SESSION FIVE
Short-term Instruments

DAVID BRODSLY
Managing Director
KNN Public Finance

ALLISON FALKENSTEIN
Financing Coordinator
City of San Diego

MELISSA SHICK
Director
KNN Public Finance

Short-Term Debt is Loosely Defined

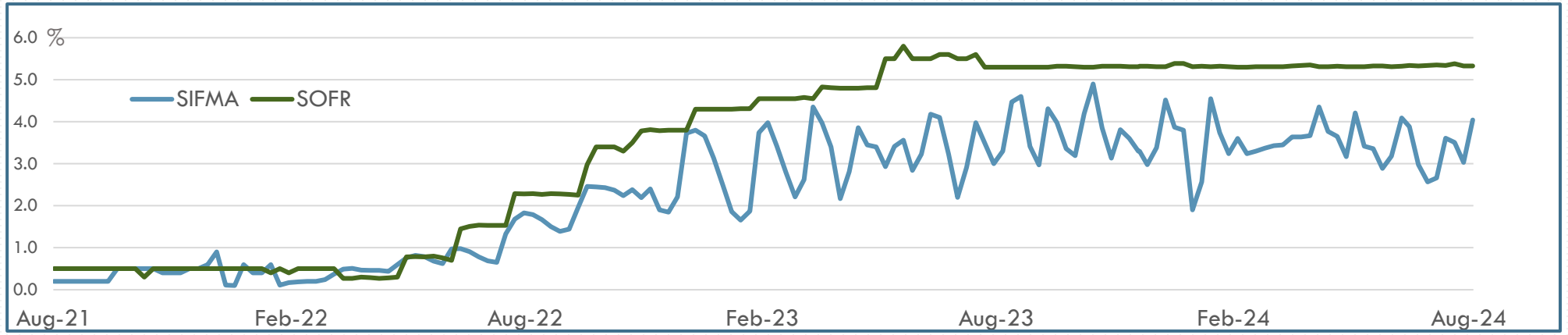
- In general, **"short-term"** is characterized as debt that bears interest based on **short-term interest rates**

- However…debt term/amortization may vary
  - Short-Term: 1-year to 3-years (generally)
  - Long-Term: Up to 30-years

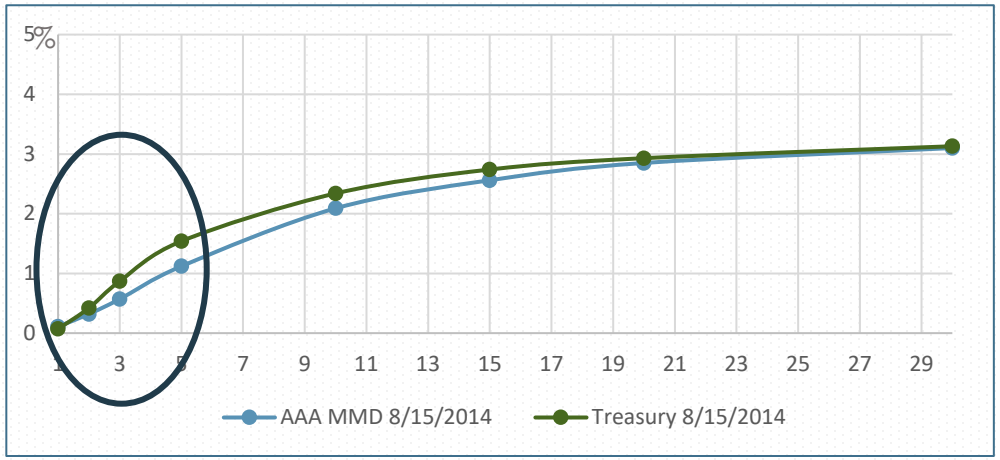
- And…coupon structures may also vary
  - Fixed rate
  - Variable rate

Short-Term Interest Rates Can be Variable or Fixed

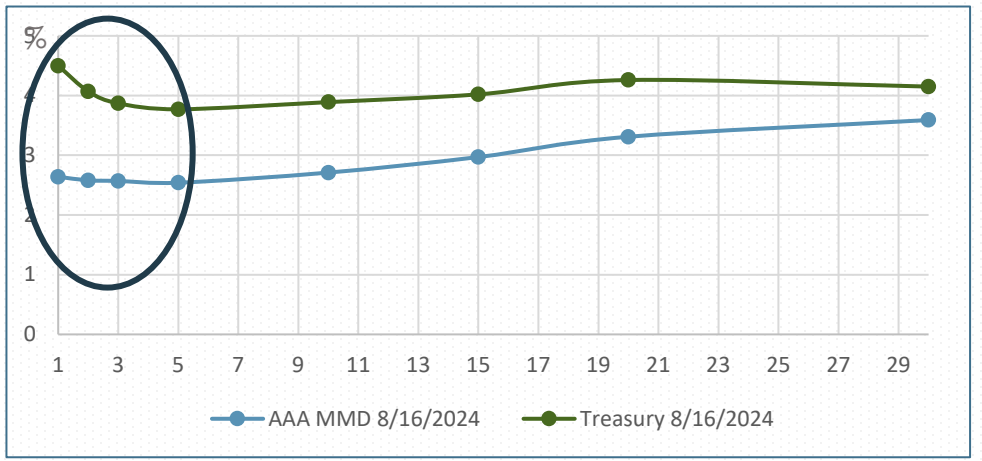
TAX-EXEMPT (SIFMA) & TAXABLE (SOFR) VARIABLE RATES (LAST THREE YEARS)



FIXED RATE YIELD CURVE (AUG 2014)



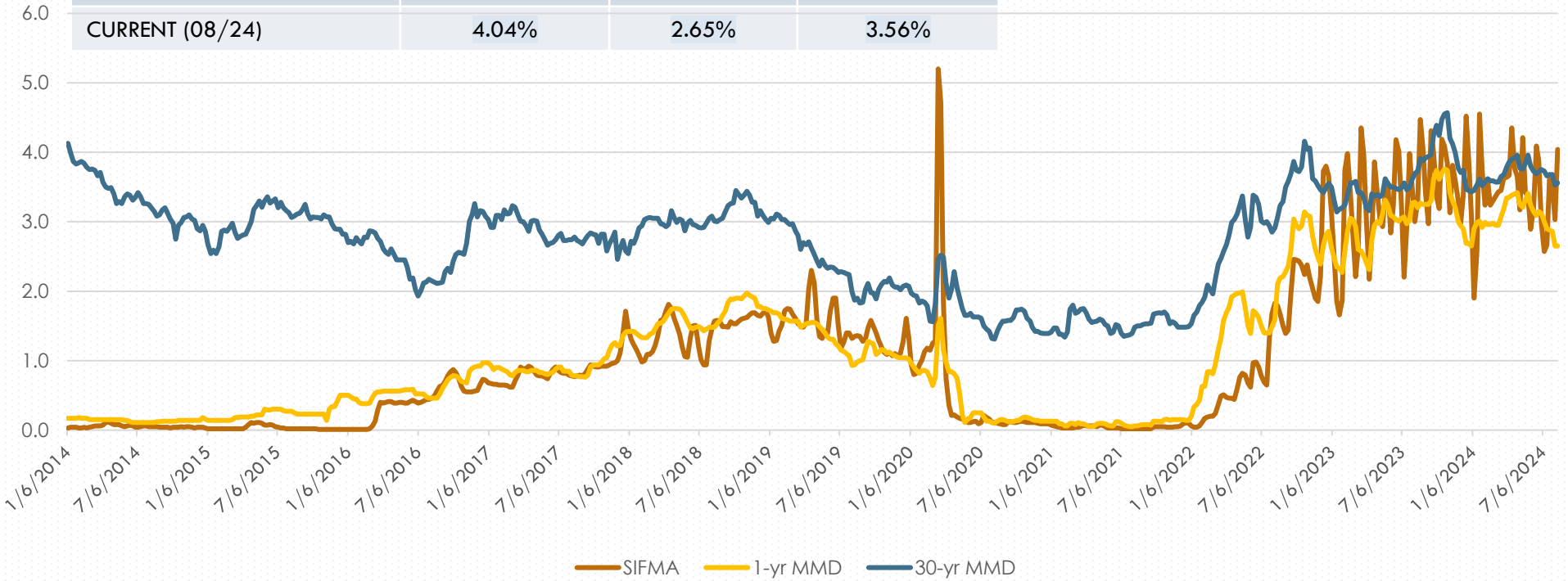
FIXED RATE YIELD CURVE (AUG 2024)



Short-Term Interest Rates Have Historically Provided a Lower Cost of Borrowing

SHORT-TERM VERSUS LONG-TERM INTEREST RATES (SINCE JANUARY 2014)

	SIFMA	1-YR MMD	30-YR MMD
MIN	0.01%	0.05%	1.31%
MAX	5.20%	3.76%	4.57%
AVERAGE (SINCE 01/2014)	1.09%	1.14%	2.77%
CURRENT (08/24)	4.04%	2.65%	3.56%



Types of Debt Characterized as "Short-Term"

I. BRIDGE FINANCINGS	• Provide interim financing for capital projects
	• Types of bridge financings:
	  • Bond or Grant Anticipation Notes (BANs or GANs)
	  • Commercial Paper (CP), Revolving Line of Credit
	• **Short-term** maturity at **fixed** or **variable** **short-term interest rates**

II. CASHFLOW FINANCINGS	• Provide working capital to pay operating expenses
	• Types of cashflow financings:
	  • Tax and Revenue Anticipation Notes (TRANs)
	  • Revenue Anticipation Notes (RANs)
	• **Short term** maturity at **fixed** **short-term interest rates** (typically)

III. PERMANENT FINANCINGS	• Provide long-term funding at short-term interest rates by pairing a long, nominal maturity(s) with a variable interest rate
	• Types of permanent financings:
	  • Variable Rate Demand Obligations/Bonds (VRDOs/VRDBs)
	  • Floating Rate Notes (FRNs)
	  • Put Bonds
	• **Long-term** maturity at **fixed** or **variable** **short-term interest rates**

I. Bridge Financings
Interim Borrowing Needs

- **WHY** are bridge financings used?
  - Less certain about larger scale borrowing needs, but some initial project investment is needed
  - Desire to fund projects on a "just in time basis" as opposed to "upfront"

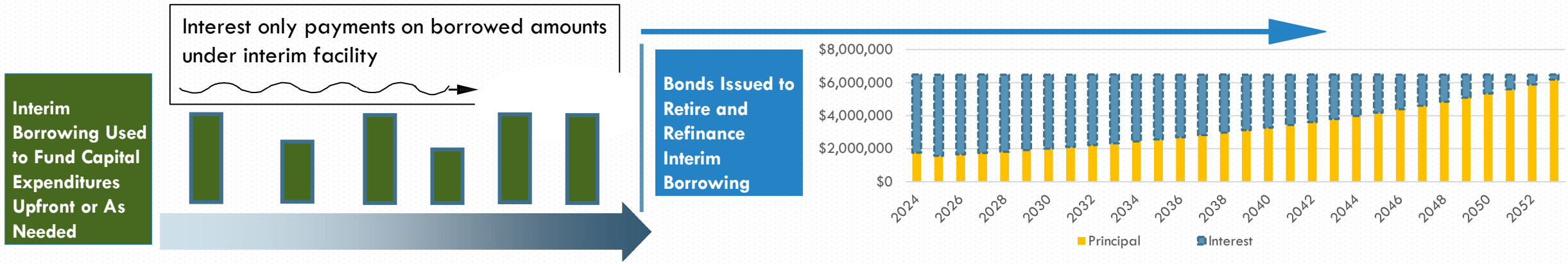
- **WHAT** are the primary types of interim financing vehicles?

	SHORT-TERM LOANS (BANs or GANs)	COMMERCIAL PAPER	BANK LINE OF CREDIT
Issuance Type	Public Offering OR Private Placement/Bank	Public Offering	Private Placement/Bank
Funding	Provided Upfront	Draw/Issued As Needed	Draw/Issued As Needed

I. Bridge Financings
Interim Borrowing Needs

- **HOW** are bridge financings typically structured?
  - Short-term maturities 0-270 days (commercial paper) or ranging from 1- to 3-years (fixed notes)
  - Interest only with no repayment of principal until "take-out"

- **WHEN** are bridge financings repaid?
  - Typically, with long-term borrowings and sometimes with available revenues/grants



I. Bridge Financings: BANs or GANs

BOND ANTICIPATION NOTES & GRANT ANTICIPATION NOTES	
Purpose	Capital projects
Benefit(s)	Can provide seed financing in advance of a planned long-term financing
Consideration(s)	Hard maturity requires a high-degree of certainty around take- out mechanism
Interest Rate	**Fixed** at time of sale
Primary Buyer(s)	The investor base has shifted away from Money Market Funds ("MMF") towards and short duration bond funds

ILLUSTRATION

BANs

- Sales tax authorization approved by voters but revenue collections do not begin for another two years
- Issuer can issue BANs now to tap future debt capacity
- BANs are repaid with long-term financing
- Credit ratings are typically based on expected terms of future take-out and assessment of future market access

GANs

- State or federal government provides grant commitment but funding does not flow immediately or is provided on an incremental or reimbursement basis (typical of transportation funding arrangements)
- GANs are issued to "accelerate" grant funding
- Credit ratings are typically based on the timing and reliability of expected grant receipts

I. Bridge Financings: Commercial Paper

COMMERCIAL PAPER	
Purpose	• **Construction:** Financing day-to-day costs of a construction project in which the issuer needs cash on hand in order to pay contractors and suppliers • **Working Capital:** Financing short-term obligations involved in daily operations, such as funding accounts payable and inventory needs • **Interim financing:** Providing the issuer with liquidity leading up to a larger and longer term bond issue
Benefit(s)	Offers flexibility to create template for borrowing program and then draw down project funds as needed
Considerations(s)	• **Interest rate risk** related to rate reset process • Requires third-party (bank) liquidity
Interest Rate	**Liquidity costs + Fixed rate** set to a stated maturity date between 1 and 270 days
Primary Buyer(s)	Money Market Funds

- While CP Notes have fixed maturities, CP does not have a fixed long-term amortization schedule like bonds
  - The issuer maintains flexibility with respect to the timing, amounts, and how the CP outstanding principal will be repaid
- There are several ways in which an issuer can obtain the funds to provide payment to note holders at the CP Note maturity
  1. CP Notes can be **"rolled"** with proceeds of a subsequent CP Note issuance
  2. CP Notes can be **"refunded"** with proceeds of a long-term bond issuance
  3. CP Notes can be **"retired"** with available funds on hand

I. Bridge Financings: Bank Line of Credit

BANK LINE OF CREDIT	
Purpose	• **Construction:** Financing day-to-day costs of a construction project in which the issuer needs cash on hand in order to pay contractors and suppliers • **Working Capital:** Financing short-term obligations involved in daily operations, such as funding accounts payable and inventory needs • **Interim financing:** Providing the issuer with liquidity leading up to a larger and longer term bond issue
Benefit(s)	• Offers flexible funding "as needed" • Can be more streamlined and easier administration as compared to commercial paper
Considerations(s)	• **Interest rate risk** related to rate reset process (if floating) • Requires bank agreement and bank terms
Interest Rate	**Floating rate + fixed credit spread** based on SIFMA, SOFR (or % of SOFR) **Fixed rate + fixed credit spread** set to a stated maturity
Lenders	Direct Purchase Banks

- Mechanically, a bank line of credit provides the funding flexibility consistent with a commercial paper program, but does not require the following:
  - Public disclosure/offering memorandum
  - CP dealer
  - Credit ratings
- Bank credit is extended in form of a "loan" versus "liquidity"

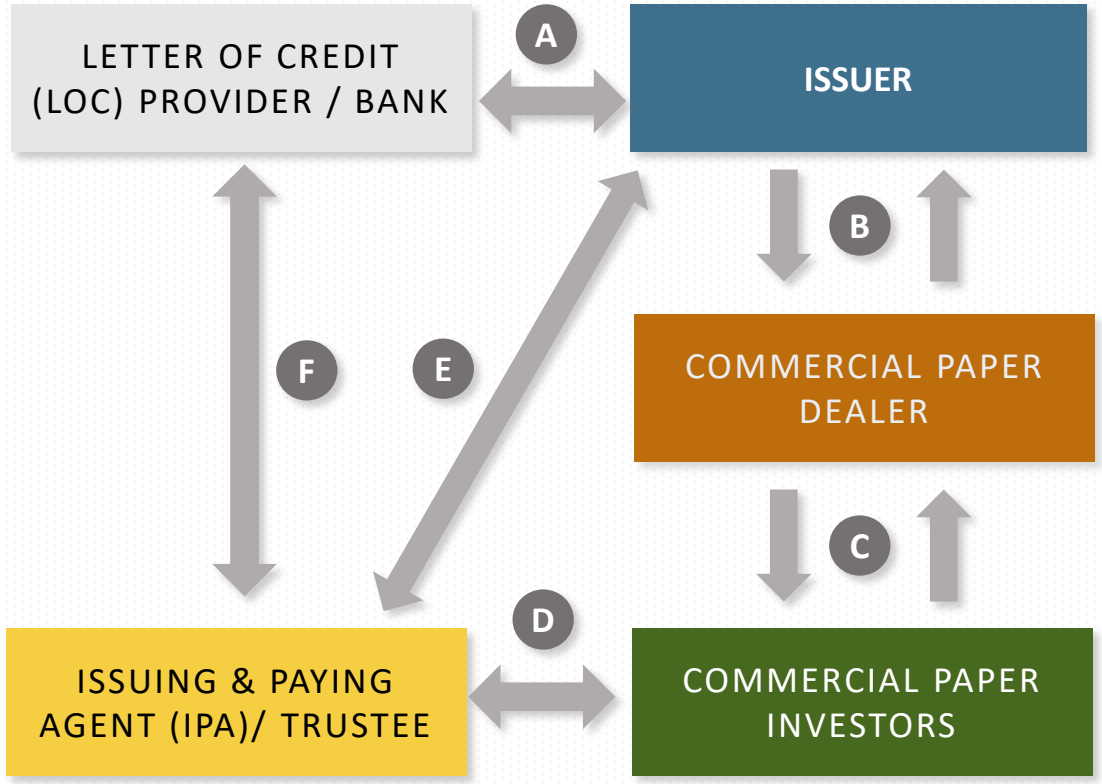
City of San Diego: Interim Borrowing Programs

WATER REVENUE PROGRAM	SEWER REVENUE PROGRAM	GENERAL FUND LEASE PROGRAM
Commercial Paper	**Revolving Credit Agreement**	**Commercial Paper**

• Program Authorization
  • $250 Million
• Tax Status
  • Tax-Exempt
• Bank Credit Provider
  • Bank of America
  • LOC expires 01/2025
• CP Dealers
  • BofA Securities, Inc.
  • RBC Capital Markets
	• Program Authorization
	  • $150 Million
	• Tax Status
	  • Tax-Exempt
	• Bank Lender
	  • Wells Fargo
	  • Expires 12/2025
	• CP Dealers
	  • N/A
		• Program Authorization
		  • $88.5 Million
		• Tax Status
		  • Tax-Exempt
		• Bank Credit Provider
		  • Wells Fargo
		  • LOC expires 11/2024
		• CP Dealers
		  • JP Morgan Securities LLC
		  • Wells Fargo Securities

City of San Diego: Commercial Paper Program Mechanics

PARTIES INVOLVED



KEY ROLES

A i) Issuer obtains bank support; ii) Bank provides credit or liquidity in the event CP notes cannot be rolled/placed with investor

B i) Issuer requests issuance of "new" CP or “rollover” of CP; ii) Issuer and Dealer determine maturity of CP notes

C CP notes sold through the Dealer either to a new investor or to an investor holding a maturing note

D i) IPA directs P&I payments to investors when note matures; ii) IPA deposits new money CP note proceeds from investors into project and cost of issuance funds; iii) IPA deposits principal from investors into LOC repayment funds

E i) Issuer transfers amount of interest due to IPA; ii) Issuer provides Issuance instructions to IPA; iii) IPA receives proceeds from new money notes for project costs and transfers to Issuer

F i) IPA draws on the LOC in the amount of principal and interest due at the CP Note maturity to pay investors; ii) IPA takes interest payment from Issuer and principal from investor to repay LOC draw

Commercial Paper Mechanics

NEW MONEY NOTE

ISSUER | CP DEALER | CP INVESTORS | IPA/TRUSTEE

- Issuer needs $10 million on October 1. Issuer contacts Dealer to plan note sale, discuss maturity options
- On October 1, Dealer markets note and places it with an Investor. Dealer sends sale details to Issuer
  - Issuer emails an Issuance Request Form to IPA by 10:00 AM
  - Investor sends principal to IPA; IPA sends proceeds to Issuer by 1:00 PM

WHEN THAT NOTE MATURES… A ROLLOVER NOTE

ISSUER | CP DEALER | CP INVESTORS | IPA/TRUSTEE | LOC BANK

- Note matures on December 3
- Issuer sends Interest amount to IPA by December 2; IPA prepares to draw on LOC on December 3
- Issuer contacts Dealer to plan rollover note sale, discuss maturity options
- On December 3, 1) IPA draws on LOC to obtain Principal and Interest to repay CP Investor, 2) Dealer markets rollover note and places with an Investor. 3) Dealer sends sale details to Issuer. 4) Issuer emails Issuance Request form to IPA by 10:00 AM. 5) CP Investor sends principal to IPA. 6) IPA uses principal from Investor and Interest from Issuer to repay the LOC on the same day

WHEN THE ISSUER IS READY TO RETIRE ALL OUTSTANDING NOTES… A BOND ISSUANCE

ISSUER | IPA/TRUSTEE | LOC BANK

- Issuer decides it's time to pay down notes. All notes are aligned to mature on June 30.
- Issuer executes a bond issuance which closes on June 29 to provide Principal and Interest on all notes. Issuer directs bond proceeds to be deposited with IPA
- On June 30, IPA draws on LOC to obtain Principal and Interest to repay CP investors; 2) IPA uses bond proceeds to repay LOC on the same day

City of San Diego: Commercial Paper Program Management

- Flexibility to determine timing of issuance needs and the maturity of each issuance, but requires active program management
- Rollover occurs for each portion of the CP program on the relevant maturity date
- Actively work with dealer in selecting the maturity dates of individual CP Notes to minimize interest expense and align notes with program administration needs

EXAMPLE: $100 MILLION CP PROGRAM

	Jul 2023	Oct 2023	Jan 2024	Apr 2024	Jul 2024	Oct 2024	Jan 2025	Apr 2025	Jul 2025
Note A - $25 mm	New Note	Roll #1	Roll #2	Roll #3	Roll #4	Roll #5		Roll #6	
Note B - $25 mm		New Note		Roll #1		Roll #2		Roll #3	
Note C - $25 mm			New Note		Roll #1		Roll #2		
Note D - $25 mm				New Note		Roll #1			
									$100 mm Bonds

II. Cash Flow Financings: TRANs (or RANs)

- California Constitution limits "any indebtedness… exceeding in any year the income and revenue provided for such year"
  - TRANs are indebtedness that is fully repaid out of current year revenues
  - Typically issued early in the fiscal year to fund payroll expenditures prior to receipt of property tax revenues
- TRANS (or RANs) issued for cash flow
  - Property tax and business license taxes are the most cyclical of revenues, received beginning in December
  - Salary expenditures are level all year
  - Some extraordinary expenditures may be front loaded (i.e. prepayments to retirement systems)
- Some factors when considering issuing TRANs
  - Real cashflow needs
  - Reinvestment opportunities (can keep any arbitrage as long as planned deficit occurs)
  - Costs of issuance are current expenses, not amortized over many years

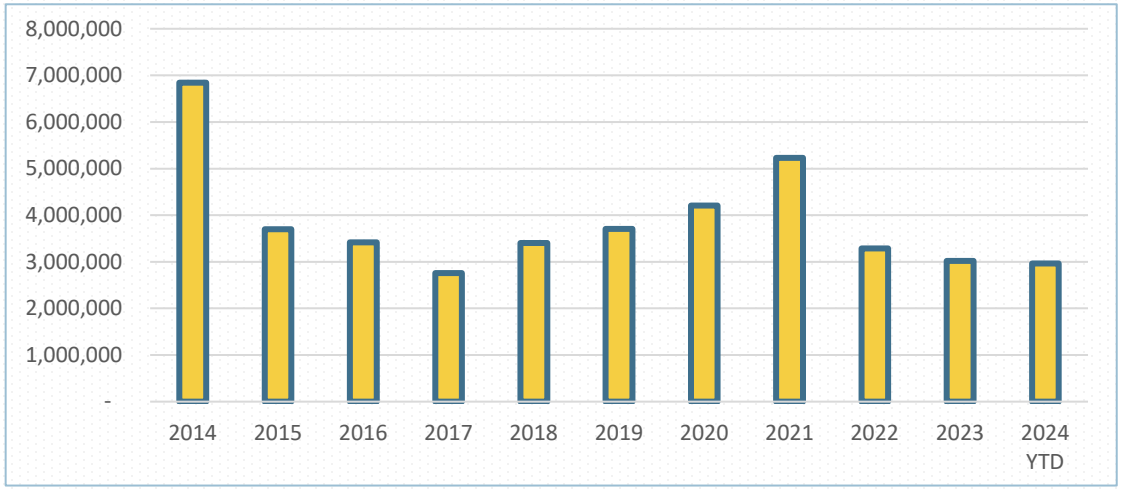
II. Cash Flow Financings: TRANs (or RANs)

TAX AND REVENUE ANTICIPATION NOTES	
Purpose	Cashflow borrowing or capital projects
Benefit(s)	Smooths-out inconsistent revenue stream, such as property taxes or grants
Consideration(s	Short tenor and mandatory repayment require careful forecasting of future cashflows to appropriately time payment date(s)
Interest Rate	**Fixed** at time of sale
Primary Buyer(s)	The investor base has shifted away from Money Market Funds ("MMF") towards and short duration bond funds
Requirement(s)	Statutory and tax limits

SELECT CALIFORNIA FY 2024-25 TRAN ISSUANCES

AMOUNT ($000'S)	ISSUER	SALE DATE	MATURITY
$ 1,544,195	City of Los Angeles	6/26/2024	06/26/2025
$ 700,000	County of Los Angeles	6/11/2024	06/30/2025
$ 425,000	County of Riverside	6/6/2024	06/30/2025
$ 200,000	San Diego Unified School District	7/10/2024	06/30/2025

HISTORICAL CALIFORNIA TRAN ISSUANCE VOLUME



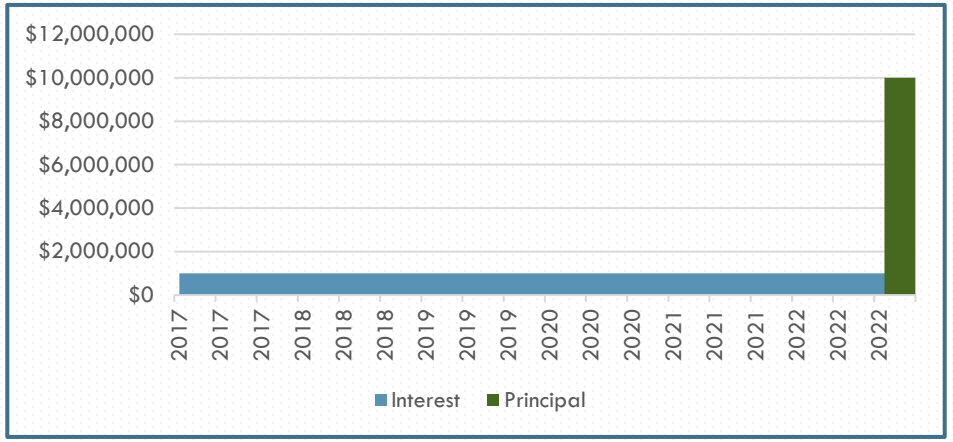
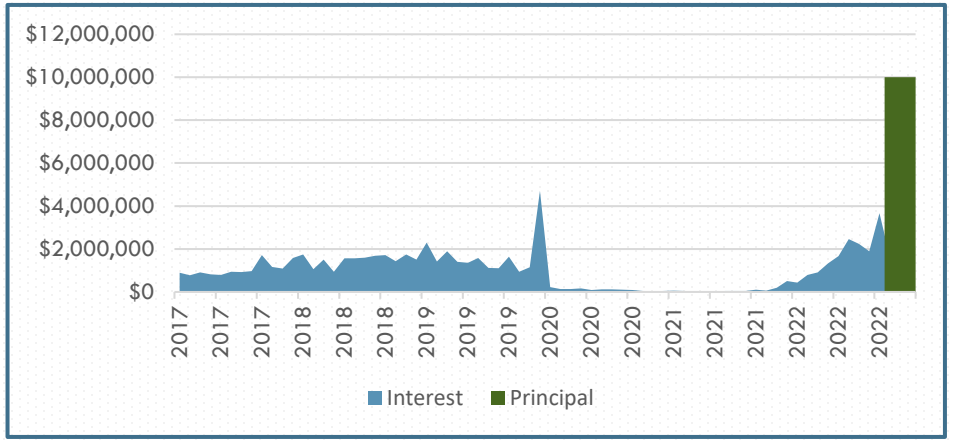
III. Permanent Financings: Why Use Variable Rate Debt?

- Debt Portfolio Diversification
  - Interest cost, timing, investor base
- Asset / Liability Balance
  - Short-term investments naturally hedge variable rate liabilities
- Prepayment Flexibility
  - Remarketed securities often have flexible redemption terms; can be refinanced on any "put" date (daily, weekly, monthly, yearly)
- Interest Cost Management
  - Historically, has offered the lowest cost of capital
  - Can avoid locking in rates for long tenors in unfavorable markets

Thus…variable rate debt tends to be most utilized by issuers with large

- **Enterprises**
- **Capital programs**
- **Debt programs**

III. Permanent Financings: Fixed Rate versus Variable Rate Interest

	FIXED RATE DEBT	VARIABLE RATE DEBT
	• Rates (coupons) are set on the day of the pricing and do not change • Issuer will pay scheduled interest (usually twice a year) for as long as the bonds are outstanding	• Rates are reset to different coupons at predetermined points throughout the year • Issuer's interest payments will vary for the life of the bonds based on market conditions or changes in an index
		
PRO	• Budget certainty • No bank credit support necessary	• Asset/liability management • Portfolio diversification/flexibility
CON	• Less flexible prepayment feature • Can be higher cost	• Interest cost variability • Requires bank credit support

III. Permanent Financings: Primary Variable Rate Financing Vehicles

	DAILY VRDBS	WEEKLY VRDBS	FLOATING RATE NOTES	PUT BONDS
Product Overview	• Bonds with a long-term nominal maturity bearing interest at variable rates adjusted at **daily** or **weekly** intervals • VRDB holders have the option to tender securities for purchase to the issuer • Short-term tender features give VRDBs the liquidity and principal preservation characteristics of money market paper, allowing for pricing at the short end of the yield curve		• Alternative to traditional variable rate products (VRDBs) to generate committed floating rate funding • Interest is paid monthly at the index plus a spread, which is set at pricing and fixed through maturity or mandatory tender date	• Fixed rate bonds that have a long-term nominal maturity with a mandatory investor put prior to maturity • Priced to the put date, allowing issuers to lock in rates at the shorter end of the yield curve
Predominant Buyer	Money Market Fund	Money Market Fund	Short Duration Intermediate	Short Duration Intermediate
Maturity	Long-term (e.g. 30Y)	Long-term (e.g. 30Y)	Long-term (e.g. 30Y)	Long-term (e.g. 30Y)
Tender / Put Tenor	Daily	Weekly	1-10 Years	1-10 Years
Rate Reset Period	Daily	Weekly	On Mandatory Tender Date	On Put Date
Bank Liquidity Required?	Yes	Yes	No	No
Pricing	~SIFMA	~SIFMA	SIFMA + Spread % SOFR + Spread	MMD + Spread (+ Put Premium)

III. Permanent Financings: Variable Rate Demand Bonds (VRDBs)

VARIABLE RATE DEMAND BONDS	
Purpose	Capital Projects
Benefit(s)	Access rates on the short end of the yield curve Retain flexibility to pay off or restructure debt at any time
Considerations(s)	• **Interest rate risk** related to rate reset process • Requires third-party (bank) liquidity • Investor "put" feature • If VRDBs cannot be remarketed, bonds are held by liquidity bank at higher interest rates
Interest Rate	**Bank facility costs + Variable rate** remarketed on a daily or weekly basis
Primary Buyer(s)	Money Market Funds

- Long nominal maturity/amortization; often 30-year term
- Remarketing agents reset VRDB interest rates based on market conditions on each rate reset date
  - **Daily:** Remarketing agent typically sets a rate by 10 a.m. each business day
  - **Weekly:** Remarketing agent sets a rate (typically Tuesday evening) that is effective for seven calendar days
  - Other periodic options may be possible
- Issuers must have third party (bank) liquidity or self liquidity if highly-rated (not typical)

III. Permanent Financings: Floating Rate Notes & Put Bonds

FLOATING RATE NOTES & FIXED RATE PUT BONDS	
Purpose	Used to generate long-term, committed funding at short-term floating or short-term fixed rate interest rates
Benefit(s)	• No liquidity is needed because there is no remarketing over the life of the bonds • May be sold with optional par call feature ranging from 6-12 months based on put date
Considerations(s)	• **Interest rate risk** related to underlying floating rate benchmark (if variable) • Remarketing/market access risk at "mandatory tender date"
Interest Rate	• **Floating: SIFMA or SOFR (or % thereof) plus a credit spread** • **Fixed: MMD or UST plus a fixed credit spread** • May be based on a par or premium coupon structure • May assume either a soft or hard put "penalty"

- Long nominal maturity/amortization; often 30-year term
- Base interest rate based on note/bond rate mode and term
  - **Floating Rate:** SIFMA or SOFR serves as base rate; reset weekly
  - **Fixed Rate:** MMD or UST serves as base rate corresponding to term of "tender" (i.e. 3-year put priced based on 3-year MMD)

Bank Liquidity Concepts: CP and VRDBs

BANK LIQUIDITY FACILITIES

- Standby Bond Purchase Agreements (SBPA) or Revolving Credit Agreements
- Banks fund the purchase price of a failed remarketing
- Does not guarantee the payment of principal & interest
- The bank has the option to terminate or suspend payments immediately in case of:
  - Voluntary issuer bankruptcy
  - Issuer fails to pay principal or interest
  - Issuer defaults on parity debt
  - Involuntary bankruptcy
  - Issuer falls below investment grade
- VRDBs/CP carry bank's short-term ratings
- VRDBs carry issuer's long-term ratings

BANK DIRECT PAY LETTER OF CREDIT

- Reimbursement Agreement or Letter of Credit (LOC)
- Supports payment of principal and interest when due
- Banks must pay noteholders – guaranteed payment of principal and interest
- Issuer generally pays a larger premium to the bank for the guarantee
- The bank does not have the option to terminate or suspend payments despite:
  - Bankruptcy of the issuer
  - Downgrade in ratings
  - Default of the issuer on outstanding VRDBs or parity debt
- VRDBs/CP carry the bank's short-term ratings
- VRDBs carry bank's long-term ratings

Put Features: VRDBs, FRNs, and Put Bonds

VRDB PUT FEATURES – AT REMARKETING

- Investors can "put" VRDOs back to the remarketing agent at each rate reset date
  - If an investors "puts" the VRDO back, the remarketing agent will attempt to remarket the securities to a new investor
  - If a remarketing is unsuccessful, and the remarketing agent is unable to find new investors to purchase the VRDOs, the remarketing agent may, **but is not obligated to**, purchase the securities
  - If a remarketing is unsuccessful and the remarketing agent elects **not** to purchase the securities, the liquidity provider must purchase the securities

NOTE/BOND PUT FEATURES – AT TENDER DATE

Soft Put

- If notes/bonds are not refinanced at the mandatory tender date, the issuer pays a punitive stepped-up interest rate on the bonds/notes, but no event of default occurs
- The interest rate may "step-up" over a few periods if the bonds continue to remain outstanding, or it may automatically step up to a maximum rate
- May be structured similar to the "term-out" feature of a bank liquidity facility whereby principal is paid over a defined period

Hard Put

- If notes/bonds are not refinanced at the mandatory tender date, the issuer is considered to be in default

QUESTIONS?

DAVID BRODSLY
Managing Director
KNN Public Finance

ALLISON FALKENSTEIN
Financing Coordinator
City of San Diego

MELISSA SHICK
Director
KNN Public Finance