



Refunding of Previously Issued Revenue Bonds

Revenue Bond Oversight Committee September 2, 2020

Financial Analysis Office Budget, Financial Planning and Analysis

The Opportunity

- Interest rates are at historic lows
- Staff is investigating the opportunity to refund revenue bonds
- Based on current rates, advance refunding of revenue bonds could result in \$24-29 million cash flow savings over 25 years
- Comparable transportation agencies have secured interest rates on bonds at ~2 percent and lower
- The SFMTA has one of the best credit ratings of any transportation agency in the country

Assumes rates as of 8/20/2020, 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	3 M Refunding prior parking bonds
Series 2012-B	26 M	26 M	3.42	Jul-12	Mar-42	Mar-22	2 M New money-Pkg Garages
Series 2013	75 M	56 M	2.68	Dec-13	Mar-33	Mar-23	6 M New money-Traffic safety, vehicles
Series 2014	71 M	62 M	2.09	Dec-14	Mar-44	Mar-24	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					15 M

Summary Comparison of Refunding Scenarios

Scenario	Base Case	Upfront Savings	Upfront + Partial 2017
Approach	Level Savings	Amortization in 2024	Amortization in 2024 and refund only 2021, 2022, 2023 maturities of the series 2017
Objective	Reap max cashflow savings over the life of the bonds	Free ~\$23M (compared to base) in FY21-FY23 to increase financial flexibility	Free ~\$33M (compared to base) in FY21-FY23 to increase financial flexibility
Tradeoff	More total cash flow savings for less near-term flexibility	More near-term flexibility for less cashflow savings	Max near term-flexibility for less cashflow savings, and less flexibility in FY24-FY26
Total Cashflow Savings	\$29.1 M	\$24.7 M	\$24.1 M
NPV Savings	\$25.8 M	\$25.9 M	\$26.1M

Assumes rates as of 8/20/2020, subject to change based on market conditions

Detailed Comparison of Refunding Scenarios

	Base Case	Upfront Savings	Upfront + Partial 2017
Savings Approach	Level savings	Amortization begins in 2024	Refund only 2021, 2022, 2023
Refunding Par Total Debt Service	\$161,000,000 199,872,908	\$161,000,000 204,286,273	\$172,385,000 216,179,782
Total Cash Flow Savings Average Annual Savings	29,071,540 1,211,314	24,658,174 1,027,424	24,139,291 1,005,804
NPV Savings NPV Savings to Refunded Par	25,839,574 16.542%	25,862,677 16.556%	26,097,407 15.648%
<u>Fiscal Year</u>	Base Case	Upfront Savings	Upfront + Partial 2017
2021	\$2,526,323	\$8,827,934	\$13,245,547
2022	2,532,069	10,250,293	13,180,258
2023	2,528,367	10,068,043	13,829,955
2024	2,529,801	400,543	(3,487,295)
2025	2,529,338	405,842	(3,477,652)
2026	2,527,317	406,064	(3,479,772)
2027	2,531,963	401,893	402,406
2028	2,533,204	401,463	401,977
2029	2,532,353	398,650	404,163
2030	2,528,588	395,778	406,207
2031	2,530,290 (148,487)	405,186	405,440
2032 2033	(3,826,300)	(2,281,657)	(2,281,403) (5,588,883)
2033	(3,820,300)	(5,589,138) 665,001	(5,365,863) 665,255
2034 2035	1,131,686	661,872	667,126
2035	1,135,478	664,048	664,186
2037	1,131,293	665,079	665,217
2038	1,133,724	667,863	668,001
2039	1,132,131	661,901	667,039
2040	1,131,043	661,856	661,856
2041	1,129,958	667,091	667,091
2042	(695,585)	(1,161,413)	(1,161,413)
2043	681,252	262,899	262,899
2044	(3,827,022)	(4,248,916)	(4,248,916)
2045			
2046			
2047	\$29,071,540	\$24,658,174	\$24,139,291

- Upfront option with amortization beginning in 2023 is also available
- Inclusion of full series 2017 results in negative NPV costs due to recency of issuance
- Partial refunding of series 2017 would provide immediate relief but negative NPV costs for the series

Assumes rates as of 8/20/2020, subject to change based on market conditions

Next Steps

- Define SFMTA's benchmarks in terms of cashflow savings, NPV savings, etc.
- Select a refunding scenario given current revenues and funding goals
- Decide whether to pursue new money given the current market and extant transportation capital needs
- Work with Office of Public Finance, City Attorney, and Bond Counsel to have the transaction market ready
- Secure approval of MTA Board

Thank You.

(Background Materials Follow)



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SFMTA

Detailed Base Case for Tax Advance Refunding As of 8/20/2020

Refunded Series	Series 2012-A	Series 2012-B	Series 2013	<u>Series 2014</u>	TOTAL
Refunded Par	\$11,690,000	\$25,835,000	\$56,190,000	\$62,495,000	\$156,210,000
Maturities	2021 - 2032	2023 - 2042	2021 - 2033	2021 - 2044	¢ 100,2 10,000
Redemption Date	3/1/2022@100	3/1/2022 @ 100	3/1/2023@100	3/1/2024@100	
Transfer of Prior Reserve Fund	\$2,684,050.70	\$1,826,724.17	\$5,980,000.00	\$4,508,750.00	\$14,999,524.87
Assumed Refunding Date	12/1/2020	12/1/2020	12/1/2020	12/1/2020	12/1/2020
Refunding Par	\$9,860,000	\$25,945,000	\$56,840,000	\$68,355,000	\$161,000,000.00
Maturities	2022 - 2032	2022 - 2042	2022 - 2033	2022 - 2044	2022 - 2044
Tax Status	Taxable	Taxable	Taxable	Taxable	Taxable
Escrow Securities	SLGs	SLGs	SLGs	SLGs	SLGs
Escrow Deposit	\$12,492,090	\$27,647,394	\$62,539,504	\$72,525,858	\$175,204,846
Deposit to DS Reserve Fund	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Cost of Issuance	\$23,884	\$62,848	\$137,687	\$165,580	\$390,000
UW Discount(\$)	\$24,650	\$64,863	\$142,100	\$170,888	\$402,500
UW Discount (per bond)	\$2.500 per bond	\$2.500 per bond	\$2.500 per bond	\$2.500 per bond	\$2.500 per bond
TIC	1.612%	2.586%	1.716%	2.498%	2.305%
AIC	1.660%	2.606%	1.756%	2.521%	2.332%
Average Life	5.431 years	14.714 years	6.514 years	12.792 years	10.434 years
Total Cash Flow Savings	\$1,862,878	\$8,092,870	\$7,272,769	\$11,843,023	\$29,071,540
Average Annual Savings	\$155,240	\$367,858	\$559,444	\$493,459	\$1,211,314
Savings Approach	Levelsavings	Levelsavings	Levelsavings	Levelsavings	Level savings
NPV Savings (Net-to-Net) AIC	\$1,925,286	\$6,601,900	\$7,131,080	\$9,956,912	\$25,839,574
NPV Savings to Refunded Par	16.470%	25.554%	12.691%	15.932%	16.542%

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RECENTLY PRICED DEALS BY TRANSPORTATION AGENCIES

Pricing Date	0/10	/2020	0/19/	2020	8/10	8/2020	8/13	/2020	8/11	1/2020	8/5	8/5/2020	
ssuer	SF	SF BART Los Angeles Internationa Airport			NYS Metropolitan Transportation Authority BANs - MLF		Miami-Da	Miami-Dade County		Los Angeles County MTA		San Francisco International Airport	
ecurity Type	0	60	GARB				Sales Surtax Revenue		Measure R Jr Sub Lien nr/AA/AA Tax-Exempt		GARB		
Ratings			Aaa/AAA Aa2/AA-/AA		SP-2		100 Stark - 1896	AA/AA				/A/A+	
ax Status		Exempt	Tax-Exempt (Non-AMT)		Tax-Exempt		Taxable				Tax-Exempt (AMT) / Taxable		
ar Amount		05.000		00.000		000.000		05.000		.095.000	291,275,000		
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	Yield	T/E Spread	Yield	T/E Spread	Yield	T/E Spread	Yield	Tax Spread	Yield	T/E Spread	Yield	T/E Spread	
2021							0.410	+ 25					
2022					105102204	Star March	0.460	+ 30	1000000000	225			
2023	20120700700707070707	are -	Second Process	No. Alexandre	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			Contractory.	00.001000000	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					10412-01220	1000	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	
2041	2.100 (2s)	+ 94											
2042	2.130 (2s)	+ 94					2.600	+ 130					
2043	10000000000	2344					1.000	E)					
2044			1.820 (5s)	+ 52									
2045	1.640 (4s)	+ 36	10 B										
2046	2.220 (2s)	+ 93											
2047	Construction Activity	1-00 Feet	1014-55-001045-934447010	6000									
2048			2.070 (4s)	+ 70									
2049			Sec. 3.8										
2050	2.060 (3s)	+ 72											
2051				2		86.52					2.958	+ 175	
			5s '24-'35		5294 - 1985			5mm T-E		•	taxable 2051		
			4s '35-'40			e bids from 10 firr							
						ted; TIC avg 2.799	6						
					MLF TIC = 1	.92%							
			g the week of 8/ sit Authority, Sal		nding (Tayahl		nr/A+/nr/AA-						
	537.630			es Tax Rev Refu es Tax Rev Refu			nr/A+/nr/AA-						

- 1,300.000 NYS Transportation Dev Auth LaGuardia Airport Terminal-Delta Airlines, Spec Fac Aa1/AA+
- 215.405 Delaware Transportation Authority, Sr Rev Refunding
- 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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RECENTLY PRICED DEALS BY TRANSPORTATION AGENCIES (cont.)

Issuer Colorado Department of Transportation authority Southeast Pennyslvania Transportation Authority DFW Airport Bi-State Development Authority, MO Transbay Joint Power Authority Security Type Raings Tax Statis Par Amount COP Lease A2/AA- Tax Statis Tax Exempt 19,050,000 GANs GARB A1/I/A/+AAA AA- Taxable Sales Tax A2/AA- Taxable Sales Tax A2/A- TaxAble Sa	Pricing Date	7/28	8/2020	7/1	5/2020	7/3	30/2020	7/7	/2020	6/1	7/2020	
Ratings Tax Status Par Amount Aa2/AA- Tax-Exempt 19,050,000 AA- Tax-Exempt 0,7250,000 AA- Tax-Exempt 0,7250,000 AA- Tax-Exempt 0,7250,000 AA- Tax-Exempt 1,193,985,000 Aa2/AA-Int/AA+ Taxable Aa2/AA-Int/AA+ TaxAble Tax/Exempt Tax Spread Int/n/A- Tax-Exempt 20,225 2021 Vield 7/E Spread Vield 7/E Spread Vield Tax Spread Vield <	Issuer						DFW Airport					
Tax Status Par Amount Tax-Exempt 19,050,000 Tax-Exempt 97,250,000 Taxable 97,250,000 Taxable 1,93,985,000 Taxable 271,205,000 Tax-Exempt 189,480,000 2021 Yield T/E Spread Yield T/E Spread Yield Tax Spread Yield Yield T/E Spread Yield Yield Tax Spread Yield Yield Tax Spread Yield Yield Tax Spread Yield Yield Yield Tax Spread Yield Yield Yield Tax Spread Yield	Security Type	COP	² Lease	G	ANs	GARB		Sales Tax		Sr Tax Allocation		
Par Amount 19,050,000 97,250,000 1,193,985,000 271,205,000 189,480,000 2021 Vield T/E Spread Vield T/E Spread Vield Tax Spread Vield T												
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2035 2.796 + 225 2.896 + 235 2.530 + 124 2037 1.770 + 62 2.896 + 235 2.610 + 125 2038 1.770 + 62 2.610 + 125 2.610 + 125 2039 1.810 + 63 3.089 + 190 2.929 + 155 2.650 + 126 2041 1.900 + 65 3.089 + 190 2.929 + 155 2.690 + 126 2042 2043 (all 4s) 2.044 2.979 + 160 2.710 + 112 2046 2.047 2.048 2.919 + 173 2.750 + 111								2.350	+ 170			
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2048 2049 2050 2.919 + 173 2.750 + 111										2.710	112	
2049 2050 2.919 + 173 2.750 + 111												
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							170			2.750	+ 111	
	2050 2051					2.919	+ 1/3			(all 5s)		