MUNICIPAL DEBT ESSENTIALS

BASICS

MECHANICS

ONGOING

40 YEARS

CALIFORNIA DEBT AND INVESTMENT ADVISORY COMMISSION

DAY 3 | ONGOING ADMINSTRATION

Issuer Responsibilities Post-Issuance

Jay M. Goldstone
Chief Operating Officer
City of San Diego

Now That You've Priced the Bonds....

- Typically, 14-30 days between pricing and closing
- During this time:
  - Lawyers are finalizing all legal documents, including the Official Statement (offering document) to reflect the pricing of the transaction
    - Changes/adjustments cannot be material to the deal
    - If material, must sticker the O/S
  - Team reviews all closing documents
  - Arrange for all documents to be signed, typically the day before actual closing
  - Morning call to confirm receipt of funds and release of bonds to DTC
  - You should be preparing for what's next

What Is Next….

A. YOU'RE TOTALLY DONE AND CAN GO BACK TO YOUR REGULAR JOB?

B. TAKE THE REST OF THE DAY OFF?

C. GO FISHING/PLAY PICKLE BALL?

D. NOW THE REAL WORK BEGINS?

Reality Sets In

- YOU'RE BASICALLY ON YOUR OWN
  - Underwriters have moved on to their next transaction
  - Bond/Disclosure Counsel have also moved on
  - Financial Advisor has basically moved on

So who does that leave?

What Do You Need To Be Thinking About

- Paying bills
- Setting up accounts
- Recording the transaction in your general ledger
- Monitoring
  - Cashflow
  - Proper use of funds
  - Timing on the use of funds
- Reporting
  - EMMA
  - CDIAC
  - Governing Board

What To Do With All This Money?

- Proceeds are received by the Issuer or Trustee
  - Trustee allocates funds between various accounts
    - Cost of Issuance
    - Construction
    - Bond Reserve
- Pay cost of issuance as invoices are received
- Determine how to invest proceeds
  - Reserve Funds
  - Construction Funds
- Let appropriate departments know that funds are available

Understand Your Responsibilities

- To the Regulators
  - IRS and SEC
  - MSRB
    - Regulates Underwriters and Municipal Advisors
    - What do I do with the disclosure letters?
      - MSRB Rules G-17, G-42
- CDIAC Reporting
  - Report of Proposed Issuance
  - Report of Final Sale
  - New Annual Debt Transparency Report
- Under the indenture, tax certificate and continuing disclosure agreement

Understand Your Responsibilities - (cont.)

- Proper use of the bond funds
  - Capital purposes
  - Projects listed
  - Like projects allowed
  - Proceeds expended in a timely manner within the tax certificate
- Properly Invested
  - Permitted investments within bond documents
  - Permitted investments within your investment policy
- Arbitrage Rebate reports prepared during the required timeframes
- Timely debt service payments
  - Include debt service in the budget
  - Monitor your cash flows to ensure adequate funds are on hand for payment

Understand Your Responsibilities - (cont.)

- Setting your proper rates
- Coordinating of project payments or bond draws with the Trustee
  - Use of the proper form
  - Attach appropriate documentation
  - Time your bond draws with cash needs
- Record Keeping
  - Accurate accounting
    - Make sure that the closing transaction is properly set up
  - Financial Statements
    - Notes to the financial statements related to debt service
  - Tracking bond payments
    - Keep track of your payments per each bond issue with details for the individual bond draws and cumulative totals. These totals should reconcile with your Trustee statements.

Get Yourself Organized

- Review your Debt Policy
- Establish a tickler system with dates & responsibilities:
    - Debt service payments
    - Continuing disclosure filings
    - Arbitrage rebate obligations
    - Spending timelines
    - Yield restrictions
    - Use of proceeds

Get Yourself Organized

- Searchable database of trigger events
  - Rating changes
  - New debt or SWAP
  - Document amendments
  - Bankruptcy
  - Legislation
  - Major judgment
  - Late payment/nonpayment
  - Late filing
- Backup planning

Post-Issuance Best Practices

- Know what's in your Continuing Disclosure Agreements (CDA)
- Understand federal and state muni tax and securities requirements
- Develop disclosure policies and procedures to ensure compliance and peace of mind
  - Formal, written, adopted
  - Review update at least every three years
  - Use assistance of outside professionals if desired (municipal advisor, counsel)
- Elements
  - List of all compliance actions at time bonds are sold – by series
  - Documentation of sources and frequency of requirements
  - Identify and assign responsibilities by title

Post-Issuance Best Practices - (cont.)

- Elements
  - Create policies and procedures that reflect who you are
  - Determine if outside vendor may be of assistance
  - Monitor changes in laws and regulations
  - Identify records to be maintained, for how long and how to maintain
  - Train responsible employees
  - Determine how to identify and correct mistakes
  - Other considerations
    - Bond Indentures/Bond Ordinance/Bond Resolution
    - Other internal finance policies and how they relate to debt management and post issuance compliance

Post-Issuance Tax Compliance

- Remember all those documents you signed at closing?
  - You now have a legal (and moral) obligation to comply
- Record retention
- Arbitrage and yield restriction
- Correct expenditure of proceeds
- Tracking use of proceeds
- Understanding and monitoring private use
- Remedies when things go sideways (call counsel, IRS VCAP program)

Record Retention

- General rule: life of the bonds plus three years
  - If new money bonds are refunded, extends to life of refunding bonds plus three years
- What do you keep?
  - Basic records relating to the bond transaction
  - Documents evidencing the expenditure of bond proceeds
  - Documents evidencing the use of bond-financed property by public and private sources
  - Documents evidencing all sources of payment and security of the bonds
  - Documents pertaining to the investment of bond proceeds
- How do you keep it?
  - IRS Electronic storage guidelines

Your Relationship With Your Trustee

- While most of your team moves on to their next deal, you and the Trustee are actively involved for the life of the bonds
- Select your Trustee based upon experience, professionalism and resources, not just price
- Trustee performs administrative functions on your behalf which directly reflects on you and your agency and the bond holders
- Selection of the Trustee should begin prior to the closing and as early in the document review process as possible

Your Relationship With Your Trustee

- What skills should they possess?
  - Legal knowledge and document review skills
  - Understanding of investments and settlement process
  - Accounting skills
  - System knowledge
  - Communication skills
  - Organization skills
- In general, they should possess a wealth of information related to your bond issue
- Get them to share this knowledge with you

It's Now Time For Arbitrage Calculation

- Arbitrage is the ability to earn profit by capitalizing in differences between investments or markets
- In the case of public finance, Arbitrage refers to ability to profit from investment of tax-exempt bond proceeds in taxable securities
- The ability to earn arbitrage depends on the relationship between taxable and tax-exempt rates and the shape of the yield curve
- Positive arbitrage represents earnings above the arbitrage yield. Negative arbitrage represents earnings below the arbitrage yield (i.e., "losses")

Arbitrage Rebate Compliance Activities

- Internal monitoring of rebate compliance
- Recommend annual calculations during construction period
  - Set aside annual rebate liability in Rebate Fund
  - Get it out of the Construction Fund
- Paying rebate is not bad, just need to monitor and pay as required
- Pay attention to requirements in Tax/Arbitrage Certificate

When is Rebate Calculated?

- Required:
  - Every five years, and on Final Maturity
  - Refunding Triggers New Final Maturity
  - 8038-T: Only file if rebate is owed
  - When required by bond indenture

- Recommended:
  - Annually during construction period

Accounting & Expenditure of Proceeds

- Reasonable expectations vs actual facts – are you spending funds on correct items?
- General Accounting
- Best Practice: Open communication with those responsible for spending the money
- Reallocation of bond proceeds
- Tracking proceeds

Private Use/Payment Tests

- Private Business Use Test:
  - No more than 10% of the proceeds of the bonds can be used for Private Business Use
- Private Payment Test:
  - No more than 10% of the payment of principal or interest on the bonds is made or secured by payments for Private Business Use
- BOTH tests must be “met” in order to have Private Activity Bonds
- Live and learn: the federal government is treated as a PRIVATE party

Be sure to talk with bond counsel about existing and changing federal tax laws

Other Compliance Issues

- Bond Indenture Requirements/Covenants
  - Coverage Ratios
  - Progress Reports/Financial Reports
  - Additional Bonds Tests

- Debt Policy Requirements

QUESTIONS

15-MINUTE

BREAK

CDIAC MUNICIPAL DEBT ESSENTIALS

Ongoing Administration:
Continuing Disclosure Responsibilities

September 29, 2022

NIXON PEABODY

SPEAKER

David Song

Associate
Project Finance and Public Finance
Nixon Peabody LLP

WHY IS DISCLOSURE NECESSARY?

- Investors in municipal securities have rights under federal securities laws
- All “material” information must be disclosed
  - What is material?
- Policy: Parties buying and selling municipal securities should have access to information necessary to make an informed investment decision

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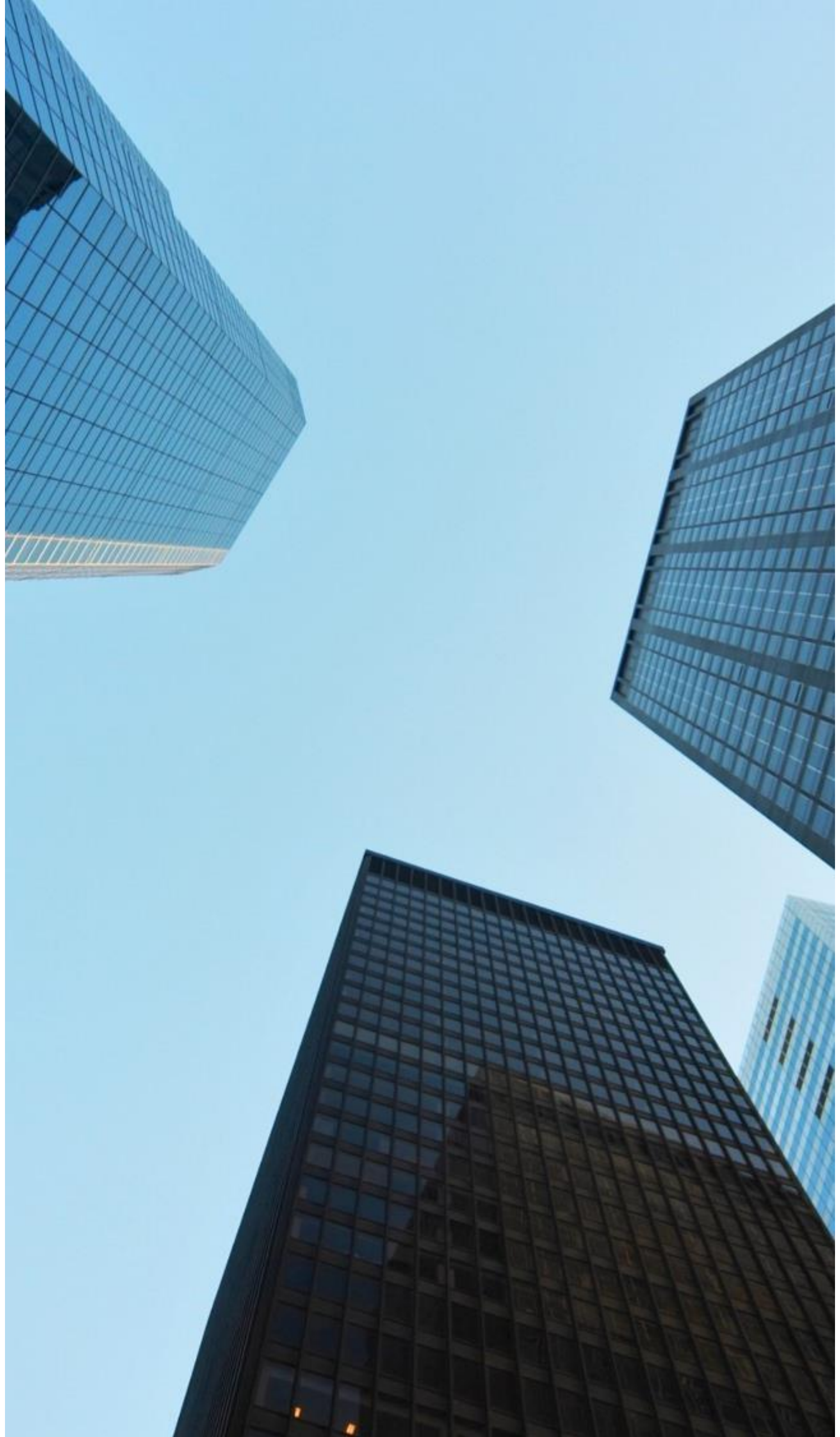
FEDERAL SECURITIES LAWS

- Securities Act of 1933—registration requirement for most securities, but does not include municipal bonds
- Securities Exchange Act of 1934—creates ongoing disclosure requirements for public companies and regulates brokers and dealers
- Both the 1933 Act and the 1934 Act contain antifraud provisions, which do apply to municipal securities



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WHEN DO DISCLOSURE RULES APPLY?

- Rule 10b-5 applies whenever an issuer is "speaking to the market"
  - New offerings
  - **Reporting under Continuing Disclosure Undertakings ("CDUs")**
  - **Voluntary filings on EMMA website**
  - Other circumstances
    - Public statements by officials—"speaking to the market" will depend on who is making the statement and the audience ("Political speech" has in the past been viewed as OK, but recent SEC actions suggest using greater caution)
    - Investor websites

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CONTINUING DISCLOSURE AND RULE 15C2-12

Originally enacted in 1989 to prevent dealers from underwriting an issue of municipal bonds unless the underwriter has been able to “obtain and review a preliminary official statement that the issuer of such securities or an obligated person deems final as of it date”

Amended in 1994 to add continuing disclosure requirements. Underwriters must reasonably determine that the issuer or an obligor has entered into a binding commitment to provide continuing disclosure.

This includes: Annual Reports, Listed Events, and notices of failure to file Annual Reports on time

Amended in 2010 to add additional Listed Events, more specific timing requirements for reporting Listed Events, and reporting requirements for new variable rate debt

CONTINUING DISCLOSURE AND RULE 15C2-12

Amended in 2018

- Additional two (2) Listed Events; must be included in new CDUs but do not apply retroactively to CDUs in existence prior to *February 27, 2019* (the "Compliance Date")
- According to *SEC News Release*, the adopted amendments "focus on material financial obligations that could impact an issuer's liquidity, overall creditworthiness, or an existing security holder's rights"
- Better inform investors and market participants about the financial condition of issuers of municipal securities and obligated persons
- Provides more timely information about "financial obligations" that previously were not reported on EMMA, particularly private placements and bank loans

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TIMING OF ANNUAL REPORTS AND LISTED EVENTS

Annual Reports

- Audited financial statements
- Financial information and operating data as specified in the continuing disclosure agreement; essentially updates key financial and operating data contained in the original offering document that is available from the issuer or the obligor's records
- Filing required annually by a fixed date specified in the continuing disclosure agreement up to one (1) year after the end of the fiscal year

Listed Events

- Listed events notices must be filed "not in excess of 10 business days after the occurrence of the event"
- Note that some of the events have a materiality qualifier, others do not (they are deemed automatically material)
- In addition, the issuer or obligor must file a notice of failure to provide an annual report on or before the time required by the CDU

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LISTED EVENTS NOTICES

Listed events that require notification within ten (10) business days (emphasis added):

1. Principal and interest payment delinquencies;
2. Nonpayment-related defaults, ***if material***;
3. Unscheduled draws on debt service reserves reflecting financial difficulties;
4. Unscheduled draws on credit enhancements reflecting financial difficulties;
5. Substitution of credit or liquidity providers, or their failure to perform;
6. Adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB), or other ***material*** notices or determinations with respect to the tax status of the security or other ***material*** events affecting the tax status of the security;
7. Modification to rights of security holders, ***if material***;

LISTED EVENTS NOTICES

Listed events that require notification within ten (10) business days:

8. Bond calls, ***<u>if material,</u>*** and tender offers;
9. Defeasances;
10. Release, substitution, or sale of property securing payments of the security, ***<u>if material</u>***;
11. Rating changes;
12. Bankruptcy, insolvency, receivership, or similar event of an obligated person;
13. The consummation of a merger, consolidation, or acquisition involving an obligated person or the sale of all or substantially all of the assets of the obligated person, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, ***<u>if material</u>***;
14. Appointment of a successor trustee or additional trustee or the change of name of a trustee, ***<u>if material</u>***;

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NEW "LISTED EVENTS" ADOPTED BY SEC

15. Incurrence of a financial obligation of the obligated person, ***if material***, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a financial obligation of the obligated person, any of which affect security holders, ***if material;***

16. Default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a financial obligation of the obligated person, any of which ***reflect financial difficulties.***

INCURRENCE OF A FINANCIAL OBLIGATION: LISTED EVENT (15)

Key Takeaways:

- Disclosure will provide investors with important information about current financial conditions and potential liabilities, including potential impacts on the liquidity and overall creditworthiness of the issuer or obligated person or which may otherwise affect security holders of the debt to which the CDU relates
- A financial obligation generally should be considered to be incurred when it is enforceable against an issuer or obligated person
- Applies to CDUs entered on or after the Compliance Date; and new, material financial obligations incurred on and after the date the CDU was entered.
- The second part of event (15) can be retroactive, and requires reporting of material changes to any financial obligation whether incurred before or after the date of a new CDU
- Does not include municipal securities as to which a final official statement has been provided to the Municipal Securities Rulemaking Board (“MSRB”) consistent with Rule (e.g., posted on EMMA and having an effective CDU) this exception is designed to avoid duplication of regulations

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INCURRENCE OF A FINANCIAL OBLIGATION: LISTED EVENT (15)

Key Takeaways:

- A “financial obligation” is defined as a: (i) debt obligation, (ii) derivative instrument entered into in connection with, or pledged as security or a source of payment for, an existing or planned debt obligation, or (iii) a guarantee of either (i) or (ii)
- A debt obligation is any short-term or long-term debt obligation under the terms of an indenture, loan agreement, lease, or similar contract that represents a borrowing of money to be repaid at a later date; the term is broader than the state law definition of debt and focuses on impacts to liquidity or creditworthiness of the issuer
- Not every incurrence of a financial obligation or agreement to terms is material; materiality determinations under (15) should be based on whether the information would be important to the total mix of information made available to the reasonable investor consider potential impacts on the issuer’s liquidity or creditworthiness or the rights of security holders to which the CDU relates
- Lines of credit, draw-down bonds, or commercial paper only needs to be reported once, when the debt is legally enforceable (whether or not any funds are immediately drawn or borrowed) and not on each draw or CP issuance, as long as the initial reporting contains all the material terms of the borrowing program

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… REFLECT FINANCIAL DIFFICULTIES: LISTED EVENT (16)

Key Takeaways:

- An event that occurs under the terms of a financial obligation pursuant to (16) that occurs on or after the Compliance Date must be disclosed regardless of whether such financial obligation was incurred before or after the Compliance Date
- **"Reflect Financial Difficulties"** concept used since adoption of the Rule; existing disclosure events, including unscheduled draws on debt service reserves (3) and unscheduled draws on credit enhancements (4)
- Consider whether the event may have potential adverse impact on the liquidity and overall creditworthiness of the issuer/obligated person or affect security holders
- **"Default"** can be monetary default (failure to pay principal/interest or other funds due) or failure to comply with specific covenants; <u>does not have to be an "event of default" as defined in bond documents</u>
- **"Other Similar Events"** broad concept to capture circumstances that reflect financial difficulties even if they do not qualify under any of the prior types of events

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UNDERWRITER CONSIDERATIONS

Understand the approach of underwriters to verifying that issuers have complied with the new rules once deals are offered after February 27, 2019:

- Rule 15c2-12 requires underwriters to independently investigate an issuer's compliance with its CDU reporting over the past five (5) years
- For an issuer's first deal after the Compliance Date, underwriters may want to see new policies and procedures to confirm appropriate internal controls will be in place
- For subsequent deals, they will need to determine if event (15) or (16) have occurred and were reported within the requisite ten (10) business days

CONSEQUENCES OF FAILURE TO COMPLY

- Non-compliance is not an event of default under bond documents or continuing disclosure agreements but bondholders have the right to sue for compliance with continuing disclosure obligations
- Must disclose a material failure to comply in future official statements for five (5) years following the failure
- Can give rise to a securities law fraud case if there is a misstatement about past compliance in a later offering document
- No clear guidance on what is a “material” failure to comply, especially as to late filings (Underwriters now insist on listing any non-compliance, even if seemingly trivial)

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TYPES OF SEC ENFORCEMENT ACTIONS

Since the mid-2000's, the SEC has ramped up enforcement focused on the municipal market.

- Inadequate pension disclosures
- Misleading or incomplete financial disclosures
- Failure to disclose the use of unusual accounting actions
- Failure to disclose shortcomings in economic development projects
- Failure to disclose financial or legal risks
- Failures of continuing disclosure

RESULTS OF SEC ENFORCEMENT ACTIONS

- Governmental agencies were levied civil fines, up to hundreds of thousands of dollars
- Required to retain outside consultants and/or legal counsel to review disclosure practices
- Individuals working for agencies were fined and, in some cases, barred from participating in municipal securities offerings
- In one instance, an individual sentenced to jail for 2 1/2 years
- Cost of defending cases brought by the SEC can be significant
- Bad publicity, political damage, and possible rating reductions
- SEC doesn't need to prove that allegations resulted in any bond default, loss of value, or harm to investors

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ENFORCEMENT ACTIONS RELATING TO CONTINUING DISCLOSURES

Continuing Disclosure – Pre-Municipalities Continuing Disclosure Cooperation Initiative (“MCDC”) Cases

City of Harrisburg (2013)

- May of 2013, the SEC charged the City of Harrisburg, Pa. (“City”) with securities fraud for its misleading public statements when its financial condition was deteriorating and financial information available to municipal bond investors was either incomplete or outdated
- SEC investigation found that the City made misleading statements in the City’s budget report, annual and mid-year financial statements and a State of the City address and also failed to comply with continuing disclosure requirements to provide certain ongoing financial information and audited financial statements for the benefit of investors from 2009 to 2011
- The City was nearly bankrupt, under state receivership, and as of March 2013, had missed approximately $13.9 million in general obligation debt service payments, and was the obligated person for approximately $455 million of outstanding debt for several of its component units
- Significant because this was the first time the SEC charged a municipality for misleading statements made outside of its securities disclosure documents
- The City settled with the SEC and was ordered to cease and desist from committing or causing violations of Section 10(b) of the Securities Exchange Act of 1934 and Rule 10b-5.

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ENFORCEMENT ACTIONS RELATING TO CONTINUING DISCLOSURES

Continuing Disclosure – Pre-MCDC

West Clark Community Schools, Indiana and City Securities Corporation (2013)

- In the summer of 2013, the SEC settled an antifraud case against a small school district in Indiana which stated in its Official Statement (2007) that it had not failed to comply in all material respects with any prior continuing disclosure undertakings but had, in fact, failed to file any annual reports—SEC alleged this misstatement in the Official Statement was a violation of Section 17(a)(2) of 1933 Act
- The underwriter paid a $580,000 settlement ($280k disgorgement and $300k penalty) for failing to investigate the issuer’s statements, and the individual at the underwriter paid approximately $38,475 ($20k disgorgement and $18k penalty) with a one-year collateral bar and a permanent supervisory bar
- Significant because this was the first time the SEC charged (i) a municipal issuer with falsely claiming in an Official Statement that it was fully compliant with annual disclosure obligations and (ii) an underwriter and its principal for not doing the necessary research to attest to the truthfulness of the issuer’s claims

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ENFORCEMENT ACTIONS RELATING TO CONTINUING DISCLOSURE

Post-MCDC Initiative Cases

City of Beaumont, CA (2017)

- Beaumont Financing Authority ("BFA") issued approximately $260 million in municipal bonds in 24 separate offerings from 2003 to 2013, each underwritten by O'Connor & Company Securities, Inc. ("O'Connor").
- From 2004 to 2013, BFA regularly failed to provide investors with the promised information (in a complete and timely manner) and failed to disclose this fact when it issued bonds in 2012 and 2013 totaling more than $32 million.
- BFA and O'Connor did not voluntarily report to the SEC under MCDC. O'Connor was found to have failed to conduct reasonable due diligence on CDU compliance.
- The BFA and O'Connor would have been eligible for more lenient remedies had they self-reported during the MCDC Initiative. The SEC went beyond the MCDC settlements by including individual issuer officers and requiring that BFA engage an independent consultant.

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ENFORCEMENT ACTIONS RELATING TO CONTINUING DISCLOSURE

City of Beaumont, CA (2017) cont'd

Significant because (i) BFA was required to hire an independent consultant on securities procedures and (ii) an individual official (city manager) was fined $37,500 and agreed to be <u>permanently</u> barred from participating in any future municipal bond offerings.

O'Connor was fined $150,000 and was ordered to retain a consultant to review its policies and procedures. It's investment banker was ordered to pay a $15,000 penalty and serve a six month suspension from the securities industry.

ENFORCEMENT ACTIONS RELATING TO CONTINUING DISCLOSURE

Post-MCDC Cases

Lawson Financial Corp (2017)

- Lawson Financial Corporation ("Lawson Financial") was the underwriter for multiple issues for entities controlled by Richard Brogdon ("Brogdon"), the proceeds of which were to be used for projects for nursing homes, assisted living facilities, and retirement housing.
- The offering documents represented that the borrowers had not failed to comply with any prior CDUs, when, in fact, they had consistently failed to provide the required information.
- The SEC found that Lawson Financial conducted inadequate due diligence, did not review EMMA, and solely relied on Brodgen's representations. Lawson Financial and Robert Lawson paid disgorgement of approximately $198,000, Lawson Financial paid a penalty of approximately $198,000, and Robert Lawson paid a penalty of $80,000 and was barred from the securities industry for three years. Penalties were approximately double what the firm would have paid under the MCDC Initiative.
- Lawson Financial's counsel was also charged and paid nearly $45,000 and agreed to the entry of an order permanently suspending him from appearing and practicing before the SEC as an attorney.
- The SEC separately charged Brogdon with fraud and is seeking an order for Brogdon to repay $85 million to investors.

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ENFORCEMENT ACTIONS RELATING TO CONTINUING DISCLOSURE

Post-MCDC Cases

Municipal Financial Services, Inc., Oklahoma (2017)

- SEC brought an administrative action against a municipal advisor for violating its fiduciary duty to the city by failing to advise the city that amending the reporting period on three prior CDUs violated the CDUs and did not advise the city to notify bondholders of those prior issues that the CDU deadline had been changed.
- Firm was fined $50,000, and each of the two principals was fined $8,000 each. Firm was fined because of its contractual duty to help the City with CDU compliance.

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CASE FOR ESTABLISHING POLICIES AND PROCEDURES

- Shows the organization cares about compliance and is actively managing its compliance
- Might be a mitigating factor when SEC calls
- May lessen the risk of personal liability for staff
- Greater attention to disclosure made for continuing disclosure compliance and for new offerings

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ESTABLISHING POLICIES AND PROCEDURES

- Establish internal written procedures to comply with CDUs
- Identify key personnel and their responsibilities for CDU compliance
- Review annual reports and event notices
- Review historical compliance with CDU undertakings
- Assign a coordinator
- Monitor compliance
- Information gathering/Internal ticker system/create a template or chart for annual reports and event filings
- Training

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THANK YOU

NIXON PEABODY

Investing Bond Proceeds

September 29, 2022

415-393-7270

pfmam.com

Monique Spyke, Managing Director

Co-Head of California Practice

PFM Asset Management LLC

Let’s Build Our Project!

When Should You Think About Investments?

Well BEFORE the bond pricing	When drafting bond documents	When developing "net" costs in funding plan
▸ Allows time to implement the investment "game plan" at **bond closing**	▸ Definition of "permitted investments"	▸ Critical when determining how much to raise/borrow

Why Is Having a Strategy Important?

- Increases the potential for higher earnings on the proceeds of a debt issue
- Reduces the amount you need to borrow
- Offers potential to lessen the amount you may need to spend from general fund
- Optimizes retainable earnings
- Plans for “best case scenario” positive arbitrage liability

Factors Influencing Investment Decisions

- Structure of the bonds
- Arbitrage rebate requirements
- Cash flow schedules
- Permitted investments
- Prevailing and expected rate environment

Why Is Bond Structure Important?

- General obligation bonds typically have one major fund
- Revenue bonds may have multiple funds

Debt-funded

- Construction/Project Fund
- Capitalized Interest Fund
- Debt Service Reserve Fund

Funded by project revenues or other sources

- Debt Service Fund
- Revenue Fund
- Other Reserve Funds

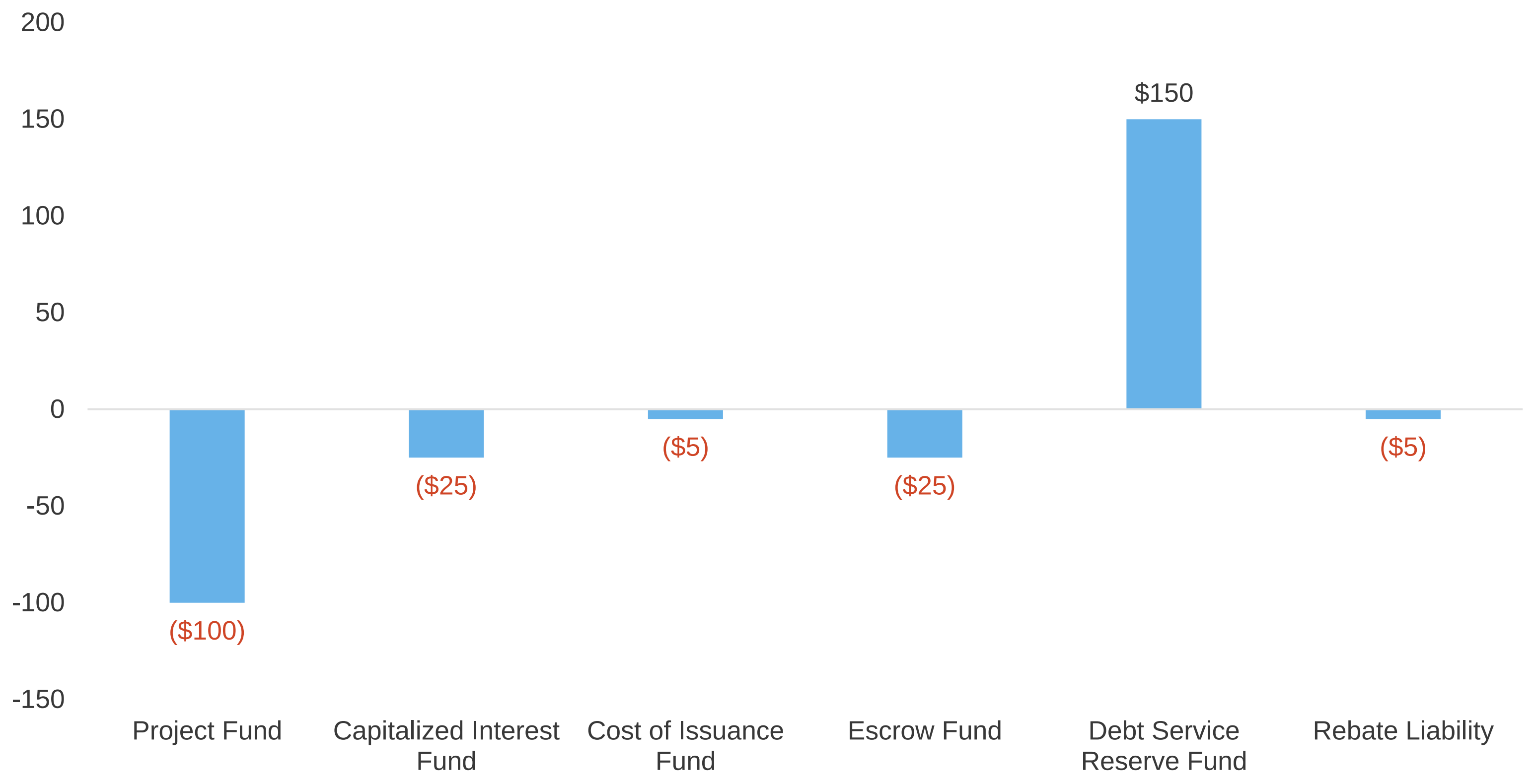
Arbitrage Impacts the Investment Strategy

- Arbitrage rules apply to every tax-exempt/tax-advantaged borrowing

- Limits earnings on gross proceeds to the bond yield
  - “Positive arbitrage”
  - “Negative arbitrage”

Arbitrage Rebate Liability Aggregated Amongst Issue Funds

- Arbitrage is cumulative over the life of a bond issue
- Negative arbitrage can blend away positive

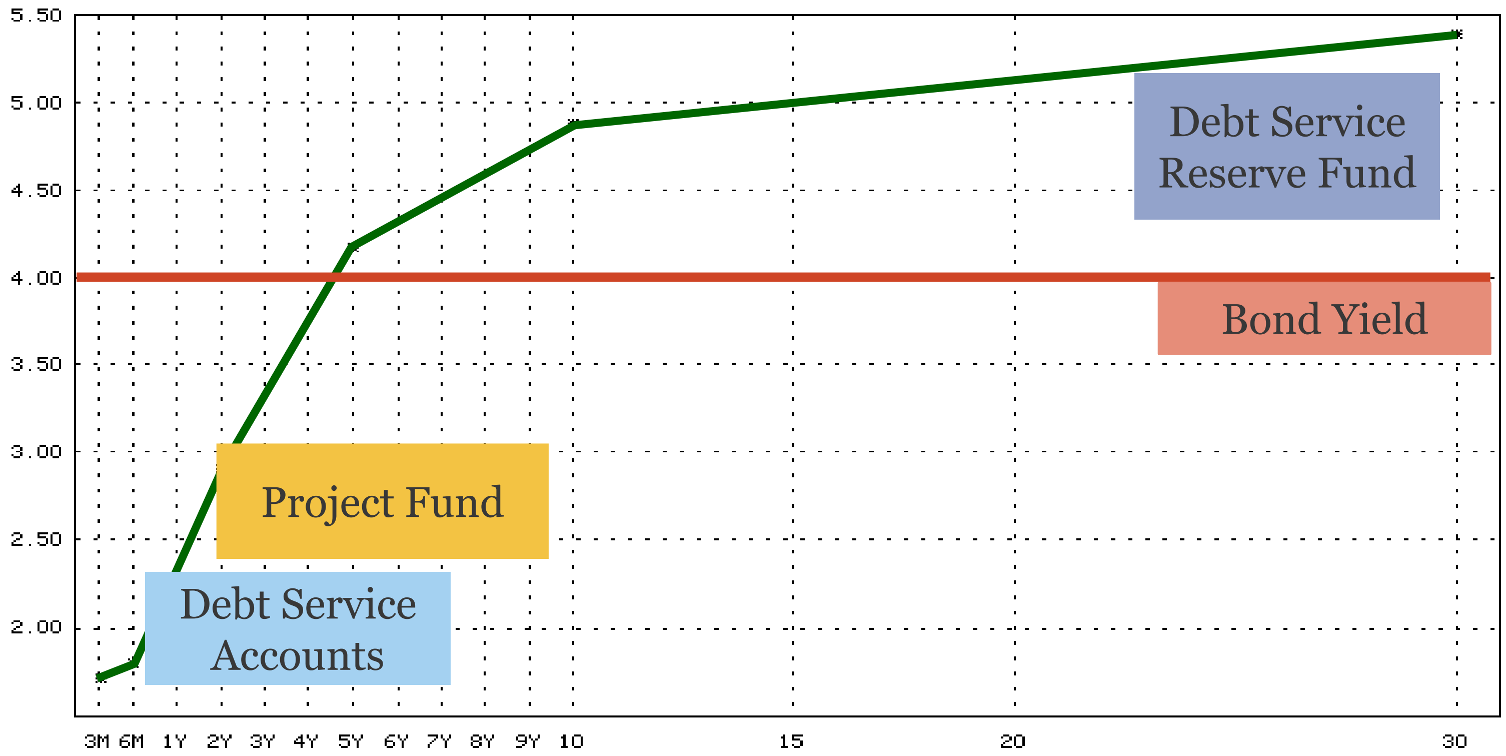


Arbitrage Considerations

- Yield restriction is also cumulative, but begins at the end of the so-called temporary period
- Waiving the temporary period may be a good idea to start the clock early in a low interest rate environment but not when earning positive arbitrage is a real possibility
- Pay particular attention to spending exceptions in this higher interest rate environment

Cash Flow Will Impact Return

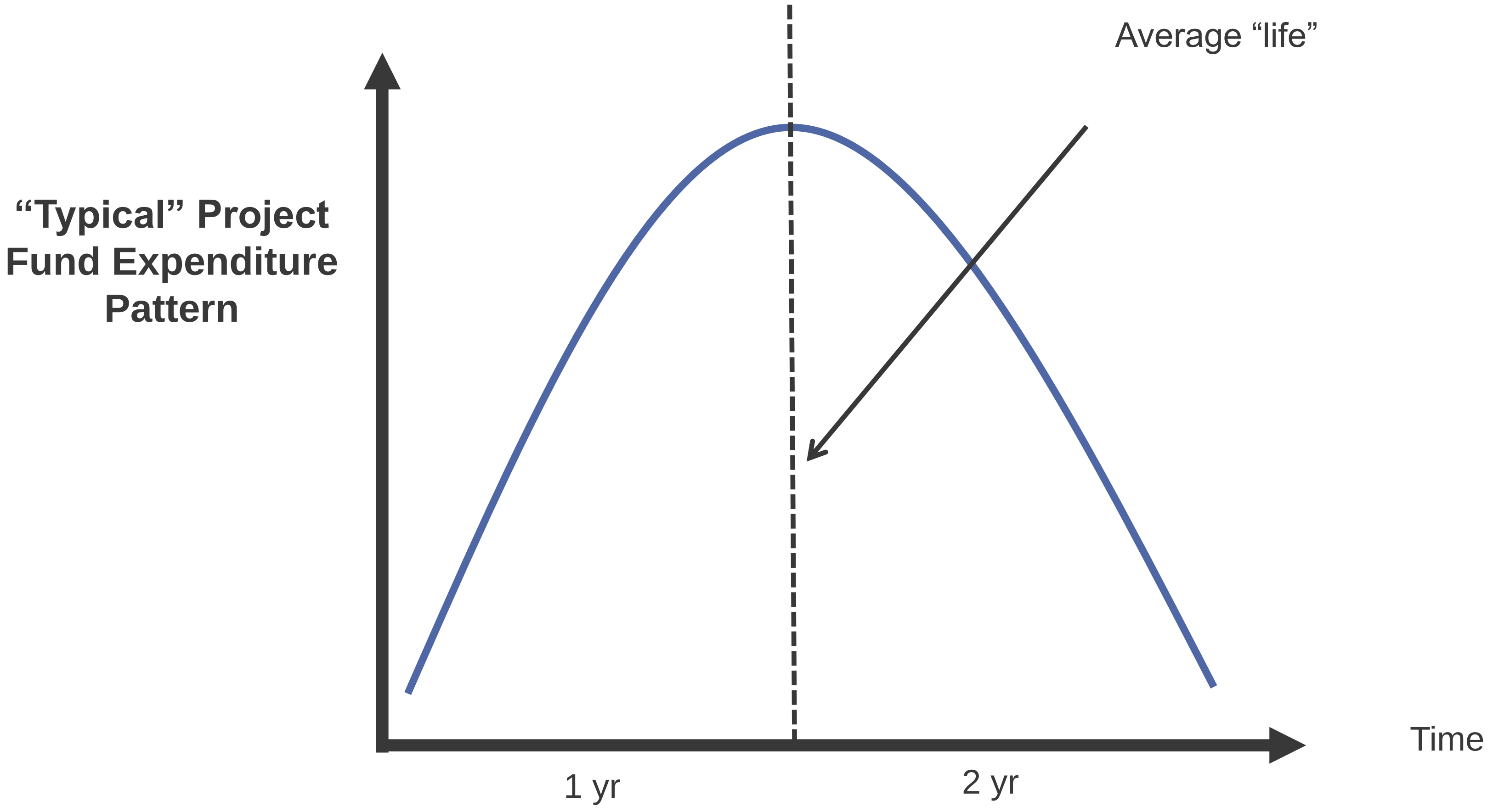
“Normal” U.S. Treasury Yield Curve



What Is a Draw Schedule?

- A schedule of anticipated funding needs for project or a series of projects
- May be funded entirely with bond proceeds or may be funded by cash and bond proceeds
- A draw schedule may apply to just one project, or it may apply to several projects

Typical Draw Schedule



If Draw Schedule Is Uncertain...

- Analyze historical capital spending patterns
- Structure investments around conservative estimates
- Build in additional liquidity
- Invest in securities that can be easily liquidated
- Rebalance based on changes in cash flows and/or market conditions

If Draw Schedule Is Rather Uncertain…

- Ladder investments, targeted to specific cash flow needs
- Monitor periodically to determine if actual expenditures are in line with expected project fund draws
- Rebalance based on changes in cash flows and/or market conditions

Bond Documents

- Tax or non-arbitrage certificate

- Trust indenture or bond resolution
  - Permitted investments
  - Establishment of funds
  - Investment of funds

- Official statement
  - Description of the project

Permitted Investments

Investments determined by:

- Government Code
  - Section 53601(m)
- **Trust indenture/resolution**
- Investment policies
- Other requirements

Mixing and Matching Investments

Typical bond proceeds investments

Liquidity pools	**Portfolio of securities**	**Investment agreements**

Liquidity Pools

Vehicle	Type of Fund	NAV	Rating
Money Market Fund	• Government • Prime	• Stable NAV • Varies	Varies
LAIF	Hybrid	Hybrid	Not rated
County Pools	Varies	Varies	Varies
CAMP	Liquidity pool	Stable NAV	AAAm

Standard & Poor’s fund ratings are based on analysis of credit quality, market price exposure, and management. According to Standard & Poor’s rating criteria, the AAAm rating signifies excellent safety of invested principal and a superior capacity to maintain a $1.00 per share net asset value. However, it should be understood that the rating is not a “market” rating nor a recommendation to buy, hold or sell the securities. For a full description on rating methodology, visit Standard & Poor's website.

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Liquidity Pools

Features

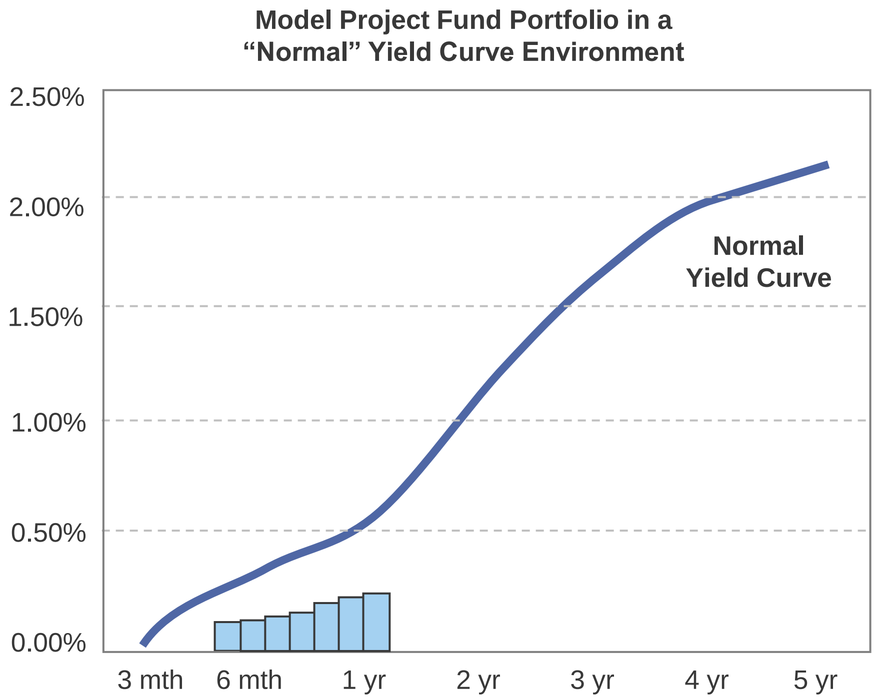
- Liquidity within restrictions of investments
- Ease in administration

Issues to consider

- Variable investment rate
- No customization to draws

Portfolio of Securities

- Laddered portfolio matched to draw schedule
- Fixed rate of interest
- Reinvestment risk if draw schedule is delayed
- Interest rate risk if the interest rate environment changes



U.S. Treasury Obligations

Issuer: U.S. Government

Credit Quality: Risk Free

Liquidity: High (active market)

Type	Term to Maturity	Interest
Bills	1, 3, 6, 12 months	Interest at Maturity
Notes	2 – 10 years	Coupon
Bonds	10 – 30 years	Coupon
Strips	3 months – 30 years	Interest at Maturity

Federal Agency/GSE Obligations

Issuer:	Federal agencies
	Government sponsored enterprises (GSE)
Credit Quality:	Most are highly rated
	Most **do not** carry explicit U.S. Government guarantee (full faith and credit)
Term of Maturity:	1 day to 20 years
Liquidity:	Generally high, but depends on structure
Return:	Higher than U.S. Treasury obligations
Caution:	May have complicated structures
	May be callable

Commercial Pager

Issuer:	Domestic and foreign corporations
Credit Quality:	Investment grade
Term of Maturity:	1 to 270 days
Liquidity:	Moderate to high
Return:	Moderate to high
Cautions:	Unsecured promissory note
	May be asset-backed
	Credit analysis required

Negotiable Certificates of Deposit

Issuer:	Domestic and foreign financial institutions
Credit Quality:	Based on NRSRO of issuing bank
Term of Maturity:	0 to 5 years
Liquidity:	Moderate
Return:	Moderate to high
Cautions:	Unsecured deposit
	Credit analysis required

Corporate Notes

Issuer:	Publicly owned corporations
Credit Quality:	Varies
Term of Maturity:	1 to 30+ years
Liquidity:	Moderate
Caution:	Unsecured promissory note
	Credit analysis required

Yield Environment as of August 31, 2022

Maturity	Treasury	Federal Agency	AA Corporate	A Corporate
3-Month	2.92%	3.18%	3.12%	3.30%
6-Month	3.31%	3.30%	3.25%	3.41%
1-Year	3.50%	3.54%	3.48%	3.61%
2-Year	3.49%	3.54%	3.65%	3.87%
3-Year	3.51%	3.51%	3.72%	3.97%
5-Year	3.35%	3.45%	3.84%	4.13%
10-Year	3.20%	3.52%	4.15%	4.50%

Source: Bloomberg BVAL yield curves for Treasury and Corporate yields, TradeWeb for Federal Agency yields. 3- and 6-month corporate yields from commercial paper; A-1+ for AA and A-1 for A.

Portfolio of Securities

Features

- Customized investment strategy
- Active trading can improve yield
- Portfolio restructured as draw schedule changes and to adjust to changes in market
- Ability to lock in higher yield on longer-term funds

Issues to consider

- Can be time consuming to monitor and manage
- Slightly higher transaction costs may be incurred
- Mark-to-market risk for reserve fund
- Reduced liquidity

Investment Agreements

Various types

- **Guaranteed investment contracts**
- **Forward delivery agreements**
- **Repurchase agreements**

Considerations for Structured Investments

Benefits

- Fully customizable
- Agreements can be structured to include downgrade triggers and collateralization requirements
- May provide exposure to infrequent issuers
- Potential to utilize different coupon structures
- Typically valued at par, which may limit interest rate risk

Risk

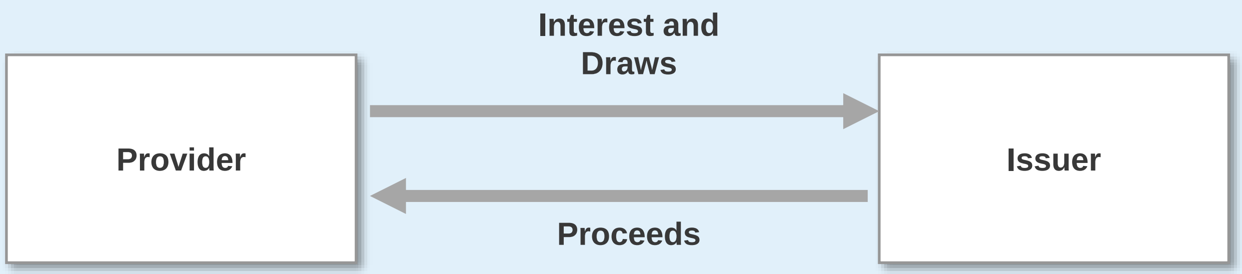
- Credit and bankruptcy risk
- Lack of pricing transparency and limited liquidity due to reduced provider participation and lack of secondary market
- Customization premium reduces return, particularly for secured structures
- Two-way collateralization may be required based on creditworthiness of investor
- Requires extensive analysis to determine relative value versus other alternatives and in-depth conversations with counsel

Applications

- Lock in rate of return on future cash flows and/or deposits
- Achieve exposure to an area of the yield curve potentially without taking on interest rate risk
- Use of floating- or variable-rate coupons, including potential exposure to different indices
- More complex coupon structures and/or underlying indices will have less provider participation

Uncollateralized Investment Agreements

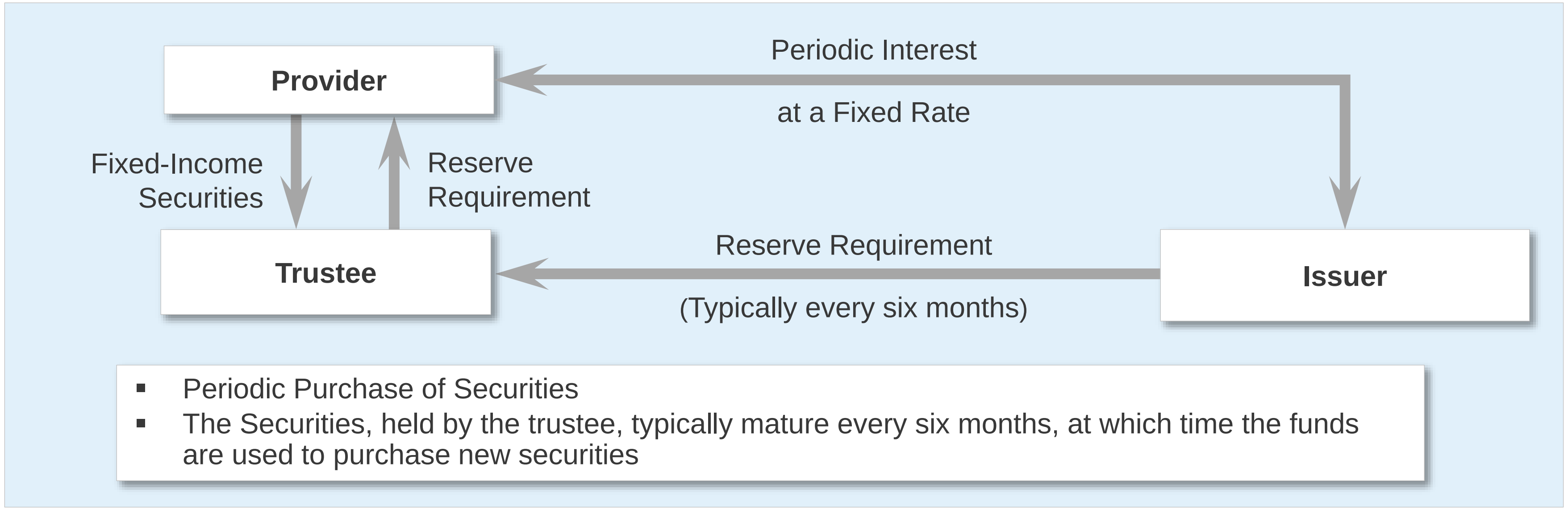
- Provider guarantees a rate of return on all invested proceeds
- Security for investment is the pledge/guarantee of the counterparty



- Issuer wires Project Funds to Provider
- Provider Pays interest and returns principal for project costs

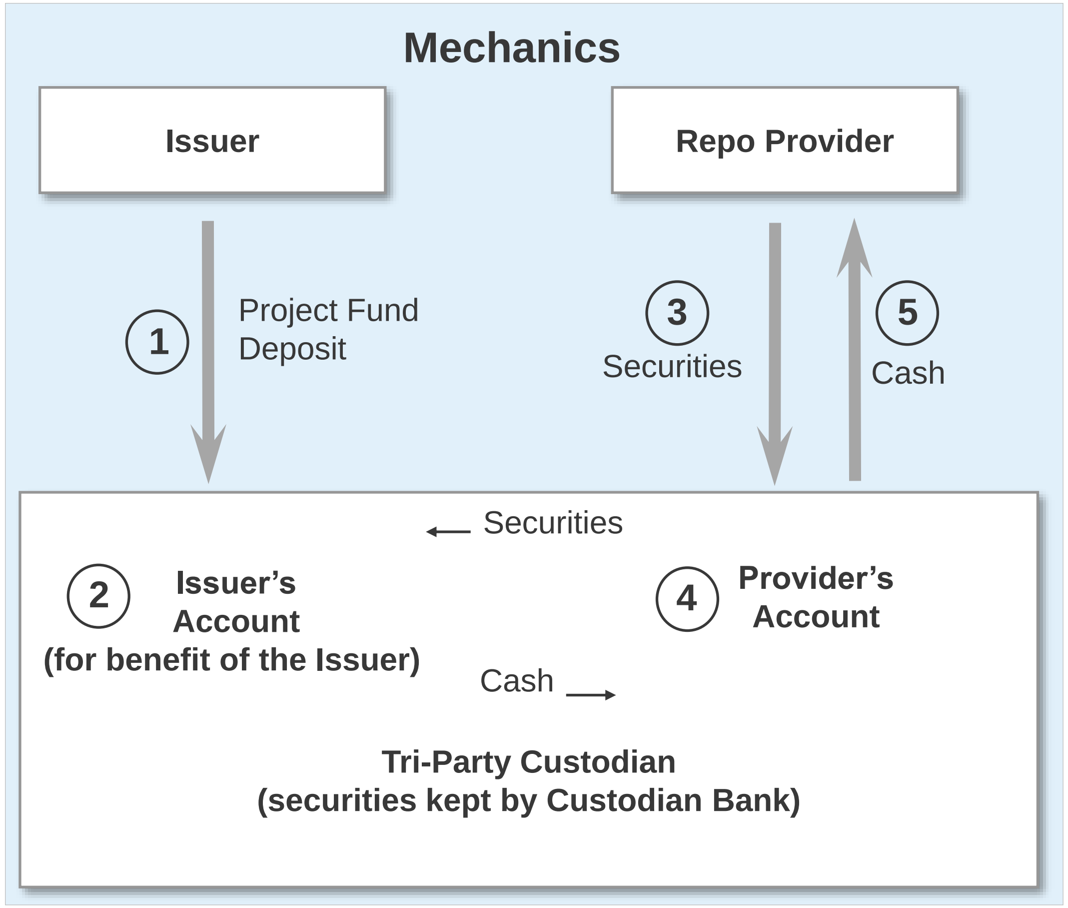
Forward Delivery Agreements

- Provider is required to sell eligible securities the investor based on a pre-set schedule



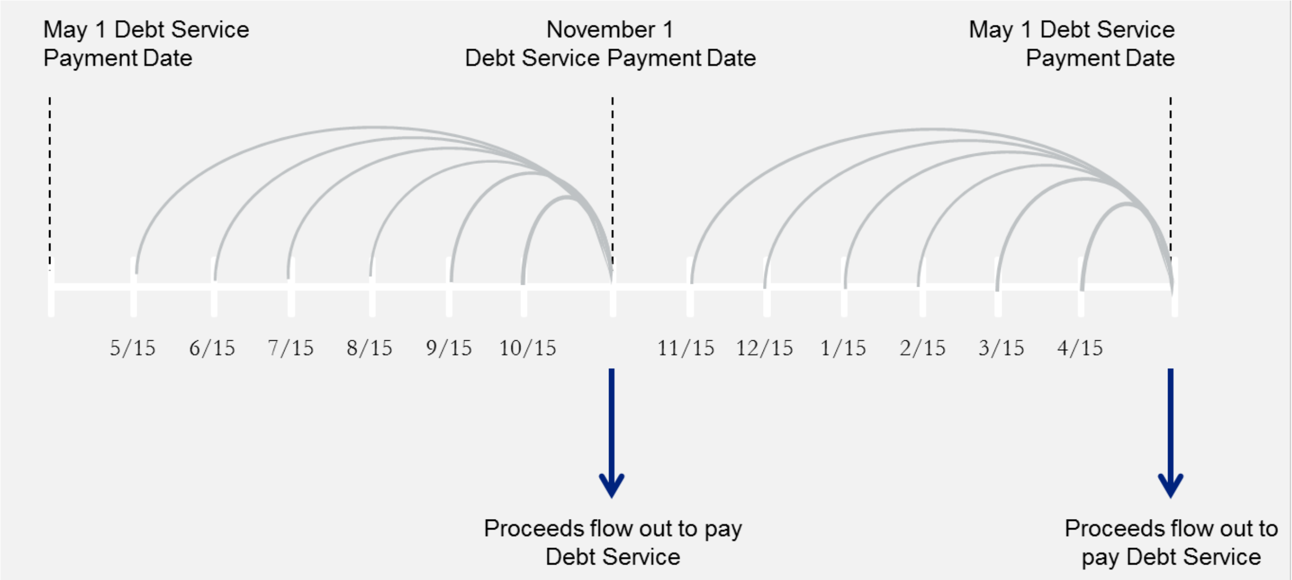
Flexible Repurchase Agreements

- Provider sells securities to an investor with a pledge to repurchase them in the future



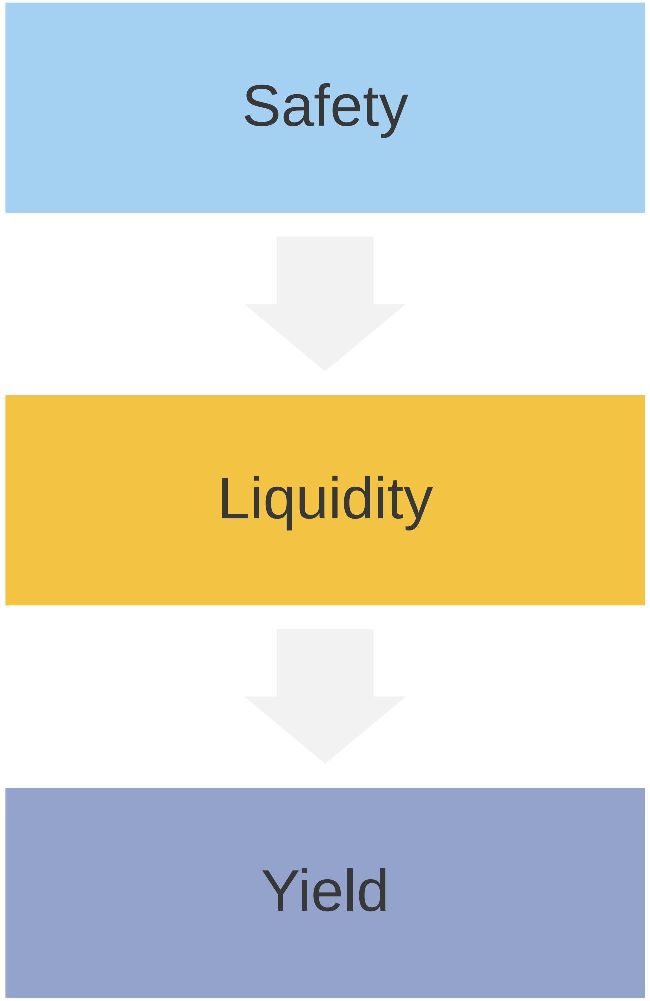
Cash Flow Factors for Other Funds

- Debt Service Reserve
  - Mark-to-market
  - Amortization
- Capitalized Interest
- Debt Service
  - Bona Fide?



Know Your Risks and Remember Your Objectives

- Interest rate risk
- Reinvestment risk
- Credit/Default risk
- Call risk



Current Market Themes

Inflation

- The Consumer Price Index is increasing 8.5% year-over-year as of July 31, 2022.
- The Federal Reserve has increased the overnight federal funds target rate four times in 2022.
- The Federal Reserve is expecting to continue to hike interest rates to combat inflation.

Unemployment

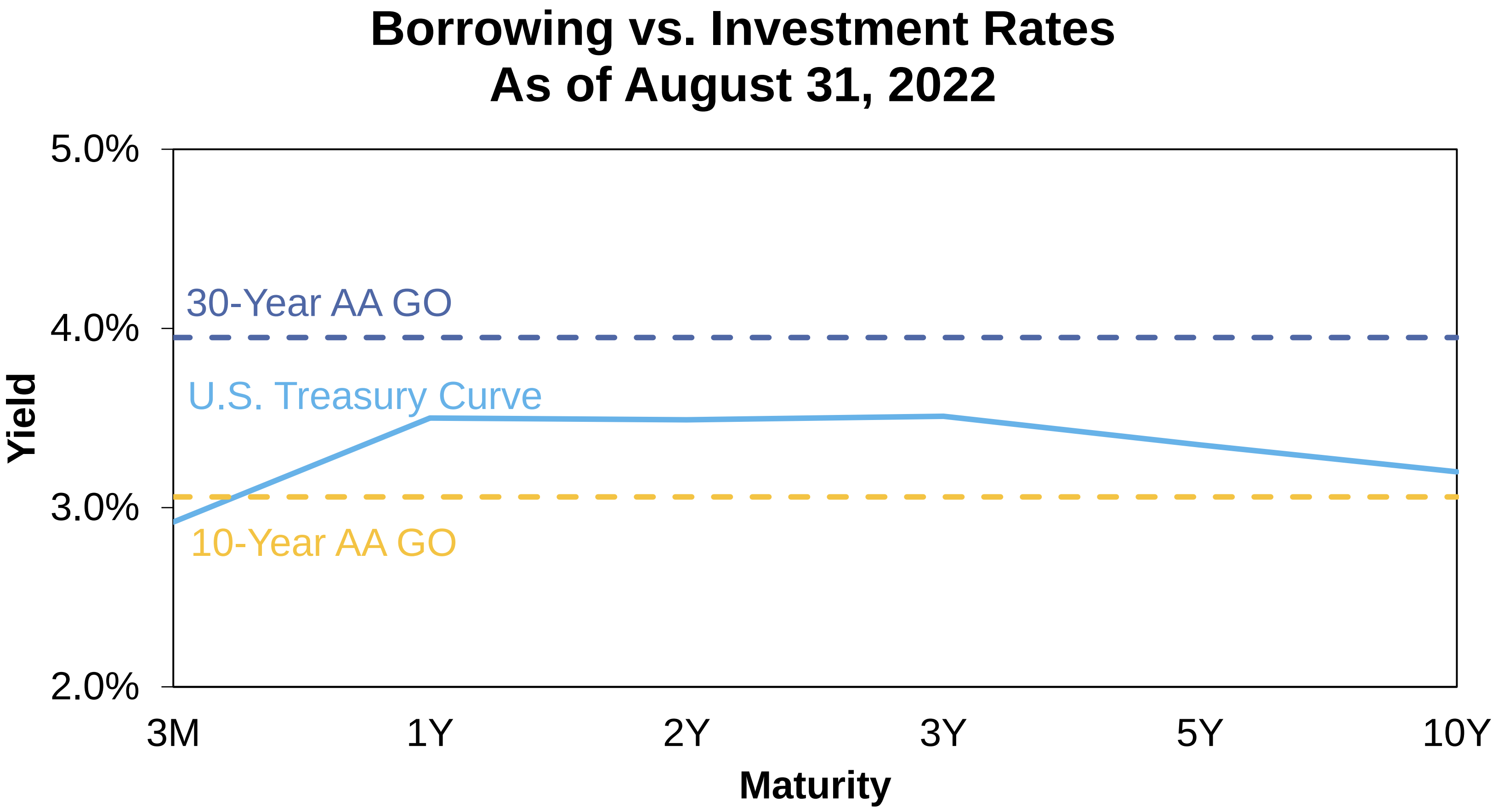
- The economy added 2.7 million new jobs this year.
- Unemployment remained at 3.6% while wage growth remains elevated and job openings remain plentiful.
- Job gains have begun to moderate, and the level of new weekly jobless claims has increased noticeably.

GDP

- The economy has downshifted as federal stimulus programs ended and rampant inflation cuts into consumer spending habits and corporate profits.
- Economists' estimates for future GDP reflect expectations for growth to normalize in the future.

Interest rates are on the rise!

Current Rate Environment



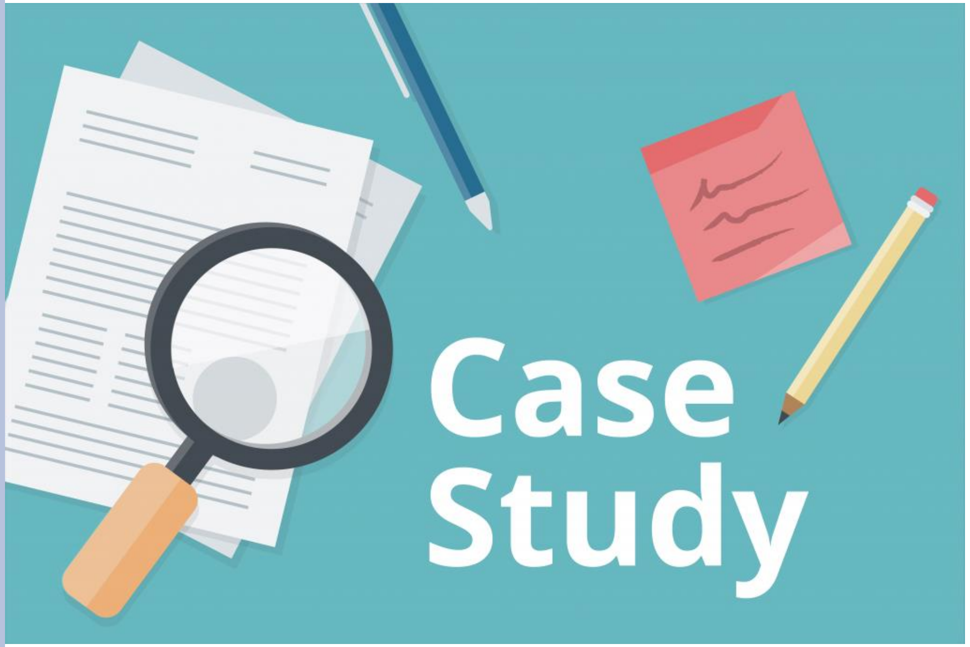
Source: Bloomberg, Municipal Market Data.

How Can a Registered Investment Advisor Help

- Serve as an integral member of the financing team
- Prepare investment analysis for “gross” and “net” funded analysis
- Review permitted investment language
- Recommend an investment strategy
- Implement investment strategy at bond closing
- Aid in preparing investment reports for record retention
- Support your tax compliance obligations

Case Study

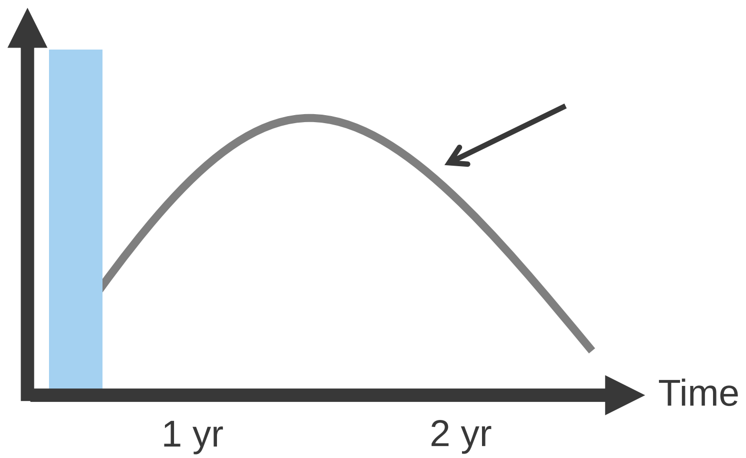
- Local agency needs to fund a $100 million building project.
- Agency issues $75 million in general obligation bonds to cover a portion of the project expenditures. The rest will be cash funded.
- The project manager is very certain of draw schedule.



Liquidity Vehicle Strategy

- Convenient
- Typically overnight liquidity
- Variable rate
- Net asset value (NAV)

Projected Expenditures

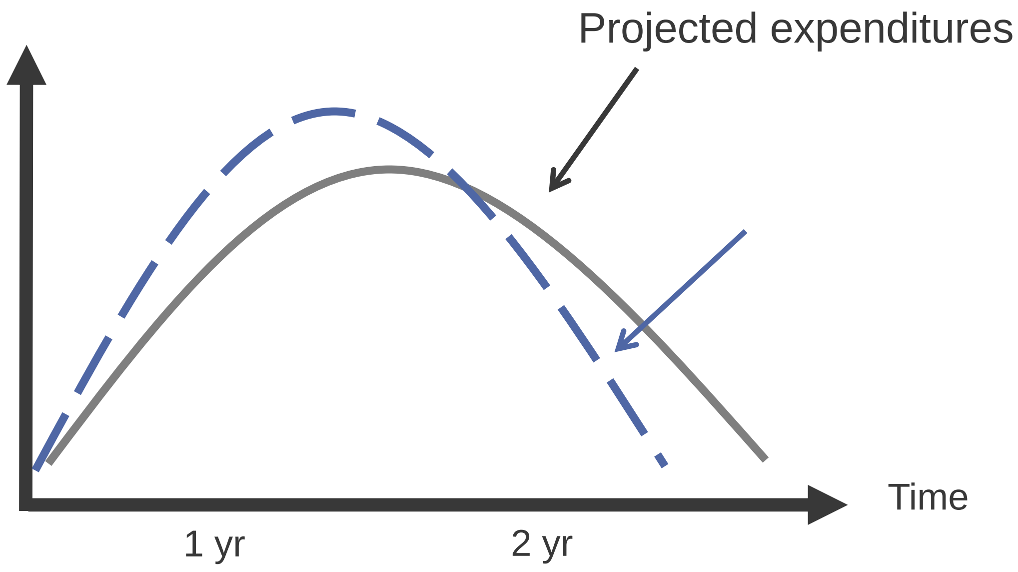


Structured Products Strategy – Current Market

- Difficult, if not impossible, to meet the safe harbor
  - GICs: 2 – 6 providers
  - Repo: 2 – 4 providers
  - FDAs: 1 – 2 providers

Portfolio of Securities Strategy

- Laddered to match project fund schedule
- Fixed rate of interest for life of the security
- Reinvestment risk, if draw schedule is delayed
- Interest rate risk if security must be sold prior to maturity



Sample Investment Strategy

Security Type	Coupon	Maturity Date	Par Amount	Estimated Gross Yield	Estimated Security Cost
Generic LGIP/MMF		8/27/2022	8,056,776	1.62%	8,056,776
U.S. Treasury Note	0.125%	9/30/2022	4,270,000	1.99%	4,264,536
Commercial Paper		10/25/2022	2,260,000	2.62%	2,250,169
U.S. Treasury Note	0.125%	10/31/2022	1,625,000	2.39%	1,619,085
Corporate Bonds	2.050%	11/1/2022	560,000	2.87%	562,827
Corporate Bonds	2.050%	11/21/2022	560,000	3.00%	561,764
Commercial Paper		11/24/2022	2,270,000	2.95%	2,253,372
U.S. Treasury Note	2.000%	11/30/2022	2,510,000	2.55%	2,518,244
Commercial Paper		12/24/2022	2,280,000	2.92%	2,258,036
U.S. Treasury Note	0.125%	12/31/2022	1,800,000	2.86%	1,783,534
Commercial Paper		1/23/2023	2,290,000	3.35%	2,258,513
Commercial Paper		1/23/2023	2,290,000	3.25%	2,259,371
Corporate Bonds	1.950%	2/1/2023	565,000	3.26%	562,612
…	…	…	…	…	…
…	…	…	…	…	…
U.S. Treasury Note	2.500%	1/31/2024	560,000	3.33%	554,570
U.S. Treasury Note	2.125%	2/29/2024	565,000	3.32%	560,992
U.S. Treasury Note	2.125%	3/31/2024	1,080,000	3.31%	1,069,528
U.S. Treasury Note	2.000%	5/31/2024	2,645,000	3.33%	2,597,842
U.S. Treasury Note	1.750%	6/30/2024	2,180,000	3.32%	2,125,109
U.S. Treasury Note	2.125%	7/31/2024	3,165,000	3.31%	3,100,117
U.S. Treasury Note	1.875%	8/31/2024	2,875,000	3.33%	2,820,468
U.S. Treasury Note	1.500%	9/30/2024	1,190,000	3.32%	1,153,671
U.S. Treasury Note	2.250%	10/31/2024	2,730,000	3.35%	2,687,280
Total			**76,306,776**		**75,400,000**

Average Maturity	Modified Duration	Average Gross Yield	Estimated Gross Earnings
289 Days	0.76 Years	3.29%	$2,028,010

Sample. Not a recommendation to buy or sell.

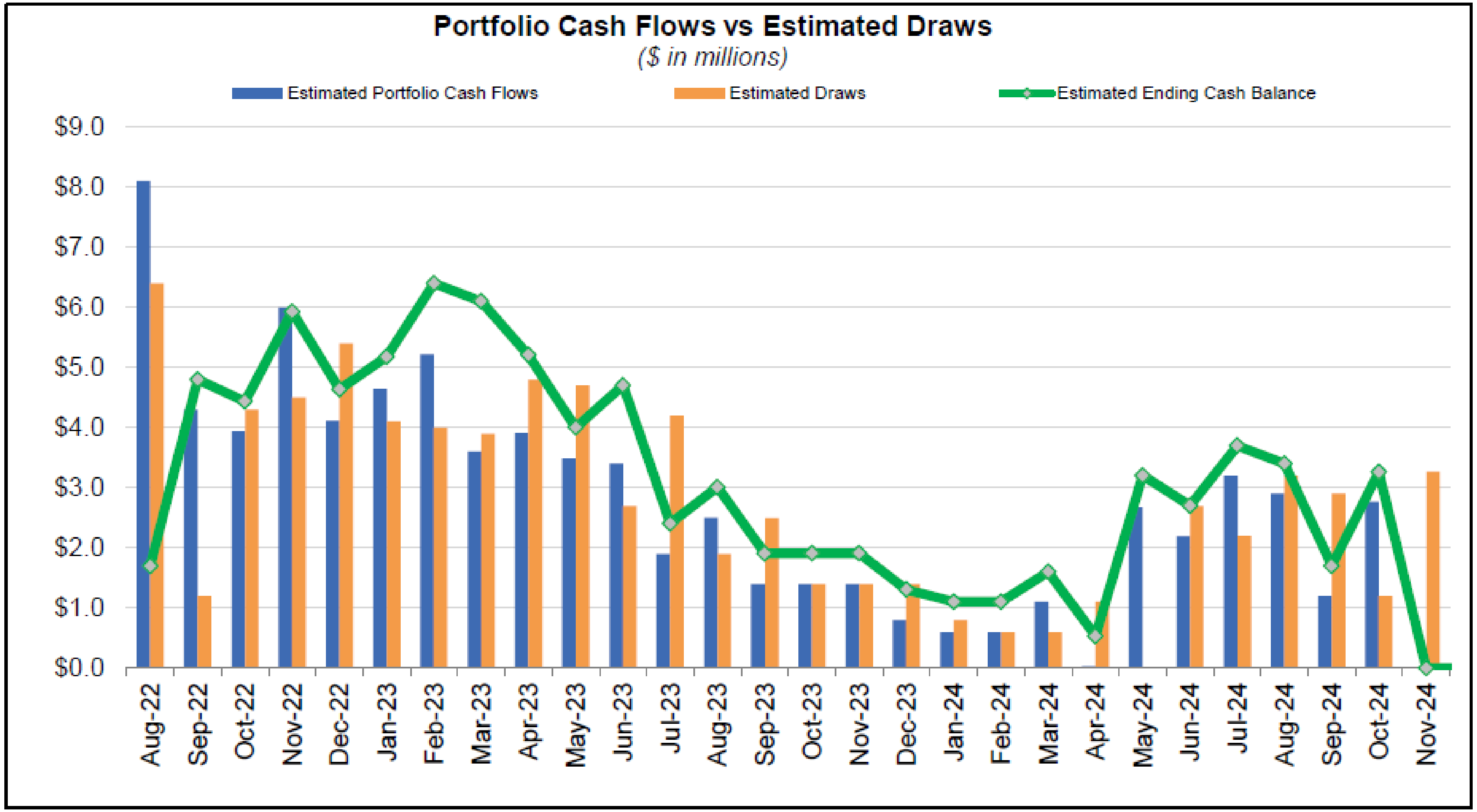
Source: Bloomberg, Estimated market yields as of August 24, 2022.

Investment Strategy Cash Flows

Date	Estimated Beginning Pool Balance	Estimated Portfolio Cash Flow	Projected Draw	Estimated Reinvestment Rate	Estimated Monthly Dividend	Estimated Ending Pool Balance
8/26/2022	75,400,000	(67,343,224)		1.620%		8,056,578
8/27/2022	8,056,578		(6,400,000)	1.620%		1,656,380
8/31/2022	1,656,380	45,813		1.620%	652	1,702,051
9/1/2022	1,702,051		(1,200,000)	1.620%		501,853
9/30/2022	501,853	4,304,719		1.620%	721	4,801,545
10/1/2022	4,801,545		(4,300,000)	1.620%		501,359
10/16/2022	501,359	10,922		1.620%		509,495
10/17/2022	509,495	4,520		1.620%		513,829
10/25/2022	513,829	2,260,000		1.620%		2,772,342
10/31/2022	2,772,342	1,663,834		1.620%	1,490	4,436,591
11/1/2022	4,436,591	565,740	(4,500,000)	1.620%		502,157
11/15/2022	502,157	10,129		1.620%		509,865
11/20/2022	509,865	10,823		1.620%		519,823
11/21/2022	519,823	565,740		1.620%		1,085,390
11/24/2022	1,085,390	2,270,000		1.620%		3,354,876
11/25/2022	3,354,876	10,080		1.620%		3,364,792
11/30/2022	3,364,792	2,563,563		1.620%	1,685	5,929,216
12/1/2022	5,929,216		(5,400,000)	1.620%		529,059
12/12/2022	529,059	2,156		1.620%		529,484
12/22/2022	529,484	1,294		1.620%		529,204
12/24/2022	529,204	2,280,000		1.620%		2,808,889
12/31/2022	2,808,889	1,830,250		1.620%	1,676	4,639,760
…	…	…	…	…	…	…
…	…	…	…	…	…	…
10/31/2024	502,240	2,760,713		1.620%	744	3,263,459
11/1/2024	3,263,459		(3,263,459)	1.620%		0
Total		**1,990,508**	**(77,363,459)**		**37,502**	

Sample. Not a recommendation to buy or sell.

Investment Strategy Cash Flows



Sample. Not a recommendation to buy or sell.

Stay Compliant and Monitor Your Investments

- Expenditures
  - Enforce requisition disbursement requirements dictated under indentures
  - Monitor authorized disbursements
  - Require authorized signers
- Arbitrage rebate liability
- Bond financing rules

Summary

- Understand cash flow needs
- Strategize about investment options during bond issuance process
- Assess current market environment
- Implement strategy
- Monitor proceeds throughout the life of the project and restructure, if needed

Any Questions?

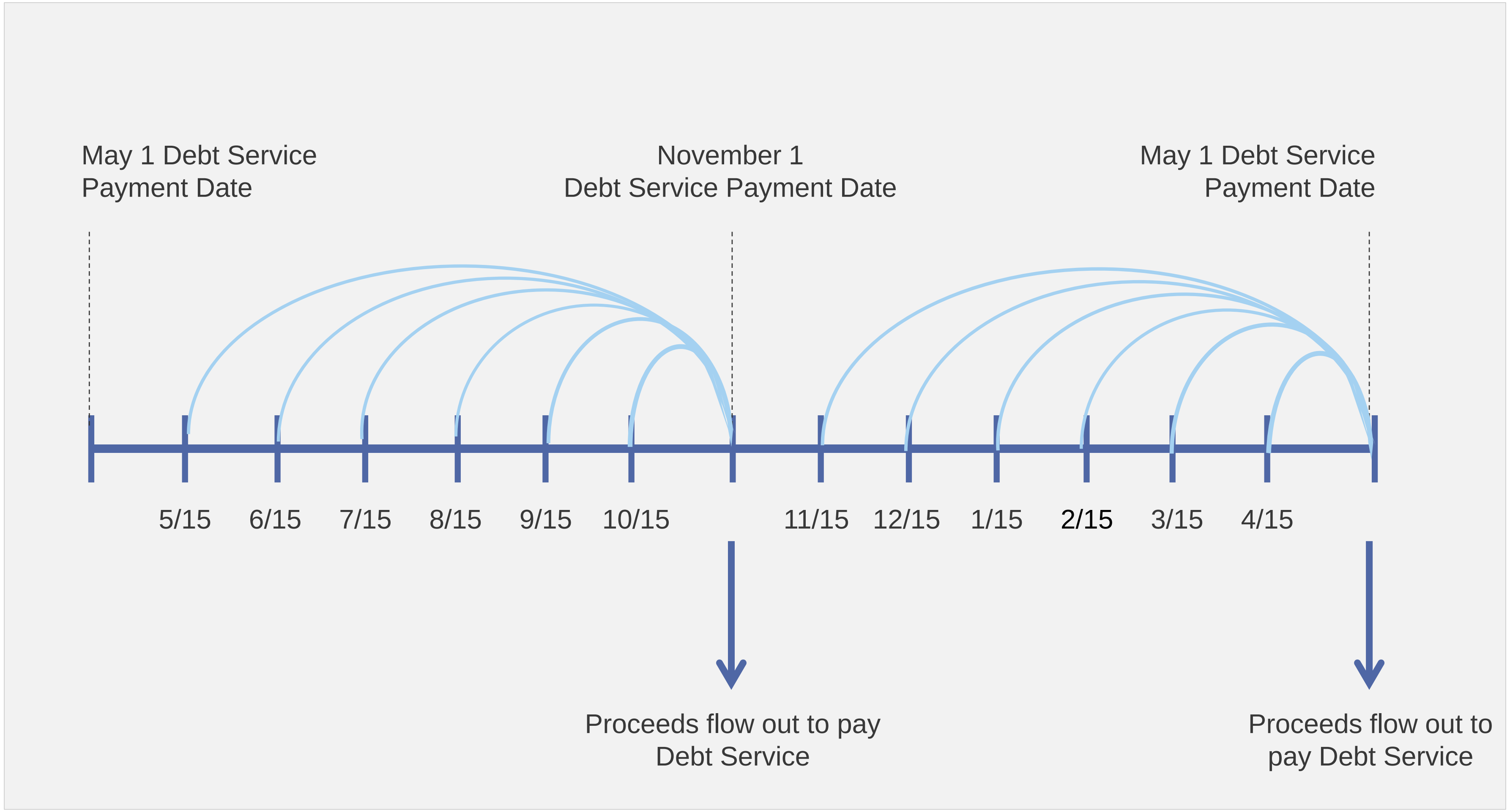
Steps to Managing New Bond Proceeds

1. Understand the structure of the bond issue
2. Identify investment options
3. Determine if issue will meet spend-down exception from rebate
4. Formulate investment strategy (safety always paramount)
5. Implement strategy
6. Actively manage to maintain optimization
7. Monitor compliance with spend-down exception
8. Maintain all necessary records
9. Calculate arbitrage rebate, if needed

Structured Investment Product Strategy

	FDA	Guaranteed Investment Contract	Repurchase Agreement
Security for Investment	Purchased securities	Promissory note from counterparty	Collateral held at 3rd party custodian
Mechanism for Interest Payments	Difference between purchase price and par amount of securities	Credited to account	Credited to account
Credit Risk	Limited to underlying deliverables; very low if UST	Depends on agreement counterparty	Depends on agreement counterparty; collateral reduces concerns subject to “J”-Risk
Bankruptcy Considerations	None - clean bankruptcy opinion is market standard	Subject to clawback and bankruptcy stay	Intended to be exempt; however, clean bankruptcy opinion not possible
Other Risks	Mark-to-market risk (auditors) and performance risk	Overnight bankruptcy risk – no collateral	“J”-Risk – interpretation of structure under Bankruptcy Code

Factor: Cash Flow Strategy



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MUNICIPAL DEBT ESSENTIALS

BASICS

MECHANICS

ONGOING

DAY 3 | ONGOING ADMINSTRATION

40 YEARS CALIFORNIA DEBT AND INVESTMENT ADVISORY COMMISSION

KEYNOTE ADDRESS

CALIFORNIA STATE TREASURER
FIONA MA, CPA

LUNCH
LAGUNA ABC

pfm asset management

What Every Issuer Needs to Know About Arbitrage Rebate

September 29, 2022

717.232.2723

pfmam.com

Michael Steinbrook, Director

Arbitrage and Tax Compliance Group

PFM Asset Management LLC

What is Arbitrage Rebate?

Arbitrage

- When the yield on taxable investments exceeds the tax-exempt restricted rate

Rebate

- Essentially a 100% tax
- Issuer’s “rebate” or pay excess earnings to the IRS

Arbitrage Rebate

- Financial disincentive to violate the rules
- Non-compliance could result in taxable bonds

Arbitrate Rebate & Yield Restriction

To **prevent abuses**, the tax code limits the permitted uses of tax-exempt bonds

Prevents:

- Issuance of more bonds than are necessary
- Issuance of bonds earlier than is necessary
- Bonds from being outstanding longer than is necessary
- In other words, borrow what you need, when you need it, for an appropriate duration based on what is being financed.

Applies to **<u>every</u>** tax-exempt borrowing and some taxable subsidy obligations

- Measured on an issue-by-issue basis
- Arbitrate Rebate begins on the issue date
- Yield Restriction begins at the expiration of a temporary period

Tax law and regulations create financial disincentives to **prevent** issuance of tax-exempt debt for profit-driven reasons

- Yield restriction – IRC Section 148(b)
- Arbitrage rebate – IRC Section 148(f)
- Overlapping requirements – “Belt & Suspenders”

Tax Considerations Timeline

- Arbitrate rebate requirements apply to **<u>every</u>** tax-exempt borrowing and certain subsidy obligations

- Compliance begins with pre-issuance planning and continues with post-issuance policies and procedures (does it ever end…)

Pre-Issuance

- Timing (how financing schedule affects investment rates)
- Project draw schedule
- Evaluate available exceptions and elections
- Identify investment options

Issuance

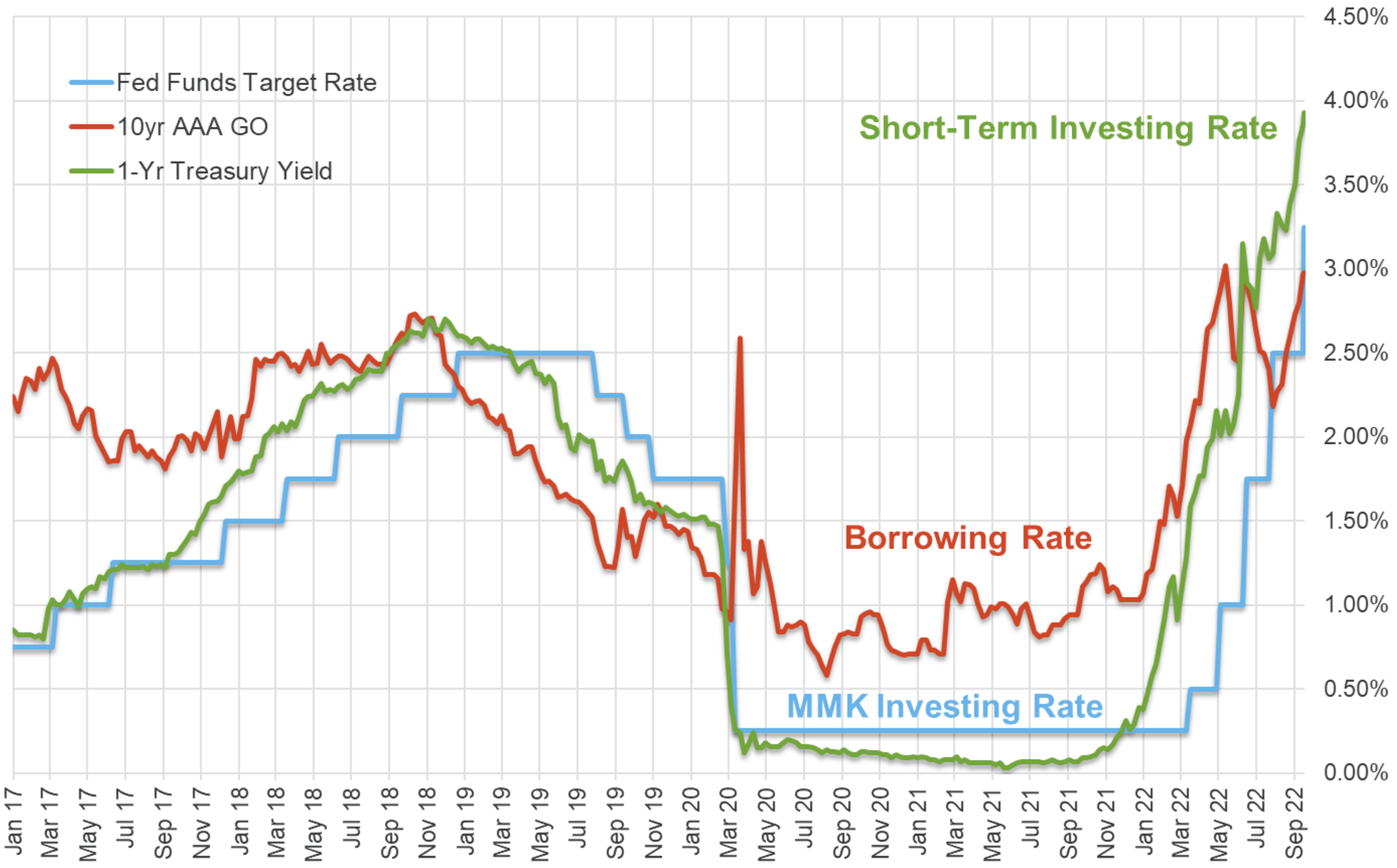
- Invest bond proceeds
- Purchase securities, establish fair market value
- Revise draw schedule
- Make elections in tax certificate

Post-Issuance

- Arbitrage reporting
- Monitor draw schedule
- Monitor investments
- Record retention

Positive Arbitrage – It's Back

Arbitrage Environment



Sources: Bloomberg, Refinitiv. See important disclosures at the end of this presentation

Positive and Negative Arbitrage

Actual investment earnings yield

– Average borrowing rate (aka, the *arbitrage yield*)

= Arbitrage %

- **"Positive Arbitrage"** = Actual earnings > Earnings @ arbitrage yield (positive earnings yield spread)
- **"Negative Arbitrage"** = Actual earnings < Earnings @ arbitrage yield (negative earnings yield spread)

- Arbitrage Rebate Liability =
  - Earnings of bond proceeds invested in taxable securities less (-)
  - Earnings of bond proceeds invested at the arbitrage yield
    - Future value methodology
    - Measured on an issue-by-issue basis
    - Cumulative from the issue date

Funds Subject to Rebate

PROCEEDS	+	REPLACEMENT PROCEEDS	=	GROSS PROCEEDS
Sale Proceeds / Investment Proceeds • Project / Construction Funds • Capitalized Interest Funds • Debt Service Reserve Funds • Escrow Funds • Costs of Issuance Funds • Interest earnings Transferred Proceeds Any of the above		Cash / Equity / Revenue Funded • Debt Service Funds • Debt Service Reserve Funds • Any “Pledged” Fund		All subject to Rebate Exceptions may apply

Exceptions to Arbitrage Rebate

- Small Issuer Exception
- Spending Exceptions
  - 6-month
  - 18-month
  - 2-year
- "Bona Fide" Debt Service Fund Exception
- Electing to pay the 1.5% penalty in lieu of rebate
- Investing in tax-exempt obligations (eliminating the "arbitrage")

Exceptions to Arbitrage Rebate

Small Issuer Exception

Exception to Arbitrage Rebate Only

- Calendar year exception
  - $5 million of governmental bonds for municipalities
  - $15 million per year for public school construction

- Requirements
  - General taxing powers
  - Governmental bonds (not private activity bonds)
  - At least 95% of the proceeds must be used for local governmental activities

- Exclusion of current refunding issue in certain circumstances

Exceptions to Arbitrage Rebate

Spending Exceptions (Can Be Internally Monitored)

- **"Reward"** for spending bond proceeds quickly
- Allowed to keep positive arbitrage
- Simple way to establish compliance (no future value, no yields)
- Must meet each benchmark, no catch-up allowed

Exception to Arbitrage Rebate Only

6-Month		18-Month		2-Year (ACP)	
All gross proceeds		All new money		Construction issues	
✓ 6 months	100%*	✓ 6 months	15%	✓ 6 months	10%
		✓ 12 months	60%	✓ 12 months	45%
		✓ 18 months	100%**	✓ 18 months	75%
				✓ 24 months	100%**

** Exceptions for 5% of the proceeds of the issue if spent within one year*
*** De minimis (lesser of 3% or $250K) and reasonable retainage (5% spent in 12 months) exceptions may apply for last benchmark*

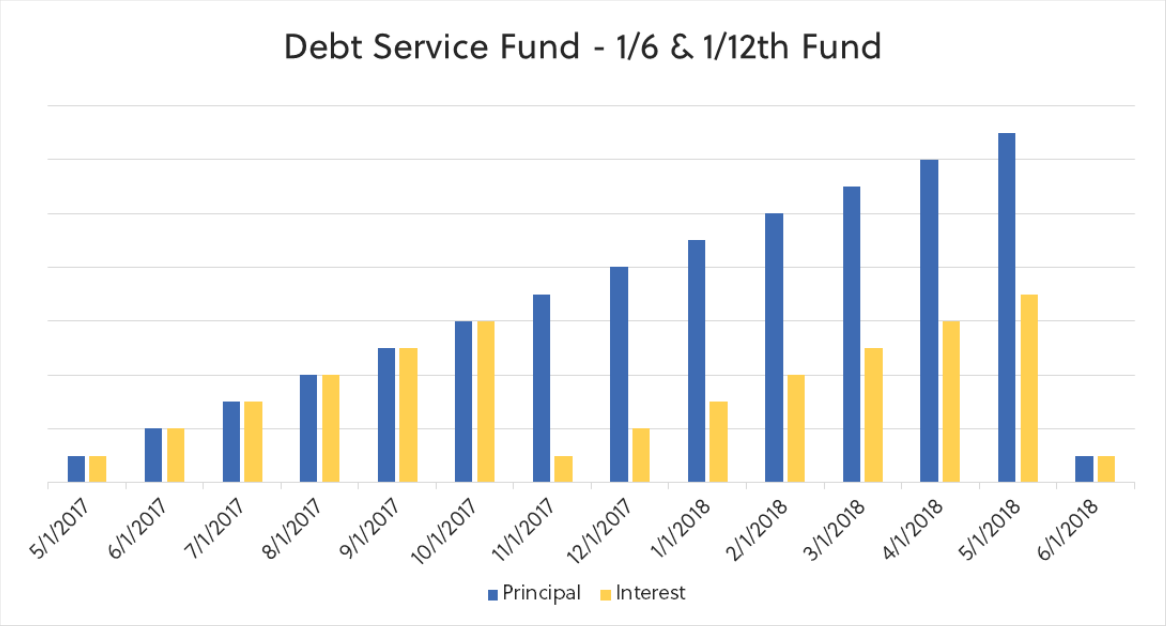
Exceptions to Arbitrage Rebate

"Bona Fide" Debt Service Fund Exception

- Depleted at least annually except for greater of:
  - Previous year's earnings in the fund, or
  - 1/12th of previous year's principal and interest payment
  - Additional earnings test for Private Activity Bonds

Exception to Arbitrage Rebate

Exception to Yield Restriction



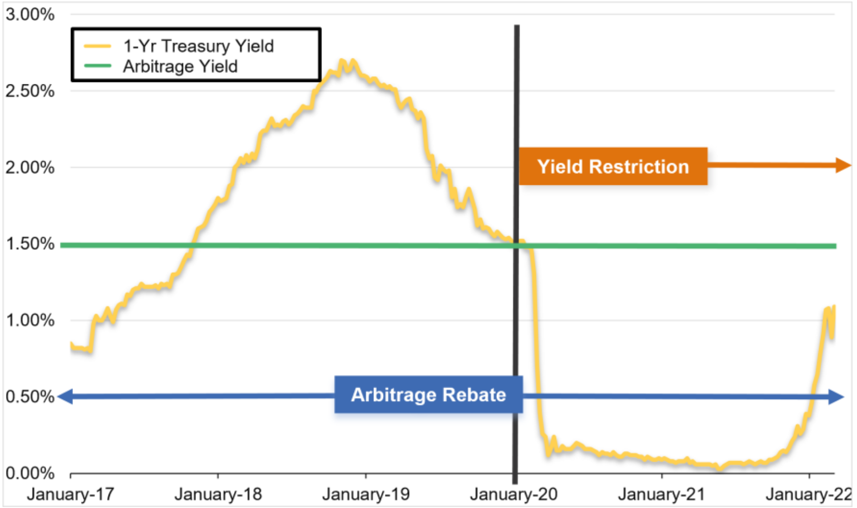
Yield Restriction Compliance

What is Yield Restriction?

- Like rebate, restriction against investing above the arbitrage yield
- Only applies to proceeds that are subject to yield restriction
- Exceptions apply
- Temporary periods
  - Exception for “Reasonably Required” Reserve Fund
  - Minor Portion

Arbitrage Rebate vs. Yield Restriction

- Arbitrage Rebate and Yield Restriction are separate calculations
- Yield Restriction only applies to proceeds that are subject to yield restriction
- Cannot blend positive arbitrage of yield restricted proceeds with negative arbitrage of unrestricted proceeds
- Exceptions apply
  - Exception for “Reasonably Required” Reserve Fund
  - Minor Portion
  - Temporary periods



Could the next 5 years produce a similar interest rate environment?

Yield Restriction Compliance Methods

- Active Yield Restriction
  - Investments must be purchased at fair market value

- Yield Reduction Payments
  - Rebate like payments
  - Limited availability for advance refunding issues

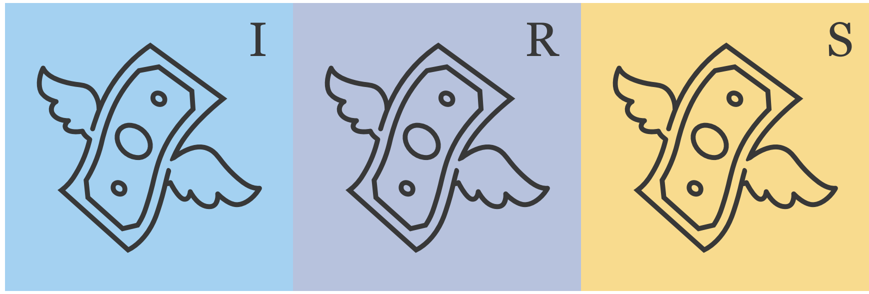
- Other Options
  - Longer construction fund temporary period (5-years vs. 3-years)
  - Waiver of temporary period at issuance

Calculation Requirement

Calculation and Filing Requirement

- Payment due no later than 60 days after the computation date
  - No later than 5-years after the issue date
  - Every 5-years thereafter until the final maturity date
  - At least 90% of the liability
  - As of final maturity date, 100% of the liability

- Submit check & IRS Form 8038-T



- Do not submit calculations

- No filing required if no payment is due

Late Payments

- Governmental bonds (including qualified 501(c)(3) bonds)
  - 50% of rebate amount, plus interest
- Private activity bonds
  - 100% of rebate amount, plus interest
- Interest computed @ underpayment rate (reset quarterly)
- Late payment explanation required
- Penalty (excluding interest) is typically waived if:
  - Liability plus interest is paid within 180 days after the date the failure was discovered
  - Bonds not under audit
  - Late payment not caused by “willful neglect”

Refunds

- Bond issues may be eligible for a refund
  - Rebate payment made after first 5-year period, offsetting negative arbitrage thereafter
  - Computational error

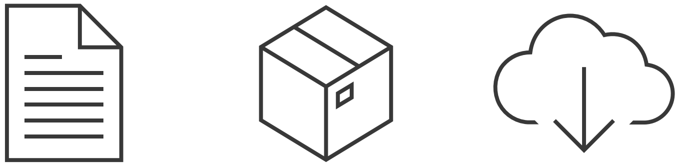
- Request must be filed no later than 2 years after the final computation date **PLUS** 60 days
  - File a Form 8038-R
    - Prior 8038-T (proof of prior payment)
    - Calculation related to payment
    - Additional documents generally requested by the IRS

- May want to consider potential audit risk before filing

- IRS will not pay interest on prior payment

Record Retention

- Life of the bonds **+ 3 years**
- If the bonds are refunded, life of refunding bonds **+ 3 years**
- Consider separate document collection, storage and destruction policies for bond related records
- Consider electronic storage systems



DO NOT DESTROY:

- Board minutes, resolutions
- Appraisals
- Bond transcripts
- Newspaper ads, misc. correspondence
- Investment records
- Expenditure histories
- Invoices
- IRS Filings
- Records related to acquisition of investment agreements and interest rate swaps
- Payments for credit facilities
- Arbitrage rebate and yield restriction compliance reports

Can I Earn Positive Arbitrage?

- **EARNING** positive arbitrage may be allowed in certain circumstances, but prohibited in other circumstances.

Proceeds	Able to Earn Positive Arbitrage?
Current Refunding	**YES**
Tax-Exempt Advance Refunding	**NO**
Defeasance Escrow	**NO**
Project Funds	**YES**
Reserve Funds	**YES**

Dual Requirements of Arbitrage

Arbitrage Rebate	Gross Proceeds	Yield Restriction
• Subject to rebate from issue date, *unless:* • Exempt if a spending exception is met (6-month, 18-month, or 2-year) • Exempt if the issue qualifies under “small issuer”	**Project Fund and Capitalized Interest**	• Generally, a 3-year temporary period applies (5-years with certification for a longer period necessary) • Temporary period can be waived • Yield restricted at the bond yield + 0.125% after temporary period expires
• Subject to rebate from issue date, *unless:* • Exempt if the issue qualifies under “small issuer”	**Reserve Fund**	• Exempt from yield restriction if qualified as a reasonably required reserve or replacement fund in size • If failed in size, yield restricted at the bond yield + 0.001%

• Subject to rebate from issue date. *unless:*
• Exempt if the issue qualifies under “small issuer”
• Exempt if the 6-month spending exception is met
	Escrow Fund	• Yield restricted at the bond yield + 0.001% after the end of the applicable temporary period:
		  • Advance Refunding: 30 days
		  • Current Refunding: 90 days

• Exempt from rebate if qualified as a bona fide debt service fund (generally depleted annually) • If failed in compliance, subject to rebate	**Debt Service Fund**	• Exempt from yield restriction if qualified as a bona fide debt service fund (generally depleted annually) • If failed in compliance, yield restricted at the bond yield + 0.001%
• Subject to rebate from issue date, *unless:* • Exempt if the issue qualifies under “small issuer” • Exempt if a spending exception is met	**Cost of Issuance**	• For new money issues, a 3-year temporary period applies • For refunding issues, a 13-month temporary applies

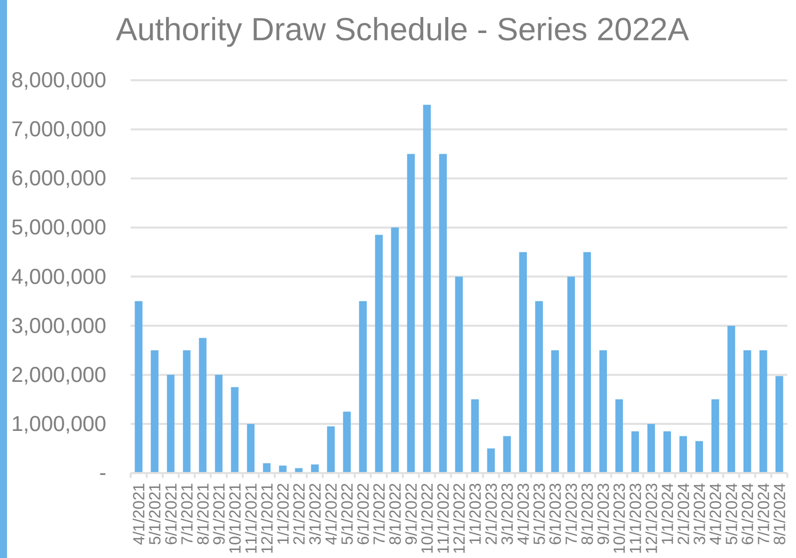
Case Study

The Situation: The Authority of We Need To Raise Tolls To Repair All These Potholes (the “Authority”) is selling Series 2022A new money revenue bonds with the following characteristics:

Par Amount	$110,000,000
Construction Fund Deposit	$100,000,000
Reserve Fund Deposit	$10,000,000
Estimated Draw Schedule	~40 mos
Arbitrage Yield	2.50%
Current Investment Yield	3.00%

Questions to consider:

1. How confident is the Authority in the draw schedule?
2. Does the Authority expect to meet a spending exception? Should the spending exception be applied?
3. Does the Authority expect to earn positive arbitrage?
4. Is waiving the 3-year temporary period an option?



Tips for a Smooth Process

- Be familiar with the tax or non-arbitrage certificate
- Create an organized file system
  - Avoids having to find records from 5-years ago
  - Consider hiring a consultant when the bonds are issued
- Schedule your calculation at least 60 days or more in advance
- Know the exceptions
  - If eligible, find out which one, and what that means for the issue
- Consider having calculations prepared more frequently
  - Can help in keeping an eye on spending exceptions
  - Allows you to plan for a future liability
- Ask questions!

Exception to Arbitrage Rebate Only

Let’s see what you’ve learned…

Start the presentation to see live content. For screen share software, share the entire screen. Get help at **pollev.com/app**

What Every Issuer Needs to Know About Arbitrage Rebate

Get ready to compete!

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With respect to the Arbitrage Rebate and Yield Restriction Regulations, what is the Federal Government trying to prevent related to tax exempt bonds?

With respect to the Arbitrage Rebate and Yield Restriction Regulations, what is the Federal Government trying to prevent related to tax exempt bonds?

- Issuing more bonds then necessary
- Issuing bonds sooner than necessary
- Leaving bonds outstanding longer than necessary
- All of the above

With respect to the Arbitrage Rebate and Yield Restriction Regulations, what is the Federal Government trying to prevent related to tax exempt bonds?

Issuing more bonds then necessary

Issuing bonds sooner than necessary

Leaving bonds outstanding longer than necessary

All of the above

Leaderboard

Which of the following issues is not subject to the Arbitrage Rebate and Yield Restriction Regulations?

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Which of the following issues is not subject to the Arbitrage Rebate and Yield Restriction Regulations?

- $30,000,000 Taxable Build America Bonds, Series 2010A
- $15,000,000 General Obligation Bonds, Series 2015 (Tax-exempt)
- Master Lease dated July 15, 2017 privately placed with US Bank
- Pension Obligation Bonds (Taxable) Series 2011

Which of the following issues is not subject to the Arbitrage Rebate and Yield Restriction Regulations?

$30,000,000 Taxable Build America Bonds, Series 2010A

$15,000,000 General Obligation Bonds, Series 2015 (Tax-exempt)

Master Lease dated July 15, 2017 privately placed with US Bank

Pension Obligation Bonds (Taxable) Series 2011

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Leaderboard

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Which are exceptions from Yield Restriction?

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Which are exceptions from Yield Restriction?

- Small Issuer Exception, 2-year Spending Exception
- Minor Portion, Temporary Period
- 18-Month Spending Exception, Minor Portion
- Bona Fide Debt Service Fund Exception, Temporary Period

Which are exceptions from Yield Restriction?

Small Issuer Exception, 2-year Spending Exception

Minor Portion, Temporary Period

18-Month Spending Exception, Minor Portion

Bona Fide Debt Service Fund Exception, Temporary Period

Leaderboard

How long are you federally required to retain records related to your tax-exempt bonds?

How long are you federally required to retain records related to your tax-exempt bonds?

- 6 Years
- Life of the Bonds +3
- 7 Years
- Life of the Bonds +6

How long are you federally required to retain records related to your tax-exempt bonds?

6 Years

Life of the Bonds +3

7 Years

Life of the Bonds +6

Leaderboard

True or False. Only the proceeds I receive from selling my Bonds are subject to the arbitrage rebate and yield restriction requirements.

True or False. Only the proceeds I receive from selling my Bonds are subject to the arbitrage rebate and yield restriction requirements.

True

False

True or False. Only the proceeds I receive from selling my Bonds are subject to the arbitrage rebate and yield restriction requirements.

True

False

Leaderboard

True of False. I can take negative arbitrage from my Series 2011 Bonds and use it to offset positive arbitrage on my 2019 Bonds.

True of False. I can take negative arbitrage from my Series 2011 Bonds and use it to offset positive arbitrage on my 2019 Bonds.

True

False

True of False. I can take negative arbitrage from my Series 2011 Bonds and use it to offset positive arbitrage on my 2019 Bonds.

True

False

Leaderboard

True or False. My reporting requirements end once I have fully expended my project fund monies.

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True or False. My reporting requirements end once I have fully expended my project fund monies.

True

False

True or False. My reporting requirements end once I have fully expended my project fund monies.

True

False

Leaderboard

Which form is used to make an Arbitrage Rebate or Yield Reduction Payment?

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Which form is used to make an Arbitrage Rebate or Yield Reduction Payment?

- 8038-G
- 8038-CP
- 8038-T
- 8038-R

Which form is used to make an Arbitrage Rebate or Yield Reduction Payment?

8038-G

8038-CP

8038-T

8038-R

Leaderboard

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The School District issued Bonds to fund the construction of a new high-school. Which spending exceptions are available for this issue?

The School District issued Bonds to fund the construction of a new high-school. Which spending exceptions are available for this issue?

- 6-month spending exception
- 18-month spending exception
- 2-year spending exception
- All of the above

The School District issued Bonds to fund the construction of a new high-school. Which spending exceptions are available for this issue?

6-month spending exception

18-month spending exception

2-year spending exception

All of the above

Leaderboard

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The County issued 30 year Bonds on May 5, 2019 with principal payable on August 1 beginning on August 1, 2019. The first required calculation date is:

The County issued 30 year Bonds on May 5, 2019 with principal payable on August 1 beginning on August 1, 2019. The first required calculation date is:

- May 5, 2020
- August 1, 2020
- May 5, 2024
- August 1, 2024

The County issued 30 year Bonds on May 5, 2019 with principal payable on August 1 beginning on August 1, 2019. The first required calculation date is:

May 5, 2020

August 1, 2020

May 5, 2024

August 1, 2024

Leaderboard

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Bonus: True or False. Having positive arbitrage with respect to my issue is a bad thing.

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Bonus: True or False. Having positive arbitrage with respect to my issue is a bad thing.

True

False

Bonus: True or False. Having positive arbitrage with respect to my issue is a bad thing.

True

False

Leaderboard

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Thank You!

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Refunding an Issue

KNN Public Finance, LLC

September 2022

INTRODUCTIONS | PRESENTERS

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DAVID BRODSLY

Principal/Managing Director
dbrodsly@knninc.com

BLAKE BOEHM

Principal/Managing Director
bboehm@knninc.com

NOTIONS OF REFUNDING

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PAYING OFF A LOAN WITH A NEW LOAN

MORTGAGE EXAMPLE:

- Mortgages can be prepaid at any time
- Considerations:
  - » Transaction cost
  - » Term of new loan (e.g., a new 30-year loan would extend overall repayment).

BOND EXAMPLE:

- Bond investor has call protection, most commonly for 10 years
- Borrower has call option

OPTIONAL REDEMPTION

SAMPLE PROVISION:

The Series 2022 Bonds maturing on and after **August 1, 2033**, are **subject to redemption** prior to their respective stated maturity dates, **at the option of the County**, … on or after **August 1, 2032** at the principal amount of the Bonds called for redemption, together with interest accrued thereon, **without premium**……

First 10 years call protected

First optional call date

Call price – at par in this case

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PURPOSE OF REFUNDING BONDS

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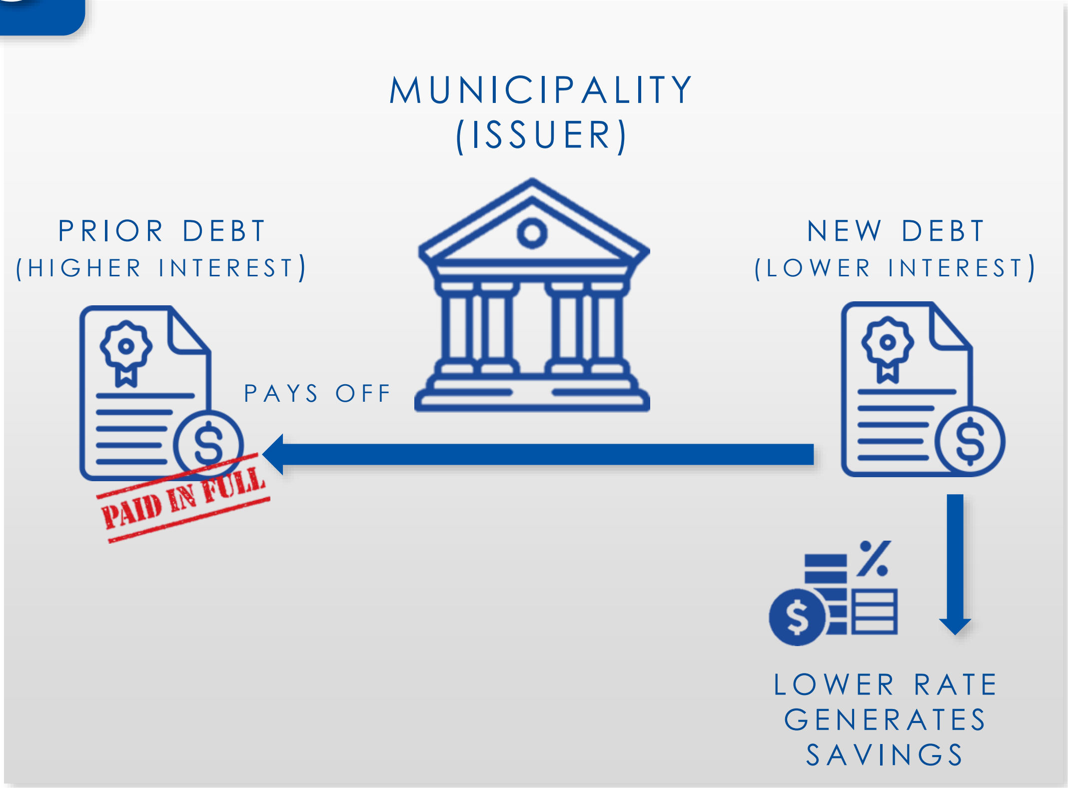
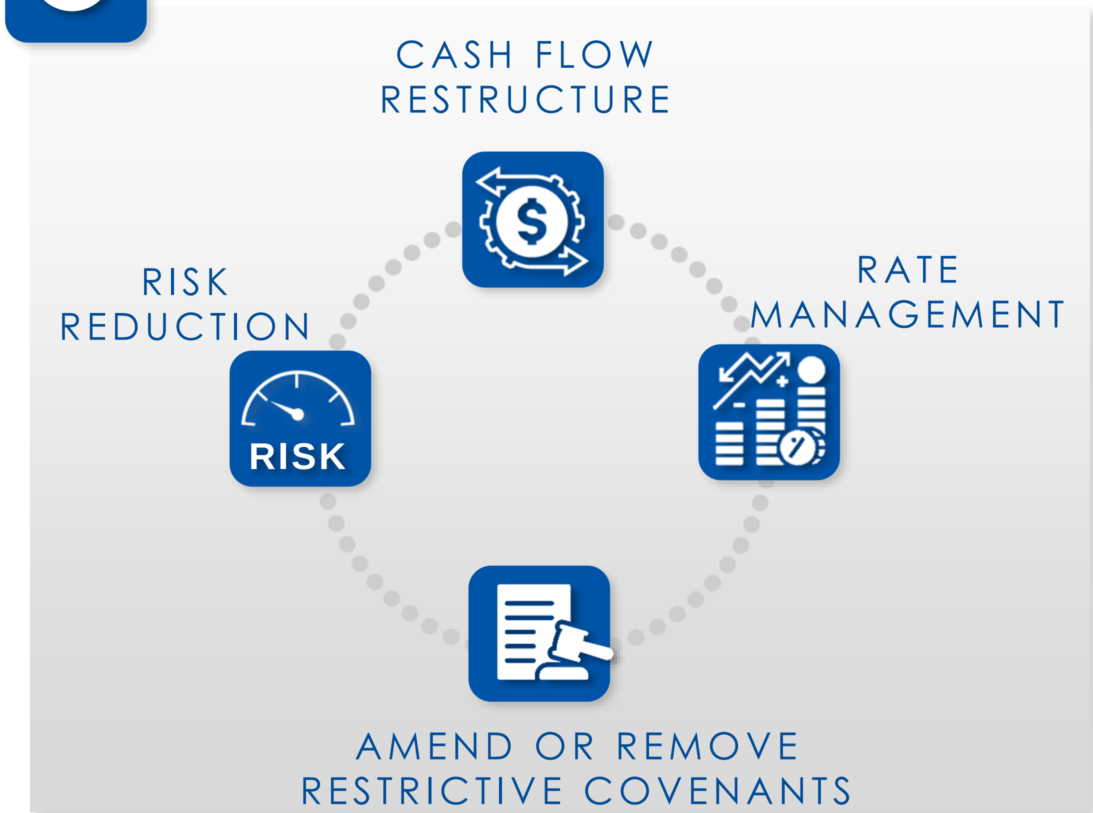
1 ACHIEVE DEBT SERVICE SAVINGS ON OUTSTANDING BONDS:



2 OTHER OCCASIONAL CONSIDERATIONS:



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TYPES OF REFUNDING & TIMING

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- Refunding bonds are characterized as either current refunding or advance refunding

CURRENT REFUNDING:

- New bond proceeds are used to call refunded bonds within 90 days
- Tax-exempt bonds can be issued to currently refund outstanding tax-exempt bonds

ADVANCE REFUNDING:

- Refunding bonds are issued more than 90-days before call date
- Proceeds sized to be sufficient to fund an escrow that, along with interest earnings, will pay debt service until the call date and then call the bonds
- Advance refundings are typically less efficient, especially when the interest rate earned on escrow is less than the borrowing rate (negative arbitrage)

Tax-exempt advance refunding eliminated in 2017

Some agencies have issued *taxable* bonds to advance refund, still generating savings.

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CAPTURING SAVINGS

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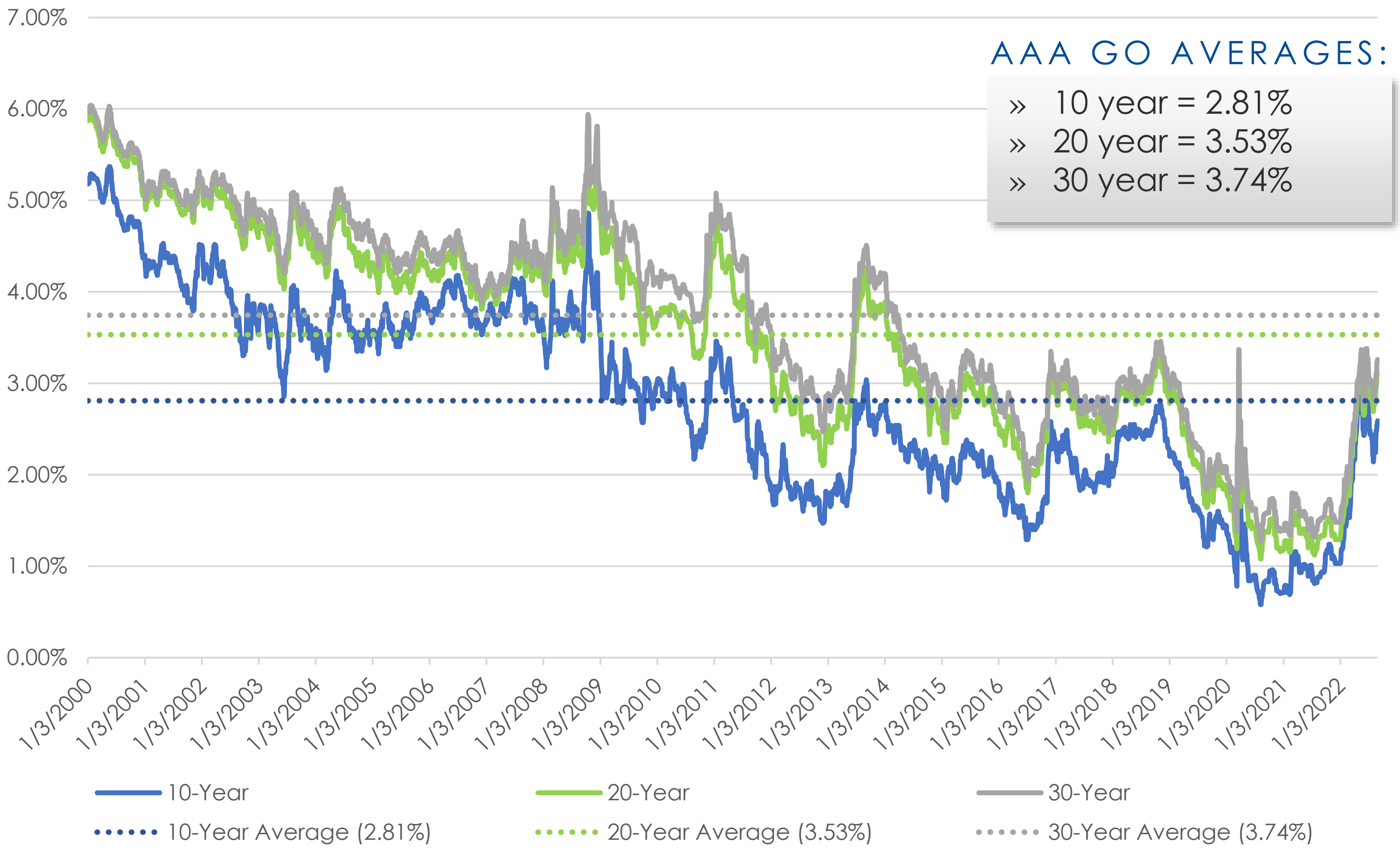
- What goes up, must(?) go down
- When to examine a bond for a refunding?
  - Nine months to a year before the optional call date
  - More frequently if market and policies might support a taxable advance refunding
- When evaluating a bond for refunding savings, the **coupon rate** of existing debt is compared to the **true interest cost** of the refunding bonds

CYCLICALITY OF INTEREST RATES



WHAT CREATES SAVINGS?

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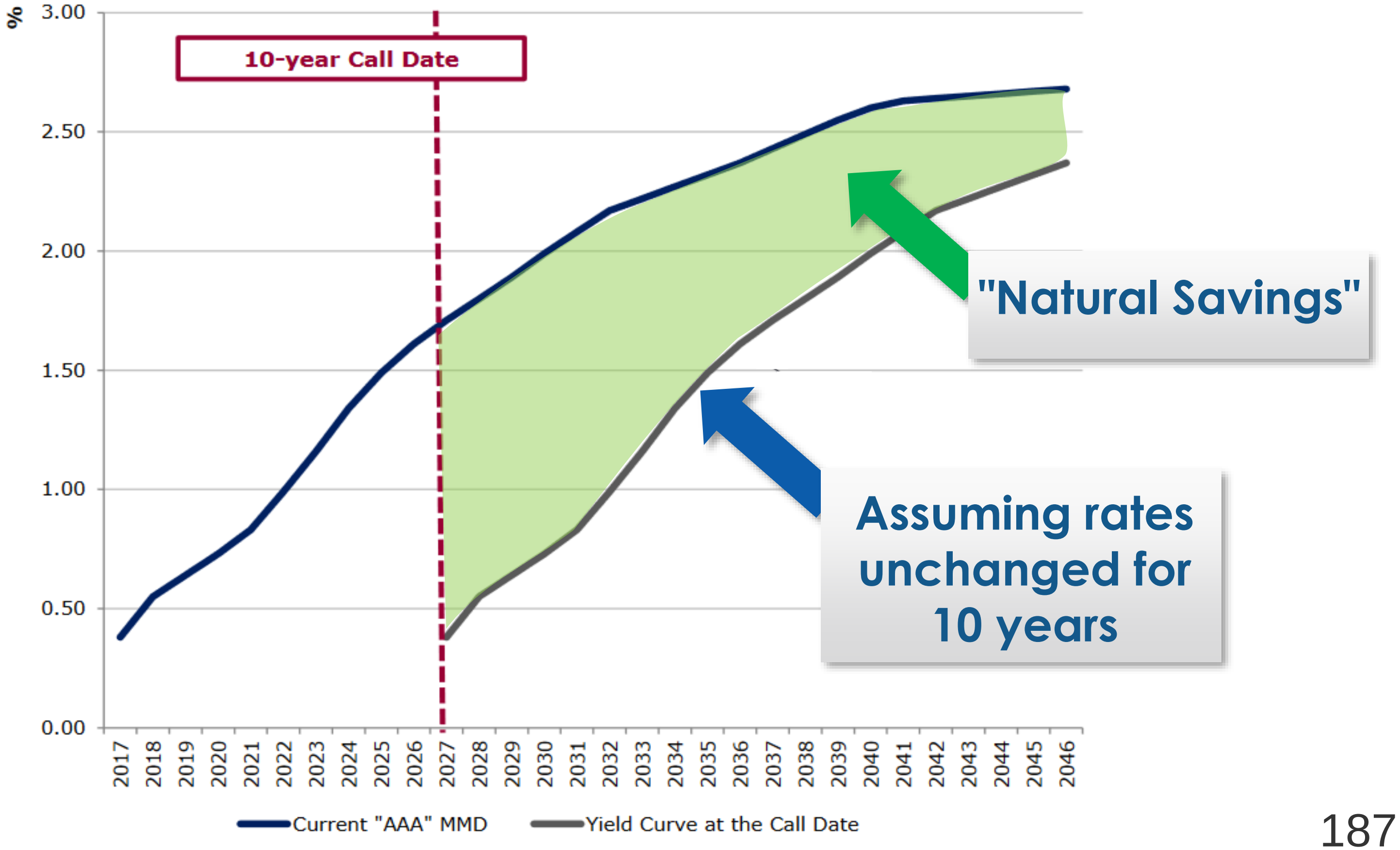
ROLLING DOWN THE YIELD CURVE

- Because of the typical shape of the yield curve, the passage of time alone may create savings
- At the optional call date, there is a "roll down" for corresponding maturities (e.g., years 10-30 are now years 0-20)
- The common use of “premium couponing” (e.g., 5% coupons to yield 3% to the investor) creates higher likelihood of future refunding: creates “optionality”

YEAR	PAR	COUPON	YIELD
2032	1,975,000	5.000	2.500
2033	2,075,000	5.000	2.610
2034	2,180,000	5.000	2.720
2035	2,290,000	5.000	2.820



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MEASURING SAVINGS

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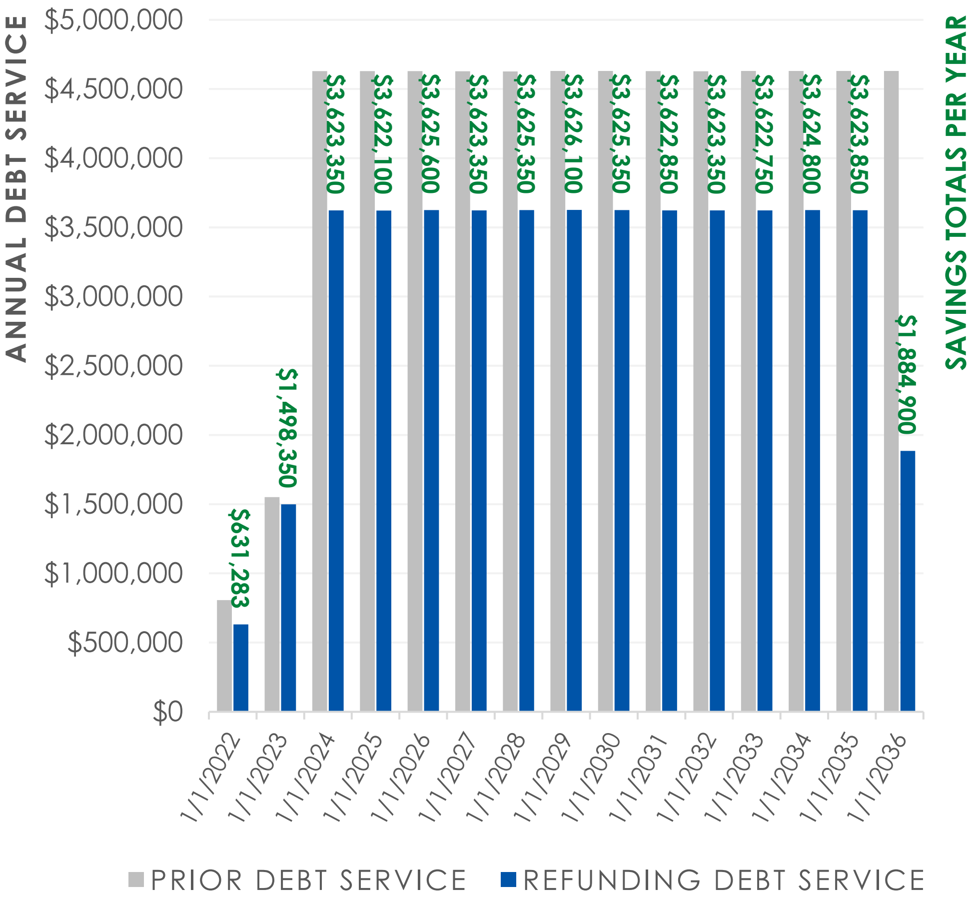
- Savings typically presented as "present value savings"
- Future cashflows typically discounted by the arbitrage yield on the refunding bonds (the current cost of funds)
- Most common measurement is present value savings divided by par amount of refunded bonds, shown as a percent
- Net-to-net refunding takes into account other factors, such as investment earnings on debt service reserve fund

SAVINGS SUMMARY:

» **$845,073 Avg. Annual Cash Flow Savings**
» **$11,540,160 NPV Savings**
» **26.4% Savings of Refunded Bonds (Par Amount of $35.7M)**



DATE	PRIOR DEBT SERVICE	REFUNDING DEBT SERVICE	SAVINGS	PRESENT VALUE SAVINGS
2/1/2022	$806,356	$631,283	$158,806	$158,409
2/1/2023	$1,551,063	$1,498,350	$43,827	$43,141
2/1/2024	$4,629,263	$3,623,350	$997,027	$970,601
2/1/2025	$4,629,263	$3,622,100	$998,277	$960,388
2/1/2026	$4,629,263	$3,625,600	$994,777	$945,783
2/1/2027	$4,628,013	$3,623,350	$995,777	$935,413
2/1/2028	$4,627,263	$3,625,350	$993,027	$921,455
2/1/2029	$4,630,700	$3,626,100	$995,714	$912,793
2/1/2030	$4,630,500	$3,625,350	$996,264	$902,251
2/1/2031	$4,629,700	$3,622,850	$997,964	$892,861
2/1/2032	$4,628,100	$3,623,350	$995,864	$880,214
2/1/2033	$4,630,500	$3,622,750	$998,864	$872,113
2/1/2034	$4,630,500	$3,624,800	$996,814	$859,936
2/1/2035	$4,630,500	$3,623,850	$997,764	$850,488
2/1/2036	$4,630,500	$1,884,900	$515,334	$434,014
TOTAL	$62,541,481	$47,503,333	$12,676,102	$11,539,860

REFUNDING SAVINGS: WHEN TO PULL THE TRIGGER?

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A MOVING TARGET:

- Rule of thumb was often 3% PV savings
- "Conservative" polices called for 5% savings
- Prior to recent interest rate run-up, double-digit savings were common

FORMAL POLICY VS. WISE PRACTICE

- Policies typically set a "minimum" goal
  - » Risk of losing an opportunity
  - » Risk of leaving significant savings on the table
- Refunding options have value; in practice, only can be exercised every ten years
- Prior to the call date, the challenge of a forward or advance
  - Bird in the hand vs. potential future savings
- After the call date, the call option is a 'wasting asset'

CITY& COUNTY OF SAN FRANCISCO DEBT POLICY

Absent any significant non-economic factors, it is the policy of the City that a refunding should produce minimum debt service savings of at least 3% of the par value of the refunded bonds on a net present value basis, using the refunding issue's True Interest Cost ("TIC")[1] as the discount rate.

TAXABLE ADVANCE REFUNDING

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- Can generate significant savings when interest rates are low
- Federal tax law restrictions on tax-exempt debt don't apply to taxable debt
- When evaluating a taxable advance refunding, it is helpful to calculate the break-even rate as compared to a future current refunding

	TAXABLE ADVANCE REFUNDING 12/15/2021	TAX-EXEMPT CURRENT REFUNDING 12/01/2023	BREAKEVEN ANALYSIS
SUMMARY OF REFUNDING SAVINGS:	SEPTEMBER 2020 RATES	SEPTEMBER 2020 RATES	+156 BASIS POINTS
True Interest Cost (TIC):	1.92%	0.93%	2.49%
Escrow Size	$233,864,124	$213,912,804	$213,912,804
Negative Arbitrage	$7,255,650	$140,882	$417,508
Net Present Value (PV) Savings:	**$31,221,695**	**$49,548,834**	**$31,154,833**
% Savings of Refunded Bonds:	**14.7%**	**23.3%**	**14.6%**
Escrow Efficiency	**81.1%**	**99.7%**	**98.7%**

- Negative arbitrage is the dollar cost of the escrow above what the dollar cost if invested at the arbitrage yield
- Escrow efficiency measures the relationship of this cost to savings

Escrow Efficiency

$31,221,695 (NET PRESENT VALUE SAVINGS) / ($31,221,695 (NET PRESENT VALUE SAVINGS) + $7,255,650 (NEGATIVE ARBITRAGE)) = **81.1%**

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WHEN TO PULL THE TRIGGER?

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ANALYSIS AS OF SEPTEMBER 2019

SCENARIO	TAXABLE ADVANCE NOW	TAX-EXEMPT CURRENT @ CALL	TAX-EXEMPT CURRENT @ CALL
Market Cushion	None	None	204 bps
Closing Date	Feb 1, 2020	Dec 1, 2023	Dec 1, 2023
True Interest Cost	**2.71%**	**1.48%**	**3.53%**
Net Present Value Savings	**$16,715,700**	**$38,777,500**	**$16,713,500**
Present Value Savings %	**7.85%**	**18.20%**	**7.85%**

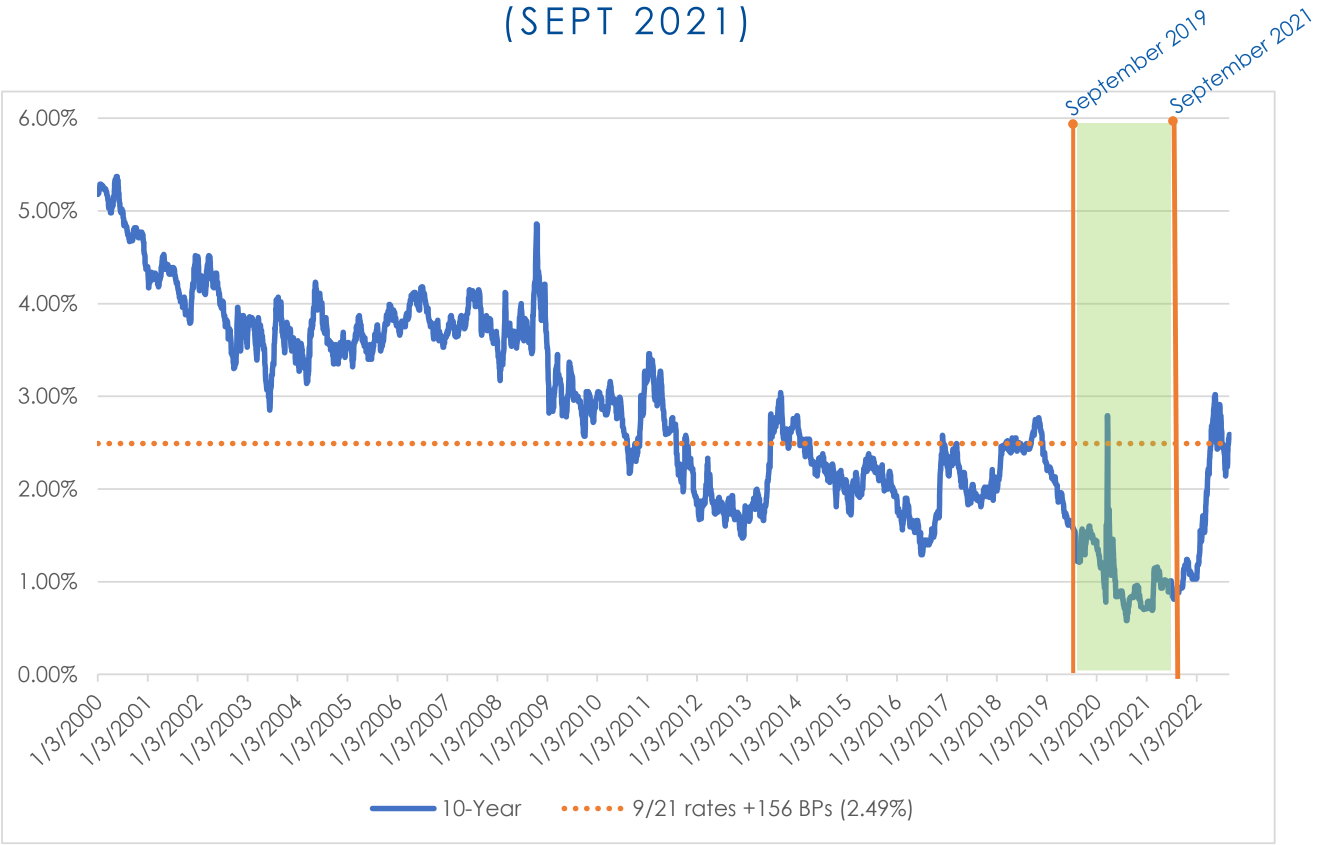
ANALYSIS AS OF DECEMBER 2020

SCENARIO	TAXABLE ADVANCE NOW	TAX-EXEMPT CURRENT @ CALL	TAX-EXEMPT CURRENT @ CALL
Market Cushion	None	None	211 bps
Closing Date	March 15, 2021	Dec 1, 2023	Dec 1, 2023
True Interest Cost	**2.04%**	**0.81%**	**2.93%**
Net Present Value Savings	**$25,171,000**	**$49,654,000**	**$25,216,000**
Present Value Savings %	**11.82%**	**23.31%**	**11.84%**

ANALYSIS AS OF SEPTEMBER 2021

SCENARIO	TAXABLE ADVANCE NOW	TAX-EXEMPT CURRENT @ CALL	TAX-EXEMPT CURRENT @ CALL
Market Cushion	None	None	156 bps
Closing Date	Dec 15, 2021	Dec 1, 2023	Dec 1, 2023
True Interest Cost	**1.92%**	**0.93%**	**2.49%**
Net Present Value Savings	**$31,222,000**	**$49,549,000**	**$31,155,000**
Present Value Savings %	**14.66%**	**23.26%**	**14.63%**

BREAKEVEN EVALUATION (SEPT 2021)



MATURITY BY MATURITY ANALYSIS

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MMA FINE TUNES THE POTENTIAL SAVINGS ON AN ADVANCE REFUNDING

- When a partial refunding is possible, no need to refund maturities that don't meet goals

MATURITY-BY-MATURITY TAXABLE ADVANCE REFUNDING MONITOR

REFUNDED MATURITY	REFUNDED COUPON	REFUNDED PAR	CALL DATE	CALL PRICE	ESCROW RATE	REFUNDING YIELD	REFUNDING PAR	NPV SAVINGS	SAVINGS AS % OF REFUNDED PAR	NEGATIVE ARBITRAGE	ESCROW EFFICIENCY
8/1/2025	4.00%	$2,090,000	8/1/2024	100	1.32%	1.54%	$2,222,072	$28,223	1.35%	$7,952	78%
8/1/2026	4.00%	2,440,000	8/1/2024	100	1.32%	1.77%	2,594,189	68,798	2.82%	18,930	78%
8/1/2027	3.00%	2,815,000	8/1/2024	100	1.32%	1.92%	2,936,953	38,995	1.39%	28,753	58%
8/1/2028	4.00%	3,185,000	8/1/2024	100	1.32%	2.07%	3,386,268	165,324	5.19%	41,038	80%
8/1/2029	4.00%	3,615,000	8/1/2024	100	1.32%	2.22%	3,843,440	212,836	5.89%	55,801	79%
8/1/2030	4.00%	4,070,000	8/1/2024	100	1.32%	2.18%	4,327,193	313,378	7.70%	60,056	84%
8/1/2031	4.00%	4,555,000	8/1/2024	100	1.32%	2.28%	4,842,841	381,061	8.37%	74,945	84%
8/1/2032	4.00%	5,080,000	8/1/2024	100	1.32%	2.38%	5,401,017	448,020	8.82%	92,188	83%
8/1/2033	4.00%	5,635,000	8/1/2024	100	1.32%	2.53%	5,991,089	482,587	8.56%	116,540	81%
8/1/2034	4.00%	6,225,000	8/1/2024	100	1.32%	2.68%	6,618,372	500,516	8.04%	144,467	78%
8/1/2039	4.00%	41,455,000	8/1/2024	100	1.32%	3.05%	44,074,639	2,500,909	6.03%	1,217,266	67%

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FORWARD DELIVERY REFUNDING

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- Tax-exempt current refunding will always generate greater savings than taxable advance, all else equal… but waiting until near the call date entails risk of interest rates rising
- Forward delivery refunding is a middle-ground approach: locks in the bulk of the economics, at the expense of leaving a slice of potential savings on the table
  - » Refunding bonds are priced, locking-in savings, well ahead of the call date (e.g., a year)
  - » Bonds settle within 90 days of call date, allowing for tax-exempt status
  - » Pricing premium for delayed settlement -- typically ~5 bps per month between pricing and delivery but can vary
  - » A relatively short "forward" usually more favorable than issuing advance refunding bonds at taxable rates
- Additional considerations:
  - » Some potential incremental effort (updating OS)
  - » Savings begin only after the call date
  - » Practical limit to how far ahead of the call date a forward is feasible
- If a forward is not feasible, more exotic strategies (e.g., "Cinderella" refunding) can accomplish similar objectives

EXAMPLE: OPTIONS IN FALL 2022 FOR BONDS CALLABLE IN SUMMER 2023

	TAXABLE ADVANCE	T-E CURRENT*	T-E FORWARD
PRICE:	Oct 2022	May 2023	Oct 2022
SETTLE:	Nov 2022	May 2023	May 2023
CALL DATE:	Aug 2023	Aug 2023	Aug 2023
NPV SAVINGS:	$8m / 10%	$12m / 15%	$10m / 12.5%

* illustrative option in fall 2022

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OTHER REFUNDING CONSIDERATIONS

CASH FLOW RESTRUCTURE:

- Restructuring debt payments with a modified amortization schedule and/or repayment term can help issuers better align with annual cash flows.

RISK REDUCTION:

- Refunding bonds can help to take advantage of enhanced credit profile and/or valuation if there has been improvement since the original issuance.
- Replacing variable-rate debt with fixed-rate debt.

RATE MANAGEMENT:

- Front-loading savings can help to reduce and/or stabilize rates for escalating debt service.

AMEND OR REMOVE RESTRICTIVE COVENANT:

- Onerous covenants may be revisited and potentially removed, particularly when replacing a short-term note with longer term debt.

CONCLUSION

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- Remember that the option to call bonds has a value
- It can only be exercised once every ten years
- Use it wisely!!

- Question debt policy refunding targets
- Rules-of-thumb: they may not be well informed

- With the common use of 5% or higher coupons (premium bonds), municipal bond loans can be thought of as bullet loans (effectively "coming due" in ten years), but with an interest rate cap of 5% if you don't refund

- Approach refunding opportunities with caution
- Virtually everybody advising you regarding a refunding only makes money if you refund your bonds.

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MSRB Rule G-42: Disclosure of Conflicts of Interest & Legal or Disciplinary Events

Pursuant to Municipal Securities Rulemaking Board ("MSRB") Rule G-42, on Duties of Non-Solicitor Municipal Advisors, Municipal Advisors are required to make certain written disclosures to clients which include, amongst other things, Conflicts of Interest and any Legal or Disciplinary events of KNN Public Finance, LLC ("KNN Public Finance") and its associated persons.

Conflicts of Interest

Other Municipal Advisor Relationships. KNN serves a wide variety of other clients that may from time to time have interests that could have a direct or indirect impact on the interests of another KNN client. For example, KNN serves as municipal advisor to other municipal advisory clients and, in such cases, owes a regulatory duty to such other clients just as it will to your entity, if hired. These other clients may, from time to time and depending on the specific circumstances, have competing interests. In acting in the interests of its various clients, KNN could potentially face a conflict of interest arising from these competing client interests. KNN fulfills its regulatory duty and mitigates such conflicts through dealing honestly and with the utmost good faith with its clients.

Compensation. KNN Public Finance represents that in connection with the issuance of municipal securities, KNN Public Finance may receive compensation from an Issuer or Obligated Person for services rendered, which compensation is contingent upon the successful closing of a transaction and/or is based on the size of a transaction. Consistent with the requirements of MSRB Rule G-42, KNN Public Finance hereby discloses that such contingent and/or transactional compensation may present a potential conflict of interest regarding KNN Public Finance's ability to provide unbiased advice to enter into such transaction. This conflict of interest will not impair KNN Public Finance's ability to render unbiased and competent advice or to fulfill its fiduciary duty to the Issuer.

If KNN Public Finance becomes aware of any additional potential or actual conflict of interest after this disclosure, KNN Public Finance will disclose the detailed information in writing to the Issuer in a timely manner.

Legal or Disciplinary Events

KNN Public Finance, LLC, has never been subject to any legal, disciplinary or regulatory actions nor was it ever subject to any legal, disciplinary or regulatory actions previously, when it was a division of Zions First National Bank or Zions Public Finance, Inc.

A regulatory action disclosure has been made on Form MA-I for one of KNN Public Finance municipal advisory personnel relating to a 1998 U.S. Securities and Exchange Commission ("SEC") order that was filed while the municipal advisor was employed with a prior firm, (not KNN Public Finance). The details of which are available in Item 9; C(1), C(2), C(4), C(5) and the corresponding regulatory action DRP section on Form MA and Item 6C; (1), (2), (4), (5) and the corresponding regulatory action DRP section on Form MA-I. Issuers may electronically access KNN Public Finance's most recent Form MA and each most recent Form MA-I filed with the Commission at the following website: www.sec.gov/edgar/searchedgar/companysearch.html.

The SEC permits certain items of information required on Form MA and Form MA-I to be provided by reference to such required information already filed on a regulatory system (e.g., FINRA CRD). The above noted regulatory action has been referenced on both Form MA and MA-I due to the information already filed on FINRA's CRD system and is publicly accessible through BrokerCheck at http://brokercheck.finra.org. For purposes of accessing such BrokerCheck information, the Municipal Advisor's CRD number is 4457537.

There has been no change to any legal or disciplinary event that has been disclosed on KNN Public Finance's original SEC registration Form MA filed on February 8, 2016 or Form MA-I's filed on January 22, 2016.

MUNICIPAL DEBT ESSENTIALS

BASICS

ONGOING

MECHANICS

CALIFORNIA DEBT AND INVESTMENT ADVISORY COMMISSION

DAY 3 | ONGOING ADMINSTRATION

Complete the seminar evaluation and leave it on your table.

Return your name badge at the registration table on your way out.

UPCOMING **CDIAC** EVENTS

Fundamentals of Land-Secured Financing
November 2, 2022 | Pomona, CA

2023 CDIAC & CMTA Public Funds Investment Essentials: The Workshop
January 25-26, 2023 | Montebello, CA

Municipal Market Disclosure
March 1-2, 2023 | Folsom, CA