

Report to the Finance Committee 2017 Year End Review

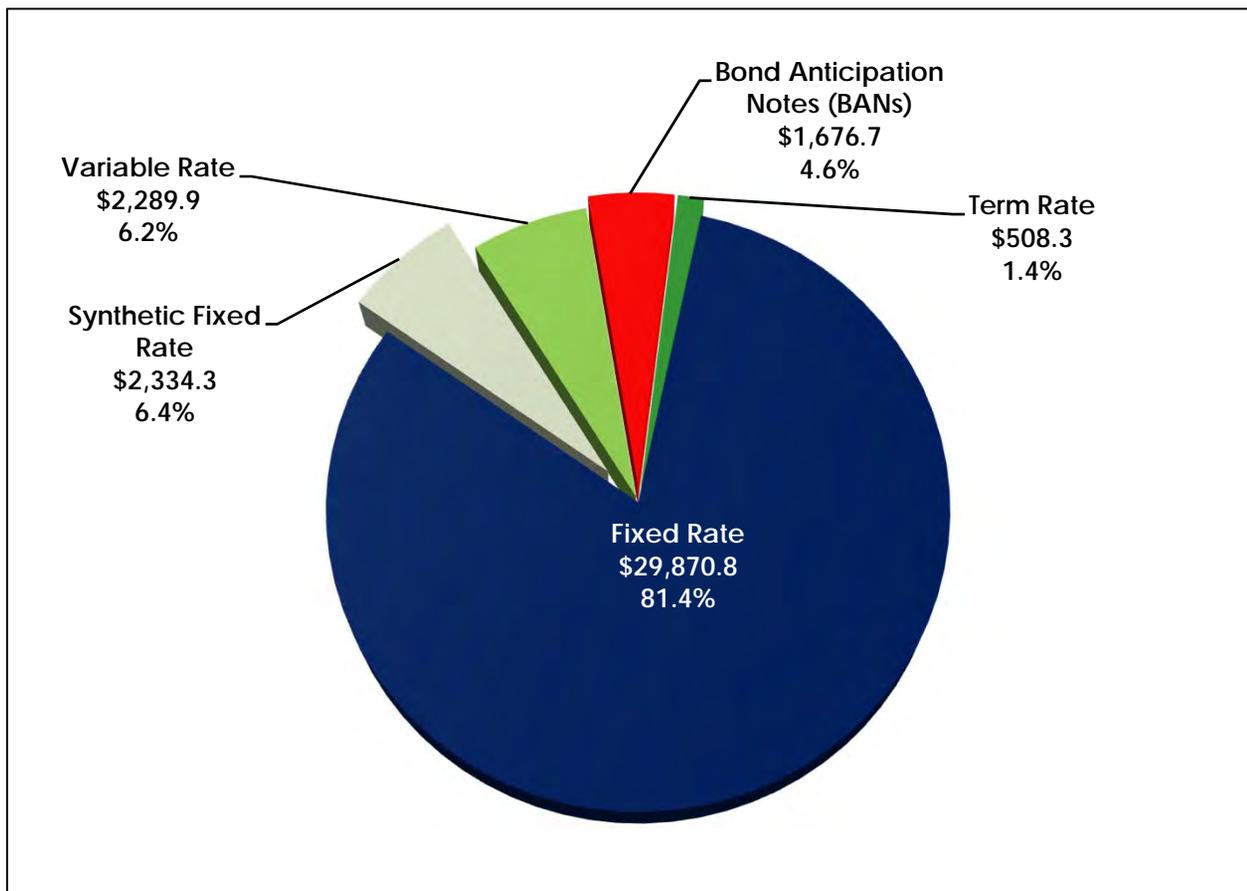
MTA Finance Department
Patrick McCoy, Director
January 22, 2018



\$36.7 billion of Outstanding Debt on Core Credits

As of 12/31/2017
(\$ in millions)

- \$965.3 million of long-term debt was retired through normal amortization in 2017
- Year over year change in outstanding debt was approximately \$1.0 billion
- All-In True Interest Cost (TIC) 3.38%



Notes:

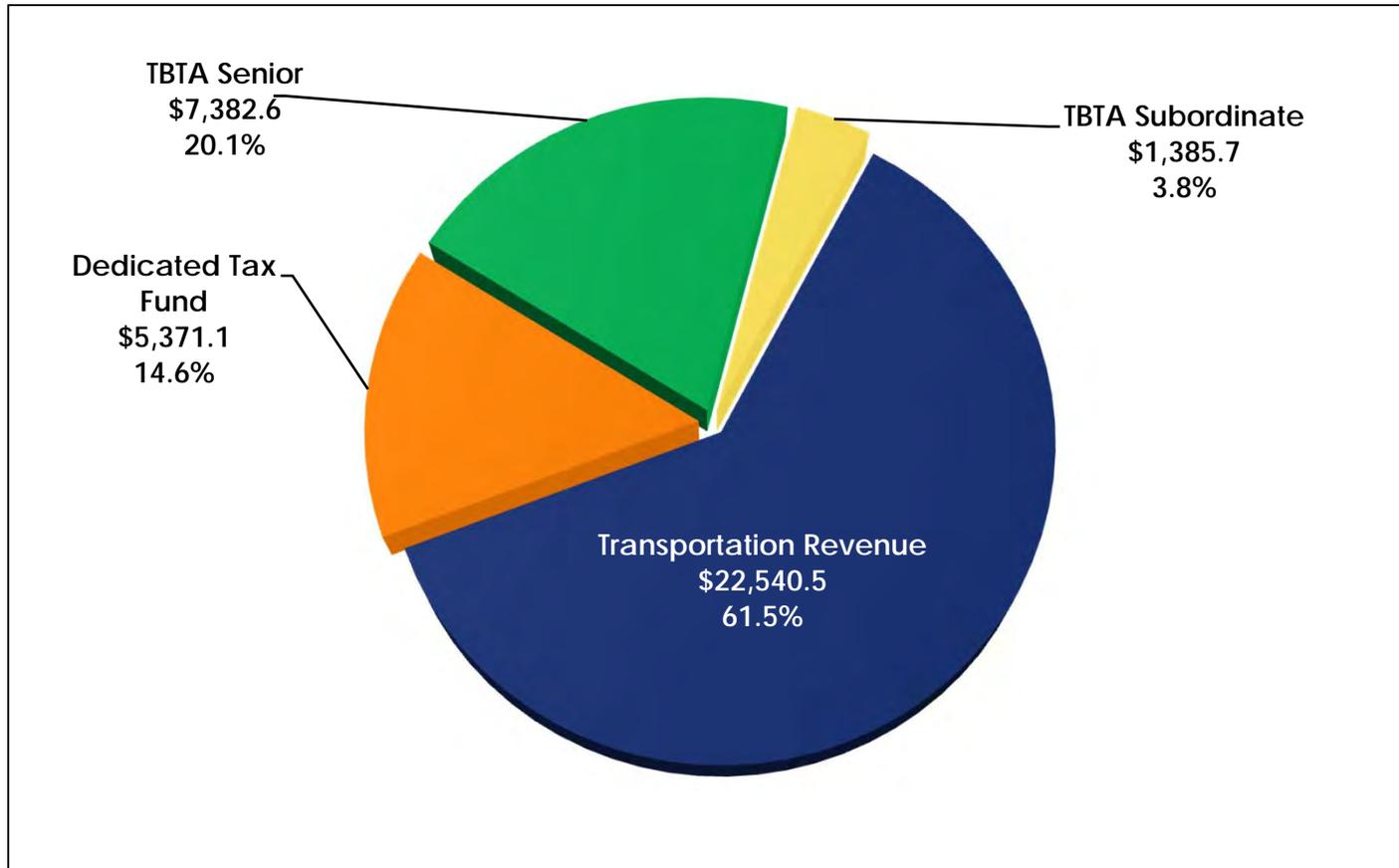
- 1) Term Rate bonds have a fixed rate for a defined period (ending with a mandatory tender) but do not have a fixed rate for the entire life of the bond
- 2) Totals exclude \$68.0 million State Service Contract Bonds, \$277.7 million Special Obligation Bonds, and \$1.057 billion Hudson Rail Yards Trust Obligations
- 3) Numbers may not total due to rounding



Debt by Resolution

As of 12/31/2017

(\$ in millions)

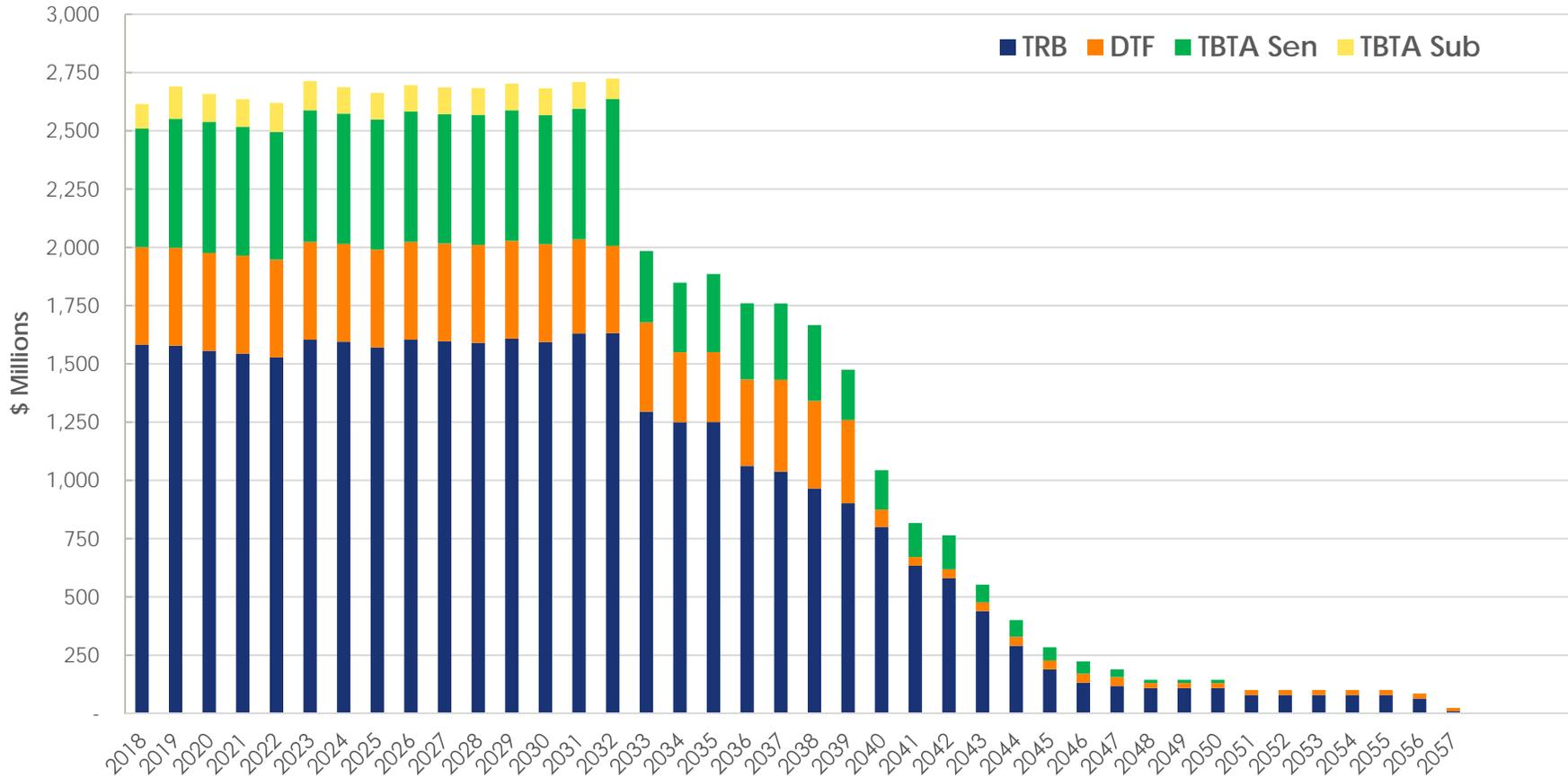


Notes:

- 1) Transportation Revenue includes \$1,512 million Transportation Revenue BANs and reflects the \$146.5 million draw dated 9/20/2016 on the Railroad Rehabilitation and Improvement Financing Program loan (RRIF Loan)/TRB Series 2015X
- 2) TBTA Senior includes \$164.7 million TBTA General Revenue BANs
- 3) Totals exclude \$68.0 million State Service Contract Bonds, \$277.7 million Special Obligation Bonds, and \$1.057 billion Hudson Rail Yards Trust Obligations
- 4) Numbers may not total due to rounding

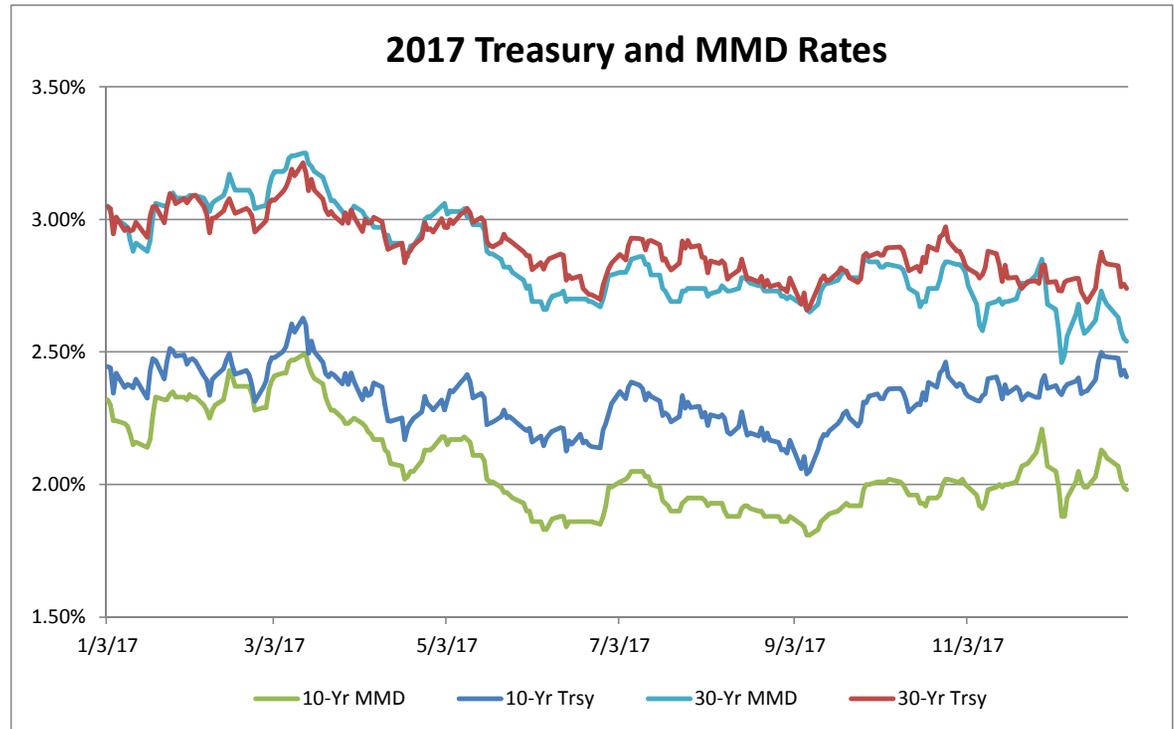


Debt Service on Outstanding Bonds by Credit



2017 Market Recap and 2018 Outlook

- ❑ Issuance volume in 2017 reached \$438 billion, with a record December issuance of over \$60 billion
- ❑ Going into 2018, municipal issuance volume is expected to drop significantly, estimated in the range of \$300 billion to \$350 billion
- ❑ Municipal yields outperformed Treasuries in 2017, especially in the intermediate to long-end of the curve
- ❑ Municipal yield curve flattened in 2017
- ❑ Muni market is expected to continue to outperform Treasuries into 2018 primarily due to reduced supply, despite lower demand from banks and insurance companies with the corporate tax rate reduced from 35% to 21%
- ❑ The Fed raised the Fed Funds rate at the end of the year as expected; new Fed Chairman, Jerome Powell, is expected to follow current Fed rate policy
- ❑ Three more rate hikes are expected in 2018



2017 Rates	Average	Low	High	1/3/17	12/29/17	Diff. (bps)
10-Yr MMD	2.07%	1.81%	2.49%	2.32%	1.98%	(34)
10-Yr Treasury	2.33%	2.04%	2.63%	2.45%	2.41%	(4)
30-Yr MMD	2.85%	2.46%	3.25%	3.05%	2.54%	(51)
30-Yr Treasury	2.89%	2.66%	3.21%	3.05%	2.74%	(31)



Note: MMD = Municipal Market Data
Sources: Bloomberg, The Bond Buyer, SIFMA, and Thompson Reuters as of December 31, 2017

Tax Cuts and Jobs Act 2017

- **Tax Cuts and Jobs Act Became Public Law No: 115-97 on December 22, 2017**

- **Key Areas Affecting Tax-Exempt Bonds and Municipal Market**
 - Prohibits tax-exempt advance refundings, effective for bonds issued after December 31, 2017
 - Eliminates the authority to issue various forms of tax credit bonds after December 31, 2017
 - Eliminates corporate Alternative Minimum Tax (AMT) after December 31, 2017
 - Increases exemption amount and phase-out levels for individual AMT
 - Reduces Corporate Tax Rate from 35% to 21%, after December 31, 2017
 - Limits the deductibility of State and Local Taxes (SALT) for individuals to \$10,000
 - Retains ability to issue tax-exempt Private Activity Bonds and tax-exempt bonds to finance professional sports stadiums



2017 Transactions Summary - \$9.9 billion

- **\$2.90 billion New Money borrowing**
 - \$300 million fixed rate bonds
 - \$2.6 billion bond anticipation notes (BANS)

- **\$1.01 billion long-term fixed rate bonds to retire BANs/RANs**

- **\$5.26 billion Refunding bonds**
 - Achieved Present Value savings of \$534.3 million, or 9.7% of par refunded
 - Total Refunded par was \$5.53 billion, including \$150 million of current refunding and \$5.38 billion of advance refunding

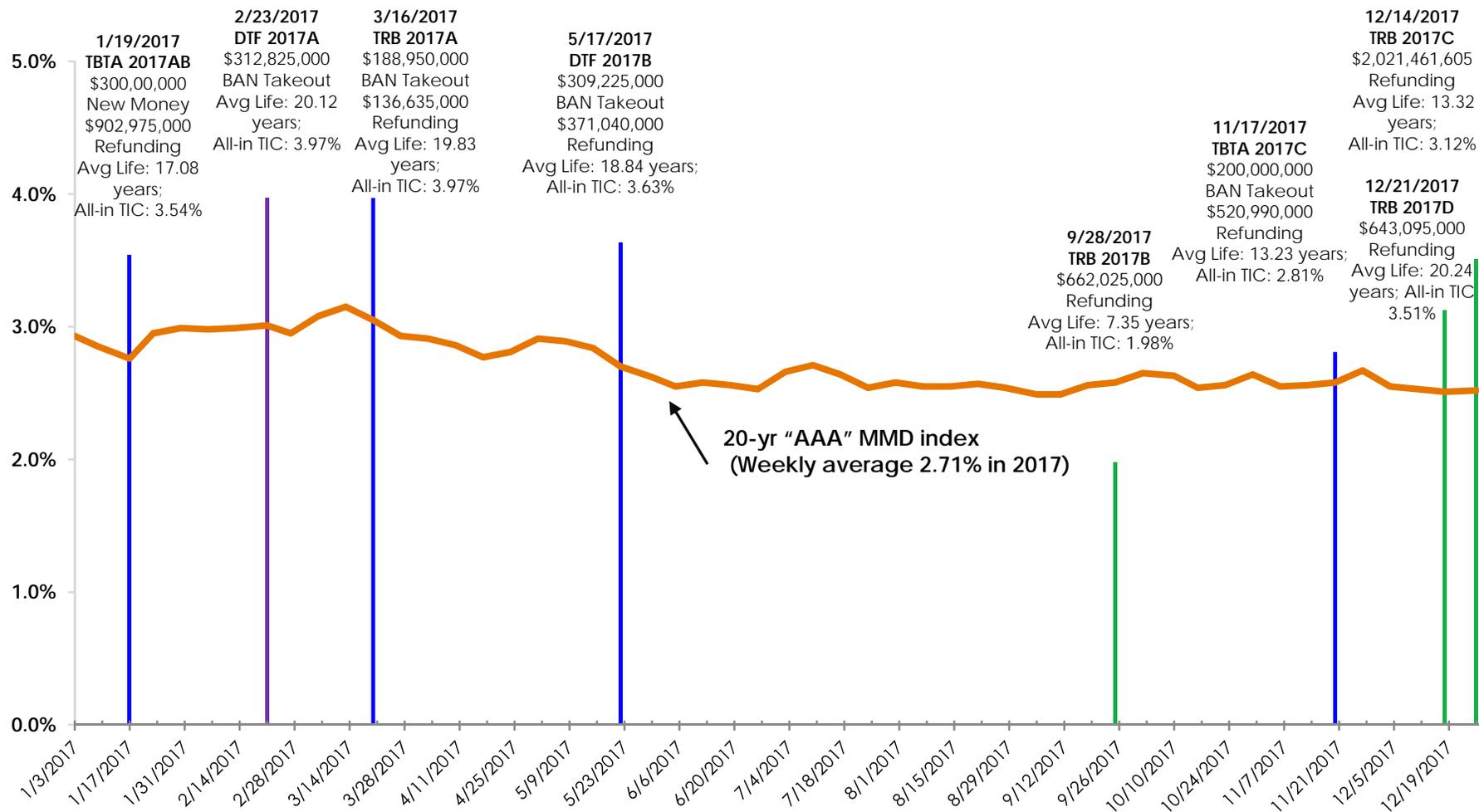
- **\$758.7 million Remarketing of Tendered Obligations**
 - \$519.8 million remarketed as FRNs
 - \$167.4 million remarketed as variable rate debt with bank support in daily mode
 - \$71.4 million remarketed as variable rate debt with bank support in weekly mode



Notes:

- 1) Does not include \$98.8 million five year Letter of Credit extension on TRB Subseries 2005D-2, daily variable rate with bank support
- 2) Numbers may not total due to rounding

2017 MTA Fixed Rate Bond Issuances



Note:

- 1) Fixed Rate TICs calculated as of issuance of Fixed Rate bonds. Floating Rate TICs calculated from inception including fees. Any Unhedged Variable Rate bonds that have been fixed to maturity are carried at the new Fixed Rate TIC. Synthetic Fixed Rate TICs include average swap rates plus current variable rate fees and estimated basis adjustments for life of swap. Synthetic Fixed Rate TICs do not include benefit of any upfront payments received by MTA. Variable Rate TICs include average remarketed rate plus current variable rate fees



2017 Remarketing Transaction Results

<u>Bond Series</u>	<u>Par</u>	<u>Mode</u>	<u>FRN Rate/Index</u>	<u>LOC Expiration/ Put Date</u>
DTF 2008A-1	\$ 167,435,000	Daily	NA	6/13/2022
DTF 2008A-2a	82,575,000	FRN	SIFMA + 45 basis points	6/1/2022
TRB 2002D-2a-1	50,000,000	FRN	69% of LIBOR + 57 basis points	4/6/2020
TRB 2002D-2a-2	50,000,000	FRN	69% of LIBOR + 68 basis points	4/6/2021
TRB 2005E-2	71,385,000	Weekly	NA	12/10/2021
TRB 2011B	99,560,000	FRN	67% of LIBOR + 55 basis points	11/1/2022
TRB 2012G-4	72,700,000	FRN	67% of LIBOR + 55 basis points	11/1/2022
TRB 2014D-2	165,000,000	FRN	SIFMA + 45 basis points	11/15/2022
	<u>\$ 758,655,000</u>			

Notes:

- 1) FRN = Floating Rate Notes; LOC = Letter of Credit
- 2) During 2017, SIFMA averaged 0.85%; 1-month LIBOR averaged 1.11%
- 3) Does not include \$98.8 million five year Letter of Credit extension on TRB Subseries 2005D-2, daily variable rate with bank support



Financing Approaches

■ BAN Program

- BAN transactions typically ranging from \$500 million to \$1 billion in size
- Sold via competitive method of sale
- Minimum bid size of \$25 million, with increments of \$5 million, to facilitate wider participation
- Bids awarded based on lowest true interest cost
- Low cost short-term financing
- Better able to match assets and related debt liability once bonds are issued

■ Green Bonds (Climate Bond Certified)

- MTA's inaugural 2016 issuance of green bonds was first Climate Bond Certification in the U.S.
- Certified under the Climate Bonds Initiative's (CBI) Climate Bonds Standards using the Low Carbon Transport criteria
 - The Low Carbon Transport criteria sets out what transportation projects are applicable for certification; projects are determined eligible if they are compatible with an emission trajectory that limits global temperature rise to 2°C
- \$11.3 billion spent on 2010-2014 capital projects and conform to the CBI's Low Carbon Transport criteria
- \$4 billion in MTA TRB and DTF green bonds issued in 2017; total outstanding \$5.5 billion



2017 Rating Agency Stable Ratings and Outlooks

- Year-round, regular communications and updates

- Briefings and materials on MTA's Financial Plans (Feb, July, November)
- Capital Program updates
- Annual Combined Continuing Disclosure Filings
- Assist with information requests for annual credit reviews

- Fitch upgraded Transportation Revenue Bonds to "AA-" on June 7, 2017

- Two notch upgrade from "A"

Credit	Moody's	S&P	Fitch	Kroll
Transportation Revenue	A1 Stable	AA- Stable	AA- Stable	AA+ Stable
Dedicated Tax Fund	NAF*	AA Stable	AA Stable	NAF*
TBTA – General Resolution	Aa3 Stable	AA- Stable	AA- Stable	AA Stable
TBTA – Subordinate Resolution	A1 Stable	A+ Stable	A+ Stable	AA- Stable



* NAF – Not applied for

2017 Investor and Green Market Outreach

- **Year-Round:** Investors may reach MTA Finance staff directly via email and phone
- **February 2017:** Participated in Women in Public Finance Transportation Panel discussing transportation infrastructure projects
- **March 2017:** MTA Finance presented at the annual J.P. Morgan Public Finance Transportation & Utility Conference and hosted several 1:1 meetings with institutional investors
- **April 2017:** Participated on panel in 5th Annual Green Investing Conference
- **May 2017:** MTA Finance held conference call with institutional investor interested in Green Bonds
- **September 2017:** MTA Finance assisted with the coordination of a NYC Climate Week event, along with Climate Bonds Initiative and Moody's; MTA's Finance Director and Sustainability Director presented on panels discussing Green Bonds and sustainability in local infrastructure
- **October 2017:** Participated on panel at the Environmental Finance 2017 Green Bonds America Conference
- **October 2017:** Participated in National Federation of Municipal Analysts Advanced Seminar on State Governments focusing on state infrastructure funding



2018 Financing Quarterly Calendar

(\$ in millions)

Purpose	Q1	Q2	Q3	Q4	Total
New Money and BAN Takeout ⁽¹⁾	\$1,365	\$635	\$700	\$500	\$3,200
Remarketing ⁽²⁾	313	290	1,012	752	2,367
Current Refunding ⁽³⁾	-	-	574	-	574
Total	\$1,678	\$925	\$2,286	\$1,252	\$6,141

All information in the 2018 Financing Quarterly Calendar is preliminary and subject to change

Notes:

- 1) Bond issuance for approved Capital Programs, including the 2015-2019 Capital Program; new money obligations may be issued as bonds or BANs; assume taxable BANs will be paid down by RRIF Loan proceeds on hand
- 2) FRNs and VRDBs with mandatory put dates or liquidity facility expiration dates in 2018
- 3) Fixed rate TRB and TBTA bonds callable in November 2018



Appendix

- 1) Bond Financed Capital Investments in 2017
- 2) 2017 Debt Issuance and Remarketing Activity
- 3) 2017 Cost of Issuance Summary



Bond Financed Capital Investments in 2017

- **MTA financed \$2.95 billion in capital expenditures from bond proceeds in 2017** ⁽¹⁾
- **Capital Construction (\$250.9 million)** ⁽²⁾
 - East Side Access (\$242 million)
- **New York City Transit/SIR/MTA Bus (\$1.475 billion)**
 - \$193 million for Bus Purchases
 - \$431 million for Passenger Stations
 - \$339 million for Signals and Communications
 - \$304 million for Mainline Track and Switch
 - \$65 million for Line Structures
 - \$54 million for Depot Rehab, Reconstruction and Improvements
- **Commuter Railroads (\$593.5 million)**
 - LIRR (\$337 million, including Positive Train Control, Double Track and M9 Rolling Stock procurement)
 - MNR (\$257 million, including M-8 Fleet Replacement, Positive Train Control, and Harmon Shop improvements)
- **Bridges and Tunnels (\$613.4 million)**
 - \$228 million for Open Road Tolling and New Toll Initiatives
 - \$135 million for various structure rehabs and structural painting
 - \$171 million for Roadways and Decks



Notes:

- 1) Does not reflect expenditures on projects related to Superstorm Sandy
- 2) Includes Security, Police, Administration and Lower Manhattan Projects

2017 Debt Issuance and Remarketing Activity

<u>Settlement Date</u>	<u>Credit</u>	<u>Subseries</u>	<u>Amount</u>	<u>Structure</u>	<u>Senior Manager/Special Co-Seniors</u>	<u>Purpose</u>	<u>Assignment Basis</u>
1/19/2017	TBTA	2017A	\$ 300,000,000	Fixed	Goldman/Academy/Alamo/Blaylock	New Money	Rotation
2/14/2017	TRB	2017A BANs	700,000,000	BAN	Competitive BAN	New Money	Competitive
6/29/2017	TRB	2017B BANs	500,000,000	BAN	Competitive BAN	New Money	Competitive
10/6/2017	TBTA	2017A BANs	400,000,000	BAN	Competitive BAN	New Money	Competitive
10/25/2017	TRB	2017C BANs	1,000,000,000	BAN	Competitive BAN	New Money	Competitive
Subtotal New Money Bonds and BANs			2,900,000,000				
2/23/2017	DTF	2017A	312,825,000	Fixed	BAML/Drexel/Rice/Stern Brothers	BAN Takeout	Rotation
3/16/2017	TRB	2017A-1	188,950,000	Fixed	Jefferies/Cabrera/Drexel/Stern Brothers	BAN Takeout	Merit
5/17/2017	DTF	2017B-1	309,225,000	Fixed	Ramirez/Academy/Alamo/PNC Capital and Williams Capital Group	BAN Takeout	Rotation
11/17/2017	TBTA	2017C-2	200,000,000	Fixed	Siebert/Academy/Alamo/Rice Financial	BAN Takeout	Rotation
Subtotal BAN/RAN Takeout Bonds			1,011,000,000				
1/19/2017	TBTA	2017B	902,975,000	Fixed	Goldman/Academy/Alamo/Blaylock	Refunding	Rotation
3/16/2017	TRB	2017A-2	136,635,000	Fixed	Jefferies/Cabrera/Drexel/Stern Brothers	Refunding	Merit
5/17/2017	DTF	2017B-2	371,040,000	Fixed	Ramirez/Academy/Alamo/PNC Capital and Williams Capital Group	Refunding	Rotation
9/28/2017	TRB	2017B	662,025,000	Fixed	Citi/Blaylock/Drexel/Stern Brothers	Refunding	Rotation
11/17/2017	TBTA	2017C-1	520,990,000	Fixed	Siebert/Academy/Alamo/Rice Financial	Refunding	Rotation
12/14/2017	TRB	2017C	2,021,461,605	Fixed	BAML/Citi/Goldman/J.P. Morgan/PNC Capital and Williams Capital Group	Refunding	Merit
12/21/2017	TRB	2017D	643,095,000	Fixed	Goldman/Loop/BAML/Citi/Drexel/J.P. Morgan/Morgan Stanley/Ramirez/Stern Bro	Refunding	Merit
Subtotal Refunding			5,258,221,605				
4/6/2017	TRB	2002D-2a	100,000,000	FRN	RBC/Academy/Alamo/Loop	Remarketing	Merit
5/25/2017	DTF	2008A-2a	82,575,000	FRN	Competitive (BAML win)	Remarketing	Competitive
6/14/2017	DTF	2008A-1	167,435,000	Daily VRDB	TD Bank	Remarketing	Merit
10/20/2017	TRB	2011B and 2012G-4	172,260,000	FRN	Jefferies/Academy/Alamo/Cabrera	Remarketing	Merit
11/3/2017	TRB	2014D-2	165,000,000	FRN	Morgan Stanley/Drexel/Loop/Stern Brothers	Remarketing	Merit
12/13/2017	TRB	2005E-2	71,385,000	Weekly VRDB	BAML	Remarketing	Merit
Subtotal Remarketing			758,655,000				
Total 2017 Transactions			\$ 9,927,876,605				

Notes:

1) Does not include \$98.8 million five year Letter of Credit extension on TRB Subseries 2005D-2, daily variable rate with bank support



2017 Cost of Issuance Summary

	New Money	BAN Takeout	Refunding	Remarketing	Total
NYS Bond Issuance Fee	\$2,499,008	\$8,421,658	-	N/A	\$10,920,666
Underwriter's Discount	5,978,000	18,895,290	5,675,133	1,419,874	31,968,297
Bond Counsel	174,360	1,155,673	50,400	481,524	1,861,956
Disclosure Counsel	55,949	328,132	145,695	233,823	763,599
Financial Advisor Fee	59,500	416,500	119,000	119,000	714,000
Rating Agency Fees	401,500	1,776,525	947,973	80,000	3,205,998
Trustee	10,000	63,500	8,500	24,000	106,000
Printing and Distribution	3,347	89,641	7,157	16,509	116,653
Miscellaneous	54,073	10,055	15,602	-	79,730
Total	\$9,235,737	\$31,156,973	\$6,969,461	\$2,374,730	\$49,736,900

Notes:

- 1) NYS Bond issuance fee (BIC) of \$8.40 per \$1,000 issued is charged for new money bonds and refunding bond transactions, but not on bond anticipations notes (new money proceeds) or remarketing transactions; BIC fees in 2017 were waived by NYS DOB on all MTA refunding transactions
- 2) Underwriter's Discount includes fees paid to Underwriters, Underwriter's Counsel, and other expenses
- 3) Financial Advisor Fee is a flat fee paid monthly for a 12-month period, rather than a per transaction cost
- 4) Miscellaneous includes: Independent Engineer, Verification Agent, TM3 wire fees, Contingency, Insurance Cancellation, and Green Bond Certification
- 5) Earnings for M/WBE and SDVOB (% of total compensation, underwriters discount net of expenses) for State Fiscal Year 2017-18 will be reported to the Board in April 2018
- 6) Numbers may not total due to rounding

