THREE PRODUCTS OF THE HEIGHTENED, INVERTED YIELD CURVE– DERIVATIVES ARE BACK!!! (TEMPORARILY), INCREASED FINANCING PROCEEDS THROUGH CASH-BACKED BONDS AND REDUCED PAB OVERSUBSCRIPTION*

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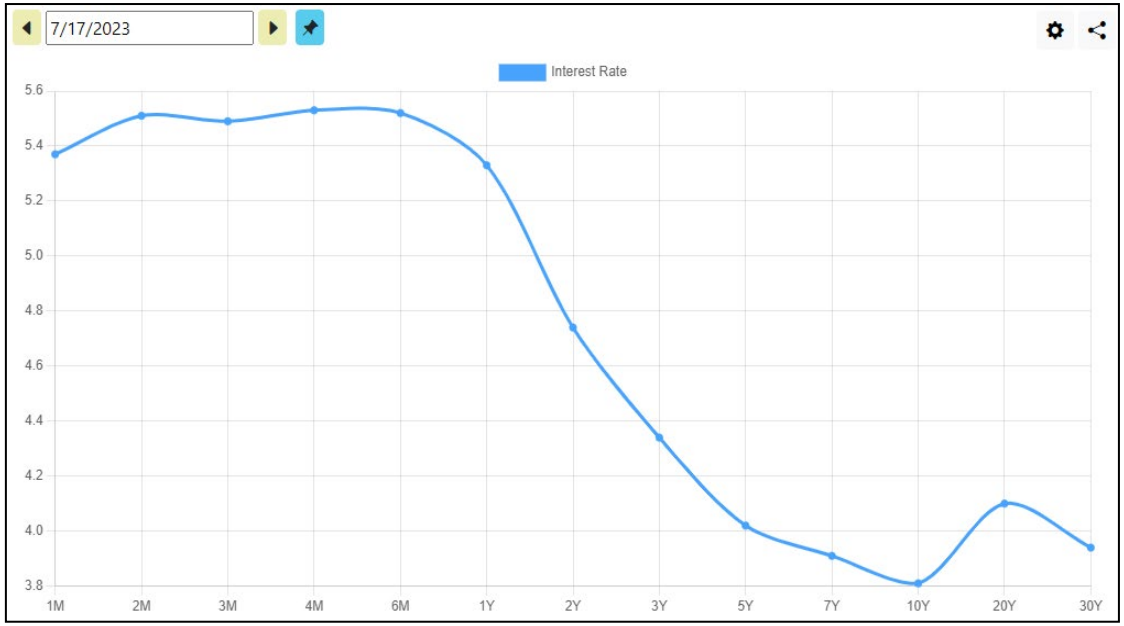
This PowerPoint sets forth a very detailed discussion of two significant new opportunities and other effects stemming from the heightened, inverted yield curve. Nothing contained in this document constitutes advice, a recommendation or solicitation to enter into any transaction and any potential financing should be thoroughly vetted by the potential borrower and its professional advisors. These topics are very complex. Our firm frequently arranges meetings and/or video conference calls with borrowers and other clients to review these and other topics relating to tax-exempt affordable multifamily rental housing bond and loan financings. Please do not hesitate to contact us if this would be helpful in reaching a better understanding of these or other topics relating to affordable multifamily rental housing finance.

I. DERIVATIVES ARE BACK!!! (TEMPORARILY)*

A. INTRODUCTION

- It is no secret that both the taxable and tax-exempt yield curves have (a) risen dramatically in only 18 months since early 2022, and (b) have SEVERELY inverted.

U.S Treasury Yield



- We believe **private placements** continue to comprise 75-80% of the tax-exempt private activity multifamily rental housing bond and loan financings under Section 142(d).
- Under these very unique market conditions, **in some private placements, the use of derivatives – interest rate caps and swaps – may now produce a more compelling opportunity than at any point since the widespread use of derivatives in municipal bond financing emerged in the early 2000s**.
- We believe the attractiveness of derivatives today is a **result of our current elevated, severely inverted yield curve environment.**

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- **Lowering Perm Rates:** In 2004-2006, a borrower could lower its permanent interest rate by 40-50 basis points by setting a variable rate on the tax-exempt bonds and entering into a swap to synthetically fix the perm rate. **Borrowers loved the additional cash flow**, but **we all know that ended badly in 2008**. ☹

- Today, **perm rates** on private placements often hover around 6.0% or a bit higher due to the huge market movements described below. Today, **in certain circumstances sponsors and borrowers can lower the perm rate by 100 basis points or a bit more by using a forward starting interest rate swap*** to set the perm rate. **This is unprecedented.**

- This can result in a **12% or greater increase in loan proceeds** on a debt service constrained loan at today's rates! **We have seen this save deals which otherwise would have failed for lack of adequate funding sources.**

- **Lowering Pre-Conversion Rates:** Today, **pre-Conversion interest rates** in private placements are often around 7.50% (*e.g.*, one-month SOFR at 5.30% plus a 220 basis point spread) due to the severe yield curve inversion. **In certain circumstances** sponsors and borrowers **can set the pre-Conversion rate by as much as 150 basis points less than the then current floating rate by using a swap** to set the pre-Conversion rate.

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* See Appendix A for a very basic explanation of caps and swaps, including forward starting swaps. While the author is solely responsible for the content of this PowerPoint, he appreciates and acknowledges the assistance of Jim Moore of Kensington Capital Advisors, a leading borrower-side Independent Registered Investment Advisor ("IRMA"), in the analyses regarding derivatives set forth in this presentation.

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- This **can result in Pre-Conversion interest rate savings equal to several percentage points** of the construction loan amount if floating rates remain high.

- However, using swaps during the pre-Conversion phase can involve complications and potential extra costs if construction draws vary from those expected at original closing.

- As a result, **borrowers and private placement sponsors are increasingly using caps** to limit the interest rate risk associated with pre-Conversion variable rates and lower capitalized interest reserves in private placements.

- As recent Fed guidance suggests, we believe **it could take six months to a year or two before inflation abates and the yield curve drops back down and assumes its normal positive slope**.

- **Swaps** (and to a much lesser degree, caps) **involve risks which are remote but poorly understood**, as is discussed below. **The use of derivatives may not be advantageous in all private placements**, but in this era of continued cost increases and extremely high rates, **borrowers should be aware of the advantages these devices may currently provide on a number of private placements**.

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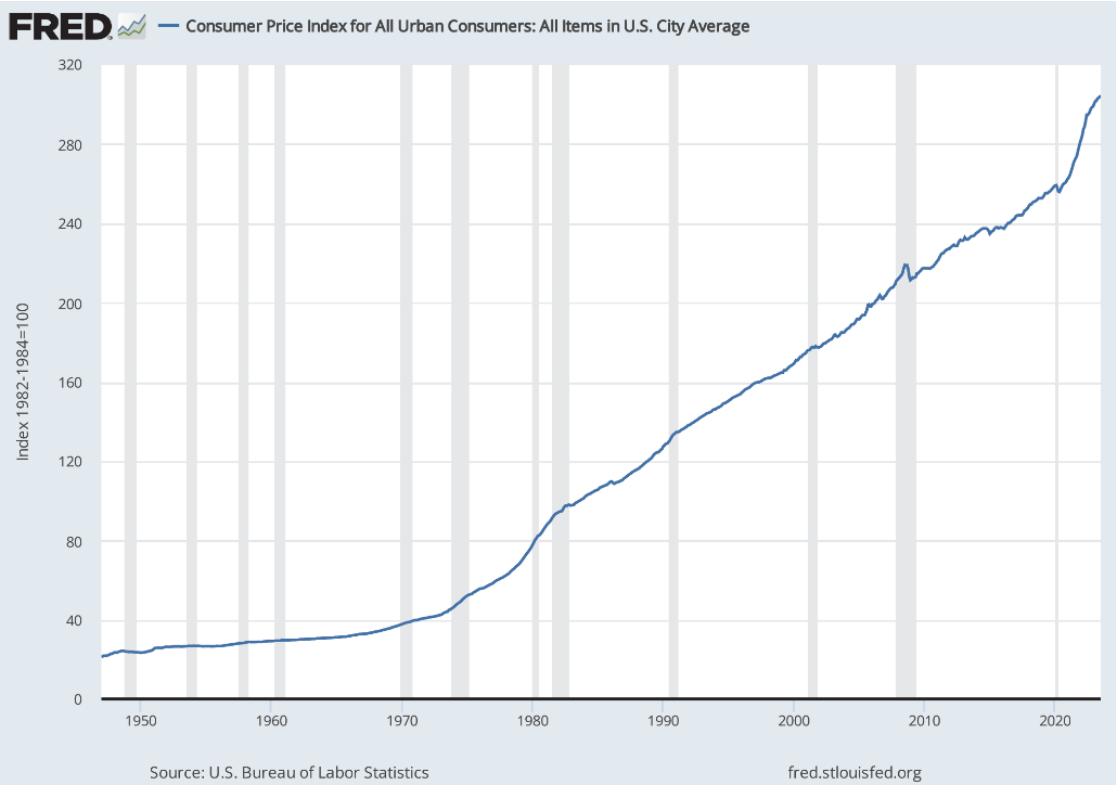
B. NGO ANALYSIS OF THE SUDDEN RISE IN INTEREST RATES AND WHY CURRENT CONDITIONS MAY PERSIST

- We all know **the big underlying story** is the **dramatic jump in the rate of inflation** the nation experienced from early 2020 through the recent peak of an 8.9% annual rate of increase in the CPI in June 2022. How substantial was this historically and why did this occur?

- The chart below shows a history of inflation in the US – CPI growth over the past 75 years. Note CPI growth accelerated from 1972 through 1982, but the "hockey stick" on the right-hand side of the chart shows that **inflation grew at a much faster rate over the 2.5 years through the June 2022 peak than in any similar period over the last 75 years**!!!!!



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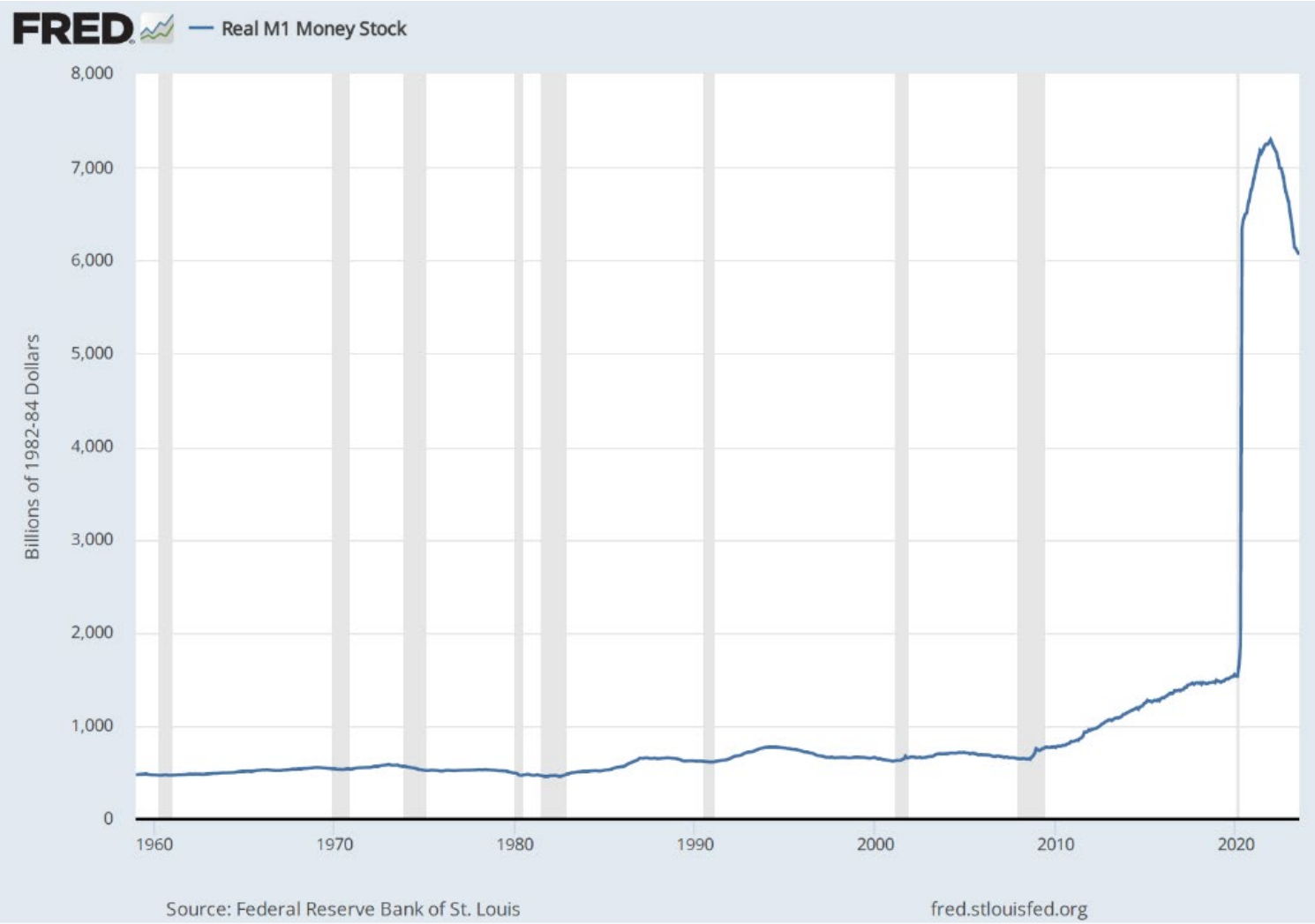
- The chart below shows that **in response to the Pandemic, the federal government expanded the real money supply (M1)** from $1.65 trillion in March 2020 to $7.3 trillion at the peak in November 2021 – *i.e.*, **over 4 times its prior level**!!!



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- Chris Thornberg of Beacon Economics makes the parallel observation that the **pandemic caused a $1.2 trillion hit to our $26 trillion GDP**. The federal government's reaction? **Over $6 trillion** of **fiscal stimulus – 5 times the GDP hit**.*

- Let's see, a limited supply of goods to buy due to pandemic gridlocks and subdued demand for services because going out to dinner may kill you, and **over four times** the amount of money sloshing around in the hands of people who are prone to spend it? **It is no wonder why prices have been bid up and we have had a major and hard to reverse surge in inflation**.

- **Relative to this historically rapid inflation upsurge, how dramatic has been the Fed's rate increase?**

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* Estimates are that three recent major pieces of bipartisan federal legislation – the Infrastructure and Jobs Act of 2021 (November 2021), the CHIPS and Science Act of 2022 (August 2022) and the Inflation Reduction Act of 2022 (August 2022) – have added an additional $2.0 trillion of fiscal stimulus which has rendered the Fed's efforts to combat inflation through interest rate increases less effective than it otherwise would have been.

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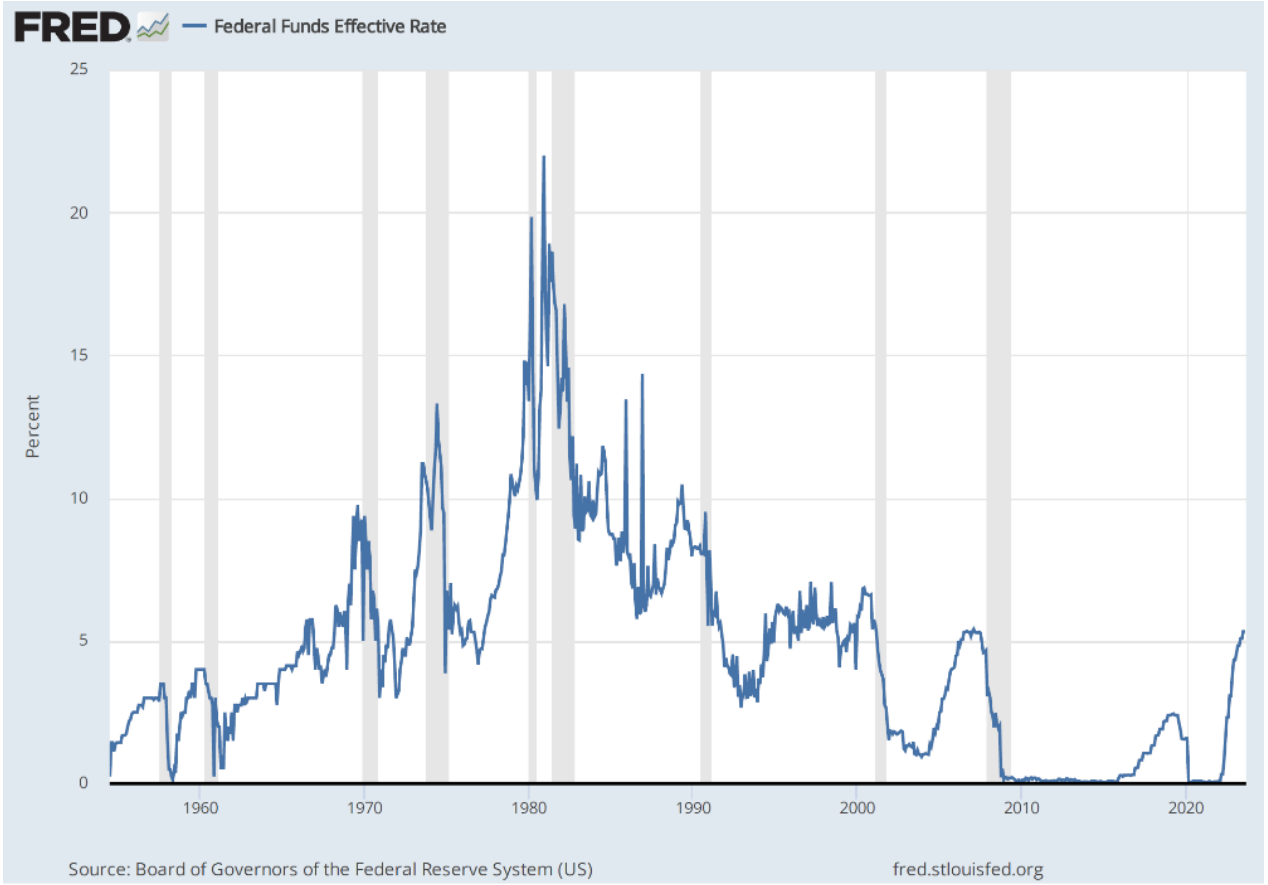
- A quick glance at the righthand side of the chart below shows that **in response to the recent historically rapid inflation surge, the Fed has raised the discount rate** from only 5 basis points at the low on May 29, 2021, **to 5.33% today**.

- **It also shows that in June of 1981**, to beat back eight years of 8-9% inflation from 1972 to 1980, **the Fed raised the Federal Funds Rate to over 19%!!!** It is therefore not surprising that the Fed is not yet lowering rates and could raise them further if inflation resurges.



- As a result, we think the current yield curve environment may be with us longer than many have projected and that the reversion to a lower normal upward sloping yield curve may emerge more slowly than all of us have hoped.

C. RISKS OF DERIVATIVES – ADOPTION OF THE MUNICIPAL ADVISOR RULE UNDER THE DODD-FRANK ACT

- The potential benefits of using derivatives in the present market summarized in Slides 2 and 3 are quite compelling.

- However, as stated above, many borrowers, both governmental and profit motivated conduit borrowers, used swaps in 2004-2007 to lower borrowing rates and in the case of multifamily housing developers, to increase cash flow. **Many of these borrowers had no idea how swaps worked** and were shocked and **suffered major losses when these swaps unwound in late 2008** following the failure of formerly AAA/Aaa rated counterparties like Lehman Brothers, **even though the borrowers had performed on all of their obligations on their side of the deal**.

- Here's what one savvy investor had to say about derivatives **as early as 2002**:

"In my view, derivatives are financial weapons of mass destruction carrying dangers that, while latent, are potentially lethal."

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- **Swaps, especially long-duration swaps (*e.g.*, 17 or 18 years)** as are used in 100% affordable multifamily rental housing bond financings with 4% LIHTC, **entail a number of risks**, which are important for borrowers to understand and assess.
- **The following is a summary of some of the principal risks such swaps entail, but is not exhaustive.** Expert guidance, as discussed below, is critically important to a borrower's understanding of these risks.
- As we abruptly discovered in 2008, **these risks include**:
  - **Duration risk. Does your cap or swap run to the full 18-year maturity of your bond issue?** If it must be renewed, it's not the equivalent of a traditional permanent fixed rate. **This was not a problem for most swaps on multifamily issues in 2008 – they usually ran through bond maturity** and caps had effective provisions to escrow premiums forward to provide for extensions.
  - **Basis risk.** Are the payments you receive as the borrower under a cap or swap based on an index which differs from, and may fall short of, the basis for computing your liability on your variable rate bonds or loan? We saw negative gaps of 125 basis points or greater on some interest rate caps in 2007-2008. **If the counterparty's payment obligations under the cap or swap is based upon the same index (*e.g.*, one-month SOFR) as that on which the interest rate your tax-exempt bond issue or tax-exempt loan is based, there is no basis risk.** So, perhaps you can scratch that.
  - **Counterparty risk.** This is the BIG KAHUNA and the one so many borrowers, not surprisingly, missed on swaps. **In a swap, a default by either party terminates the swap. So…….?**

- **The Kicker: (i) which party pays the other on termination of a swap and (ii) the magnitude of the payment depends on whether the swap was "in the money" or "out of the money" with respect to that party and by how much, *irrespective of which party was at fault in the termination*!!!**
- **To the extent interest rates have gone down since the swap was entered into, the borrower will generally owe money to the counterparty upon the swap's termination** – even if the counterparty defaulted, as Lehman Brothers did on a number of swaps when if filed for bankruptcy in October 2008.* Of course, the likelihood of such a default by highly rated counterparties is very remote (but see the further discussion below).
- Another risk is that **most swaps give the counterparty the right to assign its obligations to another counterparty. Usually the assignee must be rated AA/Aaa or higher.** Moreover, since 2017, large banks and certain other financial institutions have been subject **to Qualified Financial Contract Rules** under the Dodd-Frank Act, which require that their derivative documents contain broad language **allowing the assignment by the FDIC of the financial institution's obligations to any solvent party** into which a failed institution might be merged following a bankruptcy, insolvency or a similar event with respect to that institution.
- These factors do broaden the parties on whom the realization of the borrower's synthetic fixed rate may depend for the duration of the swap.

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* This actually happened to one of our very sophisticated borrower clients (over 100 affordable apartment financings) who had entered into a floating to fixed rate swap with then AAA/Aaa-rated Lehman Brothers in late 2007 to convert a variable rate bond issue to a fixed rate borrowing. It's now early 2009. The phone rings. "Hello, Mr. Developer, this is Bill Bodacious from Barclays. As you know, we are the successor to Lehman Brothers, who defaulted on its swap with you when Lehman declared bankruptcy last October. Please send us a check for $340,000." (They ultimately settled on terms more favorable to the borrower, but a harrowing experience.) These kinds of losses, in the hundreds of billions, came as a total shock to a huge number of municipalities and other borrowers in the 2008 financial crisis, and brought us the Dodd-Frank Act of 2010 and the related Municipal Advisor rule, as discussed below.

- **If your counterparty is a bank, how likely is it that it will default?** Since the Silicon Valley Bank ("SVB") failure last March, much attention has been focused on the financial condition of U.S. banks. In general, since interest rates began to climb in early 2022, **FDIC insured banks have incurred increasing losses on their securities portfolios**, which now total over $600 billion, or roughly 25% of the face value of those portfolios, and there is some belief that these paper losses have widened since the SVB default last March.

- **On the other hand**, following the failure of SVB, **the Federal Reserve implemented its Bank Term Funding Program ("BTFP")**. **Under the BTFP, eligible banks are allowed to pledge U.S. Treasuries, agency debt, and mortgage-backed securities *at par***, in effect allowing banks to borrow substantially more than the bonds' current market value. This does provide a cushion which was unavailable when Silicon Valley Bank failed, though the exposure of some banks is still quite large. Banks have now borrowed over $100 billion under BTFP.

- It should be noted that, **if a failed counterparty is a bank** (which Lehman Brothers was not) and is merged into another financial institution, **it is likely that the failed counterparty's swap obligations would also be assumed**, avoiding a swap termination, **but there can be no assurance** that this would be the case.

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- In short, borrowers contemplating the use of a long-duration swap to set the perm rate should ask themselves two questions: **1. "What happens if my counterparty fails** and interest rates have gone down?" Answer: **I may owe my defaulting counterparty a substantial payment. 2. "What happens if I set a traditional perm rate** with my lender, **and my lender fails**?" Answer: **The terms of my borrowing remain exactly the same.** This significant difference may or may not outweigh the benefits of a swap, especially in today's market, but it does point out an important difference between a synthetic perm rate and a traditional perm rate. This is discussed further below.

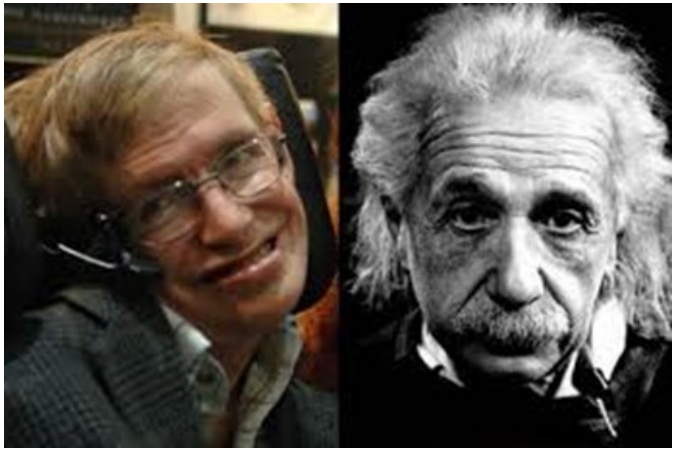
- **To summarize, assessing counterparty risk on a long-duration swap is a complex undertaking. This is an additional risk which borrowers should assess.**

- Other risks relating to swaps, while also remote, involve **the risk of a greater dollar loss in the event of a borrower default**. The borrower's swap obligations are generally secured by a second deed of trust on the project and, in the case of a forward starting swap to create a synthetic perm rate, guaranties by deep pocket general partners or other guarantors, at least until the payment obligations under the swap begin. **In a financing incorporating a swap, this collateral is exposed to claims for the borrower's payment obligations on termination of the swap if the swap is out of the money to the borrower** (*e.g.*, interest rates have fallen) when the default occurs, **in addition to claims for the lender's loss of its principal and interest on the tax-exempt debt**. This is another "black swan" risk, but an additional risk which should be assessed and factored into the borrower's analysis.

D. THE CRITICAL IMPORTANCE OF SOUND EXPERT ADVICE

- **The Municipal Advisor Rule** promulgated under the Dodd-Frank Act following the 2008 financial crisis effectively **requires an underwriter or bank that is offering a derivative product to a borrower client in a tax-exempt municipal bond transaction to establish that the borrower is represented by an Independent Registered Investment Adviser, or "IRMA"** as defined in the Municipal Advisor Rule, that has passed a test and is registered under the Rule, unless the underwriter or bank is so registered and is performing that function and is assuming the related fiduciary responsibilities, which underwriters and banks generally avoid.
- Thus if a bank or other private placement sponsor is offering to arrange a cap or a swap for a borrower in a municipal debt transaction, an IRMA is likely to be involved to assist the borrower in evaluating the benefits and risks of these products.
- **An IRMA can also provide important guidance to the borrower in determining whether the terms being offered are generally competitive** under current market conditions for the type of transaction and the parties involved.

- Does your IRMA have to be one of these guys?



- No (sadly, they are deceased), but **especially in long-duration (*e.g.*, 17- or 18-year) swap transactions**, it is important that the IRMA have (i) **broad and deep derivatives experience** (ii) **representing borrowers** in the use of swaps (iii) **in tax-exempt multifamily bond transactions**. **All three criteria are important**.

- A final note on the complexity of derivatives. **The ISDA forms used to document derivative transactions use a multitude of defined terms which are extraordinarily hard for even very sophisticated borrowers and counsel to understand.** If you enjoy perusing sections of the Internal Revenue Code for your weekend reading pleasure, you will absolutely delight in reading through the ISDA swap documents on a municipal bond transaction. **Some of NGO's borrower clients have engaged our firm and/or other law firms with specialized background in this area to work with the borrower and its counsel and its IRMA in assessing the benefits and the costs and risks of using swaps in these financings and to give comfort that the ISDA forms reflect the terms agreed upon.**

E. HOW AND WHY DERIVATIVES MAY BE EXCEPTIONALLY BENEFICIAL TODAY ON SOME EXECUTIONS

- As noted above, in some circumstances in today's market, a private placement borrower may be able to lower its construction period interest rate and/or its perm rate by as much as 100 basis points or possibly a bit more through the use of swaps. Again, using a swap to set the perm rate, in some cases, may increase loan proceeds by 12 points or more!

- **Why this historically high differential?**

- **Traditional perm rates** can be driven by non-market factors like the sponsor's yield requirements, cost of funding and available alternatives.

- **In the swap markets**, on the other hand, the swap rate is driven by **the market's implied forward rates**, and at the moment, as the severely inverted taxable and tax-exempt yield curves suggest, **the swap markets reflect a projection that both short and long term interest rates will be lower in the not too distant future**.*

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* A corollary of this is that if a borrower has the option to maintain a variable rate on its debt during the proposed duration of the swap (as in the pre-Conversion rate on most multifamily housing private placements) and does not need to enter into a swap to lower a loan underwriting rate or reduce a capitalized interest reserve, and if interest rates fall during the term of the swap, as the inverted yield curve projects, the amount of interest the borrower will pay on the debt may well be lower, perhaps substantially so, if the borrower has not used a swap to convert a variable rate borrowing to a fixed rate. Of course, on almost all new multifamily private activity bond financings under Section 142(d) with 4% LIHTC, the tax credit investor will require that a fixed rate be set on the debt during the perm loan phase of the initial 15 year+ Qualified Project Period, so this is not a factor in the permanent phase of such a private placement – the borrower will need a traditional or synthetic fixed rate. This can be an important consideration on certain other types of conventional apartment or other real estate financings where the parties taking credit and interest rate risk on the debt may be comfortable with a variable rate on certain short to intermediate *(e.g.*, 5-10-year) debt financing structures.

- More recently, there is **another major factor which enhances the attractiveness of swaps for some private placement lenders**.

- Since the failure of Silicon Valley Bank this spring, **avoiding or offloading interest rate risk can be a huge positive factor in enabling a regional bank or certain other sponsors who carry permanent loan paper on their balance sheets to make private placement loans**. **Such a sponsor can retain the credit risk but offload almost all of the interest rate risk by entering into a "mirror image" swap** with another counterparty (usually a major money center bank). This enables such a sponsor to do a substantially higher volume of business with its developer clients in today's market.

- This does underscore **how important it is for a borrower contemplating the use of a long-duration swap to set its perm rate to carefully assess the long-term credit quality of its proposed swap counterparty**. A lot can happen in 18 years! We have regional bank clients who have very strong regional franchises, a very stable depositor base and a long and strong history of effective, professional balance sheet management where counterparty credit risk, in our view, should not be a significant concern. If the borrower is entering into a swap with such a bank that it knows and respects, these termination risks may be quite low. But as today's headlines show, this is not true of all banks. If a bank or other lender is simply arranging a swap for the borrower with a counterparty party relatively unknown to the borrower, the risk may be much more difficult to assess.

- The bottom line is that **a savvy borrower does not want to repeat the experience of our client described in the footnote on Slide 11 above** by entering into a long-duration swap with a counterparty that fails two or three years from now when interest rates have probably declined only to have the failing counterparty's receiver present a bill for a large termination payment to the non-defaulting borrower reflecting the interest rate decline if that counterparty's obligations have not been assumed by another party.

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F. CONCLUSION

- **As discussed above, today's market presents unprecedented opportunities to lower interest rates through the use of caps and swaps. Lowering the permanent interest rate on a 6.5% debt service constrained 35-year amortizing loan by 100 basis points can increase loan proceeds by 12 points or more and can make a deal which has become non-feasible due to rising construction and other costs and soaring interest rates a viable financing.**

- **We have some bank clients who, like Freddie Mac, have other ways of managing interest rate risk** during the pre-Conversion period. They can and do also hedge the permanent period interest rate risk on a forwards basis, and they can also lower perm rates through securitizations and other techniques not available to all lenders. Thus, **these lenders can also quote very competitive perm rates, even in today's challenging environment without necessarily using these products**.

- **But even some of these banks and other pre-Conversion lenders are now working with borrowers in using swaps to lower the pre-Conversion rate by as much as 100 basis points or more**, although the use of swaps, especially during the pre-Conversion phase, is subject to the potential costs and uncertainties described on slide 4 above.

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- **As a result, a growing number of private placement sponsors and borrowers are instead using caps during the pre-Conversion period to limit the borrower's exposure to rising variable pre-Conversion rates. This can substantially lower the interest rate reserve a lender would otherwise need to set aside in the loan underwriting where the projected pre-Conversion rate would be set at today's rates plus a substantial (*e.g.*, 200 basis point) cushion.** In the current market the borrower can purchase a 3-year cap under which the counterparty will make payments to the borrower on the notional amount of the cap to the extent one-month SOFR rises above 6.00% for a **premium equal to slightly less than 1.0% of the notional amount of the cap**. This can lower the risk of a rising variable rate, reduce the cap i reserve and potentially produce overall interest rate savings in that scenario.

- The same inverted yield curve conditions which have made swaps and caps attractive have more recently caused **some borrowers to purchase pre-Conversion phase caps having a one-month SOFR strike rate below the current roughly 5.30% one-month SOFR level – *e.g.*, 3 or 4%**. Such caps cost significantly more than a cap having a strike rate above the current one-month SOFR level. However, the net present value of the projected interest rate savings during the pre-Conversion phase and the additional reduction in the cap i reserve **may produce an even greater net present value savings** in interest paid and additional proceeds available at closing to cover project costs than the cost of an "out of the money" cap.

- Borrowers considering such an execution should confer in advance with bond counsel, who may take the position that such a cap has an "investment" element which **could lead to rebate obligations if certain steps**, which may vary among bond counsel firms, **are not taken**.

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- Where a borrower is considering setting the **perm rate** on its loan or with a new lender/counterparty offering to fix the perm rate with a swap, **if that borrower has a great relationship with a known private placement funding source offering a traditional fixed rate and its deal works, it might want to think twice before it jumps to another platform offering a swap just to obtain a lower rate**. **Other factors like the value of long-term lending relationships and speed and certainty of execution should always play a major role in borrower decisions on the debt side of their financings.**

- **Moreover, this whole discussion is likely to be irrelevant a year or two from now, or perhaps a bit sooner,** when the yield resumes a normal upward slope, which it almost certainly will.

Conclusion

- **In today's very unusual high interest rate, inverted yield curve market, the advantage of synthetic rates in some situations may provide historically high benefits. As long as borrowers obtain the expert advice they need to fully assess the complexity, risks and costs associated with these devices and deal with a carefully vetted counterparty, the benefits of setting a synthetic perm rate through a swap and/or limiting pre-Conversion variable interest rate exposure with a cap may in some circumstances outweigh the complexity, any black swan risks and other costs of these devices.**

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INTEREST RATE CAPS AND SWAPS

Interest Rate Caps

An **interest rate cap** is an arrangement **like an insurance policy**. One party (the **borrower**) performs its obligations by **paying a premium up front**; the other party (the "counterparty") performs over time by agreeing to protect against interest rates rising above a certain rate (the "strike rate") during the life of the cap.

The third-party cap provider agrees to pay interest on the "notional amount" of the cap contract (often equal to the principal amount of the variable rate bonds or loan) to the extent the basis for calculating the counter party's payment obligation on the cap (*e.g.,* an index such as one-month SOFR) rises above the cap strike rate (*e.g.*, 6.0%).

- Caps have a specific duration (*e.g.*, 5 years).
- So long as the variable rate on the tax-exempt bonds or loan is calculated on the same as the basis for determining the counter party's payment obligation under the cap (*e.g.,* both are based on the one-month SOFR Index), caps can provide a very effective hedge (*i.e.,* no "basis risk").
- Since cap counterparties are very strong (*e.g.*, AA- or Aa-rated or higher) financial institutions and cap durations are limited (*e.g.*, 3-5 versus 15 or 20 years), caps tend to provide a very effective hedge against rates rising above the strike rate for the duration of the cap with few complexities or risks to the borrower.
- The cost *(i.e*., the premium) is certain and is incurred up front, but unlike a swap, a cap can not only actually provide some protection against rates rising (above the cap strike rate) but also allow the borrower to lessen the amount of interest paid by the borrower on the variable rate debt if variable rates fall following the effective date of the cap which is not the case under a swap.

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Interest Rate Swaps

Interest rate swaps are much more complex. In a typical interest rate **swap**, **both parties perform over time**. In a typical interest rate swap, the **borrower** in a variable rate financing **agrees to pay a fixed rate** to the swap counterparty on the "notional amount" of the swap. The **counterparty agrees to pay the agreed upon variable rate** on the notional amount to the borrower. The notional amount of the swap is typically equal to or approximately equal to the principal amount of the variable rate debt for which it serves to create a synthetic fixed rate.

- **The counterparty will take the risk of the borrower defaulting on its payment obligations** under the swap (which may be secured by a second deed of trust on the project and deep-pocket borrower-side guarantees for some period) or will "credit enhance" the borrower's payment obligations if the counterparty transfers its rights and obligations to another third party (which generally must be rated AA or Aa or higher).
- **The borrower takes the risk of the counterparty defaulting on its obligations, since a default by either party will terminate the swap.**
- **Which party pays the other on termination and the magnitude of the payment depends on whether the swap was "in the money" or "out of the money" with respect to that party and by how much, *irrespective of which party was at fault in the termination*!!!** To the extent interest rates have gone down since the swap was entered into, the borrower will generally owe money to the counterparty upon the swap's termination (even if the counterparty defaulted, as Lehman Brothers did on a number of swaps when if filed for bankruptcy in October 2008). Of course, the likelihood of such a default by highly rated counterparties is very remote.

- As with caps, it is **important for the basis used to compute the counterparty's payment obligations under the variable rate leg of the swap to be the same basis as the borrower's payment obligation on the bonds or loan** in order to avoid "basis risk," where the revenue received by the borrower does not match the borrower's payment obligation on the variable rate tax-exempt bonds or loan.
- **Swaps**, like caps, **may be immediate** – *i.e.*, the payment obligations commence on execution and delivery of the swap – **or "forward starting"** – *i.e.*, the payment obligations commence on a specified date following execution and delivery of the swap (*e.g.*, a date targeted for Conversion to the permanent phase of a tax-exempt loan in a private placement).
- **The borrower's obligations under a forward starting swap in a private placement are likely to be recourse up to the point when the payment obligations begin** and will generally be non-recourse thereafter.
- **Swaps may be "integrated"** with (*e.g.*, a part of) the tax-exempt debt obligation, in which case the yield on the bonds or loan and other terms will reflect the terms of the swap – **or – not integrated**, in which case the swap is designed to provide different economic results for the borrower (*e.g.*, a fixed rate versus a variable rate payment obligation on the debt), but the terms of the tax-exempt debt are independent and unaffected. **Most swaps used on conduit tax-exempt multifamily housing bond or loan financings are not integrated** with the terms of the tax-exempt debt.

- As long as a borrower contemplating the use of a swap to lower its borrowing rate is represented by **an Independent Registered Municipal Advisor** (or "IRMA") who has substantial experience and a well established reputation representing **borrowers** (not just counterparties) **in swap transactions involving tax-exempt multifamily housing bonds and loans and possibly special counsel familiar with these instruments, and has well founded knowledge of and has carefully vetted its proposed counterparty's likely creditworthiness for the duration of the swap,** swaps can be effective tools in some financings to lower borrowing costs, where the advantages may outweigh the complexities and the risks, especially in today's market.

II. INCREASED FINANCING PROCEEDS THROUGH CASH-BACKED BONDS

A. THE OPPORTUNITY – ADDITIONAL TAX CREDIT BASIS AND PROCEEDS FROM TWO STREAMS OF CONSTRUCTION PERIOD INTEREST

- As discussed above, over the past year, both taxable and tax-exempt **yield curves have risen at least 200-250 basis points or more** and are **severely inverted**.

- An important aspect of this is that the **bond yields on Tax-Exempt Short-Term Cash-Backed Bonds** (herein, "Cash-Backed Bonds") **are now MUCH HIGHER: very generally 4.0% or a bit higher in recent months, versus 1% or lower as recently as a little over a year ago.**

- This has created a **unique, substantial opportunity**.

- **Any structure incorporating Cash-Backed Bonds can provide extra funds available to the borrower at closing by as much as 3.0-3.5% of Total Development Cost ("TDC"), if proper steps are taken.**

- Since the 2008 financial crisis, where yields on taxable GNMA securities fell below the yields of even Aaa-rated long-term municipal bonds backed by the same GNMAs, Cash-Backed Bonds have been widely used to satisfy the 50% Test on financings using FHA-insured and rural development ("RD") loans and certain other loans where taxable yields have been lower than comparable tax-exempt long-term municipal bond yields.

- The **unique feature** of the Cash-Backed Bond structure is that it **entails two separate sets of construction period interest:**
  - the interest the borrower pays on the taxable draw-down (FHA-insured, RD or other taxable loan), and
  - the interest which the borrower (through a U.S. Treasury escrow) pays on the fully funded Cash-Backed Bond issue.

- The same basic fact pattern exists on tax-exempt bond issues using Fannie Mae's "forward" M.TEBs structure, where a taxable draw-down bank loan funds construction and rent-up during the pre-Conversion stage, and the 17- or 18-year fixed rate bonds are secured during the pre-Conversion stage by an escrow of cash and U.S. Treasury securities.*

- As is set forth in greater detail below, in all of these financings, because we have two streams of construction period interest at very elevated short-term coupons which can be included in tax credit basis, such structures can produce substantial additional proceeds at closing as compared to structures not using Cash-Backed Bonds.

---

* In a Fannie Mae Forwards M.TEBs financing where the 50% Test amount is greater than the permanent loan amount, a separate series of Tax-Exempt Short-Term Cash-Backed Bonds is often issued under the same indenture and sold in a single official statement with the Fannie Mae Forwards M.TEBs series. Those bonds also entail two streams of construction period interest and provide the same opportunities for enhanced tax credit loans and proceeds as those used with FHA-insured and RD loans.

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B. ADDING CASH-BACKED BONDS TO TAX-EXEMPT PRIVATE PLACEMENTS

- About four years ago, a structure emerged that **added the use of Cash-Backed Bonds** (and a taxable draw-down bank loan) to fund construction or rehabilitation and met the 50% Test **to a private placement** having a forward commitment from a permanent lender (*e.g.*, a bank, Freddie Mac or other tax-exempt perm loan sponsor) **to fund a permanent tax-exempt loan** at stabilization (often referred to as "Conversion").
- We refer to this as the **"Cash-Backed Bond to Tax-Exempt Loan" structure**.
- **When Cash-Backed Bond coupons** and other short-term rates **were around 1%** and involved negative or little positive arbitrage, **the cost** of **adding Cash-Backed Bonds and a taxable draw-down construction loan** to what would otherwise be a simple, efficient, tax-exempt draw-down private placement loan **often outweighed the benefits** of this structure.

- A **possible exception** to this has been a fact pattern where a **developer's bank desires to be both the construction lender and also the 4% LIHTC investor** on the equity side under circumstances **where the Issuer charges more than 1/8 of 1% (or 12.5 "basis points") per year in upfront and ongoing fees**.
    - In this case, the Borrower cannot represent and covenant that "No person related to the borrower will have an arrangement to acquire tax-exempt debt in an amount related to the amount of the tax-exempt loan," which is necessary to use the alternative "150 basis points" limitation on allowable issuer and other fees.
    - Where Issuer fees exceed 12.5 basis points per year and the bank is simultaneously on the tax-exempt loan and 4% LIHTC sides of the deal, this alternative test would not be available and, **the tax-exempt debt would be treatable as a taxable "arbitrage"** bond which would render the financing infeasible.
    - The **use of the Cash-Backed Bond to Tax-Exempt Loan Structure is one of several approaches which can be used to avoid this problem**, and thus the structure has been used for this purpose, but historically at a somewhat elevated cost and until this past year without the substantial additional benefits described in this PowerPoint.

C. HOW IT WORKS – THE CURRENT MAJOR BENEFITS OF CASH-BACKED BONDS

QUESTION: "HOW BIG IS THE ADVANTAGE OF CASH-BACKED BONDS TODAY?"
ANSWER: "SUBSTANTIAL ADDITIONAL NET PROCEEDS AT CLOSING."

- Assume we have a large new construction project. We will probably set, say, a 4-year maturity and **sell the bonds to a 3-year mandatory tender date – recent current coupon about 4.0%** (not 1.0% or so less than two years ago).
- **We will generally reserve the right to trigger the mandatory tender earlier** (say month 24 or after), if the conditions to Conversion to stabilized occupancy have been satisfied and the U.S. Treasury escrow can be liquidated at par or any loss on liquidation is made up with a deposit of bankruptcy remote funds.
- **At Conversion** the **purchase price of the Cash-Backed Bonds paid to bondholders on the mandatory tender is paid from the proceeds of the U.S. Treasury securities** in the escrow securing those Bonds.
- Typically, a **portion of the tax-exempt debt will be paid down at Conversion from fixed tax credit equity installments** and other permanent funding sources. These funds are **used to pay off a corresponding portion of the taxable bank draw-down loan**, and that portion of the tax-exempt debt is effectively retired.*

* Where Cash-Backed Bonds are used with FHA-insured and RD loans, all of the tax-exempt debt will be paid off when the project is placed in service (*e.g.*, delivery of a certificate of occupancy ("COO") on new construction/sub rehab financings or completion of rehab on mod rehab deals).

- In a Cash-Backed Bond to tax-exempt loan structure, the **balance of the tax-exempt debt will remain outstanding** at Conversion and the **terms of the permanent component of the tax-exempt debt from that point forward will be governed by the escrowed permanent tax-exempt loan documents**.*
- That **permanent portion of the tax-exempt loan will then be delivered to the permanent lender** against payment, the **proceeds** of which are **used to retire the remaining balance of the taxable bank construction loan** which funded the construction or acquisition and rehabilitation of the Project.
- Generally the initial mandatory tender date on the short-term Cash-Backed Bonds will be set on the latest date on which the permanent lender will commit to acquire the permanent phase of the stabilized tax-exempt loan, say 36 or 42 months following initial closing, creating a **window period (*e.g.*, 24 to 36 or 42 months) when the Cash-Backed Bonds may remain outstanding** (absent a remarketing on the initial mandatory tender date if more time is needed).

* Almost all bond counsel firms now agree that if all terms of the tax-exempt debt during the perm phase have been set at initial closing and are reflected in escrowed perm loan documents, this transition will not constitute a significant modification of the debt and therefore there will be no federal tax law reissuance at Conversion.

D. ASSUMPTIONS

- Assume $60.0 Million Total Development Cost ("TDC") New Construction Project
- 2.5-year construction period; 3.0 years to stabilization / "Conversion"
- Issue $32 Million of 4.0% short-term Cash-Backed Bonds (53% of TDC)
  - (4-year maturity; sold to 3-year mandatory tender)
- Assumes 4.50% interest rate on 3-year U.S. Treasury escrow investments
- Assumes 6.0% permanent interest rate on forward bank, Freddie Mac TEL or other private placement permanent tax-exempt loan

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E. THREE POTENTIAL ADVANTAGES

1. The Major Benefit: Substantial Enhancement of Tax Credit Basis and Tax Credit Syndication Proceeds

- As discussed above, Cash-Backed Bonds under any structure add two streams of construction period interest: (i) that on the **fully funded Cash-Backed Bonds** and (ii) that on the **taxable draw-down bank construction loan which will fund construction or substantial rehabilitation**, in each case accruing before the certificate of occupancy is obtained or rehab is complete.

Extra Cons Period Interest:	2.5 yrs X 4.0%	10.0% of Bond Amount
If Project in QCT or DDA:	Multiply by X 1.3	+ 3.0%
If state tax credits available, add another:		+ 2.0-4.0%
Total Gross Additional Tax Credit Basis		15-17% of Bond Amt, or **7.5-8.5% of TDC***
Additional Syndication Proceeds to Borrower: 45% x Additional LIHTC Basis**		**3.4-3.8% of TDC**
Less: COI on Cash Backed Bonds, Additional Interest from **Taxable** Construction Loan, and Payment of federal income tax on escrow earnings under Section 266 election***		1.0% of TDC
Total Potential Benefits to Borrower		**Roughly 2.4-2.8% of TDC**

---

* If Bonds slightly > 50% of TDC.

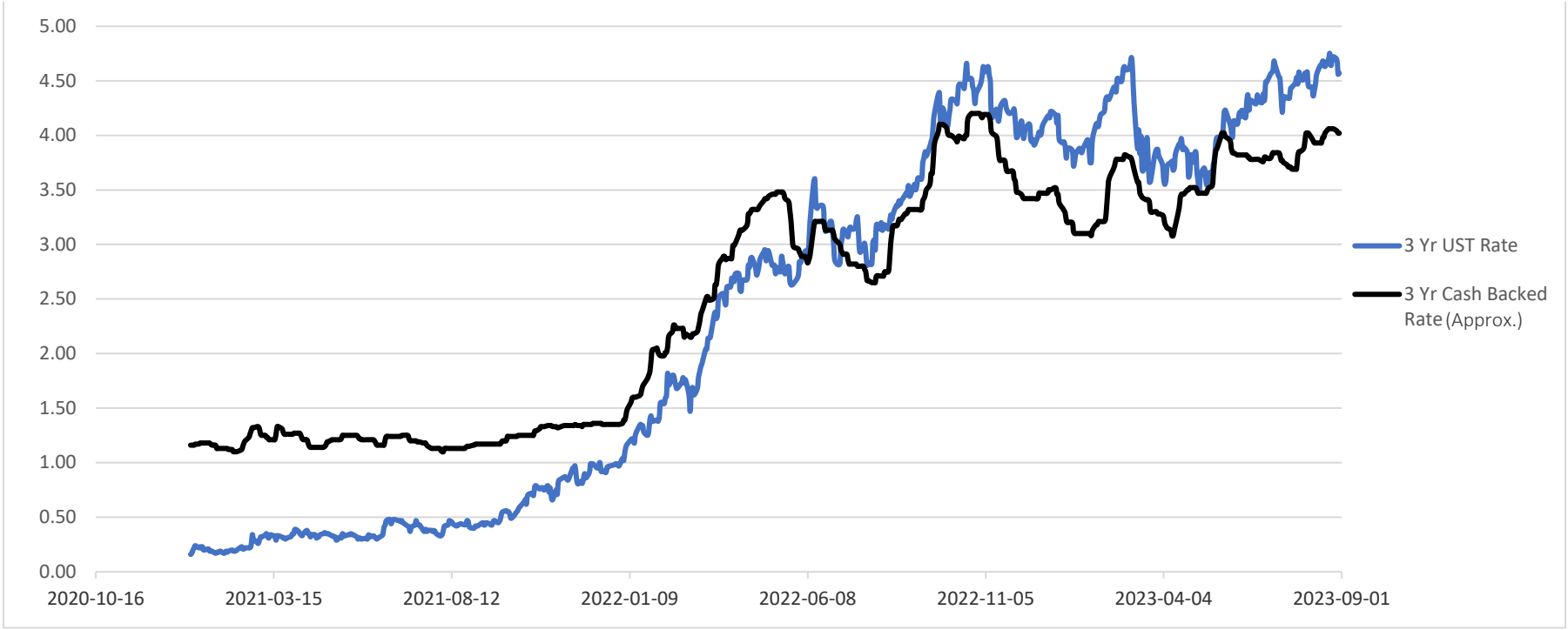
** Assume the Tax Credits sell for up front proceeds equal to 45% of the additional eligible basis.

*** The cost of issuance of the Cash Backed Bonds may run about 1.0% of the bond amount or 0.5% of TDC. In addition, there may be some incremental costs of the construction loan interest being taxable rather than tax-exempt, but a bank acquiring the 4% LIHTC (if that's the fact pattern) would be a related person, and thus construction loan interest would be taxable to it in any event. Finally, in today's market, most borrowers will elect to capitalize interest under Section 266 of the Code to support including it in basis and will allocate to one or more constituent entities in the borrower responsibility to pay federal income tax on the interest earnings in the escrow. This will often be allocated to the tax credit investors, who are generally 21% federal income tax payers. Some, but not all, tax credit investors, especially if different from the taxable draw-down construction period lender, may reduce tax credit equity pricing by 1 to 3 cents (a cost equal to about 0.5% of TDC) to offset this. On the other hand, if a bank is both the draw-down construction lender and the tax credit investor, the benefit of serving in both of these roles may largely offset or more than offset this potentially negative factor.

2. Possible Additional Benefit When Cash-Backed Bonds Added to Tax-Exempt Loan Private Placements – Retention of Positive Arbitrage

- The chart below shows that for most of the period since mid-2022 the 3-year U.S. Treasury Bond yield (blue line) has been **higher than** 3-year short-term Cash-Backed Bond yields (black line).
- This means the structure has produced **positive arbitrage** versus negative arbitrage (which had to be funded up front by the borrower) during much of the preceding period.

3-YEAR TAX-EXEMPT SHORT-TERM CASH-BACKED BOND RATES
VS.
3-YEAR U.S. TREASURY RATES (2021-TODAY)



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- The effect in our example:

Positive Arbitrage (almost 50 basis points):
2.5 yrs X $32.0 Million Bonds X (4.50% - 4.00%) = $400,000 1.25% of Bond amount or **0.65% of TDC***

- Some, but not all, bond counsel firms will let the borrower apply most or all of this positive arbitrage to project costs because the "blended" bond yield (combination of 4.0% and 6.0% tax-exempt interest rates) is quite likely to be above our 4.50% assumed Treasury earnings rate.** Our example assumes 50 basis points of positive arbitrage, but positive arbitrage as high as 111 basis points has been realized on one recent financing. **Any positive arbitrage is very volatile and varies widely from deal to deal.** In general, if bond counsel allows retention based on a "blended yield" approach, it may offset or more than offset the COI on the Cash-Backed Bonds in a Cash-Backed Bond to tax-exempt loan financing and any additional costs described in the third footnote on Slide 32.

- In these financings, our firm has worked proactively with a number of our bond counsel colleagues to encourage them to accept a blended yield approach, as we have done quite successfully with a number of major bond counsel firms since 2015, encouraging them to accept an escrow of fixed rate U.S. Treasuries on these financings, which has eliminated $millions of negative arbitrage. Where bond counsel accepts a "blended yield" approach, our firm then works with our underwriter clients and provides borrower clients with updated positive arbitrage calculations and estimates on the likely portion which can be retained throughout the course of the financing.

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* If bonds slightly > 50% of TDC.

** The calculation of this "blended yield" is not as simple as averaging the 4.0% and 6.0% yields in our example. It can be well estimated but not finally calculated until Conversion to the permanent phase of the tax-exempt loan has been achieved, and it will vary depending on several factors. Our bond issue is a "variable rate" bond issue under Section 103 due to the potential for a remarketing after year three. One calculates yield over a 5-year period on variable rate issues and there are other complexities which we can explain. The net result is that on most financings where bond counsel will accept a "blended yield" approach, under current market conditions, the borrower will be able to retain all or almost all of the "positive arbitrage" benefit unless Conversion occurs at the very end of the "window period" described on Slide 30.

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- This potential **additional benefit of retaining positive arbitrage may also be available to a much lesser degree where Cash-Backed Bonds are used with FHA-insured or RD loans**. In some instances, tax-exempt seller take-back loans, tax credit equity backed tax-exempt bridge bonds or subordinate tax-exempt surplus Cash-Backed Bonds can be added to Cash-Backed Bonds to help meet the 50% Test, lessen the need for cash to close and/or improve tax credit pricing. These bonds often carry coupons of 6-8% or more – much higher than those on the Cash-Backed Bonds.
- **Some but not all bond counsel firms will allow us to blend that yield** with our 4.0% cash backed bond yield which may pull it up toward or above our 4.50% Treasury earnings rate, **allowing the Borrower to keep a small portion (most likely only 10-20% at current rates) of the positive arbitrage**.
- **On FHA-insured and RD new construction or sub-rehab loans, we have recently seen lenders even further raise tax credit basis and proceeds substantially and lower permanent lending rates by as much as 30-35 basis points by setting a construction period rate 100-150 basis points above the permanent rate**. The higher construction period interest rate can raise tax credit basis and proceeds even further than discussed above.
- On a **Fannie Mae Forwards M.TEBs financing**, **the arbitrage** impact of having a cash-backed component **is** for the bond issuer actually **a slight negative**. With a long-term tax-exempt coupon recently about 50 basis points or at slightly more **above** our short-term investment rate, this can reduce the positive impact of substantial additional tax credit basis by about 0.5% of TDC, making the **net benefit perhaps 2.5-3.0% of TDC in our example**.

3. Bonus Benefit: Help Meeting the 50% Test

- Another benefit of **the structure**, which may be significant, is that it **can assist the borrower in satisfying the 50% Test.**
- Under **Rev. Proc. 2002-21, amounts received from investing the proceeds of tax-exempt bonds were held as being included in tax exempt bond proceeds for purposes of the Borrower's satisfying the 50% test**.
- Thus, the interest earnings in the escrow go into the numerator in this calculation.
- Let's assume we have a $32 million bond issue as in Slide 31 and eligible basis is $64 million (total development cost on a 100% affordable project assuming no commercial), and **we are not using Cash-Backed Bonds on the front end of the financing**. In that case, we **would have just met the 50% Test ($32 million / $64 million = 50%).**
- Now let's **assume we have added short-term Cash-Backed Bonds to the structure** and with no state tax credits, our **increase in basis** was 13% of our bond amount in the example in Slide 31, or **$4,160,000**.
- If we **now add 2.5 years of the escrow earnings** at 4.5%/year or $3,600,000 **to the numerator and the $4,160,000 increase in basis to the denominator**, the results are $35,600,000 ÷ $68,160,000 = **52.23%** - **a more than two percentage point gain in our ratio**, which can help if we have too low a margin in satisfying the 50% test**.**

F. TOTAL POTENTIAL BENEFIT

The following chart summarizes the total potential net financial benefit of this financing structure from the potential increase in tax credit basis and proceeds and the possible retention of the benefits of any positive arbitrage:

Cash Benefit to Borrower from Additional Basis	**2.4-2.8% of TDC**
Potential Retained Positive Arbitrage	**0.65% of TDC**
Total Potential Benefits to Borrower	**Roughly 3.0-3.5% of TDC***

---

* Possibly adjust downward to about 2.5-3.5% of TDC where Cash-Backed Bonds are used with FHA-insured or RD loans due to the lower opportunity to retain positive arbitrage and on a Fannie Mae Forwards M.TEBs financing due to the small amount of negative arbitrage.

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This Structure Was Used on Two Recent Major 2023 Los Angeles Veterans Housing Financings

Thomas Safran Development

VA 402
11301 Wilshire Boulevard
120 Supportive Veterans Housing Units
$74,688,000 Total Development Cost
$33,775,000 Tax-Exempt Cash-Backed Bonds
$14,390,000 Tax-Exempt Permanent Loan
Closed: January 13, 2023

Century Housing Development

VA 156/157
11301 Wilshire Boulevard
112 Supportive Veterans Housing Units
$96,650,000 Total Development Cost
$41,638,000 Tax-Exempt Cash-Backed Bonds
$10,350,000 Tax-Exempt Permanent Loan
Closed: June 7, 2023

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G. ADJUSTING COMPARATIVE BORROWING RATES FOR EXTRA NET PROCEEDS FROM CASH-BACKED BONDS

- When comparing all-in borrowing rates associated with various executions, it is important to take into account this current benefit of structure using Cash-Backed Bonds.
- If tax-exempt debt funds roughly 50% of Total Development Cost, then having an extra 2.5% of net proceeds on the table at closing is roughly the equivalent of an extra 5% of loan proceeds.
- At current perm rates on a long-term (35- or 40-year) amortization debt service constrained loan, a reduction in the perm rate of about **8 basis points is roughly the equivalent of a 1% increase in loan proceeds**.
- To say the same thing a different way, **if I have an extra 5% of loan proceeds on the table at closing, it is the rough equivalent of a 40 basis point reduction in perm rate** on such a loan.
- While rates and terms can vary widely from deal to deal depending on many factors and the following are **very general** estimates, the following chart may provide a very rough summary of the potential advantages of structures which can capitalize on the current advantages of structures using Cash-Backed Bonds.

SUMMARY OF BORROWING/ UNDERWRITING RATES
PRINCIPAL TAX EXEMPT DEBT PRODUCTS FOR 100% AFFORDABLE PROJECTS

	Estd. Actual All-In Borrowing and Perm Period Underwriting Rate	Adjusted for Extra Net Proceeds From Cash-Backed Bonds
1. Bank Private Placement		
-Mod Rehab	**6.00% to 6.50%**	**N/A**
-Sub Rehab/New Cons		
Cons Period	**7.0% to 8.0% Floating***	**7.00% to 8.50%***
Perm Period	**6.00% to 7.00%***	**5.60% to 6.60%***
2. Freddie Mac "TEL" Program (Mod Rehab, Sub Rehab, New Cons)	**Similar to Bank Private Placements above**	
3. Fannie Mae "M.TEBS" Structure	**6.00% to 6.40%**	**5.70% to 6.10%****
4. Short-Term Cash Backed Tax Exempt Bonds with Taxable Loan Sale		
FHA §223f or RD Mod Rehab	**6.35%**	**5.95%*****
FHA §221(d)(4) or RD Sub Rehab / New Cons	**6.60%**	**6.20%*****

* As discussed in Part I of this presentation, these rates may now be lowered by 50 to 100 basis points or more on some private placement financings through the use of caps and/or swaps.

** Assumes 30 basis point rate advantage equivalent to extra 4 points of loan proceeds.

*** Assumes 40 basis rate point rate advantage equivalent to extra 5 points of loan proceeds.

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H. QUALIFYING COMMENTS

- Actual benefits in a given project financing can often be expected to be a somewhat lower percentage of total development cost than that shown above, but in some cases could be even a bit higher.

- Our assumptions assumed a large new construction project with a substantial construction period in a DDA or QCT with some state tax credits, a financing where the draw-down construction lender and tax credit investor are the same entity, and a bond counsel firm comfortable with a "blended yield" approach, all of which increase the benefits of the structure. **Our firm and our clients can assist in these calculations.**

- But even if benefits in a given case are somewhat lower, the net benefits of Cash-Backed Bonds described above in the current market can substantially improve the results for the developer and help close significant financing gaps.

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I. CONCLUSION

- Note: **The benefit of this structure is likely to decline from current levels if the current substantial inversion in the yield curve attenuates or disappears**, as we believe is likely in the next year or so, if not sooner.
- However, **for now, these benefits continue to be quite substantial**, and **many developers** and their tax credit investors **are using this structure to close significant financing gaps on their deals**.
- As with many structures involving tax-exempt debt and tax credits, **even the most highly regarded** law firms, accounting firms, and other **experts involved in these financings may draw different conclusions** about certain aspects.
- A **key** is for borrowers and their tax credit limited partners contemplating the use of this structure to **discuss the proposed financing plans with the Issuer, Bond Counsel, their private placement sponsor and other knowledgeable financing participants at the outset** of the proposed financing. **We believe that we and our underwriter and bank clients excel in effectively representing developers in this process.**

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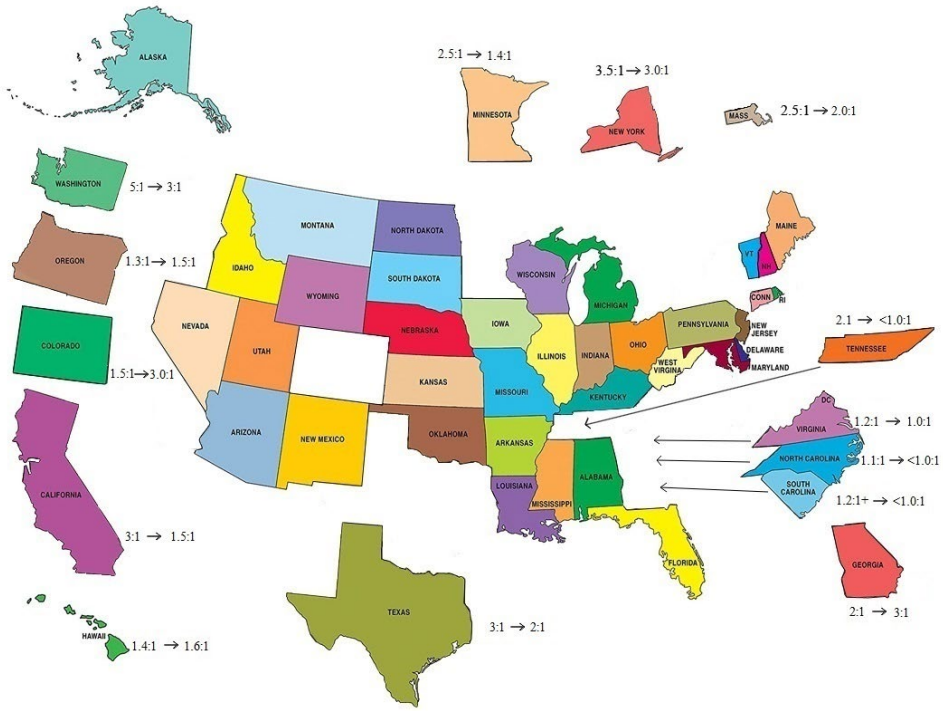
III. REDUCED PAB OVERSUBSCRIPTION

Norris George & Ostrow PLLC
Volume Limited States and "Guestimated" Oversubscription Ratios – 2023 v 2021*

- In most oversubscribed states (*e.g.*, California, Texas and other states), the dramatic rise in interest rates and continuing cost increases have lowered the level of oversubscription versus two years ago. In two states – Colorado and Oregon – as described below, we believe the oversubscription level has increased.



* Our NGO estimates are based on published data, supplemented by conversations with industry colleagues active in tax-exempt multifamily bond and loan financings in our nationwide practice. We believe the true level of oversubscription cannot be assessed by simply comparing multifamily PAB volume applications filed to multifamily PAB allocations, since this does not reflect developers who would have filed in severely oversubscribed states, but did not make the effort to do so due to the perceived low likelihood of obtaining an award. For example, in 2021 California had about $7.0 billion of multifamily PAB applications and allocated about $3.5 billion to multifamily, suggesting a 2:1 oversubscription ratio. But it was common knowledge that the State's top priority was new construction. Knowledgeable California industry colleagues told us they were confident there would have been another $1.0 billion applied for on acquisition-rehab/preservation financings, but developers simply did not apply due to the very low likelihood of receiving an award. Thus our 2021 estimate of oversubscription in California was close to 3:1 rather than 2:1 in that robust year. The more recent estimates reflect our estimates for 2023.

5:1 → 3:1

- Annual PAB Allocation ≈ $934 million
- Allocation to Multifamily ≈ $444 million (estimated)
  - 48% to Multifamily Housing
  - 52% Other
- About $250 million to WSHFC (State Agency)
- About $140 million to Other Authorities
- WSHFC – Initial Demand: $770 million for $250 million allocation
  - Slightly less oversubscribed than in prior years
- Allocation System – Recently shifted to policy-based criteria
- One round in the spring

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3:1 → 2:1

- Annual PAB Allocation ≈ $4.7 billion
- Allocation to Multifamily ≈ $4.0 billion (85%)
- 2023: 3 rounds; competitive points system

App Deadline	Mtg Date	Award
2/14	5/10	$1.15 billion
5/23	8/23	$1.34 billion
9/6	12/6	$1.54 billion
Total		**$4.03 billion**

- Heavily skewed to new construction; but exhaustion of State tax credits last summer resulted in all acquisition/rehab preservation deals which applied in 2023's third round being awarded for first time in several years
- Substantial reduction in oversubscription; the CMFA (as issuer of a majority of the Section 142(d) multifamily private activity bonds in California) believes the ratio of actual applications to available volume could drop to around 1:3 or 1:4 for 2023 and could fall even lower in 2024; they project that State tax credits may be largely exhausted after next year's first round and that **California may be undersubscribed in 2024's second round!**
- Widest choice of issuers: Cal HFA, 3 major JPAs, numerous cities and counties

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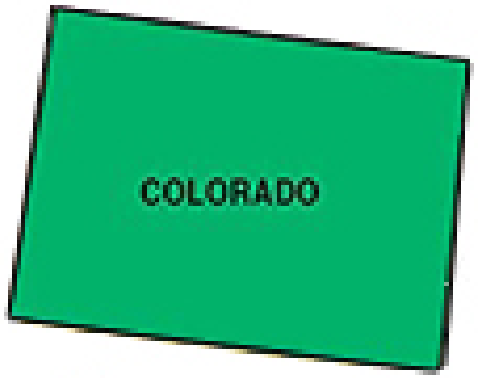

1.5:1+ → 2.5:1+

- Annual PAB Allocation ≈ $701 million
  - Colo HFA ≈ $345 million (49%)
  - 64 Counties, Cities, Towns ≈ $337 million (48%)
  - Other ≈ $19 million (3%)
- Roughly $ 600 million multifamily (80%)
- 2023: Colo HFA issued $350 million as of October 2023; **but over $1.0 billion of additional unfilled applications were then on file**
- Colorado HFA – Criteria Based; substantial majority to new construction
- Other Issuers – Criteria Varies
- Substantial increase in oversubscription likely due to legislative change which doubled state tax credit dollars in the last year
- 3 Rounds: 3/1, 6/1, 11/1

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1.3:1 → 1.5:1

- Annual PAB Allocation ≈ $509 million
- Allocation to Multifamily ≈ $450 million (88%)
- Issued about $650-700 million in 2022
  - Roughly 40 projects funded in 2023 versus about 20 in 2021
  - Exhausted carryforward
  - Will probably fund about 20 projects in 2024
- Increase in oversubscription due in part to exhaustion of $200 million of carryforward volume
- All multifamily volume now initially allocated to State Issuer – Oregon Housing and Community Services, which suballocates a portion to local multifamily housing issuers
- Major state and local subsidies for affordable multifamily rental housing
- Allocation system based on broad merit criteria

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1.4:1 → 1.6:1

- Annual PAB Allocation ≈ $359 million (Fed Minimum)
- Allocation to Multifamily moving to 90% +
- State rapidly becoming oversubscribed for multifamily; long list of approved deals; major rehabilitation financings in the wings
- Historically – sole/multifamily issuer – HHFDC (state agency)
  - More recently City and County of Honolulu and also County of Kauai have also issued
- Significant state subsidy (RHRF revolving fund) for most financings
- Allocation System: combination of first come, first served and points
- One round – early spring; discussion of expanding to two rounds

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- Annual PAB Allocation ≈ $3.811 billion
- Allocation to Multifamily ≈ $1.6 billion (42%)
- Multifamily Volume – initially allocated among four categories by issuer and/or geography
  - Initial applications due Oct 5 – Oct 20
  - Lottery held early-mid-Nov
  - Awards begin Jan 2; Max 180 days to close by statute
  - Three major priorities based on AMI levels, rent caps and MSA
  - Final collapse and reallocation on Aug 15
- In 2023, all Priority 1 projects (100% affordable ≤ 60% AMI) expected to be funded
- Oversubscription lower but demand still substantially exceeds available volume

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2:1 → <1.0:1

- Annual PAB Allocation ≈ $846 billion
- Traditionally oversubscribed for multifamily by as much as 2:1 or higher
- A small amount of volume appeared to be available in late 2023

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1.2:1 → 1.0:1

- Annual PAB Allocation ≈ $1.042 billion
-

Pool	Amount for 2023	Use
Virginia Housing*	$448 mil. (43%)	Affordable rental and ownership
Industrial Development	$260 mil. (25%)	Manufacturing and other exempt projects
Governor's (state allocation)**	$187.5 mil. (18%)	Housing, manufacturing facilities, and other exempt projects
Local Housing Authorities **	$146 mil. (14%)	Affordable rental

- 94% to multifamily 2014-21
- 2022: 64% (~$660 million) to multifamily; other uses are growing
- As of September, 2023 ≈ $100 million of the $333 million Governor's Allocation and the local HFA allocation were remaining
- Local HFA pool allocated first come first served max. $20.0 million per project until July 1; supplemental after that

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* In 2022, about 63% of VHDA volume was used for single family and 37% for multifamily portion, largely limited to VHDA balance sheet executions.

** All of local HFA pool typically for multifamily; 2022 saw 60% of Governor's pool for multifamily executions, down from 100% in prior years.

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1.1:1 → <1.0:1

- Annual PAB Allocation ≈ $1.28 billion
- Currently not volume limited; no separate buckets; first come first served
- Almost all on first priority to Multifamily
- Two Rounds; most apply in first
  - Prelim app January
  - Completed app with inducement by late May
  - Award by late August
  - Close by year end, but new volume generally available in late January of following year

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1.2:1+ → <1.0:1

- Annual PAB Allocation ≈ $633 billion
- Utilization of volume for multifamily off due to moratorium on funding of state tax credits due to concern over revenue drain

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2:1 → 3:1

- Annual PAB Allocation ≈ $1.3 billion
- Allocation to Multifamily ≈ $700 million (roughly 60%)
- Roughly 45 projects in 2022
- Allocated by Georgia Dept. of Community Affairs
- Problems with applications filed to reserve volume which are unable to close; skews the oversubscription ratio

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