## Sacramento Transportation Authority

Market Update and Refunding Analysis

Presented by PFM Financial Advisors LLC
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## Table of Contents

1. Market Update
2. Overview of Debt Profile
3. Potential Swap Refunding
4. Next Steps
5. Appendix
6. Market Update

## Tax Exempt Yield Curve

- Inflationary pressure and the Federal Open Market Committee (FOMC) rate hikes increased interest rates over the last year:
- Tax exempt rates are up 222 basis points (bps) on the short end of the curve
- Long-term rates are up 164 bps
_AAA MMD Rates at 3/2/2023 —AAA MMD Rates at 3/02/2022


| MMD Yield Curve |  |  |  |
| :---: | :---: | :---: | :---: |
| Term | 3/2/2023 | 3/2/2022 | Delta |
| 1 | 3.03 | 0.81 | 2.22 |
| 2 | 2.99 | 1.05 | 1.94 |
| 3 | 2.82 | 1.15 | 1.67 |
| 4 | 2.73 | 1.24 | 1.49 |
| 5 | 2.68 | 1.30 | 1.38 |
| 6 | 2.62 | 1.37 | 1.25 |
| 7 | 2.59 | 1.44 | 1.15 |
| 8 | 2.60 | 1.50 | 1.10 |
| 9 | 2.61 | 1.53 | 1.08 |
| 10 | 2.63 | 1.56 | 1.07 |
| 11 | 2.71 | 1.62 | 1.09 |
| 12 | 2.84 | 1.64 | 1.20 |
| 13 | 3.01 | 1.66 | 1.35 |
| 14 | 3.16 | 1.68 | 1.48 |
| 15 | 3.25 | 1.70 | 1.55 |
| 16 | 3.29 | 1.72 | 1.57 |
| 17 | 3.33 | 1.74 | 1.59 |
| 18 | 3.36 | 1.76 | 1.60 |
| 19 | 3.39 | 1.78 | 1.61 |
| 20 | 3.42 | 1.80 | 1.62 |
| 21 | 3.45 | 1.83 | 1.62 |
| 22 | 3.47 | 1.86 | 1.61 |
| 23 | 3.49 | 1.89 | 1.60 |
| 24 | 3.52 | 1.90 | 1.62 |
| 25 | 3.55 | 1.91 | 1.64 |
| 26 | 3.56 | 1.92 | 1.64 |
| 27 | 3.57 | 1.93 | 1.64 |
| 28 | 3.58 | 1.94 | 1.64 |
| 29 | 3.59 | 1.95 | 1.64 |
| 30 | 3.60 | 1.96 | 1.64 |

## 10-Year Interest Rates - Taxable \& Tax Exempt

- Taxable rates have increased faster than tax exempt rates
- Increased taxable rates decreases the cost to terminate the interest rate swaps
- Simultaneously, STA can issue tax-exempt fixed rate bonds to replace the swaps and variable rate bonds
- Tax-exempt rates are relatively attractive compared to taxable rates

10-yr MMD and 10-yr Treasury Rates


## Swap Termination Costs Have Decreased in Recent Months

- The cost to terminate STA's interest rate swaps is currently near the low-point compared to the last five years
- Termination costs reached $\$ 140$ million during the low-rate period of the pandemic and are now approximately $\$ 34$ million

STA's Swap Termination Cost Jan 2018 - March 2023


2. Overview of Debt Profile

## Current Debt Portfolio

- STA has outstanding debt in the par amount of $\$ 342.5$ million

| SERIES | OUTSTANDING PAR | FINAL MATURITY | MODE | SBPADIRECT PURCHASE | EXPIRATION/ TENDER DATE | $\begin{aligned} & \text { REMARKETING } \\ & \text { AGENT } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2009C | \$106,100,000 | 10/1/2038 | Weekly VRDB | US Bank N.A. SBPA | 11/20/2027 | US Bank |
| 2014A | \$106,100,000 | 10/1/2038 | Weekly VRDB | Sumitomo Mitsui Banking Corp. | 10/30/2024 | Wells Fargo |
| 2015A | \$106,100,000 | 10/1/2038 | Weekly VRDB | Sumitomo Mitsui Banking Corp. | 5/12/2023 | JP Morgan |
| 2022 | \$24,245,000 | 10/1/2027 | Fixed Rate | N/A | N/A | N/A |

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TOTAL $342,545,000
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The Authority's three swaps have a market valuation of (\$34.01 million)

- None of the swaps have a collateral posting requirement and all swaps have performed as anticipated


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## Total Cost on Interest Rate Swap and Bonds

- STA's all-in cost of capital on the interest rate swaps is $4.06 \%$, including all ancillary fees

| Total Cost of Interest Rate Swap |  |
| :--- | :---: |
| STA Pays |  |
| Swap Fixed Rate | $3.71 \%$ |
| Fees to Remarketing Agents | $0.06 \%$ |
| Fees to Liquidity Providers | $0.37 \%$ |
| Positive STA Bond/Swap Differential | $(0.10 \%)$ |
| All in Cost: | $\mathbf{4 . 0 6 \%}$ |

## Debt Service Coverage Ratio

- Annual Debt Service ranges from $\$ 13.7$ million in FY2023-28 to $\$ 36.1$ million in FY2029-39
- Annual Debt Service (DS) Coverage (with FY2022 budgeted revenues $=\$ 164.4$ million)
- Annual DS coverage through 2028: 8.86x
- Maximum Annual DS coverage: $4.55 x$

Total Debt Service

3. Potential Swap Refunding

## Potential Refunding of Interest Rate Swaps and Variable Rate Bonds

- Issue fixed rate bonds to:
- Refund $\$ 318.3$ million of variable rate bonds
- Pay for $\$ 34$ million termination cost of eliminating the interest rate swaps
- Secure call option on the new bonds to refinance in 2033 for potential debt service savings
- Pros
- Eliminates all variable rate bonds and interest rate swaps
- Simplifies portfolio and reduces risk
- Provides flexibility to refund fixed rate bonds in 2033 for potential future savings
- Eliminates any uncertainty with upcoming (June 2023) LIBOR index transition
- Cons
- Current rates increase total debt service costs by $\$ 12.6$ million (NPV) through 2039: 3\% increase
- Would reduce funding available for the Five-Year Capital Improvement Program


## Swap Termination \& Refunding Results

- Refunding all of the variable rate bonds and terminating the interest rate swaps by issuing new fixed rate bonds would increase debt service by $\$ 14$ million through 2039: a 3\% increase in debt service through 2039
- The new bonds could be refunded in 2033 with the potential for savings at that time

| Date | Prior Debt Sevice | Refunding Debt <br> Service | Gross Savings | NPV Savings |
| :---: | :---: | :---: | :---: | :---: |
| $6 / 30 / 2024$ | $9,618,860.96$ | $11,385,533.33$ | $(1,766,672.37)$ | $(1,760,356.57)$ |
| $6 / 30 / 2025$ | $12,920,858.00$ | $15,294,000.00$ | $(2,373,142.00)$ | $(2,269,209.71)$ |
| $6 / 30 / 2026$ | $12,920,858.00$ | $15,294,000.00$ | $(2,373,142.00)$ | $(2,202,176.92)$ |
| $6 / 30 / 2027$ | $12,920,858.00$ | $15,294,000.00$ | $(2,373,142.00)$ | $(2,137,124.29)$ |
| $6 / 30 / 2028$ | $12,920,858.00$ | $15,294,000.00$ | $(2,373,142.00)$ | $(2,073,993.32)$ |
| $6 / 30 / 2029$ | $34,670,272.00$ | $35,003,625.00$ | $(333,353.00)$ | $(270,454.16)$ |
| $6 / 30 / 2030$ | $35,826,477.00$ | $36,142,750.00$ | $(316,273.00)$ | $(249,131.78)$ |
| $6 / 30 / 2031$ | $36,015,703.00$ | $36,323,375.00$ | $(307,672.00)$ | $(235,764.59)$ |
| $6 / 30 / 2032$ | $35,862,306.00$ | $36,164,250.00$ | $(301,944.00)$ | $(225,307.71)$ |
| $6 / 30 / 2033$ | $35,966,286.00$ | $36,259,500.00$ | $(293,214.00)$ | $(213,099.24)$ |
| $6 / 30 / 2034$ | $36,021,554.00$ | $36,300,875.00$ | $(279,321.00)$ | $(197,730.38)$ |
| $6 / 30 / 2035$ | $36,028,110.00$ | $36,297,375.00$ | $(269,265.00)$ | $(185,938.07)$ |
| $6 / 30 / 2036$ | $36,279,865.00$ | $36,535,375.00$ | $(255,510.00)$ | $(172,239.60)$ |
| $6 / 30 / 2037$ | $35,882,908.00$ | $36,131,125.00$ | $(248,217.00)$ | $(163,639.57)$ |
| $6 / 30 / 2038$ | $36,331,150.00$ | $36,561,000.00$ | $(229,850.00)$ | $(148,321.78)$ |
| $6 / 30 / 2039$ | $36,118,502.00$ | $36,336,250.00$ | $(217,748.00)$ | $(137,858.80)$ |
| Total | $\$ 456,305,425.96$ | $\$ 470,617,033.33$ | $\mathbf{( \$ 1 4 , 3 1 1 , 6 0 7 . 3 7 )}$ | $\mathbf{( \$ 1 2 , 6 4 2 , 3 4 6 . 4 9 )}$ |

## Future Bonds Refunding

- If STA refunds the callable future bonds in 2033, the debt service savings is $\$ 15.5$ million (net present value)
- Future rate assumption: The 20-year average of tax-exempt rates
- Net overall savings of $\$ 2.8$ million from the 2023 potential issuance

| Date | Prior Debt Sevice | Refunding Debt <br> Service | Gross Savings | NPV Savings |
| :---: | :---: | :---: | :---: | :---: |
| $6 / 20 / 2034$ | $4,023,375.00$ |  | $4,023,375.00$ | $3,991,406.54$ |
| $6 / 20 / 2035$ | $36,297,375.00$ | $33,891,750.00$ | $2,405,625.00$ | $2,365,843.47$ |
| $6 / 20 / 2036$ | $36,535,375.00$ | $34,129,875.00$ | $2,405,500.00$ | $2,328,663.93$ |
| $6 / 20 / 2037$ | $36,131,125.00$ | $33,724,250.00$ | $2,406,875.00$ | $2,293,518.42$ |
| $6 / 20 / 2038$ | $36,561,000.00$ | $34,158,000.00$ | $2,403,000.00$ | $2,253,996.24$ |
| $6 / 20 / 2039$ | $36,336,250.00$ | $33,932,625.00$ | $2,403,625.00$ | $2,219,326.64$ |
| Total | $\$ 185,884,500.00$ | $\$ 169,836,500.00$ | $\mathbf{\$ 1 6 , 0 4 8 , 0 0 0 . 0 0}$ | $\mathbf{\$ 1 5 , 4 5 2 , 7 5 5 . 2 4}$ |

## Future Bonds Refunding - Breakeven Even Analysis

- Rates would need be +50 bps ( $0.50 \%$ ) above their 20-year average in order to stay above ( $\$ 12.6$ ) million in debt service savings and breakeven compared to today's increase in debt service costs
- 2033 rates equivalent to the 20 -year average $+0.50 \%=\$ 12.9$ million in debt service savings through 2039

| Date | Prior Debt Sevice | Refunding Debt <br> Service | Gross Savings | NPV Savings |
| :---: | :---: | :---: | :---: | :---: |
| $6 / 20 / 2034$ | $4,023,375.00$ |  | $4,023,375.00$ | $3,981,593.22$ |
| $6 / 20 / 2035$ | $36,297,375.00$ | $34,396,500.00$ | $1,900,875.00$ | $1,859,847.93$ |
| $6 / 20 / 2036$ | $36,535,375.00$ | $34,635,750.00$ | $1,899,625.00$ | $1,820,618.63$ |
| $6 / 20 / 2037$ | $36,131,125.00$ | $34,233,250.00$ | $1,897,875.00$ | $1,781,766.31$ |
| $6 / 20 / 2038$ | $36,561,000.00$ | $34,659,125.00$ | $1,901,875.00$ | $1,749,053.07$ |
| $6 / 20 / 2039$ | $36,336,250.00$ | $34,434,875.00$ | $1,901,375.00$ | $1,712,898.13$ |
| Total | $\mathbf{\$ 1 8 5 , 8 8 4 , 5 0 0 . 0 0}$ | $\mathbf{\$ 1 7 2 , 3 5 9 , 5 0 0 . 0 0}$ | $\mathbf{\$ 1 3 , 5 2 5 , 0 0 0 . 0 0}$ | $\mathbf{\$ 1 2 , 9 0 5 , 7 7 7 . 2 9}$ |

## 4. Next Steps

## Next Steps

- Staff is looking for direction on bond refunding
- Should the Board provide that direction, staff would move forward with the following:
- STA would release a Request for Proposals to select an underwriting team
- STA and financing team would prepare bond refunding documents
- Staff would then come back to the STA Governing Board to approve the following action:
- Refunding of the 2009C, 2014A, AND 2015A series bonds from variable rate to fixed rate
- Termination of the existing swap agreements and all other agreements needed to support variable rate bonds

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Appendix

## Interest Rate Swap Overview

- An interest rate swap is a contract between two counterparties to exchange interest rate payments over time.
- Purpose: the swap contract locks in the fixed rate.


## SWAP CONTRACT



## Bank Counterparties

- Bank of America
- Goldman Sachs
- JP Morgan


## Interest Rate Swap Overview

- The swap locks in the rate - the variable rate bonds raise funds for projects
- To the extent that variable-rate-1 = variable-rate-2 (i.e., inflows equal outflows) STA's net payment is the fixed swap rate


## SWAP CONTRACT



Thank You


[^0]:    Market Valuations are dated 3/02/2023 from PFM Swap Advisors

