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SFMTA Revenue Bond Advance Refunding

SFMTA Bond Oversight Committee Update

December 2, 2020

Financial Analysis Office Budget, Financial Planning and Analysis Finance & IT

The Opportunity

- MTAB updated on 12/1 with FY21/22 deficit scenarios
- Advance refunding for upfront savings could result in:
 - Up-to \$21 million in Net Present Value savings
 - Up-to \$43 million in near-term cash flow
- The SFMTA can take advantage of historically low interest rates to save the agency in debt service while increasing budget flexibility
- Deal structure may include release of reserves and upcoming principal & interest, and begin amortization in FY24 to maximize near-term cashflow
- The SFMTA may decide not to move ahead with refunding depending on financial position or market conditions

Assumes rates as of 11/13/2020, subject to change based on market conditions

SFMTA Outstanding Debt

Series	Original Par	Outstanding Par	Avg Yield	Dated Date	Final Maturity	1st Call Date	DSRF Purpose
Series 2012-A	38 M	12 M	2.28	Jul-12	Mar-32	Mar-22	1.7 M Refunding prior parking bonds
Series 2012-B	26 M	26 M	3.42	Jul-12	Mar-42	Mar-22	1.8 M New money-Pkg Garages
Series 2013	75 M	56 M	2.68	Dec-13	Mar-33	Mar-23	6.0 M New money-Traffic safety, vehicles
Series 2014	71 M	62 M	2.09	Dec-14	Mar-44	Mar-24	4.5 M New money-Traffic safety, vehicles
Series 2017	178 M	167 M	NA	Jun-17	Mar-47	Mar-27	NA New money-BRT, Mission Bay, vehicles
Total	388 M	323 M					14.0 M

The SFMTA proposes to refund series 2012 through 2014

Refunding Series 2017 would not be cost-effective

Summary Comparison of Refunding Scenarios

Scenario	1) Base Case	2) Upfront Savings	3) Upfront + New Money
Approach	Level Savings w/ Releases	Amortization in 2024 w/ Releases	Amortization in 2024 w/ Releases and New Money
Objective	Reap max savings over the life of the bonds	Greatly enhance near-term cash flow for slightly less aggregate gross (long- term) savings	Maximize near-term cash flow for slightly less aggregate gross (long- term) savings
Tradeoff	More aggregate gross (long-term) savings for less near-term cash flow	More near-term flexibility for less long-term savings	Most near-term flexibility for less long-term savings
Gross Aggregate Savings (Long-term)	\$24.3 M	\$20.5 M	\$20.6
NPV Savings	\$20.9 M	\$20.4 M	\$20.4M
FY21-23 Net Cash Flow	\$33.5 M	\$43.0 M	\$43.0 M

Assumes rates as of 11/13/2020, subject to change based on market conditions

Comparison of Refunding Scenarios

	1) Base Case		3) Upfront + New Money
Funds Available for SFMTA in FY 2021 ¹			
Aggregate DSRF Releases	14,071	14,071	14,071
Aggregate Interest Fund Releases	3,193	3,193	3,193
Aggregate Principal Fund Releases	5,317	5,317	5,317
New Money Proceeds	0	0	10,734
Sub-Total: Available Funds	22,581	22,581	33,315
Near-Term Net Cash Flow Benefit ³			
FY 2021 Net Change in Cash Flow	9,631	9,631	9,631
FY 2022 Net Change in Cash Flow	635	9,625	4
FY 2023 Net Change in Cash Flow	638	1,187	0
Sub-Total: FY21-23 Net Cash Flow Benef	10,904	20,443	9,636
Total Near-Term Financial Impact 4	33,485	43,024	42,950
Net PV Savings Calculation			
Aggregate Gross Savings	24,301	20,528	20,551
PV Savings From Cash Flows	20,949	20,377	20,398
Plus: Refunding Funds on Hand	5	5	9
Net PV Savings	20,954	20,382	20,407
Net PV Savings to Refunded Par	13.4%	13.1%	13.1%

1) Indicates funds not used as a source of funds for the refunding bonds that are made available at financial close for SFMTA's use

2) Gross annual savings generated by refunding bonds only, does not account for impact of new money debt service, if any

3) Net Cash Flow Benefit is equal to the savings generated by the refunding bonds, less any debt service due on new money bonds

4) Total Near Term Financial Impact is equal to the sum of the Sub-Total: Available Funds and the Sub-Total: FY21-23 Net Cash Flow Benefit

- Option 1 provides level savings over life of bond
- Option 2 and 3 include amortization in 2024
- Option 3 includes new money
- NPV is roughly equal for all options
- The main difference among options is the amount and timing of near-term cash flow

Assumes rates as of 11/13/2020, subject to change based on market conditions

Proposed Benchmarks

Criterion	Decription	Benckmark
Net Present Value (NPV)	Minimum NPV savings as	6%
Savings	percentage of refunded par	

- Benchmarks will be used when making the decision whether to go-to-market
- Citywide and SFMTA refunding policy is that NPV savings must be at least three percent, the proposed target is double the policy threshold
- Annual debt service projected to remain at less than two percent of the annual operating budget, in compliance with SFMTA policy not to exceed five percent

<u>Note</u>

- NPV savings differ from upfront savings NPV savings are due to interest rates, while upfront savings are due to deal structure
- While both are desirable, upfront savings are more important from a near-term budget perspective

Sensitivity Analysis

Sensitivity analysis on the base case shows aggregate savings above benchmarks with a 50 basis point 0.5% rise in rates

INF V Savings Analys	515				
	2012A	2012B	2013	2014	Aggregate
Current Rates					
Refunded Par	11,690,000	25,835,000	56,190,000	62,495,000	156,210,000
Refunding Par	-	-	-	-	173,315,000
Cash-Flow Savings	-	-	-	-	24,301,436
NPV Savings	1,662,769	5,195,674	6,427,932	7,667,678	20,954,053
NPV Savings %	14.22%	20.11%	11.44%	12.27%	13.41%
50bp Increase in Inter	rest Rates				
Refunded Par	11,690,000	25,835,000	56,190,000	62,495,000	156,210,000
Refunding Par	-	-	-	-	173,615,000
Cash-Flow Savings	-	-	-	-	13,504,908
NPV Savings	1,313,193	3,341,700	4,469,097	3,446,062	12,570,051
NPV Savings %	11.23%	12.93%	7.95%	5.51%	8.05%
100bp Increase in Inte	erest Rates				
Refunded Par	11,690,000	25,835,000	56,190,000	62,495,000	156,210,000
Refunding Par	-	-	-	-	173,925,000
Cash-Flow Savings	-	-	-	-	2,297,583
NPV Savings	1,022,791	1,723,366	2,767,455	(766,415)	4,747,197
NPV Savings %	8.75%	6.67%	4.93%	-1.23%	3.04%
				10 0000 1 1 1	

NPV Savings Analysis¹

1) Indicative, subject to change based on market conditions. Assumes rates as of November 13, 2020 market close.

Assumes rates as of 11/13/2020, subject to change based on market conditions

Credit Rating Considerations

- Rating downgrade by S&P to 'AA-' from 'AA' (negative outlook) may increase rates an estimated 5bps (0.05%) for the refunding– SFMTA's debt is still high-quality investment grade
- SFMTA retains "a very strong enterprise risk profile, a strong financial risk profile, and significant support by various tax revenue," with "strong debt and liabilities capacity"
- An additional refunding rating is required, a second downgrade is possible but unlikely

Farebox Recovery	• While historically, farebox recovery below 30% was a negative, in the post- pandemic period it is less of a factor.
Critical Service Provider	• San Francisco is amongst the wealthiest cities in the country with a strong economic base. SFMTA plays a key role in the City's transport network.
Broad Revenue Pledge	• SFMTA has a diverse enterprise revenue base (farebox, parking, fine and fee revenues) that is expected to be resilient under a wide range of scenarios.
General Fund/Public Support	• Generally supportive political establishment and voter base, translated into steady financial resources (e.g., General Fund support)
Conservative Management	• With low overall leverage and high liquidity, SFMTA is well positioned both to manage the immediate and long-term challenges related to COVID-19.
SFMTA Revenue Bond Refunding	8

Underwriter Selection

Ten proposals were received and scored by the MTA and independent advisors

Selected Team

- Sr. Manager: Royal Bank of Canada Capital Markets (RBCCM)
- > Co-Managers:
 - Goldman Sachs Group
 - Siebert Williams Shank & Co. (SWS)
- The team will provide broad market coverage and deep, diverse expertise in the transportation sector
- SWS is a MWBE with a substantial local desk— added benefit of being in the syndicate for past MTA deals

Schedule Milestones and Decision Gates

- 12/14 Capital Planning Committee approvals
- 12/15: SFMTA Board approvals
- 12/21: Distribute documents to rating agencies
- 1/4: Rating agency presentations
- 1/6: BOS Budget and Finance Committee
- 1/11: Ratings received
- 1/19: SFMTA Board approval of Preliminary Official Statements (POS)
- 1/26: BOS Adoption of Bond Resolution
- DECISION GATE: Does estimated pricing meet benchmarks?
- 2/8: Pricing
- 2/22: Closing

Thank You.

(Background Materials Follow)



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Glossary of Terms

- <u>Aggregate Gross Savings</u>: Nominal savings, prior to calculating NPV.
- <u>Advance Refunding</u>: Advance refunding refers to the practice of taking the funds received from a new bond issuance to pay off a prior issue's debt. The issue of the new bond is, usually, at a lower interest rate than the older, unpaid obligation.
- <u>Amortization</u>: Amortization is paying off a debt over time in installments.
- <u>Basis Points (bps)</u>: One hundredth of one percent, used chiefly in expressing differences of interest rates.
- <u>Debt Service Reserve Fund (DSRF)</u>: Debt service reserves are cash assets that are designated by a borrower to ensure full and timely payments to bond holders.
- <u>Escrow Efficiency</u>: Escrow efficiency is the opportunity cost or holding money in escrow for a period of time (usually in cash or short-term treasury investments) until the money is able to be put to use to fund a project, or to repay investors.
- <u>Maturity</u>: A bond's term to maturity is the period during which its owner will receive interest payments on the investment. When the bond reaches maturity, the owner is repaid its par, or face, value.
- <u>Negative Arbitrage</u>: Negative arbitrage is the opportunity lost when bond issuers assume proceeds from debt offerings and then hold that money in escrow for a period of time (usually in cash or short-term treasury investments) until the money is able to be put to use to fund a project, or to repay investors.
- <u>Net Present Value (NPV)</u>: NPV is the difference between the present value of cash inflows and the present value of cash outflows over a period of time. NPV is used to analyze the economic value of an investment, translating returns into today's dollars.
- <u>Par Value</u>: The par value is the amount of money that bond issuers promise to repay bondholders at the maturity date of the bond.
- <u>Underwriter:</u> An underwriter is any party that evaluates and assumes another party's risk for a fee. The fee paid to an underwriter often takes the form of a commission, premium, spread, or interest.
- <u>Yield</u>: Bond yield is the return an investor realizes on a bond. Setting the bond yield equal to its coupon rate is the simplest definition.

Comparison of Refunding Scenarios w/ Gross Annual Savings Detail

	1) Base Case		3) Upfront + New Money
Funds Available for SFMTA in FY 2021 ¹			
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Fiscal Year	1) Base Case	2) Upfront Savings	3) Upfront + New Money
2021	9,631,422	9,631,422	9,631,422
2022	634,922	9,625,289	9,625,560
2023	638,021	1,186,743	1,197,004
2024	639,506	5,323	5,547
2025	635,595	8,506	8,730
2026	639,273	5,343	5,567
2027	635,937	5,847	6,071
2028	638,137	8,047	8,271
2029	637,349	8,132	8,356
2030	635,818	8,734	8,958
2031	639,072	4,832	5,056
2032	638,533	3,065	8,289
2033	636,122	290	5,405
2034	639,173	3,646	3,646
2035	634,998	465	465
2036	638,365	535	535
2037	639,815	2,020	2,020
2038	638,975	1,680	1,680
2039	635,500	4,170	4,170
2040	638,950	3,895	3,895
2041	638,670	510	510
2042	639,220	3,575	3,575
2043	639,815	2,150	2,150
2044	638,250	4,185	4,185
Total	\$24,301,436	\$20,528,403	\$20,551,065

Assumes rates as of 11/13/2020, subject to change based on market conditions

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RECENTLY PRICED DEALS BY TRANSPORTATION AGENCIES

Pricing Date	8/18	3/2020	8/19	/2020	8/18/2020 NYS Metropolitan Transportation Authority		itan Miami Dade County		8/11/2020 Los Angeles County MTA		8/5/2020 San Francisco International Airport		
ssuer	SF	BART		International port									
Security Type	(30	GA	ARB	BAN	BANs - MLF		Sales Surtax Revenue		Measure R Jr Sub Lien		GARB	
Ratings		AAA	528	AA-/AA		SP-2	nr / AA/AA		123213233197	nr/AA/AA		A/A+	
ax Status		Exempt		t (Non-AMT)		-Exempt		able		Exempt		AMT) / Taxabl	
Par Amount	625,005,000		558,500,000		465,000,000		513,405,000		1,356,095,000		291,275,000		
	Yield	T/E Spread	Yield	T/E Spread	Yield	T/E Spread	Yield	Tax Spread	Yield	T/E Spread	Yield	T/E Spread	
2021	Heiu	T/E Spread	Heiu	ITE Spread	Tielu	TTE Spread	0.410	+ 25	Tielu	TTE Spread	Tield	TTE Spread	
2022							0.460	+ 30					
2023					1,920	+ 179.5	0.540	+ 35	0.090	+ 2			
2024	0.100 (5s)	-5	0.370	+ 20			0.750	+ 45	0.140	+ 3			
2025	0.150 (5s)	-6	0.470	+ 25			0.900	+ 60	0.200	+ 4			
2026	0.230 (5s)	-8	0.570	+ 26			1.100	+ 60	0.340	+ 9			
2027	0.330 (5s)	-6	0.690	+ 29			1,250	+ 75	0.480	+ 16			
2028	0.430 (5s)	-3	0.850	+ 37			1.500	+ 82	0.600	+ 21			
2029	0.550 (5s)	+ 1	0.950	+ 39			1.550	+ 87	0.690	+ 23			
2030	0.660 (4s)	+ 6	1.040	+ 41			1.650	+ 92	0.770	+ 24			
2031	0.800 (4s)	+ 11	1.150	+ 44			1.750	+ 107	0.860	+ 28			
2032	0.940 (4s)	+ 19	1.230	+ 45			1.750		0.930	+ 32			
2033	1.020 (4s)	+ 20	1.330	+ 48					1.010	+ 26			
2034	1.130 (4s)	+ 24	1.450	+ 53					1.060	+ 24			
2035	1.190 (4s)	+ 25	1.500	+ 53					1.080	+ 21			
2036	1.490 (3s)	+ 50	1.740	+ 72					1.100	+ 18			
2037	1.550 (3s)	+ 52	1.780	+ 71					1,140	+ 18	1.750 (5s)	+ 72	
2038	1.590 (3s)	+ 53	1.820	+ 72					1.140	100	1.780 (5s)	+ 72	
2039	2.030 (2s)	+ 94	1.860	+ 73							1.960 (4s)	+ 87	
2040	2.070 (2s)	+ 95	1.900	+ 74							2.010 (4s)	+ 89	
2040	2.100 (2s)	+ 94	1.000								2.010 (43)	. 05	
2042	2.130 (2s)	+ 94					2.600	+ 130					
2042	2.150 (25)						2.000	150					
2044			1.820 (5s)	+ 52									
2045	1.640 (4s)	+ 36	1.020 (00)										
2045	2.220 (2s)	+ 93											
2040	2.220 (23)	1.000											
2048			2.070 (4s)	+ 70									
2049			2.010 (10)										
2050	2.060 (3s)	+ 72											
2051	2.000 (00)	1877 C. 1									2.958	+ 175	
2001	k		5s '24-'35		S	1.0	+\$239.5	5mm T-E	1		taxable 2051	110	
			4s '35-'40		20 competitiv	ve bids from 10 firr					10010 2001		
						ted; TIC avg 2.799							
					MLF TIC = 1		-						

Transportation	n Deals pricing the week of 8/24 (\$ mils)
537.630	Chicago Transit Authority, Sales Tax Rev Refunding (Taxable)
245 070	Chicago Transit Authority Cales Tay Boy Defunding (Exempt)

nr/A+/nr/AAnr/A+/nr/AA-

- 345.070 Chicago Transit Authority, Sales Tax Rev Refunding (Exempt) 1,300.000 NYS Transportation Dev Auth - LaGuardia Airport Terminal-Delta Airlines, Spec Fac
- 215.405 Delaware Transportation Authority, Sr Rev Refunding
- Aa1/AA+ 84.980 Regional Transit Auth (New Orleans) Sales Tax Refunding (Exempt+Taxable) Aa3/AA
- 12.690 Metropolitan Airport Auth of Rock Island, IL (AGM) Refunding nr/AA

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Pricing Date	7/28	8/2020	7/1	5/2020	7/30/2020		7/7/2020		6/17/2020		
Issuer		epartment of portation	- 100 CONTRACTOR - 100 CONT	Southeast Pennyslvania Transportation Authority DFW Airq		DFW Airport Bi-State Development Authority, MO		Transbay Joint Power Authority			
Security Type	COF	, Lease	GANs		G	ARB	Sal	es Tax	Sr Tax Allocation		
Ratings Tax Status Par Amount	Aa2/AA- Tax-Exempt 19.050.000		AA- Tax-Exempt 97,250,000		A1/A/A+/AA Taxable 1,193,985,000		Aa2/AA-/nr/AA+ Taxable 271,205,000		nr/nr/A- Tax-Exempt		
i al Allount							2 Contractor of		189,480,000		
2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042 2043 2044 2045 2046	Yield 1.720 1.770 1.810 1.900 (all 4s)	+ 60 + 62 + 63 + 64 + 65	Yield 0.410 0.490 0.530 0.620 0.720 0.880 1.020 1.160 1.240 1.330 1.380 1.430 (all 5s)	<i>T/E Spread</i> + 24 + 29 + 31 + 34 + 36 + 42 + 49 + 56 + 56 + 56 + 58 + 54 + 52	Yield 1.041 1.229 1.329 1.649 1.749 1.946 2.046 2.096 2.246 2.416 2.516 2.696 2.796 2.896 3.089	Tax Spread + 90 + 100 + 110 + 125 + 135 + 140 + 150 + 155 + 170 + 187 + 197 + 215 + 225 + 235	Yield 0.765 0.895 1.016 1.224 1.344 1.616 1.716 1.870 1.970 2.020 2.150 2.250 2.350 2.929 2.929 2.979	Tax Spread + 60 + 73 + 83 + 93 + 105 + 113 + 122 + 132 + 132 + 137 + 150 + 160 + 170 + 155 + 160	Yield 1.340 1.530 1.690 1.830 1.930 2.030 2.170 2.320 2.410 2.490 2.530 2.570 2.610 2.650 2.690 2.710	+ 90 + 100 + 109 + 115 + 116 + 118 + 122 + 130 + 131 + 126 + 125 + 124 + 124 + 125 + 126 + 126 + 126 + 112	
2040 2047 2048 2049 2050 2051			0		2.919	+ 173			2.750 (all 5s)	+ 111	

RECENTLY PRICED DEALS BY TRANSPORTATION AGENCIES (cont.)