2023 BOSTON

Getting the Most Out of Your Limited Bond Cap

NCSHA
National Council *of* State Housing Agencies

Getting the Most out of Your Limited Bond Cap

National Council of State Housing Agencies

October 16, 2023

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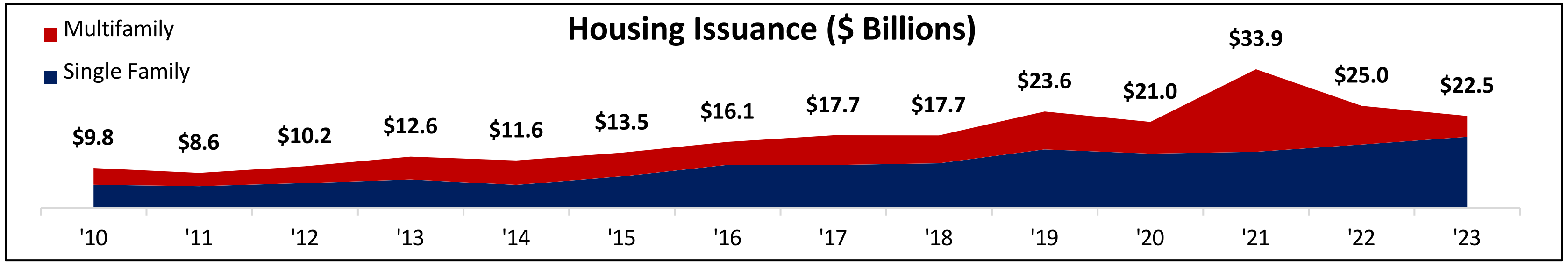
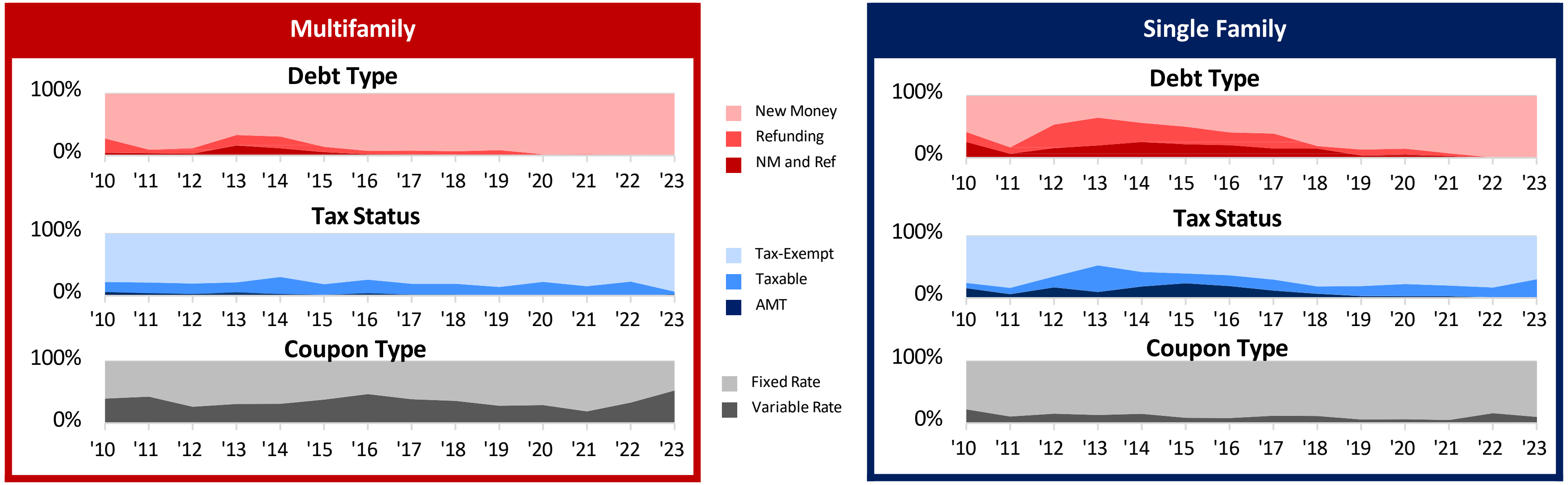
Annual Housing Bond Offerings: Mix of Debt Has Changed

- Housing issuance in 2022 decreased 40% YoY to $24.9 billion with 2023 currently trending to meet or exceed that level
  - Single family issuance increased 5% YoY to $15.5 billion in 2022 and will continue to increase for 2023
  - Multifamily issuance decreased 50% YoY to $9.3 billion in 2022 due to fall off in “work force” housing bonds
- Refundings have tapered off completely, taxable issuance have increased and, in some cases, variable rate bonds issuance



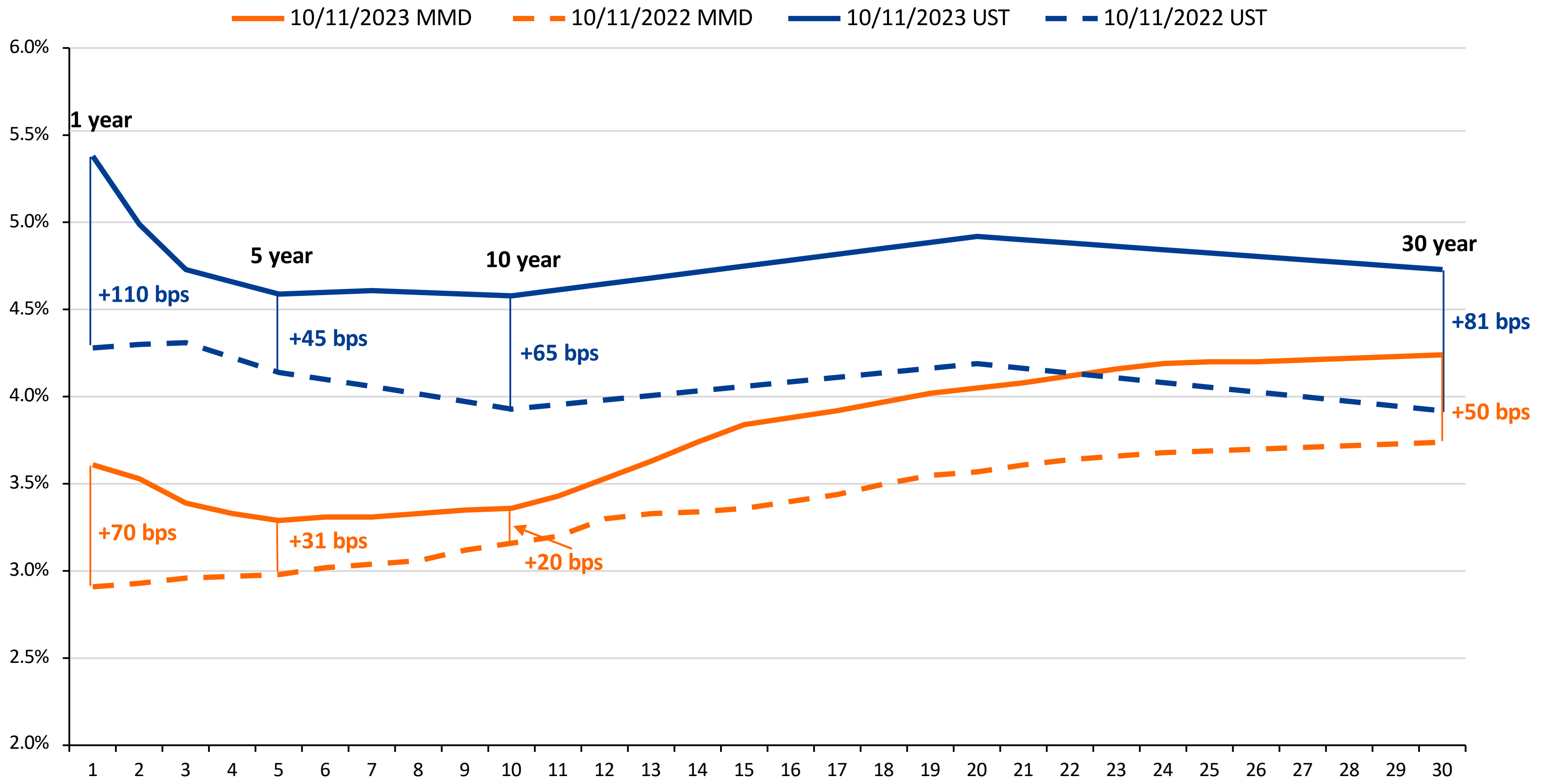


1 *Source: Refinitiv via SDC, 1/1/2010 – 9/21/2023, negotiated and competitive bids only*

Where Have Rates Gone?

- The MMD yield curve is inverted by 32 bps in year 1 (3.61%) to the lowest point in year 5 (3.29%)
- The US Treasury yield curve is relatively flat from year 10 (4.58%) to year 30 (4.73%) providing benefit for long term taxable issuance

MMD and UST Yield Curve



Sources: Refinitiv TM3, Bloomberg, U.S. Bureau of Labor Statistics, and U.S. Bureau of Economic Analysis as of 10/11/2023

Mortgage Rates

- During quantitative easing, the Fed compressed mortgage rates, which are now above 7.50% as of October 12th

30-Year Fixed Mortgage Rate vs. 10-Year U.S. Treasury

Sources: Freddie Mac, Federal Reserve Bank of St. Louis as of 10/12/2023

What Are Issuers Doing?

- Volume cap constraints have appeared across many states
  - Majority of issuers are taking advantage of favorable market conditions to leverage volume cap with taxable bonds
  - Recent issues with taxable blending percentages from 15% to 85%

Recent Single Family Housing Structures

Pricing Date	Issuer	Total Par ($mm)	Tax-Exempt Par ($mm)	Tax-Exempt (%)	Taxable Par ($mm)	Taxable (%)	T-E PAC ($mm) (Par & WAL)	Taxable PAC ($mm) (Par & WAL)
8/24/23	Wisconsin HEDA	185.000	185.000	100%	0	0%	53.435 / 6.0	N/A
8/28/23	South Carolina SHFDA	100.000	100.000	100%	0	0%	44.560 / 6.0	N/A
8/30/23	Oklahoma HFA	50.000	50.000	100%	0	0%	21.245 / 6.0	N/A
9/6/23	South Dakota HDA	174.000	99.000	57%	75.000*	43%	32.435 / 5.0	26.445 / 5.0
9/7/23	Michigan State HDA	392.925	305.615	78%	87.310	22%	133.785 / 5.0	-
9/12/23	Minnesota HFA	150.000	60.000	40%	90.000*	60%	35.795 / 5.0	-
9/13/23	Vermont HFA	22.500	22.500	67%	7.500	33%	-	7.250 / 5.5
9/18/23	New Hampshire HFA	45.000	45.000	100%	0	0%	13.630 / 5.0	N/A
9/19/23	Montana BH	43.000	43.000	100%	0	0%	10.550 / 5.0	N/A
9/19/23	Missouri HDC	95.000	80.000	84%	15.000	16%	41.200 / 6.0	-
10/3/23	Tennessee HDA	360.000	305.000	85%	55.000	15%		
10/3/23	Illinois HDA	275.000	178.750	65%	96.250*	35%	63.265 / 6.0	-
10/3/23	Colorado HFA	150.000	22.500	15%	127.500*	85%	22.500 / 5.5	31.470 / 5.7
10/4/23	Virginia HDA	250.000	100.000	40%	150.000	60%	-	-
10/5/23	Florida HFC	130.000	30.000	23%	100.000	77%	13.150 / 6.0	35.305 / 5.0
10/10/23	Georgia HFA	130.140	130.140	100%	0	0%	-	N/A
10/11/23	Connecticut HFA	52.180	52.180	100%	0	0%	-	N/A
10/11/23	Indiana HCDA	134.610	70.000	52%	64.610	48%	-	15.000 / 5.0

** Includes portion structured as Taxable Variable Rate Bonds (roughly 1/3 of the taxable component)*

Sources: Refinitiv TM3 and Respective Issuer Official Statements

How to Structure Blending % ?

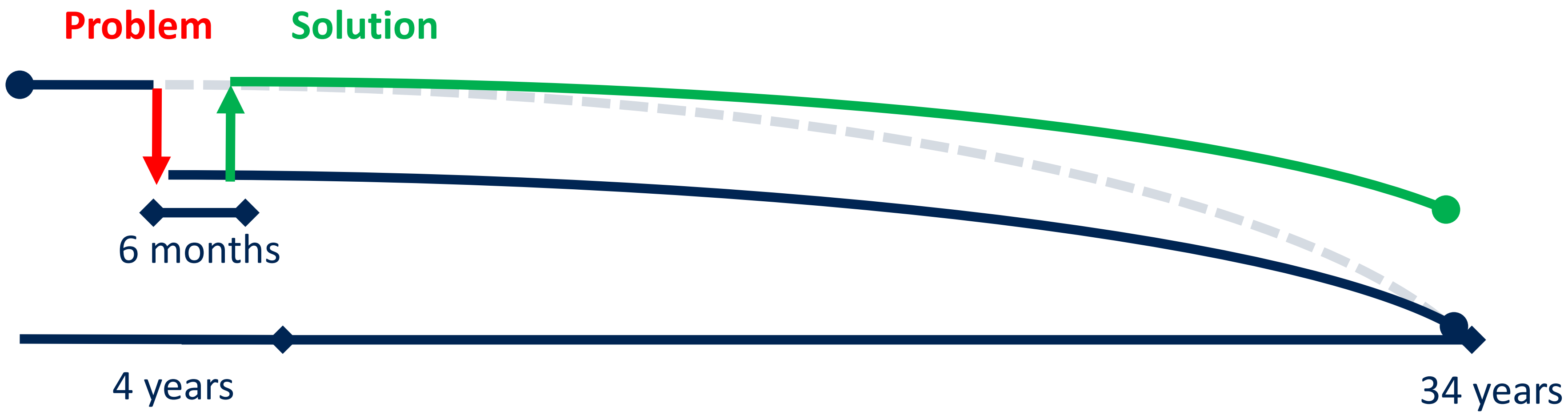
The % mix of blending taxable is dependent on each issuer

- Pipeline projection
- Volume cap constraint
- Incremental blending at what cost
- Maximization of replacement refunding opportunity
- Zero percent subsidy program utilization
- Opportunity to create zeros for unrestricted use

Where are the Opportunities?

Current tax-exempt finance plans provide attractive financing costs relative to mortgage lending rates	• PAC bond average life pricing continues to drive down cost of funds for tax-exempt issues and taxable issues
Taxable MRBs provide efficient leverage today to absorb excess tax-exempt yield and generate above average aggregate net present value returns	• BofA Securities structured $150 million taxable issue for Florida HFC to utilize a significant portion of 0% loan subsidy pool that had been building/carried across multiple plans of finance during past several years
Increasing tax-exempt PAC bond sizing in blending structures reaches diminishing returns in terms of overall yield reduction	• PAC bond utilization should be considered relative to potential value through cross-calling highest yielding taxable bonds across Resolution as taxable series expand
Alternative structures exist for increased volume cap leveraging percentages	• Relative steepness of taxable MRB yield curve supports serial/term bonds combined with tax-exempt PAC bond

Multifamily Volume Cap Recycling



IRC § 146(i)(6)
– Basic Provision

- "For purposes of the volume cap imposed by [§ 146] …If, during the 6-month period beginning on the date of a repayment of a loan financed by [a § 142(d) issue], such repayment is used to provide a new loan for any [qualified residential rental project], any bond which is issued to refinance such issue shall be treated as a refunding issue"

– Other Requirements

- "the principal amount of such refunding issue does not exceed the principal amount of the bonds refunded"
- Applies only once
- Issued not later than 4 years after original issue was issued
- Maturity limit 34 years from date original bond was issued
- TEFRA approval before issuance

Minimizing Volume Cap on Mixed-Income Developments

80 Units
60% AMI

120 Units
Market-Rate

Aggregate/Eligible Basis: $100,000,000
Applicable Fraction: ***40%***

Volume Cap: 50% x $100,000,000 = **$50,000,000**

Qualified Basis: ***40%*** x $100,000,000 = **$40,000,000**

Problem

80 Units
60% AMI
Aggregate/Eligible Basis: $40,000,000
Applicable Fraction: ***100%***

120 Units
Market-Rate

Volume Cap: 50% x $40,000,000 = **$20,000,000**

Qualified Basis: ***100%*** x $40,000,000 = **$40,000,000**

Solution

Saved: **$30,000,000**

Development #2, #3, QMBs

Morgan Stanley

NCSHA Annual Conference
Getting the Most Out of Your Limited Bond Cap

October 16, 2023

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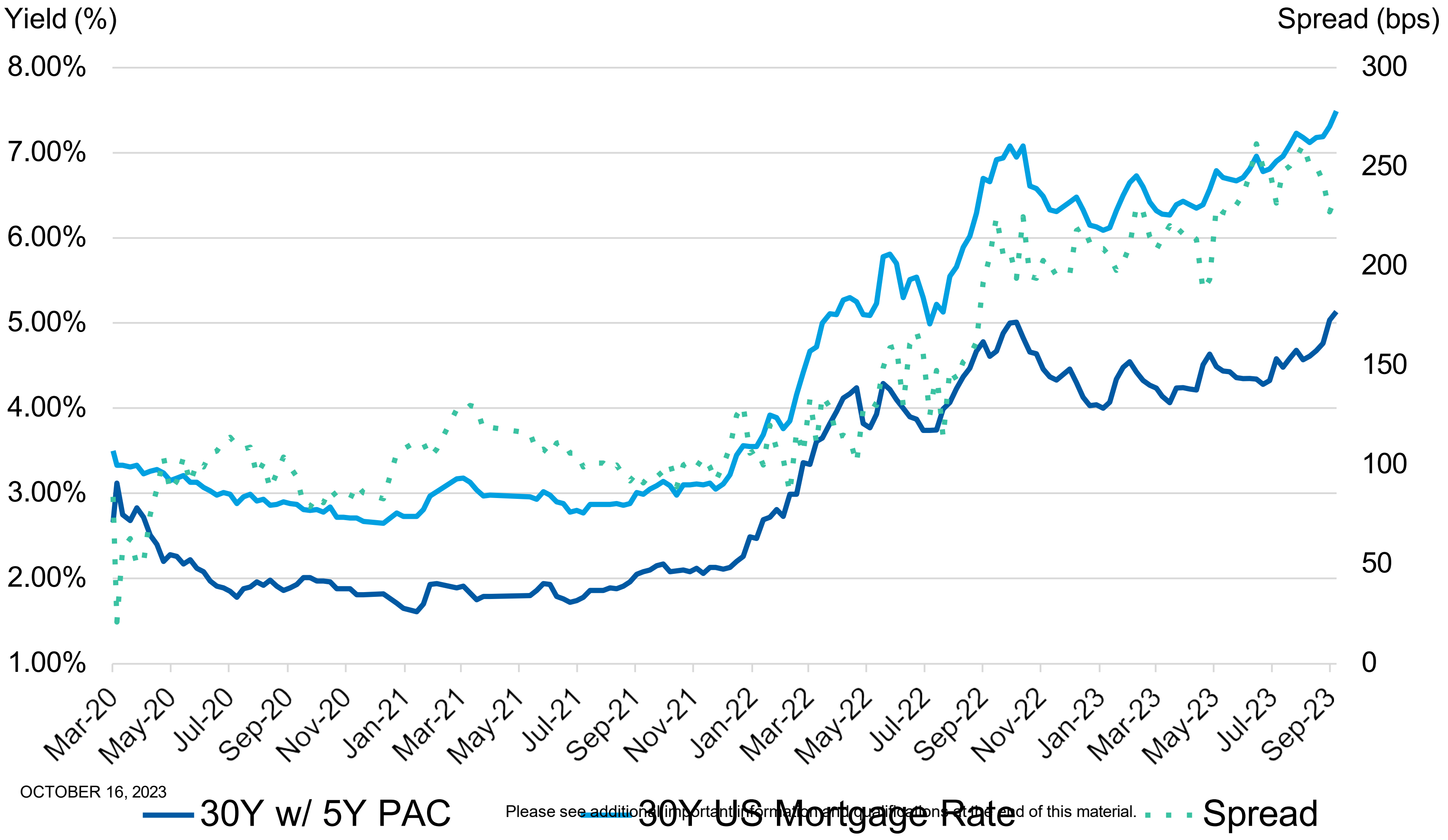
Tax-Exempt Bond Funding Costs vs. National Average Mortgage Rate



Source: Morgan Stanley Affordable Housing and Community Development Group; https://fred.stlouisfed.org/series/MORTGAGE30US

Three Methods for Preserving Volume Cap

Financing Strategies Considering Widespread Volume Cap Constraints

Replacement Refunding

- Pairing bond retirement with new issuance to create new production without the use of volume cap

Recycling

- Structuring geared towards recycling
  - Serial carveouts
  - PAC reduction or elimination

Taxable Issuance

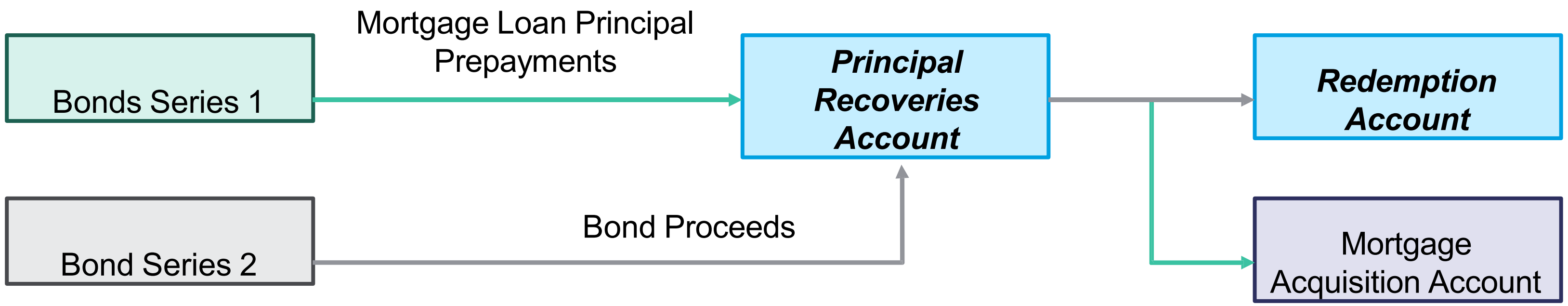
- Integrated structures can reduce cost of funds associated with taxable issuance
- Shifting yield for MRB eligible programs

Source: Morgan Stanley Affordable Housing and Community Development Group

Replacement Refunding

Conserving Volume Cap Through Replacement Refunding

- Operates in a similar fashion to volume cap recycling of tax credit bonds that Kevin described earlier but with SF prepayments instead of MF construction paydowns



  - Subject to 10-year rule – only prepayments gathered during the first 10 years from the original use of volume cap can be recycled
- Timeline can be extended with the use of a draw down facility such as a line of credit or commercial paper

Source: Morgan Stanley Affordable Housing and Community Development Group

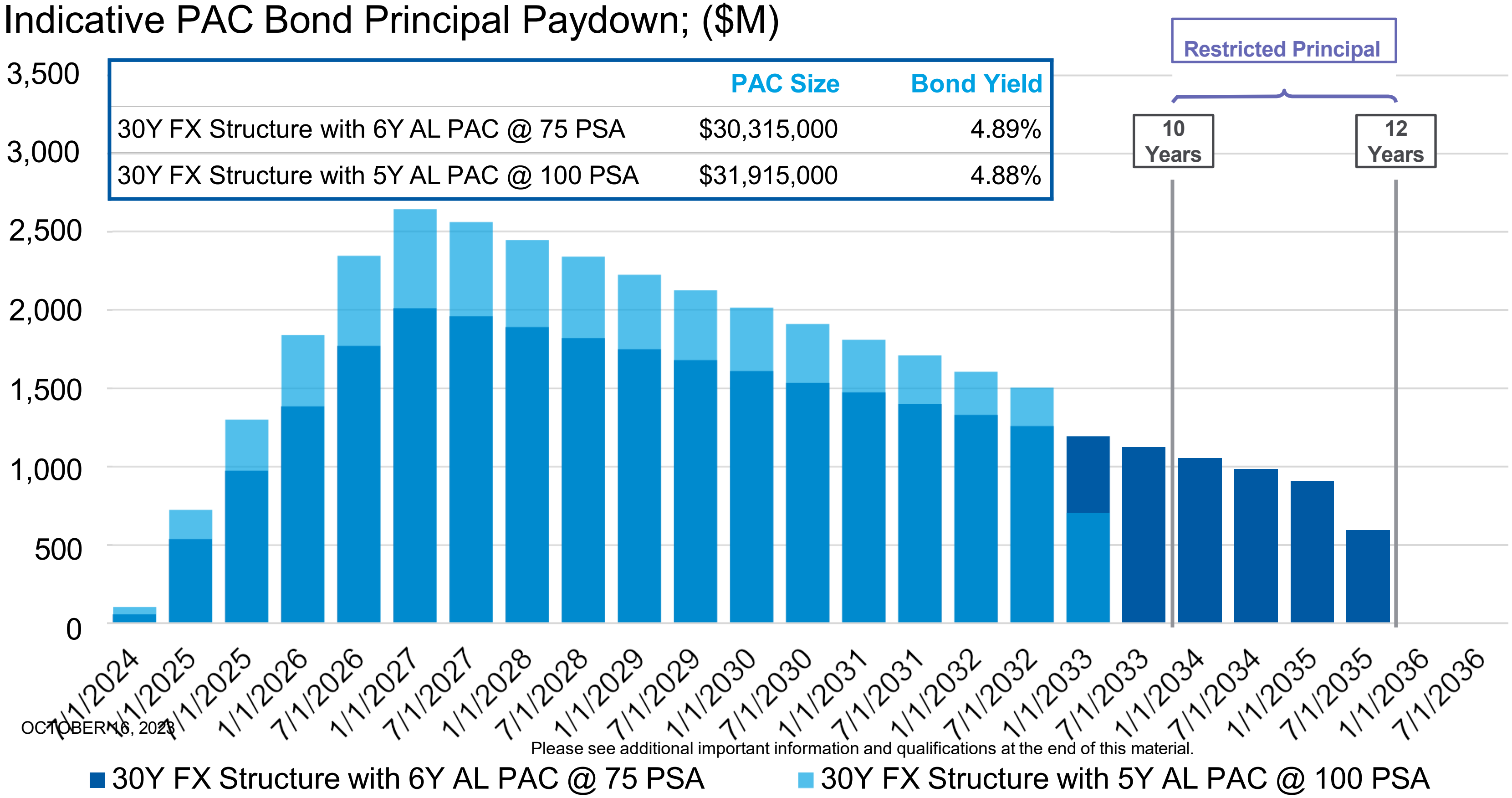
Leveraging Structures Geared Toward Recycling

Example: Longer, Slower Average-Life PACs

Amortization of PAC Bonds: 5Y WAL 100 PSA vs 6Y WAL 75 PSA

Indicative PAC Bond Principal Paydown; ($M)

	PAC Size	Bond Yield
30Y FX Structure with 6Y AL PAC @ 75 PSA	$30,315,000	4.89%
30Y FX Structure with 5Y AL PAC @ 100 PSA	$31,915,000	4.88%



Note: Morgan Stanley Affordable Housing and Community Development Group

Conserving Volume Cap by Leveraging Taxable Issuance

Impacts of Varying Levels of Standalone Taxable Issuance

Indicative Rates as of Oct 12, 2023

				Scenario A		Scenario B	
				$100mm TE / $15mm TX		$100mm TE / $100mm TX	
Term	**Structure**	**TE Bond Yields**	**TX Bond Yields**	**TE**	**TX**	**TE**	**TX**
2024 – 2033	Serials	3.70% - 4.65%	5.47% - 6.21%	$16,005,000	$1,820,000	$16,005,000	$16,005,000
2034 – 2037	15Y Term	4.80%	6.23%	7,010,000	1,630,000	7,010,000	7,010,000
2038 – 2043	20Y Term	4.90%	6.39%	15,820,000	2,375,000	15,820,000	15,820,000
2044 – 2048	25Y Term	5.05%	6.49%	22,985,000	3,450,000	22,985,000	22,985,000
2049 - 2053	30Y Term	5.10%	6.54%	4,415,000	815,000	4,415,000	4,415,000
2049 – 2053	5Y PAC	4.93%	6.05%	33,765,000	4,910,000	33,765,000	33,765,000
Tax-Exempt Proceeds				**$100,000,000**	**$--**	**$100,000,000**	**$--**
Taxable Proceeds				**$--**	**$15,000,000**	**$--**	**$100,000,000**
Total Proceeds				**$115,000,000**		**$200,000,000**	

Conserving Volume Cap by Leveraging Taxable Issuance

Reducing Aggregate Funding Costs with Integrated TE/TX Structures

Indicative Rates as of Oct 12, 2023

Term	Structure	TE Bond Yields	TX Bond Yields	Scenario A $100mm TE / $15mm TX TE	Scenario A TX	Scenario B $100mm TE / $100mm TX TE	Scenario B TX
2024 – 2033	Serials	3.70% - 4.65%	5.47% - 6.21%	$3,880,000	$13,955,000	$3,885,000	$24,270,000
2034 – 2037	15Y Term	4.80%	6.23%	7,590,000	1,045,000	7,030,000	6,995,000
2038 – 2043	20Y Term	4.90%	6.39%	18,190,000	--	15,855,000	--
2044 – 2048	25Y Term	5.05%	6.49%	26,430,000	--	23,020,000	--
2049 - 2053	30Y Term	5.10%	6.54%	5,060,000	--	50,210,000	--
2049 – 2053	5Y PAC	4.93%	6.05%	38,850,000	--	--	68,735,000
Tax-Exempt Proceeds				**$100,000,000**	**$--**	**$100,000,000**	**$--**
Taxable Proceeds				**$--**	**$15,000,000**	**$--**	**$100,000,000**
Total Proceeds				**$115,000,000**		**$200,000,000**	
Bond Yield 100 FHA				4.94%	6.02%	5.03%	6.07%
Aggregate Bond Yield				**5.03%**		**5.35%**	
Bond Yield Savings				**5 bps**		**25 bps**	

Note: Morgan Stanley Affordable Housing and Community Development Group

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NCSHA 2023 ANNUAL CONFERENCE & SHOWCASE

GETTING THE MOST OUT OF YOUR LIMITED BOND CAP
HFA OPPORTUNITIES IN THE CAPITAL MARKETS

OCTOBER 16, 2023

CaineMitter

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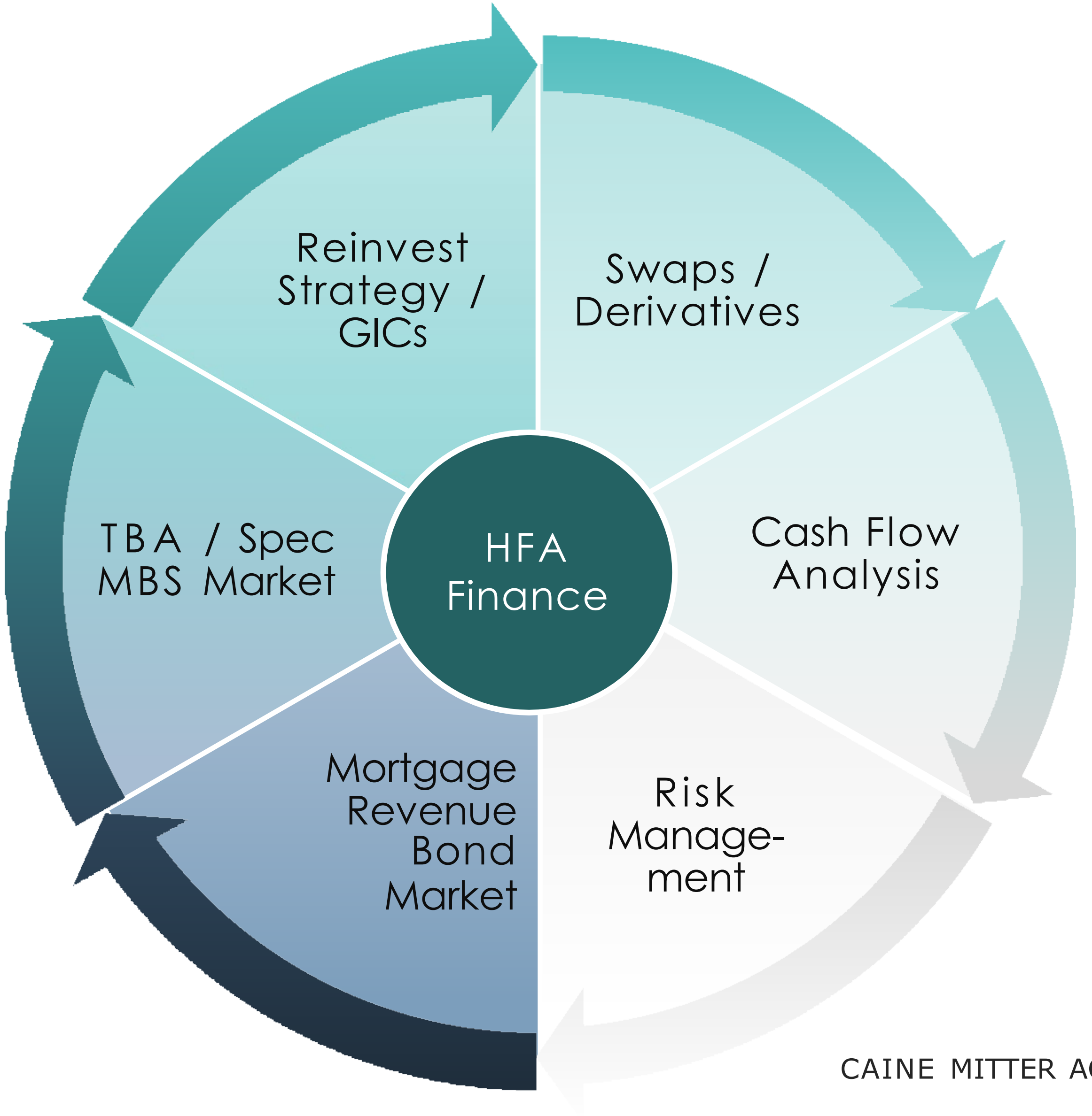
HFA CAPITAL MARKET **ACCESS / SYNERGY**



CAINE MITTER ACTIVITIES

HFAs continue to be well positioned to meet the challenges of market conditions:

- Mortgage Revenue Bonds
- TBA / MBS Secondary Market
- Derivatives
- GICs and Investment Agreements

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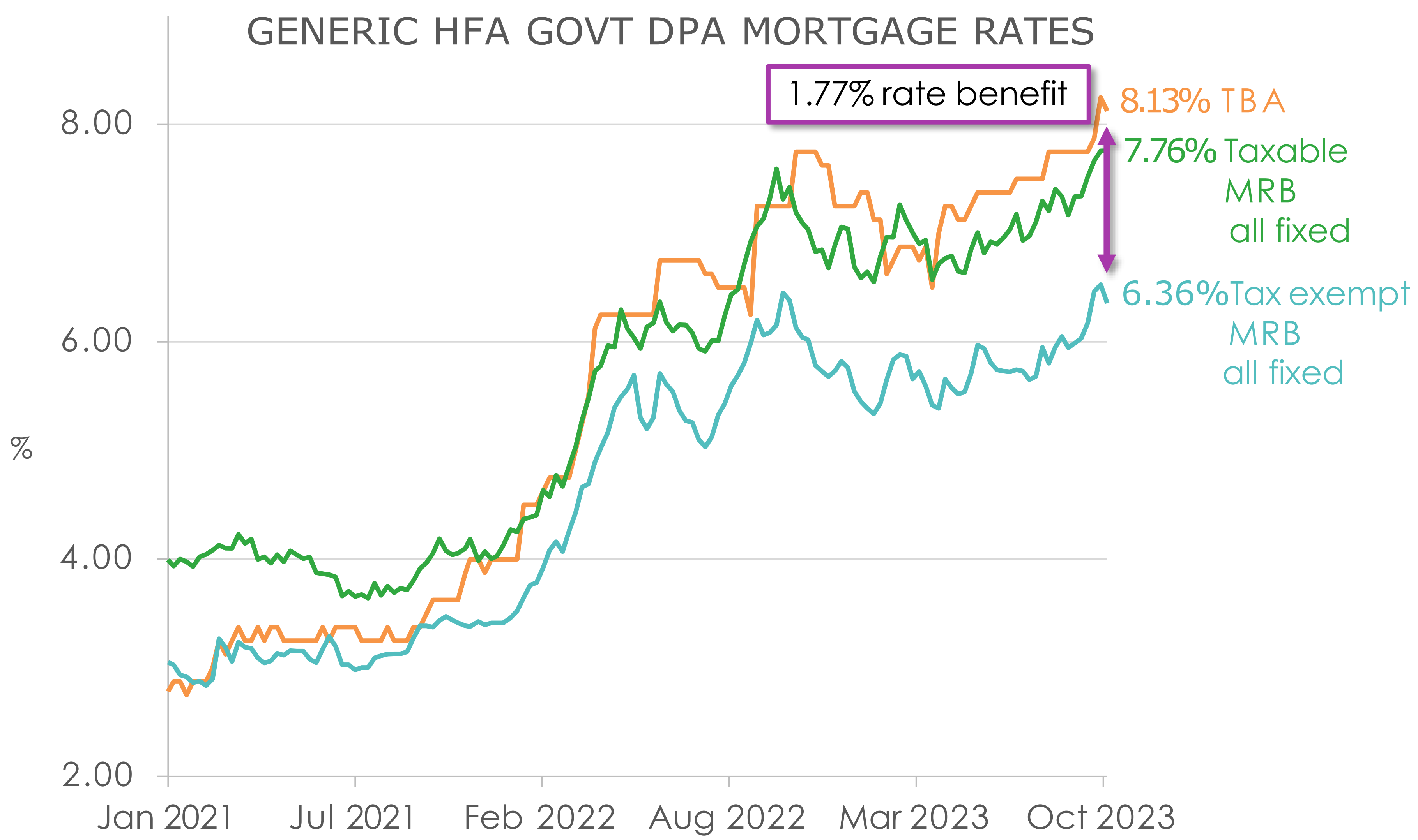
SINGLE FAMILY **MORTGAGE RATE TRENDS**



Since spring of 2022:, mortgage rates have continued to rise significantly, industry-wide.

Benefit of tax-exempt MRB over private sector cost of funds has continued to increase.

MRB rate benefit:
1.4 to 2.0%

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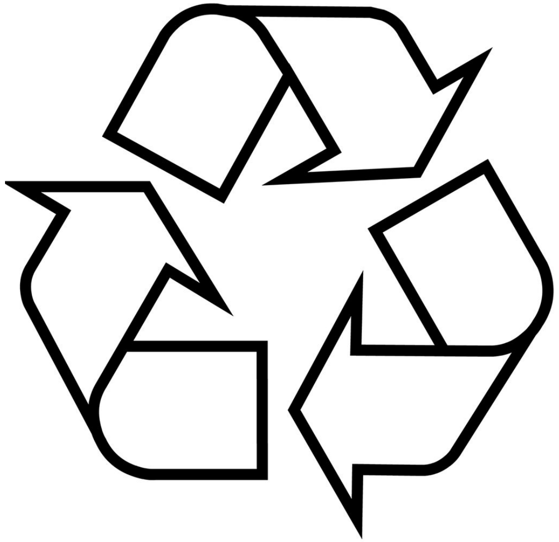
STRETCHING **VOLUME CAP**



- Reduce use of volume cap
  - Use taxable financing (does not use volume cap)
  - Consider pausing MCC (mortgage credit certificate) program
- Reuse existing volume cap
  - Replacement refunding
- Recycle mortgage repayments

HFAs can stretch volume cap by reducing, reusing, and recycling.

REDUCE VOLUME CAP USAGE

- TBA financing does not use any volume cap, but rates are currently much higher in the TBA market

- Taxable MRB financing does not use any volume cap
  - Can be used to finance both qualified mortgages that would ordinarily have been financed using tax-exempt MRB and mortgages that would otherwise have to be financed using the TBA market (e.g. non-first time homebuyer, refi, higher income, etc.)
  - Mortgage rates are higher than tax-exempt MRB but lower than TBA rates
  - Cost of financing can be lowered through the use of variable rate debt with a swap
  - Can be issued in conjunction with tax-exempt MRB

- Stop using MCCs (mortgage credit certificates)

HFAs can avoid using volume cap by financing with TBA or taxable MRB.

Taxable MRB currently offers a rate advantage over TBA. Variable rate bonds with a swap provide a further rate advantage.

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REDUCE VOLUME CAP USAGE

- Taxable MRB can be issued in conjunction with tax-exempt MRB

Taxable	Non-AMT	All Fixed Rate Full Spread Mortgage Rate	2/3 Fixed 1/3 Variable (Swap) Full Spread Mortgage Rate
100%	-	7.76%	7.28%
75%	25%	7.41%	6.91%
50%	50%	7.06%	6.54%
25%	75%	6.71%	6.16%
-	100%	6.36%	5.79%

Taxable MRB can be issued with tax-exempt MRB to reduce volume cap usage. A larger proportion of taxable bonds will result in a higher mortgage rate needed to get to the equivalent of full spread.

REUSE/RECYCLE VOLUME CAP

- Volume cap can be reused (via replacement refunding) or recycled so long as the 10-year rule is not violated
  - Repayments on mortgages financed with tax-exempt bonds must be used to redeem bonds on and after 10 years from the date of issuance of the original bonds and cannot be reused or recycled
    - Repayments received prior to the 10-year mark *can* be reused for replacement refunding or recycled

The ability to reuse volume cap via replacement refunding, or to recycle mortgage repayments is limited by the 10-year rule.

Repayments received prior to 10 years from issuance date of the original bonds financing the mortgages are eligible for replacement refunding and recycling.

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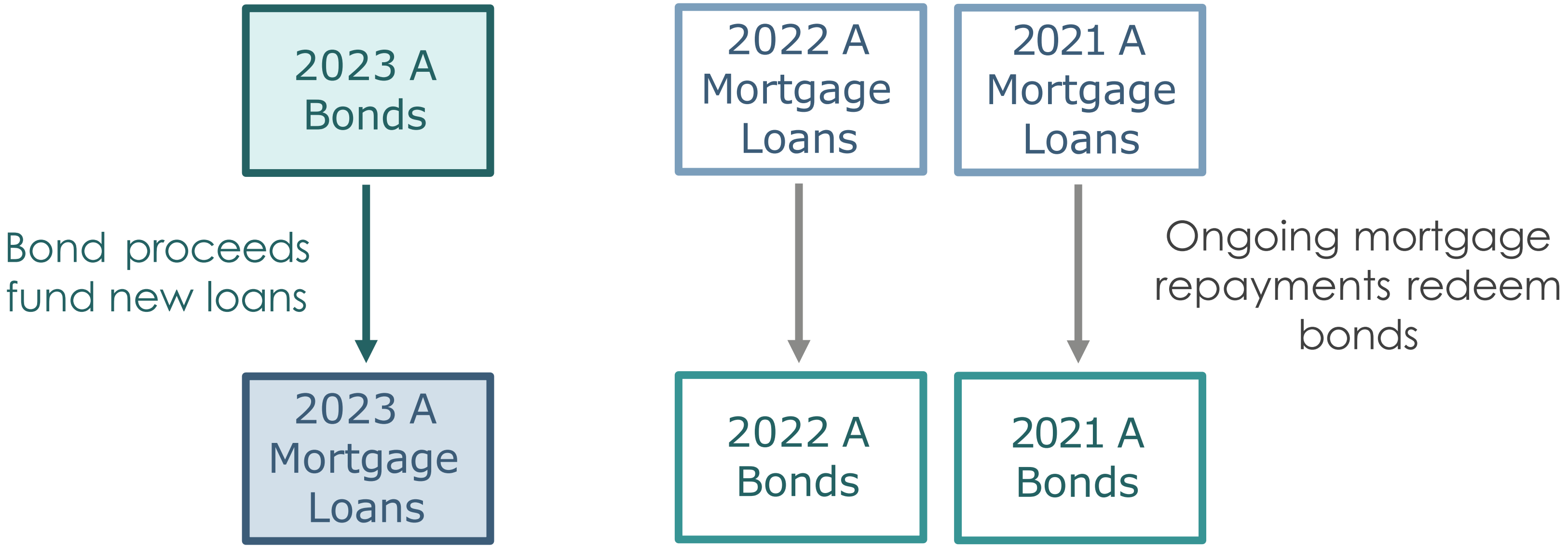
REUSE CAP: REPLACEMENT REFUNDING

- Replacement refunding is a vehicle for preserving volume cap by recycling mortgage repayments to make loans and simultaneously refunding bonds that would have otherwise been redeemed by such repayments
    - Subject to 10-year rule limitations

1. Standard cash flows (no replacement refunding)



HFAs can reuse existing volume cap through the use of replacement refunding.

REUSE CAP: REPLACEMENT REFUNDING

- Replacement refunding is a vehicle for preserving volume cap by recycling mortgage repayments to make loans and simultaneously refunding bonds that would have otherwise been redeemed by such repayments
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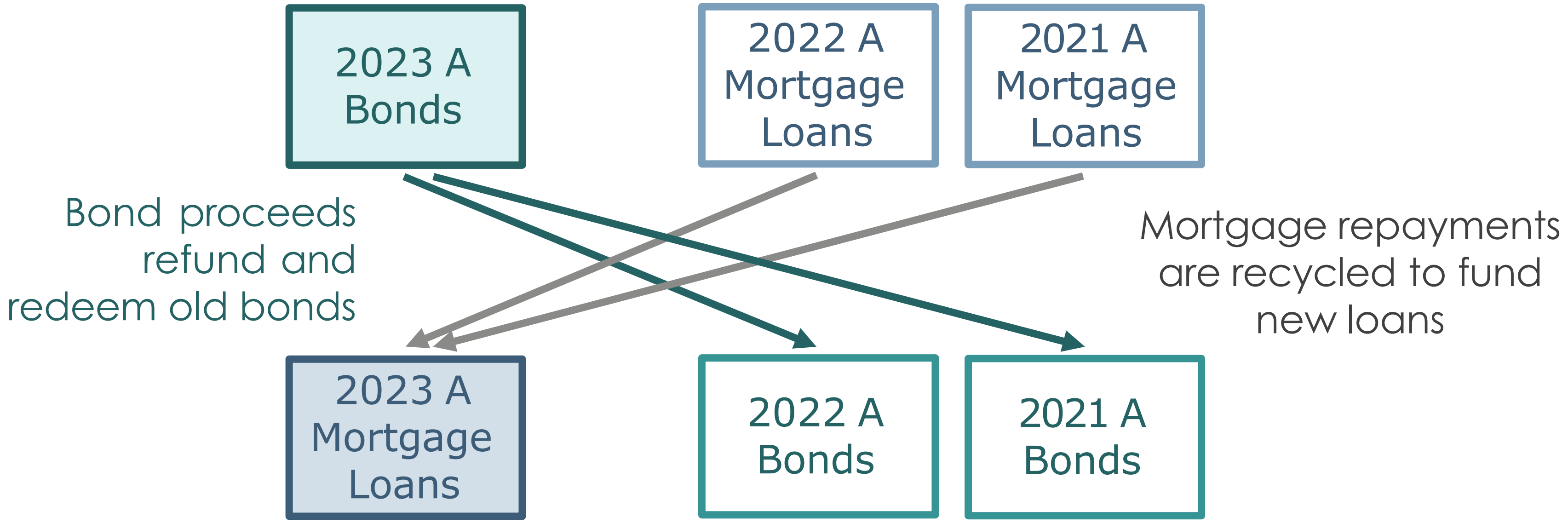
2. Replacement refunding cash flows



HFAs can reuse existing volume cap through the use of replacement refunding.

Instead of using mortgage repayments to redeem bonds in-series, new bond proceeds can be used to refund bonds, and the unused mortgage repayments can be used to finance new mortgages.

RECYCLE MORTGAGE REPAYMENTS

- Recycling is a vehicle for preserving volume cap by recycling mortgage repayments to make loans instead of redeeming bonds
  - Retains prior cost of borrowing
    - E.g., lower rate bonds issued in prior years
  - Requires mortgage yield recalculation and tracking
    - May require blending to get into mortgage spread compliance as mortgages originated today are likely to have higher yields than the mortgages originally financed
  - Subject to 10-year rule limitations

- Replacement refunding and recycling are really two different forms of recycling:
  - Replacement refunding uses current cost of funds
  - Recycling uses old (prior) cost of funds
- Generally, after meeting PAC tables and maturing principal (which is eligible for replacement refunding), if you can redeem a bond with a coupon higher than your current cost of funds, replacement refunding is better; otherwise, recycling is better

HFAs can recycle mortgage repayments and use them to finance new mortgage loans instead of redeeming bonds.

Choosing whether to use replacement refunding or recycling depends (amongst other things) on your cost of funds.

DELIBERATE ACTIONS ARE KEY

- Methods to stretch volume cap are incremental
  - Any one method at any one time may not make a huge difference, but over time, these differences add up
  - Make changes ahead of when you think you may run out of volume cap

- Choose when to use variable rate bonds (with swap)
  - Ability to use variable rate bonds is also a limited resource
  - Timing matters – issue when the rate benefit is strong

- Use a market-based approach for setting mortgage rates
  - How much subsidy is provided now vs. what will be available later?

- Every decision made now will have implications down the road

- Presentation focuses on single family; multifamily is even more incremental

Managing volume cap constraints is complicated. Having good market insights, being able to accurately forecast volume cap needs, and using various methods to stretch volume cap now will allow HFAs to maintain program continuity into the future.

THANK YOU

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