.

[17] The CRA requires each federal financial supervisory agency to assess the institution's record of meeting the credit needs of its entire community. Federal Reserve Banks assigns one of the following ratings to a depository institution's CRA performance: outstanding record of meeting community credit needs; satisfactory record of meeting community credit needs; needs to improve record of meeting community needs; and substantial noncompliance in meeting community credit needs. For more detail on CRA Bank Ratings and Performance Evaluations, refer to the web site www.federalreserve.gov/DCCA/CRA/.

- Monetary and fiscal policy in the U.S. has become increasingly oriented toward containing inflation to insure economic health and prosperity, reducing the likelihood of a prolonged recession or depression that would cause significant harm to the U.S. economy. The Fed's proactive policy stance was witnessed immediately after the World Trade Center tragedy with the easing of monetary policy in order to stimulate the U.S economy.

6. THE GUARANTEE TRANSACTION

6.1 Introduction to the "Schedule of Benefits"

The original Schedule of Benefits (also referred to as a "Schedule A") displays the sponsor's projections of the future tax benefits and cash contributions to be received by the investor for the life of the fund. In future updates to the Schedule of Benefits, actual tax and cash attributes are substituted for the forecasted values in the original schedule. If the sponsor overestimates the yield and timing of future properties, and as a consequence the fund misses its projected yield, then the guarantor makes cash payments to the investor sufficient to make up any shortfall versus the guaranteed yield.

Layout

The Schedule of Benefits (an example of which is shown in Section 6.2) displays quarterly projections of tax credits, tax losses and investor equity contributions. Other columns display the guarantee fee amortization and formula calculations of after tax cash flow, investor return, principal, ending adjusted capital and the project's internal rate of return.

Tax Credits

A ten-year stream of federal tax credits are awarded to the property developer by the SHA which are used to offset the federal tax liability of the LIHTC investor.

Tax Losses

The underlying properties generate taxable losses principally from depreciation in excess of operating income. Generally, losses are larger in the earlier years of the fund due to the fact that net operating rents increase over time while depreciation remains fixed (i.e., straight line depreciation). In guaranteed transactions, there is often a stipulated pro forma disposition date where the guaranteed investor's remaining tax basis is written off to zero. This leads to a large one-time final tax loss.

Guarantee Fee Amortization

The guaranteed investor is purchasing both an affordable housing investment and a guarantee that the investor will receive a minimum yield. For tax purposes, the guarantee is generally amortized over 15 years (10 in the simplified example) on a straight-line basis.[18]

Investor Equity

Equity investment(s) are made by the guaranteed investor in order to receive the guaranteed yield offered by the guarantor. Although not explicitly shown in the simplified Schedule of Benefits, there is usually a column labeled "cash distributions" that documents cash flows to investors such as credit adjusters paid by the developers for delayed construction and lease up, operating cash flows distributions, and proceeds from the sale or refinancing of properties in the Fund.

After Tax Cash Flow

The after tax cash flow to the guaranteed investor equals 100% of the tax credits (i.e., a 1 for 1 reduction to taxable income), 100% of cash distributions, and 35% of the tax losses (including guarantee amortization).

Investor Return

The beginning adjusted capital, initially equal to the guaranteed investor's equity investment, multiplied by the guaranteed rate of return. Over the life of the fund, this amount decreases directly with the repayment of principal.

Principal

The portion of the after tax cash flow that represents payment of principal (i.e., return of the guaranteed investor's equity contribution) in the current quarter.

Ending Adjusted Capital

The outstanding portion of the guaranteed investor's equity contribution yet to be returned in the form of after tax cash flow. If the last quarter's ending adjusted capital is positive, the Guarantor must make a payment to the guaranteed investor.

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[18] Other methods of guarantee fee amortization exist such as acceleration based on the amortization of the Fund.

Internal Rate of Return (IRR)

The IRR reflects the overall rate of return earned by the investor over the life of the transaction. The IRR is calculated based on the timing of cash flows contributed (e.g., equity investments (negative values)) and subsequently received (e.g., tax credits, cash distributions and after tax value of tax losses and guarantee amortization (positive values)) by the investor.

6.2 "Schedule of Benefits" – Guarantee Conversion

The following simplified Schedule of Benefits illustrates the conversion of affordable housing Fund BK1[19] from unguaranteed to guaranteed:

IMAGINARY FUND BK1
CONVERSION TO GUARANTEED

SCHEDULE OF BENEFITS

YEAR	TAX CREDITS	TAX LOSSES	GUARANTEE FEE AMORT.	INVESTOR EQUITY	BEGIN ADJUSTED CAPITAL	AFTER TAX CASH FLOW	REQUIRED INVESTOR RETURN	PRINCIPAL	ENDING ADJUSTED CAPITAL	IRR CALCULATION
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
UNGUARANTEED		MOODY'S CREDIT RATING: B					6.35%			
2000				800.00						(800.00)
2001	100.00	50.00	-	-	800.00	117.50	50.81	66.69	733.31	117.50
2002	100.00	45.00	-	-	733.31	115.75	46.57	69.18	664.13	115.75
2003	100.00	40.00	-	-	664.13	114.00	42.18	71.82	592.31	114.00
2004	100.00	35.00	-	-	592.31	112.25	37.62	74.63	517.67	112.25
2005	100.00	30.00	-	-	517.67	110.50	32.88	77.62	440.05	110.50
2006	100.00	25.00	-	-	440.05	108.75	27.95	80.80	359.25	108.75
2007	100.00	20.00	-	-	359.25	107.00	22.82	84.18	275.06	107.00
2008	100.00	15.00	-	-	275.06	105.25	17.47	87.78	187.28	105.25
2009	100.00	10.00	-	-	187.28	103.50	11.89	91.61	95.67	103.50
2010	100.00	5.00	-	-	95.67	101.75	6.08	95.67	0.00	101.75
TOTAL	1,000.00	275.00		800.00		1,096.25	296.25		*IRR:*	6.35%
GUARANTEED		MOODY'S CREDIT RATING: A					4.50%			
2000				900.00						(900.00)
2001	100.00	50.00	10.00	-	900.00	121.00	40.53	80.47	819.53	121.00
2002	100.00	45.00	10.00	-	819.53	119.25	36.91	82.34	737.18	119.25
2003	100.00	40.00	10.00	-	737.18	117.50	33.20	84.30	652.88	117.50
2004	100.00	35.00	10.00	-	652.88	115.75	29.40	86.35	566.53	115.75
2005	100.00	30.00	10.00	-	566.53	114.00	25.51	88.49	478.04	114.00
2006	100.00	25.00	10.00	-	478.04	112.25	21.53	90.72	387.32	112.25
2007	100.00	20.00	10.00	-	387.32	110.50	17.44	93.06	294.26	110.50
2008	100.00	15.00	10.00	-	294.26	108.75	13.25	95.50	198.76	108.75
2009	100.00	10.00	10.00	-	198.76	107.00	8.95	98.05	100.71	107.00
2010	100.00	5.00	10.00	-	100.71	105.25	4.54	100.71	0.00	105.25
TOTAL	1,000.00	275.00	100.00	900.00		1,131.25	231.25		*IRR:*	4.50%
GUARANTEE FEE (GF):		100.00 = $900 - $800					GUARANTEED RETURN		4.50%	
GF AS % EQUITY		12.5% = $100/$800					IMPLIED CREDIT SPREAD (B to A)		185 BASIS POINTS	

ASSUMPTIONS: ANNUAL TRANSACTIONS (ACTUAL SCHEDULE A IS DONE QUARTERLY)
IGNORES CREDIT ADJUSTERS AND AFTER TAX DISTRIBUTIONS
IGNORES REMAINING TAX COMPLIANCE PERIOD IN EXCESS OF 10 YEARS
INVESTOR EQUITY COLLECTED ON 1/1/2001
TAX RATE: 35%

NOTES: (7) = (2) + (TAX RATE x [(3) + (4)])
(8) = IRR x (6)
(9) = (7) - (8)
(10) = (6) - (9)
(11) = INTERNAL RATE OF RETURN

[19] Unguaranteed and guaranteed yields shown above are NOT current market yields. Guaranteed affordable housing fund yields are approximately 150-250 basis points below 2001 unguaranteed affordable housing fund yields of 7.25%-8.00% for high quality products.

In this schedule, we see that an investor[20] is willing to purchase the $1,000 stream of tax credits (and $275 of tax losses) for $800. Using industry terminology, this equates to tax credit price of $0.80 for the property developer. From an IRR perspective, the fund provides the unguaranteed investor with a 6.35% return over the life of the fund.

Since Fund BK1 is unguaranteed, the investor may not receive the implied internal rate of return on the project. Properties in the fund may be constructed slower than originally projected or the units may be leased-up behind schedule, delaying the receipt of tax credits by the investor. Poorly managed properties with negative cash flow could also be forced into foreclosure, resulting in the loss of future tax credits by the investor. In extremely rare circumstances, tax compliance issues could arise that would result in the recapture of some or all of the tax credits awarded to the project.

In order to fill this market niche, investors known as guarantors purchase funds from syndicators and repackage them as guaranteed investments[21]. In the above example, a guarantor purchases Fund BK1 for $800 from a syndicator, amortizes the guarantee fee and resells the guaranteed Fund BK1 for $900. The $100 dollar guarantee fee, equal to 12.5% of the guarantor's original equity investment, represents the risk premium that a guaranteed investor must pay in order to have an A rated guarantor backing its investment. Using bond market terminology, the investor is willing to forgo 185 (i.e., 6.35% - 4.50%) basis points of return in order to purchase an upper-medium grade investment (i.e., A rated fund) rather than purchasing a highly speculative investment (i.e., B rated fund).

Banks and other corporations, looking for safe investments that satisfy CRA requirements, often purchase guaranteed affordable housing investments (rather than purchasing unguaranteed affordable housing investments). Similar to Ambac, FGIC, FSA or MBIA's business of credit

[20] The guarantor is the investor in the unguaranteed fund in our example. The guarantor resells the investment with its guarantee to a guaranteed investor.
[21] The guarantee is only as good as the guarantor's ability to make good on its promise to pay. A review of the Fund rating and the guarantor rating (e.g., S&P, Fitch, Moody's, A.M. Best) is highly recommended when purchasing any affordable housing investment.

wrapping U.S. municipal bonds[22], LIHTC guarantors "wrap" affordable housing fund investments with their promise to make up any shortfalls in the investor's guaranteed yield. Both types of financial guarantees accomplish the same objective, which is to increase the defacto rating of the underlying investment by lowering the probability an investor will not receive the promised return, all in exchange for a risk premium (a/k/a guarantee fee).[23]

Guaranteed funds are not specifically rated. Nonetheless, guaranteed funds are priced based on the guarantor's credit ratings. Guaranteed investors focus on the credit risk of these guarantors rather than the real estate risk of the underlying affordable housing investment. In order for a guaranteed investor to realize a loss, two uncorrelated failures must occur: first, the underlying affordable housing fund must fail to achieve its expected return; second, the guarantor must fail to make good on its required guarantee payment. Therefore, it is likely that the risk associated with a guaranteed fund is less than the credit risk associated with the guarantor (i.e., the guarantee fund should be rated higher than the guarantor's credit rating).

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[22] Refer to Moody's Investor Service Global Credit Research publication titled "Financial Guarantee – Industry Outlook" for further detail on these Aaa-rated financial guarantors.

[23] The promised return for a financial guarantee involves the receipt of interest payments and the return of principal whereas the promised return for a guarantor's wrap involves the receipt of tax credits and tax losses.

6.3 "Schedule of Benefits" – Guarantee Losses

The following simplified guaranteed Schedule of Benefits illustrates two types of losses that can be incurred by a guarantor:

IMAGINARY FUND BK1
SAMPLE LOSS SCENARIOS

SCHEDULE OF BENEFITS

YEAR	TAX CREDITS	TAX LOSSES	GUARANTEE FEE AMORT.	INVESTOR EQUITY	BEGIN ADJUSTED CAPITAL	AFTER TAX CASH FLOW	GUARANTEED INVESTOR RETURN	PRINCIPAL	ENDING ADJUSTED CAPITAL	IRR CALCULATION
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
LEASE-UP DELAY = DELAY IN RECEIVING TAX CREDITS							**4.50%**			
2000				900.00						(900.00)
2001	-	50.00	10.00	-	900.00	21.00	40.53	(19.53)	919.53	21.00
2002	-	45.00	10.00	-	919.53	19.25	41.41	(22.16)	941.69	19.25
2003	**125.00**	40.00	10.00	-	941.69	142.50	42.41	100.09	841.59	142.50
2004	**125.00**	35.00	10.00	-	841.59	140.75	37.90	102.85	738.74	140.75
2005	**125.00**	30.00	10.00	-	738.74	139.00	33.27	105.73	633.01	139.00
2006	**125.00**	25.00	10.00	-	633.01	137.25	28.51	108.74	524.26	137.25
2007	**125.00**	20.00	10.00	-	524.26	135.50	23.61	111.89	412.37	135.50
2008	**125.00**	15.00	10.00	-	412.37	133.75	18.57	115.18	297.19	133.75
2009	**125.00**	10.00	10.00	-	297.19	132.00	13.38	118.62	178.58	132.00
2010	**125.00**	5.00	10.00	-	178.58	130.25	8.04	122.21	**56.37**	130.25
TOTAL	1,000.00	275.00	100.00	900.00		1,131.25	287.62			*3.79%*

TOTAL AMOUNT OF TAX CREDITS UNCHANGED. SINCE TAX CREDITS DO NOT COMMENCE UNTIL THE LIHTC UNITS ARE LEASED-UP, THE GUARANTOR MUST MAKE UP THE DIFFERENCE BETWEEN THE GUARANTEED RETURN AND THE IRR GENERATED BY THE DELAY IN RECEIVING THE TAX CREDITS. THIS EQUATES TO PAYINGTHE INVESTOR THE POSITIVE ENDING ADJUSTED CAPITAL IN YEAR TEN

$ 56.4 = LOSS PAYMENT
56.4% = NOMINAL LOSS RATIO
31.5% = DISCOUNTED LOSS RATIO
(ASSUMING 6% GUARANTOR RETURN)

YEAR	TAX CREDITS	TAX LOSSES	GUARANTEE FEE AMORT.	INVESTOR EQUITY	BEGIN ADJUSTED CAPITAL	AFTER TAX CASH FLOW	GUARANTEED INVESTOR RETURN	PRINCIPAL	ENDING ADJUSTED CAPITAL	IRR CALCULATION
FORECLOSURE OF ALL PROPERTIES							4.50%			
2000				900.00						(900.00)
2001	**100.00**	50.00	10.00	-	900.00	121.00	40.53	80.47	819.53	121.00
2002	**100.00**	45.00	10.00	-	819.53	119.25	36.91	82.34	737.18	119.25
2003	**100.00**	40.00	10.00	-	737.18	117.50	33.20	84.30	652.88	117.50
2004	**100.00**	35.00	10.00	-	652.88	115.75	29.40	86.35	566.53	115.75
2005	**100.00**	30.00	10.00	-	566.53	114.00	25.51	88.49	478.04	114.00
2006	**100.00**	25.00	10.00	-	478.04	112.25	21.53	90.72	387.32	112.25
2007	**100.00**	20.00	10.00	-	387.32	110.50	17.44	93.06	294.26	110.50
2008	**100.00**	15.00	10.00	-	294.26	108.75	13.25	95.50	198.76	108.75
2009	-	10.00	10.00	-	198.76	7.00	8.95	(1.95)	200.71	7.00
2010	-	5.00	10.00	-	200.71	5.25	9.04	(3.79)	**204.50**	5.25
TOTAL	800.00	275.00	100.00	900.00		931.25	235.75		*IRR:*	*0.77%*

TOTAL AMOUNT OF TAX CREDITS REDUCED BY $200. LOST TAX CREDITS MUST BE REIMBURSED BY THE GUARANTOR. THE GUARANTOR MUST PAY THE INVESTOR THE POSITIVE ENDING ADJUSTED CAPITAL IN YEAR TEN

$ 204.5 = LOSS PAYMENT
204.5% = NOMINAL LOSS RATIO
114.2% = DISCOUNTED LOSS RATIO
(ASSUMING 6% GUARANTOR RETURN)

Lease-Up Delay

Walking through the lease-up delay example, we see that the tax credits originally promised to the guaranteed investor are delayed by two years. A lease-up delay occurs when the developer fails to lease the credit units to schedule under Section 42(g)(1) of the Internal Revenue Code. Although the investor doesn't lose any of the promised tax credits, the delay in the

commencement of the tax credits results in a reduced yield for the guaranteed investor. The reduction in yield is driven by the compounding of the delayed credits at the 4.5% guaranteed rate of return over the life of the fund.

In order to make the guaranteed investor whole, the guarantor must make a payment of $56.37 to the investor after the fund is wound down. The $56.37 of ending adjusted capital equates to a nominal loss ratio of 56.4% (i.e., $56.37 loss payment / $100 guarantee fee). Assuming premium is collected on day one, losses are paid at the end of year 10 and the guarantor can earn an investment return of 6.0% on the guarantee fee, the guarantee transaction actually produces a discounted loss ratio of 31.5% (i.e., 56.4% x $1/(1.06)^{10}$) for pricing purposes.

As will be discussed later, a key determinate of profitability on any guarantee/insurance transaction comes from the ability of the guarantor/insurer to collect premium dollars today and earn investment income on assets held prior to the payment of claims in the future (a/k/a insurance float). As we all know from Finance 101, a dollar paid today is worth less than a dollar paid tomorrow. Comparing insurance industry payout patterns to the 17-year payout pattern of LIHTC guarantees, we see that a guarantee transaction provides one of the best opportunities to enhance return through the insurance float:

PRIMARY INSURERS

LINE OF BUSINESS	AVERAGE PAYOUT YEARS
PRIVATE PASSENGER AUTO PHYSICAL DAMAGE	0.5
COMMERCIAL AUTO PHYSICAL DAMAGE	0.8
HOMEOWNERS	1.0
SPECIAL PROPERTY (FIRE, ALLIED LINES)	1.1
COMMERCIAL MULTIPLE PERIL PROPERTY	1.2
ACCIDENT & HEALTH	1.8
PRIVATE PASSENGER AUTO LIABILITY	1.8
COMMERCIAL AUTO LIABILITY	2.6
COMMERCIAL MULTIPLE PERIL LIABILITY	2.7
WORKERS COMPENSATION	3.3
CLAIMS-MADE PRODUCTS LIABILITY	3.7
CLAIMS-MADE OTHER LIABILITY	3.8
CLAIMS-MADE MEDICAL MALPRACTICE	4.0
OCCURRENCE OTHER LIABILITY	4.7
OCCURRENCE PRODUCTS LIABILITY	5.9
OCCURRENCE MEDICAL MALPRACTICE	6.0
LIHTC GUARANTEE	17.0

Foreclosure

Walking through the foreclosure example, we see that the tax credits originally promised to the guaranteed investor are reduced by 20%. The loss of tax credits in years nine and ten result from the foreclosure of the properties in the fund. Foreclosure usually occurs when a property is unable to cover its debt obligations and operating expenses[24].

In order to make the guaranteed investor whole, the guarantor must make a payment of $204.50 to the investor after the fund is wound down. The $204.50 of ending adjusted capital equates to a nominal loss ratio of 204.5%. Assuming premium is collected on day one, losses are paid at the end of year 10 and the guarantor can earn an investment return of 6.0% on the guarantee fee, the guarantee transaction produces a discounted loss ratio of 114.2% for pricing purposes.

Although lease-up, construction, and tax compliance risk are fairly unique to LIHTC properties, a fully stabilized fund's primary remaining risk is the risk of foreclosure. Foreclosure is a risk that financial guarantors such as Ambac, FGIC, FSA and MBIA insure on a daily basis.

[24] The guarantor has the ability to infuse capital into the property in order to avoid foreclosure. The economic feasibility of this option decreases as the fund ages, since it may be less costly to foreclose the properties and incur the losses.

7. INSURANCE CONSIDERATIONS

Guarantors currently face pressure from independent auditors, rating agencies and regulatory bodies reviewing their guaranteed affordable housing risk exposure (i.e., equity outstanding). The Chief Risk Officer and senior management team are also looking at ways to manage guarantee related earnings volatility on their organization's financials. These pressures have created a strong interest by the guarantor community to develop a reliable source of insurance/reinsurance coverage from a top tier provider[25]. The following sections will lay the foundation for guarantors to begin developing a profitable and effective way to address how affordable housing funds may be insured.

7.1 Insured Event

Before discussing the different insurance coverages that could be used to insure guarantors, it is important to define an insured event under an insurance contract. An insured event can be defined numerous ways under standard insurance policies such as an injury to a worker under a workers compensation policy, a car accident under an automobile policy, or a faulty product under product recall coverage. Insurance/reinsurance on standard insurance policies often provides coverage defined as per occurrence (i.e., single event covered) and aggregate (i.e., aggregation of multiple per occurrence events).

Since there is no industry standard for defining coverage associated with guaranteed affordable housing funds, we will discuss some different ideas that insurers could use to define an insured event. A loss occurrence for a guaranteed fund could be defined as a guaranteed loss payment associated with an individual property resulting from items such as construction delays, lease-up delays, tax compliance issues and foreclosures. Although this approach would likely be the most accurate, it would require a significant amount of claims handling activity by the insurance company since individual funds usually consist of numerous properties.

[25] Through a partnership with a well-capitalized reinsurer, a guarantor can increase the implicit rating of their guaranteed fund transactions. A higher rated fund decreases the yield sold to the guaranteed investor which increases the guarantor's risk premium (determined by the spread between the yield offered by the fund syndicator and the yield sold to the guaranteed investor).

A second approach for tracking loss activity would be to aggregate all of the properties' guarantee loss payments from a single fund. This approach would be extremely cost effective for the insurance company since funds already prepare a Schedule of Benefits on a quarterly basis for all of the properties in a fund. An insurance company could use the Schedule of Benefits to compare actual versus expected fund performance for each guarantor.

A third approach leverages off of the second approach. An insurance contract could be constructed with a guarantor to consider all funds closed within a calendar year as insured under the insurance contract. Guaranteed losses for all funds closed within the calendar year would be aggregated and processed under the insurance contract as a single insured event. This approach would require the summation of all Schedule of Benefits closed by the guarantor in the calendar year.

For the remainder of this section, we will consider guaranteed losses for all funds closed in a calendar year as an insured event.

7.2 Coverage Options

Excess of Loss

A guarantor could purchase excess of loss protection aimed at eliminating or decreasing the adverse effects of catastrophic risks such as foreclosure risk and tax compliance risk. Catastrophic risk exposure is usually defined as a low frequency high severity loss occurrence such as 1 in 100 year storm, earthquake, or a rare loss event.

Excess of loss protection could also be purchased at lower attachment points for use in stabilizing financial results. Coverage provided at lower attachment points (e.g., 50% exceedence level) is often referred to as "working layer excess" in the reinsurance industry, since the reinsurer has a reasonable expectation of making loss payments each year. Although coverage of this nature may cost significantly more than catastrophic excess of loss protection, it would provide a guarantor with a more certain stream of earnings since the guarantor can more accurately estimate it's maximum loss exposure.

The following $100 xs $25 excess of loss (EOL) worksheet illustrates how an insurance transaction would impact the previous FUND BK1 sample loss scenarios:

$100 XS $25; 20% RATE ON LINE (ROL)

FEE (GROSS PREMIUM)	ROL	CEDED PREMIUM	NET PREMIUM	GROSS LOSS	CEDED LOSS	NET LOSS	GROSS LOSS RATIO	CEDED LOSS RATIO	NET LOSS RATIO
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
LEASE UP EXAMPLE									
100.00	20.0%	20.00	80.00	56.37	31.37	25.00	56.4%	156.8%	31.3%
FORECLOSURE EXAMPLE									
100.00	20.0%	20.00	80.00	204.50	100.00	104.50	204.5%	500.0%	130.6%

(3) ROL x $100 LAYER
(4) = (1) - (3)
(6) = MIN [$100, (5) - $25]
(7) = (5) - (6)
(8) = (5) / (1)
(9) = (6) / (3)
(1) = (7) / (4)

The $100 xs $25 EOL contract purchased from the reinsurer translates into 100 points of loss ratio protection in excess of an initial 25-point loss ratio retention by the guarantor. The rate on line of 20%, representing the price charged for the $100 layer of coverage provided by the reinsurer, equates to $20 of ceded premiums.

As one can see from the above example, the guarantor makes out better than the reinsurer in both loss examples since the net loss ratio is significantly less than the ceded loss ratio[26].

Coinsurance (Q/S)

In addition to purchasing straight excess of loss protection, where the insurer provides 100% of the coverage for the layer in excess of the attachment point, a guarantor could choose to retain a percentage of the layer in order to minimize the cost of reinsurance. The following example illustrates the difference between a straight excess of loss contract (i.e., 0% coinsurance) and a 40% coinsurance excess of loss contract using the lease up delay loss scenario:

[26] Gross, ceded and net are commonly used insurance industry terms. From a guarantor's perspective, gross losses equal ground up guarantee payments made to the investor, ceded losses equal guarantee payments recoverable from the insurance company, and net losses equal gross losses minus ceded losses.

STRAIGHT EOL VERSUS EOL WITH 40% COINSURANCE

FEE (GROSS PREMIUM) (1)	ROL (2)	CEDED PREMIUM (3)	NET PREMIUM (4)	GROSS LOSS (5)	CEDED LOSS (6)	NET LOSS (7)	GROSS LOSS RATIO (8)	CEDED LOSS RATIO (9)	NET LOSS RATIO (10)
LEASE UP EXAMPLE - $100 XS $25, 0% COINSURANCE									
100.00	20.0%	20.00	80.00	56.37	31.37	25.00	56.4%	156.8%	31.3%
LEASE UP EXAMPLE - $100 XS $25, 40% COINSURANCE									
100.00	20.0%	12.00	88.00	56.37	18.82	37.55	56.4%	156.8%	42.7%

(3) ROL x $100 LAYER x { 1 - COINSURANCE % }
(4) = (1) - (3)
(6) = MIN [$100, [(5) - $25]] x { 1 - COINSURANCE % }
(7) = (5) - (6)

(8) = (5) / (1)
(9) = (6) / (3)
(1) = (7) / (4)

The coinsurance option would lower the guarantor's reinsurance premium by the 40% coinsurance percentage (from $20 to $12). As one can see from the above example, the coinsurance option is still beneficial to the guarantor since the net loss ratio is significantly less than the ceded loss ratio. Although the reinsurer's loss ratio remains constant under a coinsurance contract , the guarantor's net loss ratio actually increases in this case because the guarantor is sharing 40% of the 156.8% loss ratio (instead of none).

If the guarantor expects relatively few losses in this layer on average, then the use of a coinsurance agreement would actually be beneficial in most years because the guarantor would be retaining a portion of the losses and premiums which would help the guarantor to keep a higher portion of the guarantee fee. Reinsurance companies also prefer coinsurance contracts since it provides the insured with an incentive to continue aggressive handling of losses that exceed the loss attachment point.

Multiple Fund Year Reinsurance

Due to the unique risk exposures facing a guarantor such as tax compliance and foreclosure risk, a multi-year reinsurance contract (e.g., spanning 10 years or more) may allow a guarantor to leverage the relatively low occurrence probability of their catastrophic risks. A multi-year contract would provide the reinsurer with a more stable estimation period for aggregating losses while the guarantor would gain a multi-year business partner. A multi-year deal might be

structured to utilize a reinsurance fund (a/k/a "profit share") which would return premium to the guarantor if guarantee losses were maintained below a certain predefined level. A fund of this nature would often pay the reinsurer an administrative fee (e.g., 10% of underlying premiums) and may offer to credit the reinsurance fund with interest at the average U.S. Treasury one-to-three-year note rates if results are favorable during the contract period.

7.3 Other Thoughts

Reinsurance pricing specialists with a strong understanding of the underlying risk exposures typically price reinsurance contracts to the 60% to 70% non-exceedence level. Pricing to these non-exceedence levels provides the reinsurance company with a degree of comfort that a reinsurance contract, once written, will be profitable over a number of future years. Reinsurance pricing indications, often referred to as the rate-on-line (i.e., premium charged as a percentage of the excess layer purchased by the insured), typically factor in the impact of long term relationships with the insured, the time value of money associated with paying losses in the future, and other costs such as reinsurer expenses and profit.

Given the limited knowledge of this market by the insurance/reinsurance industry and their lack of comfort with real-estate risk, initial transactions may include a hefty "risk margin" premium in the pricing. This "risk margin" premium may appear unreasonable to the average guarantor, especially when the premium quoted by the insurance/reinsurance company eats up most of the guarantor's profit margin. Given the authors experience, the use of a reinsurance fund and a long term partnership may be the best approach until the insurance/reinsurance company develops a better understanding of the LIHTC program and the loss experience generated by the guarantor.

With all the pressures guarantors face on a daily basis, we believe the guarantee community currently has a strong interest in developing a reliable source of insurance/reinsurance protection. A partnership with a top tier insurer/reinsurer would provide a guarantor with the following benefits:

- Ability to limit the guarantor's overall exposure within limits that the Board of Directors find satisfactory;

- Ability to limit the guarantor's overall exposure within limits that rating agencies find satisfactory; and
- Ability to increase the implicit rating of the guarantor's guaranteed fund transactions since a higher rated fund decreases the yield sold to the guaranteed investor which increases the guarantor's risk premium (partially paying for the cost of reinsurance).

At the same time, we believe the most responsive and innovative insurers will gain a substantial niche premium by promptly addressing current market demand and by developing strong relationships with the top-tier sponsors in the industry who drive the most profitable business through due-diligence and experience.

8. CONCLUSIONS

Participation in the affordable housing investment yield guarantee business requires the willingness and ability to assess and underwrite the risks associated with a financial guarantee of a structured, tax-motivated real estate investment. These unique skills, plus the niche nature of the opportunity (probably less than $1 billion guaranteed volume each year), have limited entrants and the resulting rate competition between guarantors. Nonetheless, guarantee premiums have proven to be volatile over the last several years as the spread between the unguaranteed yields offered by fund sponsors and the guaranteed yields necessary to attract guaranteed investors narrowed and recently widened again.

Premiums in recent years have ranged from under 10% to over 20% of the underlying affordable housing investment guaranteed by the guarantor. Despite the wide fluctuation, our analysis indicates the guarantor still has an attractive opportunity at the low end of premium cycle. Losses in the range of 1% to 2% of guarantee volume underwritten, producing loss ratios in the range of 5% (1%/20%) to 20% (2%/10%) of guarantee fee premiums, would be a reasonable expectation of nominal losses and loss ratios for a well-diversified portfolio. Including the time value of money associated with the 17-year payout period significantly enhances the guarantee transaction for the guarantor.

The improved yield guarantee opportunity that emerged in 2001 has not gone unnoticed by various banks, insurers, and credit enhancers directly or indirectly involved in the affordable housing investment business. Fund syndicators and investment brokers are continually searching for new guarantors to create additional guaranteed investments to meet the demand. We expect that guarantee premiums will be compressed over time, and continue to fluctuate with the unguaranteed yields offered by fund syndicators. However, given the modest market size and the specialized knowledge necessary to participate as a guarantor, we predict that guarantee premiums will continue to offer guarantors an attractive opportunity over the long term.

We also predict that a strong insurance/reinsurance market will emerge as the primary guarantors seek to transfer risk to accommodate concerns about the remote but large liability assumed by

the guarantor over the 17-year investment life. The market will initially be lead by the formation of strategic partnerships between top-tier guarantors (or sponsors) and insurance/reinsurance companies. In the end, we believe the individuals who create the strongest multi-year partnerships will ultimately dominate the affordable housing investment yield guarantee business in terms of market share (% of annual estimated $135 to $180 million industry guarantee fees), geographic diversification and profitability.

APPENDIX A – HELPFUL WEB SITES

- Affordable Housing Investors Council - www.ahic.org

  Non-profit organization comprised of corporations engaged in the investment of funds for affordable housing. The web site provides information on acquisition standards (e.g., due diligence, ethics and the internal rate of return calculation), asset management (e.g., property reporting, deal points, property watch and watch list categories) and other important industry information.

- Department of Housing and Urban Development - www.huduser.org

  HUD provides median household income statistics by Metropolitan Statistical Area (MSA) or county level that are used to determine the LIHTC rents. Median household income based on HUD's published Section 8 income limits is adjusted by either 50% or 60% (see Section 42(g)(1) of the Internal Revenue Code discussed above) and for the size of the household (e.g., 1 person, 2 person, etc.) to determine the unit type maximum income (studio = 1 person, one-bedroom = 1.5 persons, two-bedroom = 3 persons, etc.). The maximum LIHTC rent is calculated as 30% of the maximum income excluding the impact of utility allowances.

- National Council of State Housing Agencies - www.ncsha.org

  The NCSHA is a national, nonprofit organization created by the nation's state housing and finance agencies to assist them in increasing housing opportunities for lower income and underserved people through the financing, development, and preservation of affordable housing. The web-sites LIHTC section provides industry "best practices" for Compliance Monitoring Recommended Practices and Standards for Allocating and Underwriting Housing Credits. The site also maintains annual statistics on tax credit/apartment unit allocations by state.

- National Low Income Housing Coalition – www.nlihc.org

  The NLIHC provides up-to-date information, formulates policy, and educates the public on housing needs and the strategies for solutions. The NLIHC has a long history including the spearheading of the creation of the LIHTC. The site provides one of the most complete list of links on the internet to areas such as publications/periodicals, data sources, banking and housing finance, government sites and national housing organizations.

- Office of the Law Revision Council – www.uscode.house.gov

  The Office of the Law Revision Counsel of the U.S. House of Representatives prepares and publishes the United States Code pursuant to Section 285b of Title 2 of the Code. The Code is a consolidation and codification by subject matter of the general and permanent laws of the United States. Section 42 of the IRS code is available for viewing and printing on this web site.

- Texas Department of Housing & Community Affairs – www.tdhca.state.tx.us

  State web site providing valuable background on the LIHTC program. The site provides LIHTC frequently asked questions and answers, a detailed program information guide including examples calculating tax credits for different developments and maximum allowable rent, assistance on syndication and other valuable information.

- UncleFed's Tax*Board – www.unclefed.com

  UncleFed is a web site focused on being the complete online resource for tax relief. The "GAO reports on the IRS" link makes all of the General Accounting Office (GAO) reports and internal investigations of tax policy and administration available for public review. Included in these archives are GAO report numbers GGD/RCED-97-55 and GGD/RCED-97-149 dealing with their report "Tax Credits: Opportunities to Improve Oversight of the Low-Income Housing Program" and subsequent testimony to Mr. Bill Archer, Chairman, Committee on Ways and Means and Ms. Nancy L. Johnson, Chairman, Subcommittee on Oversight Committee on Ways and Means. The report focuses on tax credit qualified units that were placed in service in the continental United States between 1992 and 1994 (approximately 172,000 qualified units and $6.1 in tax credits for the three year period).

APPENDIX B – GLOSSARY OF TERMS

Carryover Basis Test	The 10% carryover basis test requires that 10% of costs must be incurred in the year of credit allocation.
Compliance Period	The property must remain in compliance with the set aside and rent restriction requirements, for a period of not less than 15 years from the first taxable year of the credit period (Section 42 (I)(1) of the IRS Code).
Credit Period	The tax credits that are allocated to any project are eligible to be claimed in an equal amount for a period not to exceed 10 years (Section 42(f)(1) of the IRS Code).
DSC Ratio	The debt service coverage ratio (DSC) is defined as the ratio of a property's net operating income (rental income less operating expenses and reserve payments) to foreclosable, currently amortizing debt service obligations. The National Council of State Housing Agencies (NCSHA) currently recommends a minimum DSC ratio of 1.10 (1.05 for rehabilitation properties).
Tax Credit Price	The tax credit price is defined as the ratio of investor equity raised to housing tax credits generated. Tax credit price is also referred to as the equity yield in the industry.
Fund Year	An annual time period used in the statistical collection of data corresponding with guarantee volume from all funds that close in a calendar year. Data for a fund year consists of all revenue and expense arising from events occurring during the particular period (1/1/XX through 12/31/XX), regardless of time lags in the reporting or payment of claims.
"Hard" Debt	Money that sponsor actually owes (e.g. interest and principal payments on debt financing).
Incurred Losses	The cumulative loss amount paid for a claim as of a particular point in time, plus outstanding unpaid amounts.
Loss Ratio	Ratio of losses (paid, incurred, or ultimate) to guarantee fees as a percentage.
Low-Income Unit	In general, the term "low-income unit" means any unit in a building if:

1) such unit is rent-restricted (as defined in Section 42(g)(2) of the IRS Code)
2) the individuals occupying such unit meet the income limitation applicable (under Section 42(g)(1) of the IRS Code) to the project of which such building is a part.

Paid Losses

The cumulative loss amount paid for a claim as of a particular point in time.

Project Qualification

A qualified low-income housing project (Section 42(g)(1) of the IRS Code) means any project for residential occupancy if the project meets the requirement of either:

1) 20-50 Test - 20% or more of the residential units in such project are both rent restricted and occupied by individuals whose income is 50% or less of area median gross income (medium income as established by the U.S. Department of Housing and Urban Development)
2) 40-60 Test - 40% or more of the residential units in such project are both rent restricted and occupied by individuals whose income is 60% or less of area median gross income (medium income as established by the U.S. Department of Housing and Urban Development).

Section 42

Federal law that governs the tax credit program.

Syndication

Process of underwriting qualified projects, structuring the financial arrangements, and securing the investors who will join in a partnership and own the low-income housing tax credit project.

"Soft" Debt

Money that sponsor will owe (e.g. interest and principal due only if operating cash flow is positive).

Tax Credit

Under federal income tax code, a credit is a dollar-for-dollar reduction in the tax liability or tax bill for the property owner or investor.

APPENDIX C – SAMPLE AHIC "WATCH LIST"

WATCH LIST CRITERIA

Development Phase	
Construction delays	Over 3 months behind schedule
Construction cost overruns	Exceeds 15% of original contract contingency reserves spent
Leasing delays-qualified occupancy	Over 3 months behind schedule
Leasing delays-all units	Over 4 months behind schedule
Mechanics liens	Filed lien not covered by indemnity and not cured within 3 months
Sources/uses of funds	Uses greater than sources by 3% of total development cost or $100,000, whichever is less
Changes in qualified occupancy	Any change
Other litigation	Any action
Operational Phase	
Rental delinquency	Greater than 7% of Effective Gross Income (EGI) (60 days or more lag)
High vacancies	Greater than 8% of all units
Negative NOI	Income after payment of operating expenses is negative Reserves not funded on schedule or unscheduled use of reserves
Debt coverage (DSC Ratio)	Less than 1.10 on mandatory "must pay" debt service. (Does not include amounts accruing or cash flow mortgages) Any draws on debt service reserves not replaced within 30 days of draw down
Mortgage delinquency	Any "must pay" debt service payment more than 30 days late
Mortgage default	Default on first mortgage or any subordinate debt
Unauthorized debt	Any unauthorized liens or unauthorized subordinate debt
Unpaid taxes	Property taxes more than 3 months past due (Is a tax escrow held by mortgagee?)
Insurance	Expired property insurance
Deferred maintenance	Any deferred maintenance in excess of $5,000/unit or $100,000, whichever is less Material change in property physical condition based on last inspection by Fund General Partner

WATCH LIST CRITERIA

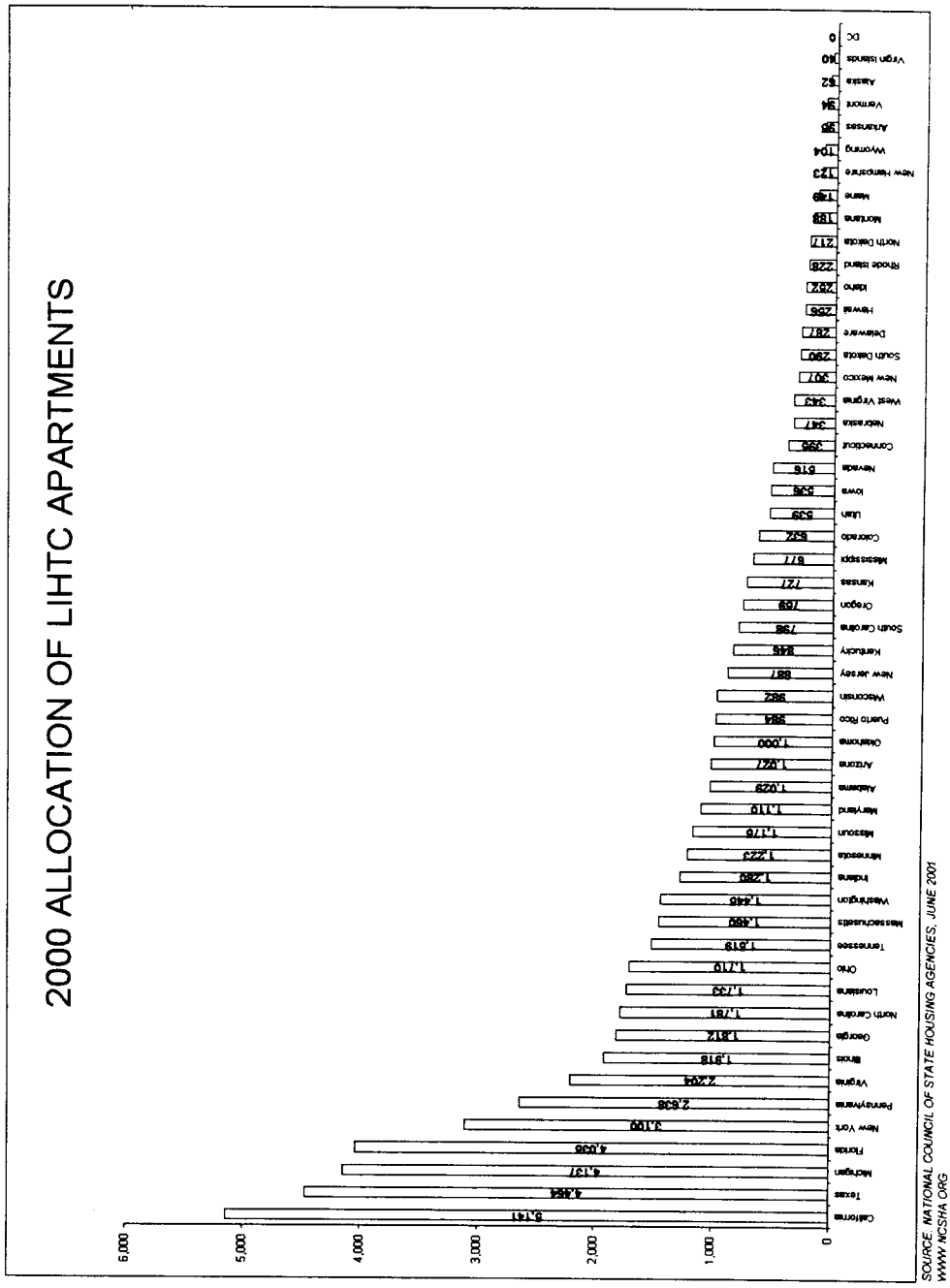
Operational Phase (Continued)	
Extraordinary repairs	Any repairs not budgeted in excess of 3% EGI or $25,000, whichever is less, or any deferred maintenance in excess of $5,000/unit or $100,000, whichever is less. Draws on replacement reserve not refunded in 6 months
Natural disaster insurance incident	Any incident over $5,000/unit or $100,000, whichever is less until resolved
Compliance Issues	
Unit non-compliance	Any qualified unit in a project out of LIHTC rent compliance for more than 60 days
Loss of LIHTC	Non-compliance with 10% or more of qualified units (e.g., rent levels, tenant income, certification)
State certification	No receipt of annual state certification
IRS compliance	Notice of IRS claim or audit
Sponsor reporting	Last quarterly report missing
Site visit	Project not visited in 12 months or more
Transfer of ownership and/or reorganization of project sponsor	Any change
Decline of project sponsor	Decline in sponsor's financial condition Deterioration of its asset management capability
Unscheduled capital call	Any amount above scheduled dollar amount
CRITICAL WATCH LIST	

Any project on the watch list for 2 or more quarters and/or a project representing 20% of the fund and/or substantial decline in a project over the past quarter.

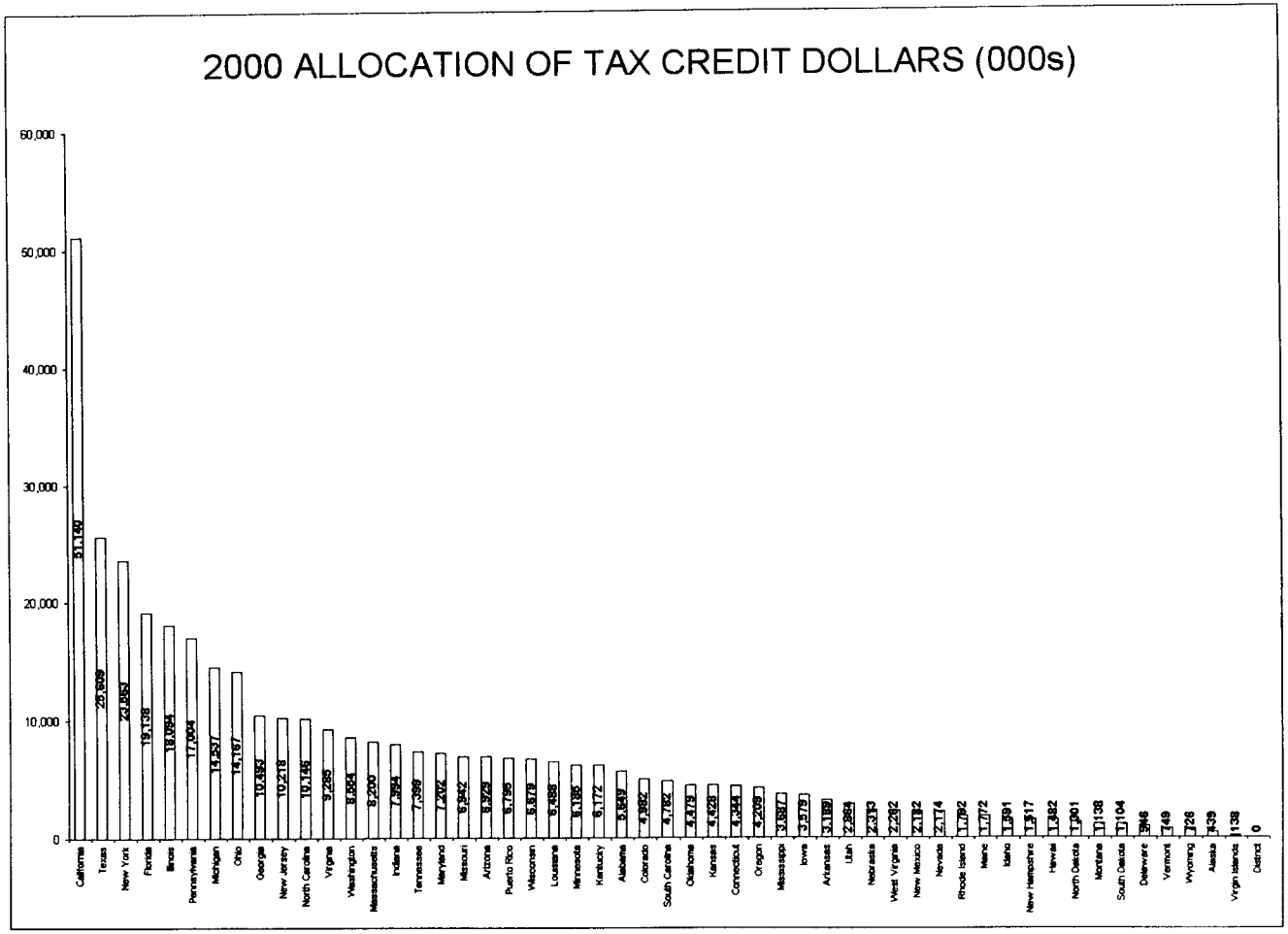
APPENDIX D

2000 Allocation of LIHTC Units

2000 Allocation of Tax Credit Dollars



SOURCE: NATIONAL COUNCIL OF STATE HOUSING AGENCIES, JUNE 2001
WWW.NCSHA.ORG



SOURCE: NATIONAL COUNCIL OF STATE HOUSING AGENCIES, JUNE 2001
WWW.NCSHA.ORG