

The Changed Reality in Affordable Housing Financing Structures

Outline:

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The affordable housing industry is facing a crisis due to several factors, such as changes in federal administration, economic downturns, and heightened risks. To tackle these challenges, a comprehensive approach that emphasizes both quantitative and qualitative risk models is necessary.

Key Points:

1. **Current Crisis:** The affordable housing industry is in crisis, and without a comprehensive approach, the risk of an economic downturn could increase the unhoused population.
2. **Analytical Framework:** To better understand the situation, an analytical framework focusing on recent events, known risks, and unknown risks is proposed.
3. **Federal Administration Changes:** The change in federal administration has created a radically different agenda, which has affected funding and affordable housing regulations and exacerbated the underlying financial crisis many sponsors face.
4. **Economic Factors:** Interest rate increases, inflation, and the COVID-19 pandemic have significantly impacted the affordable housing industry.
5. **Recommendations:** The industry should accept lower senior, permanent debt levels and find additional equity solutions. Effective solutions require collaboration between accounting experts, federal and state agencies, and nonprofits.

Conclusion: The affordable housing industry must adapt to the new reality by developing innovative solutions and working together to address the emerging crisis.

Recommendations for the Affordable Housing Industry:

1. **Accept Lower Levels of Senior Permanent Debt:** The industry must accept lower levels of senior permanent debt in deals. This requires identifying additional equity solutions to cover the gap created by reduced debt levels.
2. **Collaboration with Experts:** Accounting and LIHTC consulting expertise, such as that provided by Cohn Reznick and Novogradac, together with federal and state governmental agencies, can help develop an analysis to identify deals at risk. This combination of brain power and data sets is best positioned for the econometric forecasting needed.
3. **Adjust Expense Calculations:** More of the "below-the-line" expenses of administration and asset management should be moved up into the "above-the-line" calculations of manageable senior debt that the project can reasonably handle.

4. **Redirect Housing Funds:** Federal, state, and local governments could develop or redirect part of existing housing funds to support nonprofits during this period of disruption and transition. Rapid and chaotic changes at the federal level create a more significant burden on state and local governments to assist vulnerable affordable housing units and their sponsors.
5. **Nonprofit Strategies:** Nonprofits can protect themselves by modeling their portfolios to determine a strategy for surviving this transition period. One approach could involve selling some properties to raise cash to shore up the remainder of the sustainable portfolio. Cash forecasting and understanding the nature of each portfolio's emerging risks become essential.
6. **Consultant Support:** Industry consultants can help by developing a "work-out" or "turn-around" specialty specific to this period's causes. An effective work-out strategy would include accountants, affordable housing attorneys, developers, and asset managers to provide the necessary analysis and tools.
7. **Federal Program Changes:** A targeted federal program or rule change that assures the market that LIHTC tax credit recaptures will be minimized is essential. This will help maintain confidence in new project development.

White Paper:

An important shift is required in our thinking about what is happening in the affordable housing industry. We need to treat the situation and risk analysis more holistically. It is in crisis now. We must create, but not solely depend on, the kind of quantitative risk models used in banks and by economists to develop solutions ahead of the potential losses that may result from stressors currently faced in the system.

Without a holistic approach towards analysis and solutions, I fear the risk of an economic downturn or the new Administration's efforts will rapidly increase the unhoused population in our country despite our best efforts to solve the problem by building more units of affordable housing. There are changes to state and local programs we do have control over to put guardrails into place until we work through the changed reality.

To better frame this complex situation, I propose that we start with the analytical framework of: Recent Events, Known Risks, Known-Unknown Risks, and Unknown-Unknown Risks. This analytical framework is needed to create a qualitative plan to counter what may either be a temporary affordable housing performance downturn or a more permanent change in the business model of affordable housing.

Not identifying and addressing the actual drivers of risk to the system could cause the emerging crisis to deepen in negative outcomes, and for a longer time. The opportunity to fix it now deserves our consideration and action now.

With the change in the federal administration and conservative majorities in Congress, our industry is facing a radically different agenda¹ that we will also need to incorporate into solutions in 2025. We can't wait for the Executive Orders of Q1 2025 to work their way through the courts. Local and State governments must also quickly adjust their oversight, their funding, and their reaction times to the evolving reality, rather than put in place funding meant to solve the issues of the 2022-2023 seismic shift. With the change in administrations, another earthquake occurred in 2025. It wasn't just an aftershock of the 2022 increase in interest rates and inflation. The 2025 earthquake includes:

- Attacks on culturally specific organizations and affordable housing projects, using an anti-“DEI” (as vaguely described in Executive Orders) justification
- Defunding, delayed funding, and uncertainty of payment/regulatory authorization by reduced federal staffs will impact grant and loan programs
- The likely reduction of the maximum Corporate Tax Rate from 21% to 15% will cause losses on the value of existing tax credit investments held in portfolios, as well as reducing pricing/desirability of future LIHTC investments. This will require an increase in allowed LIHTC allocations and program changes to counter the negative impact on pricing.
- Potential diminishing of CRA regulations and oversight of Banks who provide an essential layer of funding.

Whether temporary or long-term, the emerging issues call for a re-examination of some of the assumptions we use to shape the complex, tax-motivated funding of affordable housing². While many long term factors are at play, there are three specific factors accelerating the situation today: 1) the rapid 2022 Interest Rate Increase during a period that also has a severely inverted yield curve³; 2) the 2022-2024 higher inflation rates within the specific segments of expense impacting affordable housing operations & creation⁴; and 3) the pandemic caused cash drain of established affordable housing providers who make up the essential social safety net services to America's poor. Together the impact of these three factors fit the definition of what the financial risk modeler Nassim Nicholas Taleb calls a “Black Swan Event”⁵.

¹ See Heritage Foundations “Project 2025 Leading the Change,” particularly Chapters 14 (HHS) and 15 (HUD) to understand the new administration's goals. Pay particular attention to stated Day 1 and Year 1 Goals in both of these chapters. Many of the resulting Executive Orders and memorandums will be fought vigorously in the courts but we can expect that some programs will be eliminated, have reduced funding, or will suffer damage by 1,000 small cuts of partisan oversight that delays payment through audits and required reimbursement of funds.

² The current 9% and 4% Tax Credit financing mechanism is comparatively young compared to other financial structures. It was developed in answer to the Tax Reform Act of 1986, which included the Internal Revenue Code Section 42: The Low-Income Housing Tax Credit.—See Novogradac's “Introduction to Low-Income Housing Tax Credits,” to gain an overview of the structure, the calculations used to create limits of the equity funding.

³ A detailed explanation with graphs is described in **Appendix A- Typical LIHTC financings during pre-development, at admission, conversion, and year 15**

⁴ A detailed explanation is outlined in **Appendix B – Interest Rates, Inflation impacts on LIHTC Senior Debt Appetite and Risks**

⁵ Nassim Nicholas Taleb's book, “The Black Swan: The Impact of the Highly Improbable” describes this phenomena of human tendency to look backward to experienced past events, with an impulse to use old solutions when they may no longer fit, or address the actual issue at hand.

Recommendations for the industry:

- 1) Going forward, we must accept a lower level of senior permanent debt in deals, which also means that we must find additional equity solutions to fund that gap. I believe that the LIHTC proforma model must be modified to reflect the 2020 to 2024 “Black Swan Event”
- 2) Accounting and LIHTC consulting expertise, such as that provided by Cohn Reznick, Novogradac and others,⁶ together with Federal and State governmental agencies can get us ready and develop an analysis that identifies those deals that are likely to be at risk. This combination of brain power and data sets are best in position to do the econometric forecasting, as they have more ready access to the project level financial performance of those deals still in their 15-year compliance period.
- 3) Going forward we should put more of the “below the line” expenses of administration and asset management up into the “above the line” calculations of manageable senior debt that the project can reasonably handle.⁷
- 4) Federal, State and Local Governments could simultaneously develop and/or redirect a portion of the existing housing funds to preserve the nonprofits through this period of disruption and transition. Rapid and chaotic change at the Federal level necessitates a larger burden on State and Local Governments to support vulnerable affordable housing units and sponsors.
 - a) Nonprofits can protect themselves by modeling their own portfolios to determine a strategy to survive this transition period. It could lead to selling some properties to get cash to shore up the remainder of the sustainable portfolio. Cash forecasting becomes essential as well as understanding the nature of their individual portfolio’s emerging risks.
 - b) Consultants to the industry can help by developing in their practice a specialty of “work-out” or “turn-around” specific to this time period’s causes⁸. An effective work out strategy would best be made up of accountants, affordable housing attorneys, developers and asset managers to provide the analysis needed for nonprofits who don’t have in-house financial expertise to protect their mission and ensure sustainability through this downturn, guidelines for the parties to all entities in a deal’s financing stack of what are reasonable and unreasonable expectations of each layer in a work-out situation, tools to better screen portfolios for developing asset management problems,
- 5) A targeted federal program/rule change that gives the market an assurance that we minimize LIHTC tax credit recaptures, as this will have a chilling effect on new project development.

Recent Events Leading to a Black Swan Situation:

Since the Great Recession in 2008, housing affordability dynamics and income inequality increases have led to fewer families being able to afford market rate housing. Communities have met the increased demand for affordable housing by sponsoring new affordable housing development using the tools and

⁶Cohn Reznick and Novogradac are the leading consultants and accounting firms to the industry. They have large data sets of the 9% and 4% LIHTC deals made since 1990, They have the confidence of the stakeholders including investors, lenders, and sponsors.

⁷ See **Appendix C Operating Expenses of a Project – Above and Below the Line** for an explanation of the Proforma Model and what its longer-term assumptions on Operating Expenses may be leading to unacceptable stress for recent and near future project financings.

⁸ See **Appendix D – Suggestions for weathering this storm – sponsor versus project level analysis** for a further exploration of the financial cash flow drivers and a framework that this suggested consulting practices, investors, nonprofits and their bankers should consider to address the strain of this particular period of 2024-2026

programming they have had available. This worked in a low-inflation /low-interest rate environment. More recent events have upset that ability to absorb the increased demand for affordable housing.

- Long term Interest rates nearly doubled in one year and are expected to stay at a higher level than the historic low rates of the 15 years prior to that. The interest yield curve is also expected to remain inverted (shorter term rates are higher than longer term rates) for the next 2-3 years.
- Segment specific inflation rates increased in the double digits for the first time in decades. While the rate of price increases is stabilizing, the continuing impact of the last year's increased base will linger as no deflation is expected of prior salary, energy, and materials price increases.
- In reaction to the 2020-2022 COVID crisis, the federal government funded massive programs of financial aid to stabilize the economic reality of a workforce who could not work, health care costs to treat those impacted by COVID, and to the social safety net providers who faced unprecedented calls on the food, healthcare, and rent relief services that they provide. The funding for those programs was time-defined, with most of the funding of programs used up in 2023 – 2024. Replacement funding for the operational shortfalls that continue in 2024 and beyond have not been identified or implemented. Some municipalities have increased their rent relief funding of individuals, but it isn't sufficient to meet the need.
- COVID's longer term impact is revealing itself. During the pandemic, those whose family income is less than 60% of AMI were most impacted in the areas of health outcomes, income loss, and trauma. It has negatively impacted the operation of and staffing of affordable housing providers. Longer term impacts include:
 - High levels of housing staff turnover have resulted in organizational loss of ability to staff fully, to train new staff, and to optimally manage their housing stock of existing properties.
 - Outsourcing / changing of 3rd party property management isn't working because they have the same staffing challenges.
 - The acuity of trauma and resulting problem tenants is overtaxing staff and results in increased damage to buildings and increased security concerns.
 - There is a subsegment of tenants who move into an affordable housing unit and soon after can't pay their rent. The sponsor tries to work with these tenants on solutions, but after a period, must move towards eviction which takes 6-12 months. The tenant remains housed for that period, with the sponsor providing cash injections to cover operating expenses of the project. This has a multilayered cash flow impact on the sponsor as lease up is delayed for the new project, stressing the interest reserve, violating loan terms for conversion from large sized/high-interest rate construction loans to the lower rate, and much smaller sized permanent financing.
 - Additionally Rental Assistance is not as efficiently applied as it could be because it is distributed between social safety net services and those affordable housing providers who have significant social service programs. This has resulted in a costly impact of property management staff particularly in smaller nonprofits who must go to court (spending about a thousand dollars per tenant and eviction event) in order to have the tenant access rental assistance, and just prior to eviction many months

later, the tenant gets the assistance and starts the nonpayment/eviction/assistance cycle all over again.

- Climate change has resulted in unprecedented property damage through increased intensity of and frequency of weather events. The resulting repairs are outside of what the project proformas consider in their Replacement Reserve assumptions. The insurance industry property claims have driven insurance rates to increase by over 100% in many geographies, but higher double digit increases in almost all of the country. Certain parts of the USA are no longer insurable, which causes a default potential by senior debt holders and LIHTC investors whose legal agreements require property insurance⁹. Senior debt holders' collateral position becomes less secure if the property is uninsured or if deductibles are increased dramatically by the sponsor to be able to afford some level of coverage.

How do we best analyze the qualitative and quantitative solutions to the affordable housing Black Swan event? Categorizing and prioritizing the three types of risk may help: These risk types are: Known, Known-Unknown, and Unknown-Unknown.

Known Risks:

In the affordable housing industry, the risks of a new project being developed and then maintained over the lifespan of an affordable housing physical building are well known and countered by well-defined roles of government grant and LIHTC Investment funding mechanisms; Corporate / Foundation philanthropy; and senior debt financing structures, commonly referred to as "the financing stack." Any incremental shift in the availability and nature of any one of these financing stack layers can be stretched to a limited degree through coverage by another layer in the stack, but each layer has a breaking point where the risk profile and incremental investment appetite of its stakeholders are exceeded.

Unfortunately, the many individuals active in the funding stack today do not understand the risk profile and appetite limits of the other players...so expectations to "give" can be unreasonable within the current economic dynamic or what may be a long-term shift in the industry. Those experts who built the affordable housing apparatus of the 1980's and 1990's haven't necessarily documented the why's and what's of the risk profiles and market appetite...only the who, how, and when are well documented. This presents a risk that solutions offered won't fit the basic needs of all the funding stack risk profiles, and thus won't work as a solution. Taken to its extreme we could see projects start to fail and funders exit the market, reducing supply while demand continues to grow.

- **Nonprofit providers** have limited access to capital, a risk which they mitigate by conservative financial management, maintaining liquidity cushions through operating and excess cash reserves, and relying on property & general liability insurance should unexpected damage to property occur
 - For better or worse, a portion of the costs of developing new projects and growing the liquidity of nonprofit providers has come from the 10% to 18% developer fees built into the financing stack. Without a pipeline of new projects that provide cash developer

⁹ An excellent overview of the situation is provided in David W. Chen's June 7, 2024 NY Times article titled "'It's Not Sustainable': Insurance Hikes Threaten Affordable Housing"

- fees, the nonprofit cannot support current staffing levels, fund future development efforts, or have sufficient cash reserves long term¹⁰.
- While the assumptions of other players in the financing stack on any one project may view the large cash balance at the sponsor level as available to support their deal if the need arises in outlying years, it may be unavailable or needed to support other projects and needs of the nonprofit organization.
 - Nonprofits who have stepped up to answer the housing crisis of the last several years have grown their portfolio of properties, numbers of clients served, and have done so without putting into place infrastructure of information systems, quality control and key performance indicators to identify whether they are as effective at it as they were before that growth.
 - There are very limited ways that affordable housing sponsors can grow their revenue streams, and these streams are limited by outside forces¹¹. Conversely the operating expenses of the sponsors are especially sensitive to the ravages of inflation on wages, insurance, utilities, and materials/repair costs¹². There is an expectation by the other funders in the stack that excess liquidity used to shore up their project is easily replaced by the nonprofit developer when it is not.
 - For those nonprofits who offer both extensive social safety net services (shelters, health and education) and affordable housing, the issues are more serious. Many providers do not have a clear understanding of the differences in their business models that these distinct services have because their accounting and cash flow forecasting systems are not sophisticated enough to allocate costs and determine revenue stream erosion impact adequately. The history of funding money losing programs and contracts by extra income of others only works when there are extra income streams.
- **For-profit developers** of affordable housing have a comparatively short-term perspective of deal development, construction, and lease up. Their involvement is at best 12 -15 years of the 60 to 100 year life cycle of an affordable housing building.
 - They do not have the liquidity nor appetite to support an investment that gets into trouble beyond a narrow range of financial cost. They will choose to walk away rather than invest more to sustain a project beyond that risk-return analysis. Their stakeholders are profit motivated investors. The other funders should not expect them to act like a nonprofit because they won't.
 - The growth in for-profit developers in LIHTC deals, and a predominance of non-recourse debt after the construction/lease up period by for profit developers is destabilizing in this Black Swan Event period, especially as they are not likely the LIHTC Investor who will

¹⁰ States and local governments vary in their allowed Developer Fees. The mix between Deferred and Milestone based pay-ins of the cash developer fee also vary across deals. Usually, the Developer Fee is fully recognized at closing as revenue at the Sponsor level, but actual cash payment occurs over the life of the transaction based first on construction/lease up milestones and then based off cash flow of the project.

¹¹ HUD-restricted rent revenue, government and corporate restricted grants, and foundation/personal philanthropy are limited.

¹² See Appendix C for greater detail on the nature of expenses in the affordable housing project.

most suffer if the for-profit sponsor walks away from the far smaller senior loan on the property.

- **Government Funders** of affordable housing include: HUD, Block Grant funding, State & local Housing departments, Municipal housing authorities.
 - The emphasis of these funders is on new unit development, with limited funding for preservation, or for operating funding gaps caused by inflation's prolonged impact
 - This funding group tends to look at only the project-specific cash flows, and only analyzes the sponsor's current financial condition at a high level. They are not focused on the sponsor's long term financial cash flows nor the sponsors portfolio of projects using the lens of the sponsor's mix of units, need for liquidity, and future cash needs to support an aging portfolio of properties.
 - The shift of using 4% LIHTC and Bond financing from preservation projects to new construction is likely to have a longer-term impact as that funding source is "used up" and now not available for its original purpose of acquisition of existing apartments adding to the affordable housing unit count and of refreshing existing affordable housing projects after year 20 when several systems (roof, HVAC, plumbing) need replacing. The replacement reserves that are built into the 9% and government grant proformas of projects are proving insufficient to meet these needs due to inflation's impact.

- **Foundations, Impact Investment, Corporate Grant funders** have a short term (1-3 year) role in the project financing stack and these funders are typically driven by their corpus limitations, program focus, and choice to fund capital or operating needs of their grantees. Declines in the stock market and yields on their investment corpus limit the amount of funding they can provide. During COVID many foundations "stepped up" and provided higher than regulatory required levels of funding. This may or may not have been a business choice to dip into corpus beyond what their longer-term sustainable funding could handle. These funders are understandably returning to their historic business model of using 5% - 8% of their corpus for grants in any one year. The incremental funding trend of doing Program Related Investments ("PRI" - low interest loans that must be repaid) works well for other business models of the nonprofit sector but is problematic in the affordable housing sector where every dollar of cash flow is already spoken for by the other layers of the financing stack.

- **Affordable Housing Developers and Development funds** may be for profit or nonprofit companies who provide expertise to new project creation. They may also administer LIHTC programs for investors and or providing pre-development funding of a project costs. They are revenue dependent on a continual & successful deal flow. Their financial risk reduces significantly at admission (closing the construction loan) and then even more soon after conversion of the project from construction/lease-up to perm financing. Reputation risk is extremely important to this stakeholder as they depend on all the other parties to view them as both competent and trustworthy.

- **Commercial Banks** provide construction financing, perm financing and LIHTC investments. These funders have a low-risk appetite and regulatory pressures that limit their lending dollar amounts.
 - Construction and perm financing loans are not typically at market-rate interest rates because many banks use this as a Community Reinvestment Act (CRA) compliance vehicle and the low number of new projects creates a competition of banks needing eligible investments & loans in specific census tracts. If banks start pricing construction and permanent financing of the affordable housing market more like “regular” investor held real estate loans, the lower rates upon which the affordable housing sponsors depend will further “break the model” for deals at repricing. Historically the low interest rate/return on risk-weighted investment choice has been viewed by the banks as a fair trade off, given the conservatism in underwriting and nonexistent loan loss experience on construction and perm loans made.
 - With a shrinking Net Interest Margin (NIM) at banks, moderate term profitability at commercial banks is constrained, and the LIHTC investments already in their portfolios may have lower bank specific value because they will need to wait longer to use the tax credits impacting their return on investment. Because these are not liquid investments and they are institution-specific, it has been viewed as impossible to mark to market. Typically these are a small percentage of the investment portfolio of any one institution, so they will not impact the bank’s profitability on a GAAP basis. The contemplated 2025 reduction of the federal tax rate from 21% to 15% will further reduce the value.
 - LIHTC investments, have a low rate of return, because the risk of loss is viewed as nearly nonexistent, based on historic experience and safety valves of government funding availability combined with sponsors’ liquidity. Emphasis has been on the value of the tax credits to the specific Investor’s federal tax position over the 15 year compliance period, once construction is complete¹³
 - Conservatism in investing in new tax credits is essential for the overall health of the Commercial Banking industry.
 - Most of the institutions making these investments are commercial banks who hold the LIHTC in their overall investment portfolio. The banks influenced by CRA requirements of investing back into the communities they serve use LIHTC Investments to do so. The assumption has always been that the “principal” of the investment (those sums which financed the equity portion of the funding stack) was sound¹⁴. The only risks they believed they were taking were the market risk of yield on the investment and that they would have sufficient taxable income to take advantage of the credit against their federal taxes paid in

¹³ For an exceptional overview of what makes up the LIHTC Investment calculation and risks to the investor due to noncompliance, the reader is directed to Novogradac’s “Introduction to Low-Income Housing Tax Credits,” A summary description of what happens if there is partial or full noncompliance during the 15 year Compliance period, see pages 38-43 of the Eighth Edition of that booklet.

¹⁴The Investment Tax Creditor is depended upon to manage the risk of project and sponsor underperformance on behalf of the LIHTC Investor. Usually the investment is held at its value calculated at deal Admission. At issue for the investor is the complexity of realistically valuing the investment after deal Conversion. Also untested is the regulatory scrutiny if there are a large number of credit defaults of perm debt of illiquid sponsors across the country and that then drives foreclosures that force out the equity members during the compliance period creating potential tax credit recapture.

the future. A bank has limited ability to sustain recognized investment losses before their regulatory capital required becomes at risk. If the bank has federal tax appetite, the principal of the investment is secure. While the affordable housing industry expects an increase in 9% and 4% LIHTC allocations in 2025 and beyond, it may be that the prime investor in those future credits will not be able to utilize these credits until their loan portfolios of very low-interest rate loans from the last 10 years reprice at the current market rates. If, as some of the larger banks have done, a portion of their risk is sold to nonbank investors, then work-out strategies that encourage those players' cooperation in a contracted workout situation should be developed before it happens.

- **Perm Loan investment funds** may be for-profit and nonprofit corporations. There is less transparency in this segment, but they are driven by portfolio-wide management of loss projections and portfolio monitoring as well as how they maintain loan loss reserves, first loss reserves, and investor returns. They, like the banks discussed in detail above, face issues of profit margin compression of previously booked lower interest rate loans (their revenue source), but shorter-term funding costs that are significantly higher (to the degree that they use debt or equity to finance their balance sheet.) The fund managers currently in place may not have institutional memory of a prolonged period of problem loan management. These debt providers have no incentive to work with nonprofit sponsors to continue lending at a disadvantageous interest rate. To gain their cooperation, a sponsor will be forced to pay down debt and increase their interest rate if they wish to keep the property.

Known-Unknown Risks:

- The funding framework for the 9% and 4% LIHTC projects has depended on a conservative, disciplined proforma performance model that ensures that a project will make it through the 15 year initial compliance period once the project construction is completed and the project is Placed in Service (PIS).
 - That framework conservatism also ensures that the debt burden of an affordable housing project can be covered by a reasonable level of revenue and expense variation over the compliance period. This model has resulted in a very large number of projects currently entering or in their 15 year compliance period with a 2% annual revenue / 3% expense increase assumption which is no longer valid. That model is now in question as specific expense (personnel expense, utilities, insurance, maintenance materials costs, and security related) inflation above the 3% per year occurred in multiple years (2022 to 2024) over 6% in 2022 and 2023 (likely above 6% in 2024 and 2025.)
 - The conditions listed **Recent Events** section of this paper have broken the conservatism of the proforma model. Due to interest rate and inflation rate increases in 2022-2023, a meaningful segment of the perm loans made during the last 15 years can be expected to default based on the projects' likely cashflow.

- In the first two years post pandemic, providers of affordable housing had been able to cover the cashflow shortfall via the conservative provisions of the funding stack, including: COVID period funding/rent relief, cash reserves of the nonprofits which funded the required Development Agreement requirements of the sponsor /general partner to forgo deferred developer fees, property management fees, provide Limited Partner loan advances to fund debt service of the senior debt. We can predict when those safety valves of Developer Agreements will fail by econometric forecasting using the balance sheets and income statements of the nonprofit and for-profit holders of the affordable housing properties. This is a known-unknown.
- The 2024 election and resulting spending priorities of the new administration will likely have profound negative impact on the affordable housing industry. The degree of negative impact is not yet known, but will likely come from reductions in CDBG funding, HOME funding, HHS programs that provide wrap around services to clients of affordable housing providers. Project 2025 (which is our best indicator of intent) outlines significant funding and staffing cuts in HUD and HHS. There will be a likely shift from project-based vouchers to Housing Choice Vouchers, with an expectation (not necessarily supported by recent experience) that the for-profit housing providers will accept tenants with Section 8 vouchers in increasing numbers. We also don't yet know, and it will be tested in the courts, the specific defunding of culturally specific, disability, and LGBTQA+ equity focused missions of nonprofit providers. It is a "black box" of risk where we don't know what they really mean by defunding "DEI" to recipients of HUD, HHS and other grants and loans. Likewise, the aggressive withholding of funding to Sanctuary Cities and "Blue" States, which will also be tested in the courts, could put stressors that risk viability of some affordable housing providers who have payments delayed.¹⁵

Unknown-unknown Risks:

- How will the public and investor community react when first projects and then nonprofit providers begin to fail? Will they simply look for someone to blame or will they understand that solutions and a level of patience are essential to solve the economic problems created by the situation developing but not identified over many years?
 - Loss risk models of banks are principally backward looking using historic default risk and loss given default experience. That doesn't work in this credit and investment type. How do we develop appropriate risk modeling for Banks and LIHTC Investors?
- What will happen to those housed by affordable housing providers who are now unable to keep up their properties or provide the necessary wrap around services to keep clients housed? Will we see a repeat of industry consolidation of the weaker nonprofit providers into the stronger providers? Do State and Municipal governments have a plan to pick the "winners" and "losers" that their deed restrictions of affordability give them the ultimate power to shape?
- How will the market rate rental housing weakness simultaneously occurring, particularly in the REIT's and private investor markets impact the affordable housing rental rate ability? This industry is also

¹⁵ Two sources I have used to understand Project 2025 is the original source document from the Heritage Foundation's, "[Mandate for Leadership – The Conservative Promise, Project 2025 Presidential Transition Project](#)" 2023 (Chapter's 14, 15, and 16 are particularly meaty for affordable housing.) and Woodward, Bryan's "[Project 2025 Explained Chapter by Chapter: Understanding the Conservative Promise](#)" 2025 (Kindle Version) The first is the original source document and the second has multiple perspectives (conservative and counterpoint.)

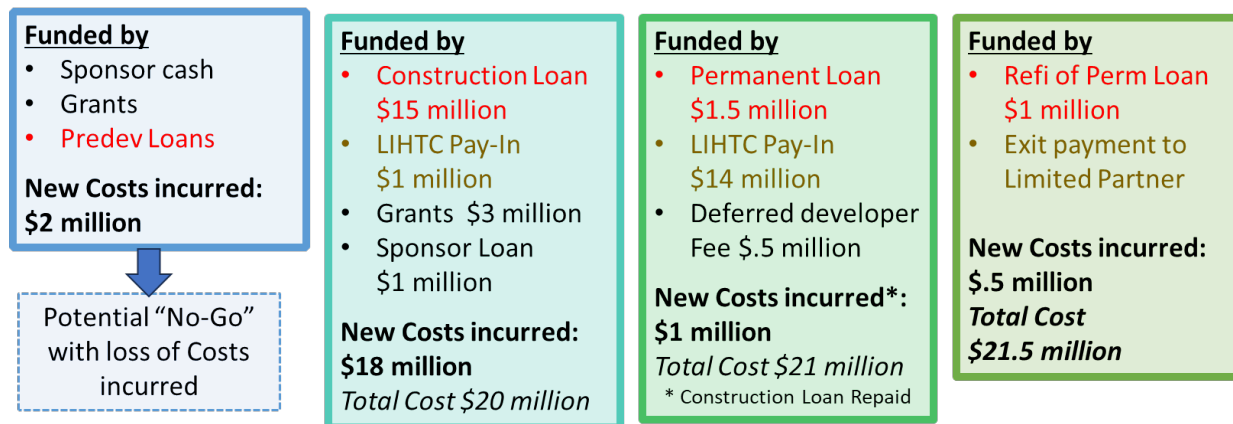
subject to repricing risk on interest rates and vacancy rate issues on their debt servicing ability impact bank's overall health. Banks' risk modeling and loan loss reserves heavily impact their ability to lend and their capital requirements which will lead to further tightening of the credit landscape to all multifamily property providers.

Summary:

"It's complicated." This risk analysis framework has within it the seeds of the solutions that need to be developed quickly to prevent what appears to be serious crisis. We cannot depend solely on a historically based set of solutions. We need different programs and funding for this new reality, and none of the players in the funding stack should be allowed to walk away from helping to create those solutions. It will take honest conversation, willingness to change, and a shaping of political will to not just seek scapegoats to blame for the situation that has developed. We have the intelligence and ability to fix this, we just need to get started doing so together.

APPENDIX A - A typical financing during pre-development, at admission, conversion, and year 15:

Both 9% and 4% LIHTC use a combination of debt, Investor Tax Credit Funding, Government Grants, Sponsor equity to fund a specific project. For demonstration purposes a hypothetical 9% is seen below. Four important periods of risk exist. The graphic below gives a qualitative description of the events in each period, a sample dollar amount of a small project (perhaps 60 units at \$350,000 a door.)



The permanent debt (also called "must pay") is triangulated to meet three factors: A Debt Service Coverage Ratio greater than 1.10 up to 1.20 during the 15 year compliance period; Loan to Value (LTV) of appraised value < 80% on a restricted rents basis; Assumed occupancy at 95% with tenants verified to be compliant within the maximum allowed tenant income (30%, 50%, 60% of Area Median Income "AMI" regulatory requirement.) While long term senior debt plays a less important role (~8% of the final financing stack), during construction / lease up that balance between debt and equity financing is most to be heavily concentrated in the senior loan of \$15,000,000 which is 75% of the cash used cumulatively through this period (\$20,000,000 in this example). This is the highest risk period for senior debt, because the project costs are borne by the senior debt, in an amount that does not bear a relationship to the final as constructed collateral value of the project. If the project falls into a default status during construction/ lease-up period, the senior lender's potential loss is very high, and that lender is vulnerable to a default status / inability to meet the LIHTC legally documented conditions for the LIHTC investor to fund into the project. Mild underperformance can result in a lower level of supported senior permanent debt. The sponsor will have to cover the amount of shortfall, as the construction loan must be repaid. Severe underperformance in lease up could result in the failure to fund the LIHTC transaction above the initial 10% pay in. If the construction funder is also the LIHTC investor on the project, their financial risk (loan plus investment) is actually 80% of the financing structure.

As long as the sponsor and/or guarantor (General Partners) are financially strong and have sufficient unrestricted cash, they are the party(s) expected to support the project through the life stages of Predevelopment, Admission, Conversion and Exit at Year 15. These are some of the common issues encountered which cause Sponsors to provide financial support.

Considerations during the life stages of a project

Pre Dev to Admission	Admission thru Lease-up	Conversion until Exit	Exit at Year 15
<ul style="list-style-type: none"> • Not granted LIHTC or Grants • Project not feasible 	<ul style="list-style-type: none"> • Construction Cost escalation and / or delays • Problems in Lease Up • Construction Interest Reserve shortfall • Operating expense escalation 	<ul style="list-style-type: none"> • NOI Short Fall requires debt pay down • Basis Issues, Escalators on LIHTC Credits • Limited Partner required financial support 	<ul style="list-style-type: none"> • Interest Rate increase on refinanced perm loan • Loan sizing due to reduced NOI • Exit Fees to General Partner • Splitting of cash accounts

APPENDIX B – Interest Rates, Inflation impacts on LIHTC Senior Debt Appetite and Risks:

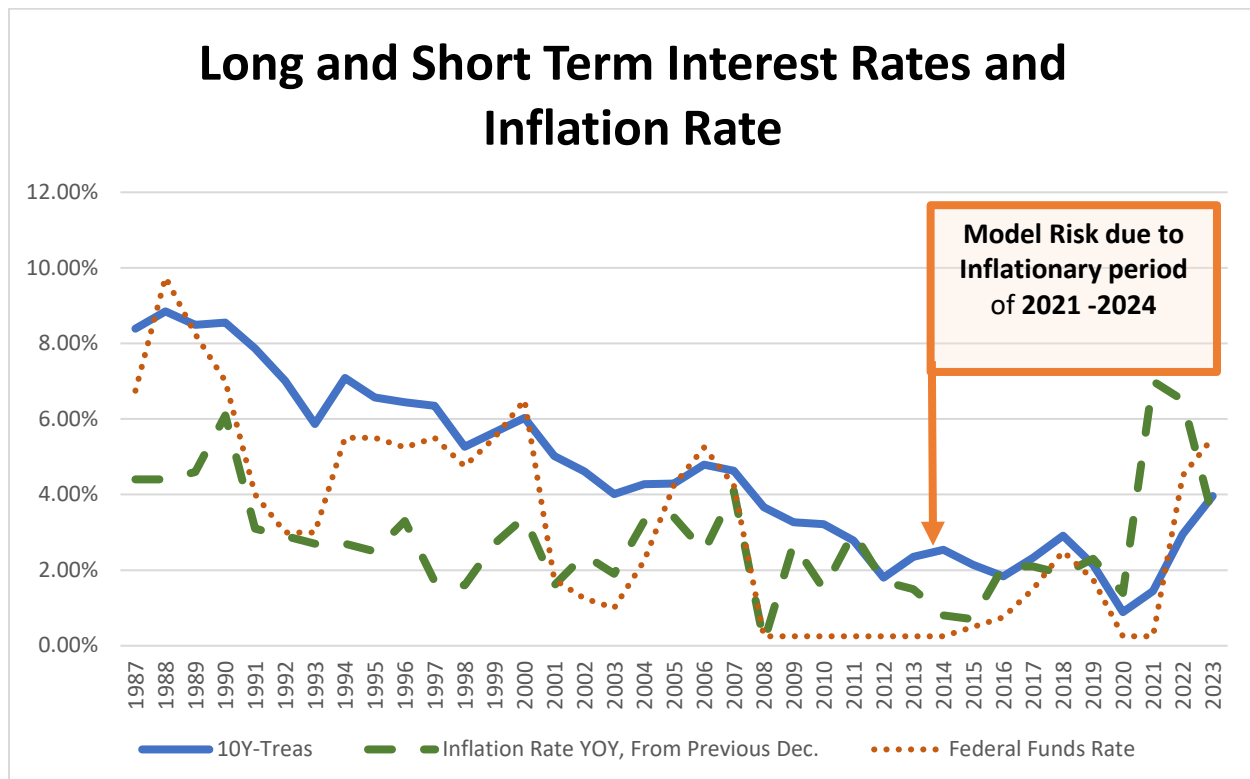
Factors which impact a bank's profitability and appetite for Affordable Housing Loans, as well as the pricing of Senior Debt and LIHTC tax credits in the financing stack are: Interest Rates, Inflation Rates, Corporate Tax Rates and periods of economic expansion and recession. A driver of bank profitability and thus appetite in one year may subside in impact when another of these drivers rises out of sync with the other(s). In 2024 the predominate factors driving appetite are the diminished profitability on all loans as there is a funding mismatch driven by the bank holding a portfolio of low interest rate bearing loans which are being funded by deposits on which they must pay a much higher interest rate (banks call this NIM – Net Interest Margin). To be a sustainable business long term and to make new loans, banks need a NIM of over 4%-5%. Reduced NIM means lower bank overall profits, and thus lower taxes. Thus, the value of tax credit investments are reduced if they exceed the bank's taxable income for that year. One year of reduced NIM isn't likely to impact the LIHTC value, but multiple years of lowered taxable income, or a reduction in the corporate tax rate such as occurred in 2017 will.

Most affordable housing Construction loans are floating rates based on a Prime, LIBOR or SOFR index plus a profit spread. These are floating rate loans, which have a meaningful impact in the variability of financing cost and the actual financing stack in a LIHTC financing before it converts to a Permanent fixed rate loan.

Most Permanent Loans on LIHTC related financings are based on the 10 year treasury rate at the initial loan closing plus a credit spread of 2%-3% (this has varied over time in the amount of the spread and by the risk profile of the project/sponsor.) In order to protect the financing stack and the project from interest rate risk, Permanent Loans are priced on a forward basis 2 years before the project converts from the Construction Loan to the Permanent Loan. In times of low or moderate interest rate volatility, the two year lag is not consequential, but in 2022 the rapid 4 percentage point increase in 10 year Treasury rates meant loans converting to permanent financing were and will remain way underpriced for the interest income compared to the banks cost of funds (which tracks the Fed Funds Rate which moved from near 0% to 5.5% currently.)

The 4% LIHTC financing structures have a required federal tax exempt interest rate on the construction and the perm loan. The corporate tax rate has shifted downward dramatically from 35% to 21% in 2017, which impacted the value of the both the LIHTC investment, but it also impacted the spread on those tax exempt bond financings. While the perm loan is priced off of the 10 year Treasury yield, it is usually in place for 15 to 20 years, which has a detrimental impact on the note holder's net interest income in a rising rate and a traditional yield curve. The tax exempt rate on loans when the maximum corporate tax rate was 34% is lower than the tax exempt interest rate on loans made when the corporate tax rate is 21%, yet after 2017 the bank is only able to take a tax credit at the 21% level on those perm loans which assumed a continuing 34% tax rate benefit, thus NIM on tax exempt loans made from 2002 until 2016 are less profitable to the bank than those made subsequent to 2017 (all other factors held constant.) All other factors are rarely constant, and with time the bank can adjust future financings to compensate for prior period loans' negative profitability impact. As long as the proportion of tax exempt loans within the overall loan portfolio of the bank are low, then bank NIM is not impacted. It will drive a bank's appetite to grow the affordable housing/tax exempt loan financing for a period of time.

As seen in the graph below, a key change occurred in the relationship between long term interest rates, short term interest rates and the inflation rates in the 2021 to 2024 period. This change impacts LIHTC deals that with Admission Dates (Deal Closings) in the 15 years before due to the impact of inflation above 3% annually. Presumably, deals booked going forward post 2024 will be “reset” to the higher operating expense structure, but the model is vulnerable to higher than 3% inflation, which has been demonstrated by 2022 & 2023 to not have sufficient cushion. The higher expected long term Permanent Loan rates of 2023-2024 present a risk for deals exiting the 15 year compliance period because the supportable debt service is lowered because of the higher payment (P&I) monthly. This may mean lower senior debt/higher DSCR requirements as a result, because we now realize that the historical model is not sufficiently robust with its compounding 2% revenue growth/3% Opex growth assumptions.

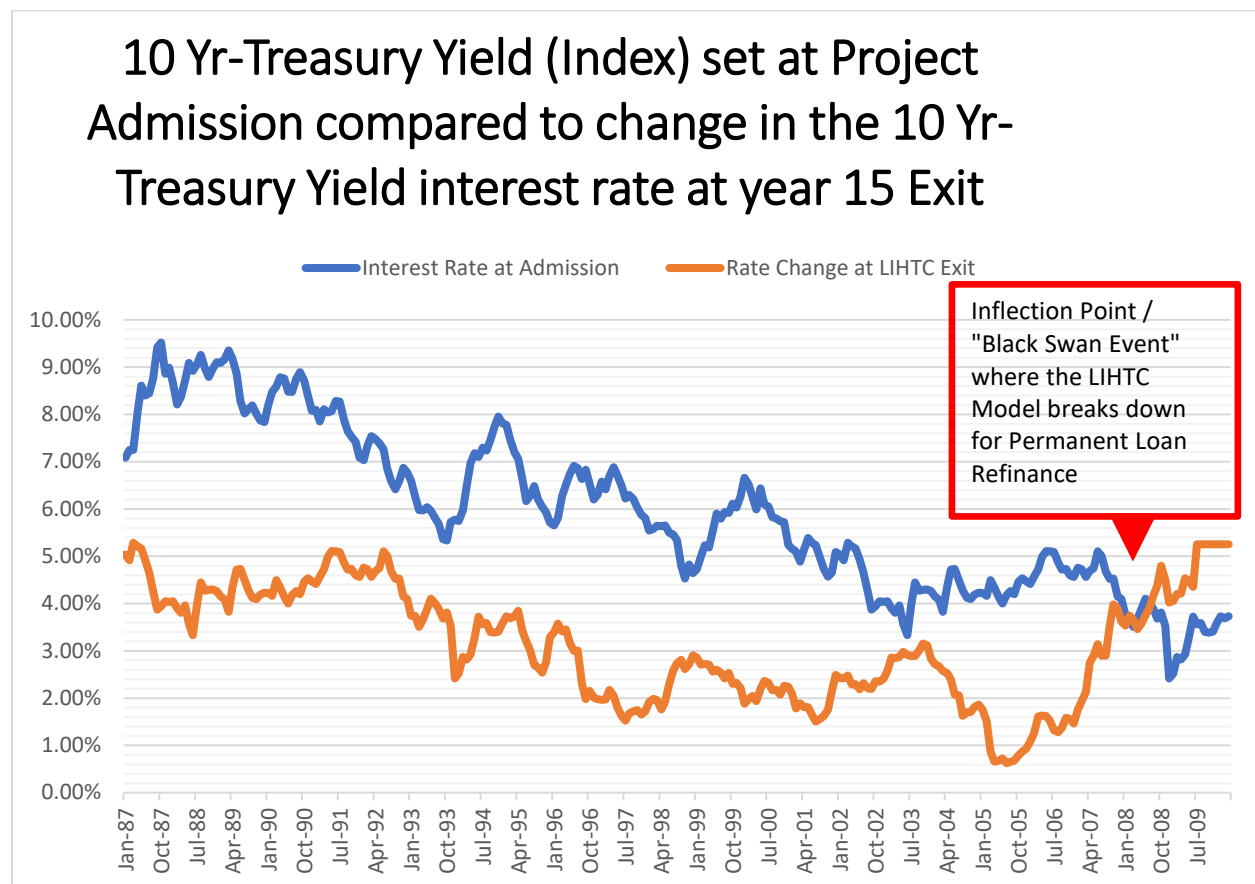


An econometric model can be built which using the Libor/SOFR 30 day index, the 10 year treasury index, the two year construction loan period and the 15 year perm loan period to arrive at the particularly at-risk years for a LIHTC financing duress. Rapid increases in interest rates and multi year inflation rates above 3% will also cause stress to deals made as they near the exit period. This could be very useful to determine the size and duration of the likely crisis occurring post COVID, and to determine if an intervention by government funding sources is needed to maintain the stability of the LIHTC funding model or that the conservatism of the model to be used going forward is sufficient enough to weather this unusual period.

I suggest that an individual bank, the nonprofit sponsors, and the governmental agencies can perform a portfolio review that targets deals which booked in 2009 to 2022. By comparing the original proforma

revenue, expense, and financing stack payments of Debt Service, Management Fees and Deferred Developer fees, they can model the risks of individual projects failing in the 2025 to 2030 period and of the sponsors risk of liquidity crisis from supporting those projects through the LPA compliance period. Repricing risk is a separate modeling exercise (using the same inputs) that will be a call on the sponsor's ability to refinance those projects put in place during the extraordinarily low interest rate time frame of 2012-2022. The risk occurs when project cash flows at exit do not have sufficient cushion to cover a 3% or greater increase in the permanent loan rate, or when a sub-30 year amortization period is used (because the properties useful life is now reduced). The issue of 35 and 40 year amortization periods is there may not be sufficient principal reduction of senior debt so that a higher interest rate will have greater impact, so a separate analysis of those deals is warranted. The graph below of the underlying rate change at year 15 exit shows that the declining long term rates (all other things being equal) resulted in refinancing rates that were meaningfully lower for much of the period that LIHTC fundings have been happening. In 2008 that changed when the permanent debt interest rate at refinance became higher than the compliance period interest rate. The impact of the 15 year exit repricing continues through today exacerbated by inflation's negative impact on NOI. It is possible that this imbalance may continue into the next several years.

Knowing the scale of the potential deals at risk, systemic solutions can be developed by the affordable housing industry and its funders.



APPENDIX C: Operating Expenses of a Project – Above and Below the Line:

A key premise of this white paper is that the Proforma model that we are all using in the financing of affordable housing is “broken” by the Black Swan Event of COVID and the two years post COVID. The breakage was caused by a rapid increase in interest rates, an increase in severity of the yield curve inversion (short term rates substantially higher than long term interest rate), and high inflation for over a 1 year period (2022 and 2023). Project development is typically 3-5 years in duration, so a shock to the financial realities could result in a portion of the projects experiencing duress outside of the expectations of the model. This shock is being felt most acutely by projects initiated in 2014-2022, and for a portion of those projects in their 15 year Compliance Period (in increasing percentage up to the Black Swan Event.) Muting the negative impact of the earlier conversion year deals was actual NOI performance above the then conservative assumptions of their proforma, as well as the structural support of the Limited Partner Agreements (LPA’s) which require the deal sponsor to financially support the project through compliance via advances to cover debt service, and agreement to accrue/not pay in cash the management fees and other administrative expenses of the Sponsor. The conservatism of the safety valves to keep a project from default has held up to this point, but it has weakened the Sponsors financially.

Here is a cursory “primer” for what is in the Proforma and why we all use it meant for the reader who does not live in this world of affordable housing development and finance. Following the primer are the writer’s perceptions of what key parts of the model are “broken” and need fixing to ensure stability in the system. Those who live in this world of affordable housing finance may skip to the end of this Appendix to the section entitled “Broken Assumptions.”

PRIMER: The “Proforma” is a financial model that all of the funding parties to a transaction use to confirm that the project fits within their risk parameters. It is not a true financial forecast of what the developer’s best estimation of actual project performance will be over the 20 year time-frame of a project is. Many aspects of the sizing the eventual financing stack of an affordable housing project result from the Proforma. During the 2-3 year project development period, the Proforma undergoes many iterations and it is the standard “language” that financing stack members use to communicate their risk tolerance. The LIHTC granting authority, typically the state, has its own version of proforma that all 4% and 9% applicants must use. Many applicants have their own model, which shares some characteristics and drivers of the official application model, but which typically simplifies what can be a rather inflexible and overcomplicated official model to their cost structure and actual experience running affordable housing in the community. Syndicators will have their own model which takes the project information from the developer and state model and adds sensitivity, investment returns, and other tax credit specific calculations/tests needed for their underwriting¹⁶.

Key drivers to the model:

- Unit configuration and Allowable Rents

¹⁶ Novogradac offers an extensive proforma on its website which is a detailed spreadsheet in Excel for developers of and investors (<https://www.novoco.com/products/novogradac-lihtc-financial-forecast-model-on-cd-rom>). Each state has their own version within their application for Tax Credits, and most syndicators / LIHTC Investors will have a proforma of their own. These all try to take into consideration the rules of LIHTC and the IRS requirements, which change over time

- Sources and Uses of the project through time (covers the two stages of Admission and Conversion)
- Operating Statement (covers the three stages of Admission, Conversion, and 15 Year Compliance periods)

This appendix focuses on the Operating Statement portion of the Proforma because these are the constraints that are “breaking” for projects recently put in service or about to be put in service in the next two to three years.

The Excel model extract below shows a subset of the modeled 23 plus years that are typically used to size of the layers of the financing stack. The highlighted in yellow assumptions of 2% rent increase, 5% vacancy, and 3% operating expense increases are not reality since the Black Swan Event. The higher interest rate on perm debt is being felt now in deals being developed, as it drives far lower levels of possible term debt, driving need of more equity financing in projects.

Project ISample		<=note years excluded in display			<=note years 5-10 not displayed for ease of presentation				
Tax Credit Yr #		2	3	4	11	12	13	14	15
Year:		2024	2025	2026	2033	2034	2035	2036	2037
RENTAL INCOME									
Inflation in Income	2.00%								
Gross Potential Rental Income	102%	\$1,000,000	\$1,020,000	\$1,040,400	\$1,195,093	\$1,218,994	\$1,243,374	\$1,268,242	\$1,293,607
Other Income - Residential	101%	\$25,000	\$25,157	\$25,315	\$26,449	\$26,615	\$26,782	\$26,950	\$27,120
Less Econ. Vac. Loss (Yrs 2-16)	5.00%	-\$51,250	-\$52,258	-\$53,286	-\$61,077	-\$62,280	-\$63,508	-\$64,760	-\$66,036
Effective Gross Income		\$973,750	\$992,899	\$1,012,429	\$1,160,464	\$1,183,329	\$1,206,649	\$1,230,433	\$1,254,690
Inflation in Expense	3.00%								
EXPENSES									
Professional Fees	103%	20,000	\$20,600	\$21,218	\$26,095	\$26,878	\$27,685	\$28,515	\$29,371
Administrative Expenses	103%	125,000	\$128,750	\$132,613	\$163,097	\$167,990	\$173,029	\$178,220	\$183,567
Total Utilities	103%	150,000	\$154,500	\$159,135	\$195,716	\$201,587	\$207,635	\$213,864	\$220,280
Total Repairs and Maint.	103%	175,000	\$180,250	\$185,658	\$228,335	\$235,185	\$242,241	\$249,508	\$256,993
Total Real Estate Taxes	103%	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Other Taxes and Insurance	103%	125,000	\$128,750	\$132,613	\$163,097	\$167,990	\$173,029	\$178,220	\$183,567
Total Property Management Fee *	103%	70,000	\$72,100	\$74,263	\$91,334	\$94,074	\$96,896	\$99,803	\$102,797
Other Miscellaneous Expenses	103%	52,278	\$53,846	\$55,462	\$68,211	\$70,257	\$72,365	\$74,536	\$76,772
Total Expenses		\$717,278	\$738,796	\$760,960	\$935,885	\$963,962	\$992,881	\$1,022,667	\$1,053,347
Property Management Fee as a % of EGI		7.2%	7.3%	7.3%	7.9%	7.9%	8.0%	8.1%	8.2%
NET OPERATING INCOME		\$256,472	\$254,103	\$251,469	\$224,579	\$219,367	\$213,768	\$207,766	\$201,343
Scheduled Additions to Residential Replacement F	103%	30,000	\$30,900	\$31,827	\$39,143	\$40,317	\$41,527	\$42,773	\$44,056
NOI Adjusted For Reserves		\$226,472	\$223,203	\$219,642	\$185,436	\$179,050	\$172,241	\$164,993	\$157,287
DEBT SERVICE AND CASH FLOW FEES									
PERM Loan P&I	1,950,000	\$157,143	\$157,143	\$157,143	\$157,143	\$157,143	\$157,143	\$157,143	\$157,143
Debt Service Coverage Ratio (after reserves)		1.44	1.42	1.40	1.18	1.14	1.10	1.05	1.00
Support required		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Assumed Deferred Dev Fee	\$550,000								
Avail for Defrd Dev Fee		\$69,329	\$66,059	\$62,499	\$28,293	\$21,906	\$15,098	\$7,849	\$144
Cash Flow Coverage Ratio target		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
* Depends on if project is self managed or 3rd party property mgmt. 3rd partycontract is usually a % of rent collected									
Year:		2024	2025	2026	2033	2034	2035	2036	2037
Replacement Reserve	\$30,000	\$60,000	\$90,900	\$122,727	\$373,916	\$414,234	\$455,761	\$498,534	\$542,590
Must Pay Debt	\$1,500,000	\$1,907,268	\$1,883,633	\$1,858,344	\$1,624,171	\$1,580,720	\$1,534,227	\$1,484,479	\$1,431,249
Sponsor Contribution	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Deferred Developer Fee Balance	\$550,000	\$480,671	\$414,612	\$352,114	\$41,580	\$19,673	\$4,576	\$0	\$0

BROKEN ASSUMPTIONS: All stakeholders in the funding stack need to realize the interdependent and compounding impact of the following broken assumptions. Sophisticated investors are doing several stress testing scenarios of assumptions independently. They then size the perm debt to incorporate statistically significant/ realistic results. This leads to a lower level of supportable debt than the commonly used proforma financing stack sizing of the historic model assumptions. As the computing power of Excel (which is what most modelers use) has increased, the ability to support statistical formulas and differential project type (PSH, Senior, Family, Urban or Rural) assumption data tables now is reasonable. The ability to use a more sophisticated predictive model negates the need to adjust all assumptions at the same time for the life of the LIHTC compliance period. Due to the compounding effect, the traditional proforma model results in an unattainable funding stack of mostly equity.

A new proforma model testing which either adjusts the DSCR requirement to 1.20 to 1.25 in sizing the perm debt, and which weights inflation assumptions more conservatively for a short period in the first 36 months of the proforma, and a differentiated economic vacancy rate (dependent on the type of units, the AMI breakout, and if the project is a Permanent Supportive Housing, family, or a Senior Housing tenant base) should be sufficient in the near term.

- Lease Up: depending on the market, unit types (studio, 1, 2, 3 bedroom), and AMI restrictions the historic model's six month lease up is not a good assumption post COVID. Filling the units with income qualified 60% of AMI tenants is difficult in several geographies within that timeframe. Delays of 6 months are common, resulting in significantly higher than reserved for financing costs. The inverted yield curve on the higher debt level compounds the impact of delays to conversion. The interest rate of the \$20 million of construction loan may be 8.5% compared to the long-term fixed interest rate of 5.5% on the perm debt of much, much lower dollar amount of less than \$2 million.
- Gross Potential Rent Increase: A different rental income inflator of greater than 2% increases annually may be appropriate given this segment's actual performance over time. (Counter intuitive – as this low percent was effective in creating NOI "cushion" for projects which converted to perm in 1991 through 2006)
- Vacancy Rate: for many years a 5% vacancy rate was assumed. Since the Black Swan Event, a higher percentage of 7% or higher would be appropriate. What is being experienced today can be as high as 10%. The vacancy rate masks the impact of actual unit occupancy in 30% of AMI and 60% of AMI units. Projects depend on the 60% of AMI rents to cover debt service of the permanent loan. In particular geographic areas, the population of potential renters may have shifted into the 30% of AMI category, so vacancy in the 60% of AMI units is driving the percentage upward, and causing lease-up delays, which are costly particularly if rate locks expire on the perm debt at conversion.
- Inflation in Expense: Using the long-term rate of inflation of 3% annually works as a conservative assumption only if inflation is flat or less than 3%. Rapid inflation in one or more years such as 2022-2023 may require a more conservative ratio for future model proforma assumptions, or more realistically a sensitivity analysis in sizing perm debt that has a 2-3 year higher inflation rate assumption (not for the entire 15 year compliance period.)
- Replacement Reserves: Same as above. Replacement reserves may be out of range of actual replacement expenses (leading to deferred maintenance issues in properties exiting at year 15.

- Developer Fees: Lenders and the LPA will limit the actual level of developer fees paid out for the deals which are NOI constrained. This means that expected cash flow of the sponsors may suffer additional deficiencies from one of their traditional sources of future liquidity cushion.
- Above the Line/Below the Line: The proforma only covers specific expenses of the nonprofit provider. Above the Line expense are those directly tied to the project including an allowance for adding to the replacement reserves. The Debt Service coverage requirement is after the impact of the reserve allowance, but before Below the Line deferred developer fees are paid out. Administrative fees are Below the Line, and if the cash flow isn't sufficient to repay debt, then the management fees paid to the property manager and/or the sponsor who self manages may be Below the Line, to be covered by the sponsor from other sources.

APPENDIX D: Suggestions for weathering this storm – sponsor versus project level analysis

I see a need for sponsors and their trusted advisors to develop a plan to sustain themselves through what is likely to be a multi-year period of financial stress caused by this unique period. The GAAP driven difference between Accrual and Cash Accounting together with the industry accepted practice of the year plus lag in consolidated audited financial reporting to stakeholders by the nonprofit sponsors is a real problem for the 2022, 2023 and 2024 fiscal year end periods. Decisions are being made by the leadership at nonprofits on strategic direction, on financial health, and reserve adequacy at the corporate and property levels based on an assumption that the conservatism of prior several years LIHTC projects made at initial underwriting can handle reasonable levels of downturn, and that analysis of the unconsolidated Corporate level 501-C-3 performance is sufficient for the most recent fiscal year end and for the current fiscal year.

- When sponsors budgeting is done each year, it is sometimes done using the base of last year's plan...not last year's actual or forecasted financial performance at the property level. In 2023 budgets and 2024 budgets, this could have led to exceptionally erroneous decisions in taking on new projects, providing unfunded social services to a traumatized tenant base, and not recognizing that cash developer fees will not be there to fund administrative costs in 2024 and beyond. The lack of a consolidated cash flow forecast is an issue in that developing liquidity challenges are not recognized in sufficient time to enact a plan to mitigate them.
- In the public for-profit world, quarterly reporting and earnings estimates as well as prompt annual audited performance are required by investors and lenders to the industry. The SEC requirements drive accounting and financial management reporting systems. Specialized industries and complex legal structures with intercompany relationships are scrutinized by industry investment analysts who question the corporate leadership and compare answers between their peers for inconsistencies and emerging problems. This doesn't happen in the affordable housing industry, which doesn't have shareholders, and typically has volunteer boards of directors who take fiduciary responsibility, but who don't have an in-depth understanding of the accounting or finance implications within their oversight. The overall expectation by most boards is that conservatism of annual CPA audits, creditors providing Must Pay debt, government agencies, and the time tested financing stack are sufficient oversight. In a Black Swan event, this may prove incorrect for a subset of organizations.
- Government agencies, lenders and tax credit investors have viewed the 12 to 24 month reporting lag as acceptable for reviewing affordable housing provider financial strength because of the complexity of the legal and accounting structures, as well as a belief in the conservatism of the overall industry. Government agencies in particular are short staffed. They understandably emphasize: 1) adherence to complicated compliance standards, and 2) developing additional housing units. To my knowledge they have not had the luxury to examine project & sponsor performance data to anticipate what could be developing. Black Swan Events or a period of rapid change (such as the pandemic, the ending of the pandemic funding programs, interest rate and inflation increases) could result in loss of precious reaction time by all the stakeholders to develop responses to the emerging problem in this complex industry.
 - I suggest that a program of financial performance analysis be done by these stakeholders using the GAAP consolidating financial statements and Real Estate Owned (REO) schedules already provided by the sponsors. This analysis serves to develop a cash flow

sensitivity model to identify those sponsors with LIHTC projects in their 15 year compliance periods that may be at risk of exhausting their liquidity cushions to support projects which are underperforming.

- Cash basis versus accrual analysis, and unrestricted versus restricted fund status can be extracted from GAAP statements by a knowledgeable financial statement reader. This is important because a multimillion cash account reported on the balance sheet does not necessarily represent liquidity to support underperforming projects.
- Growing accounts receivable and conversely notes payable from related parties are not realizable in all cases, and may be a sign of financial distress, hidden within accrual accounting that delays loss recognition.
- Deteriorating Debt Service Coverage Ratios across the REO schedule can signal the impact of inflation, vacancy impact, and developing problems which could rapidly deplete unrestricted liquidity to support LPA required injections of cash into individual properties. It is relatively easy in Excel to create a sensitivity model that calls out the risk within a sponsor's portfolio so that deterioration can be addressed earlier and a comprehensive plan of support developed¹⁷.
 - The typical analysis being done of sponsors measures the total NOI across projects divided by "must pay" debt service. A summary level ratio can mask serious problems as the excess cash flow of a well performing project in the 15 year compliance period can't be used to support the debt service of any underperforming projects in the portfolio. Multiple project level negative DSCR ratios over multiple year ends are an indication of sponsor level financial distress, and it is important to determine if unrestricted cash at the sponsor level is adequate to cover the likely cash flow deficits as the project performance issues are dealt with.
 - Mature, post-initial 15 year compliance properties may have excess cash flow that theoretically could be used to support struggling projects, but they may have unaddressed deferred maintenance that will soon call on their excess cashflow. Additional questions and quantifying the actual level of cash balances and cash flow available to support other projects is needed by the analyst in conversation with the sponsor.
 - In some geographies, and some specific projects, it may actually be best for the nonprofit to broker a "deal" through its lenders, investors and government stakeholders that recognizes that it won't be able to fix a

¹⁷ Several models are being developed by portfolio holders incorporating original proforma assumption created impact (as underwritten), recent project level Revenue and Expense performance (the needed reset), must pay debt at contractual P&I. This will show the cash support needed across the portfolio of a sponsor, which can be used to decide survival of the organization without portfolio changes (keep as is, sale with recapitalization, or abandonment of an unfixable project.) Further sophisticated modeling is likely needed for the longer term for sponsors and investors that considers deferred maintenance backlogs, Asset Management and Supportive services "below the line" expense actuals, along with the upcoming debt refinancing requirement in the new interest rate reality.

specific project's problems, and that the optimal solution is to sell to another sponsor with a recapitalization/funding support by the state or local government, to give back a property to a senior lender/investor, and ultimately for all parties to abandon that project. The "abandonment" option should only happen when the stakeholders cannot find a viable solution, which by the very nature of original underwriting conservatism in the industry should be very rare, and only a result of a "black swan" event. In 2024 there were only a couple of sponsor and/or project failures, none of which occurred in Oregon. Expectations by most Tax Credit syndicators are that 2025 and 2026 will accelerate the pace of project and sponsor failures.

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RESOURCES:

1. NOVOGRADAC –Booklet (copyright 2024) "Introduction to Low Income Housing Tax Credits", – details differences between 4% and 9% transactions.
2. 10 year Treasury Yield Data from www.macrotrends.net
3. Inflation Rates and Economic category from www.investopedia.com/inflation-rate-by-year-725383
4. Heritage Foundation, "Mandate for Leadership – The Conservative Promise, Project 2025 Presidential Transition Project" 2023
5. Woodward, Bryan's "Project 2025 Explained Chapter by Chapter: Understanding the Conservative Promise" 2025 (Kindle Version)