



# **Report to the Finance Committee 2018 Year End Review**

**MTA Finance Department  
Patrick McCoy, Director  
January 22, 2019**

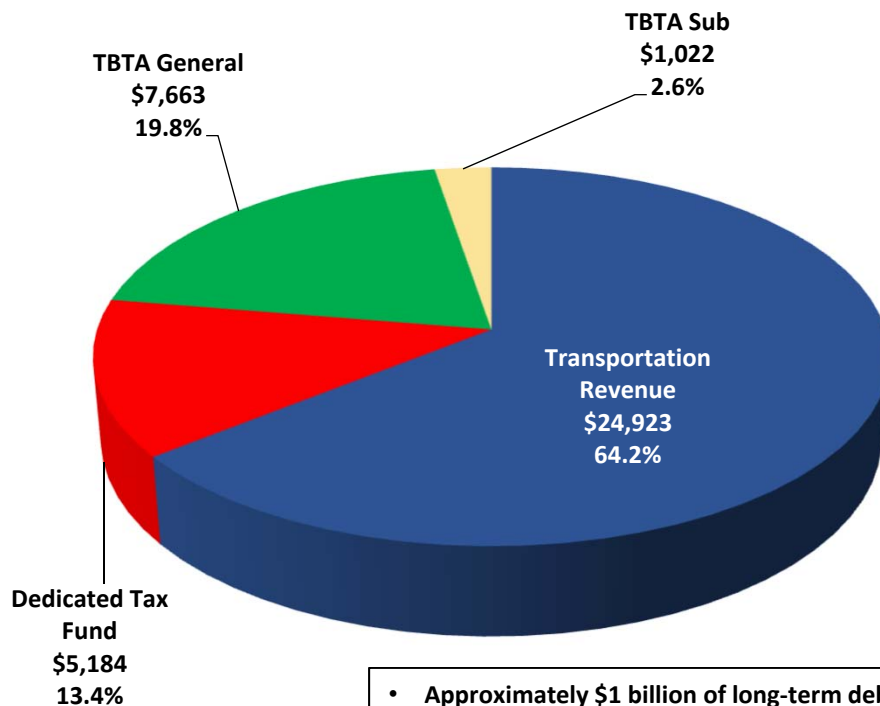


# MTA Debt Overview

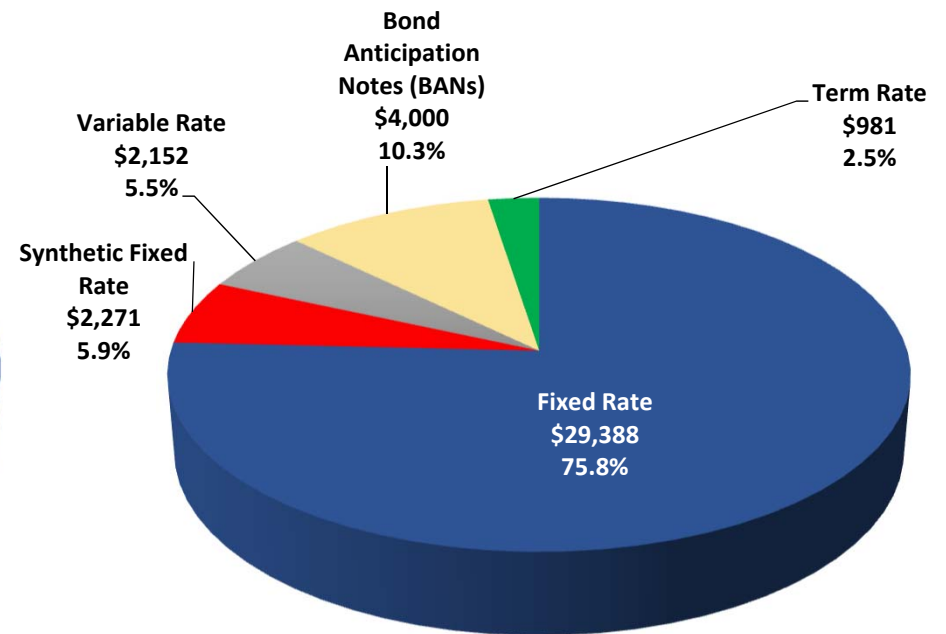
\$38.8 billion – Debt Outstanding on Core Credits (as of 12/31/2018)

\$ in millions

Debt by Credit



Debt by Type



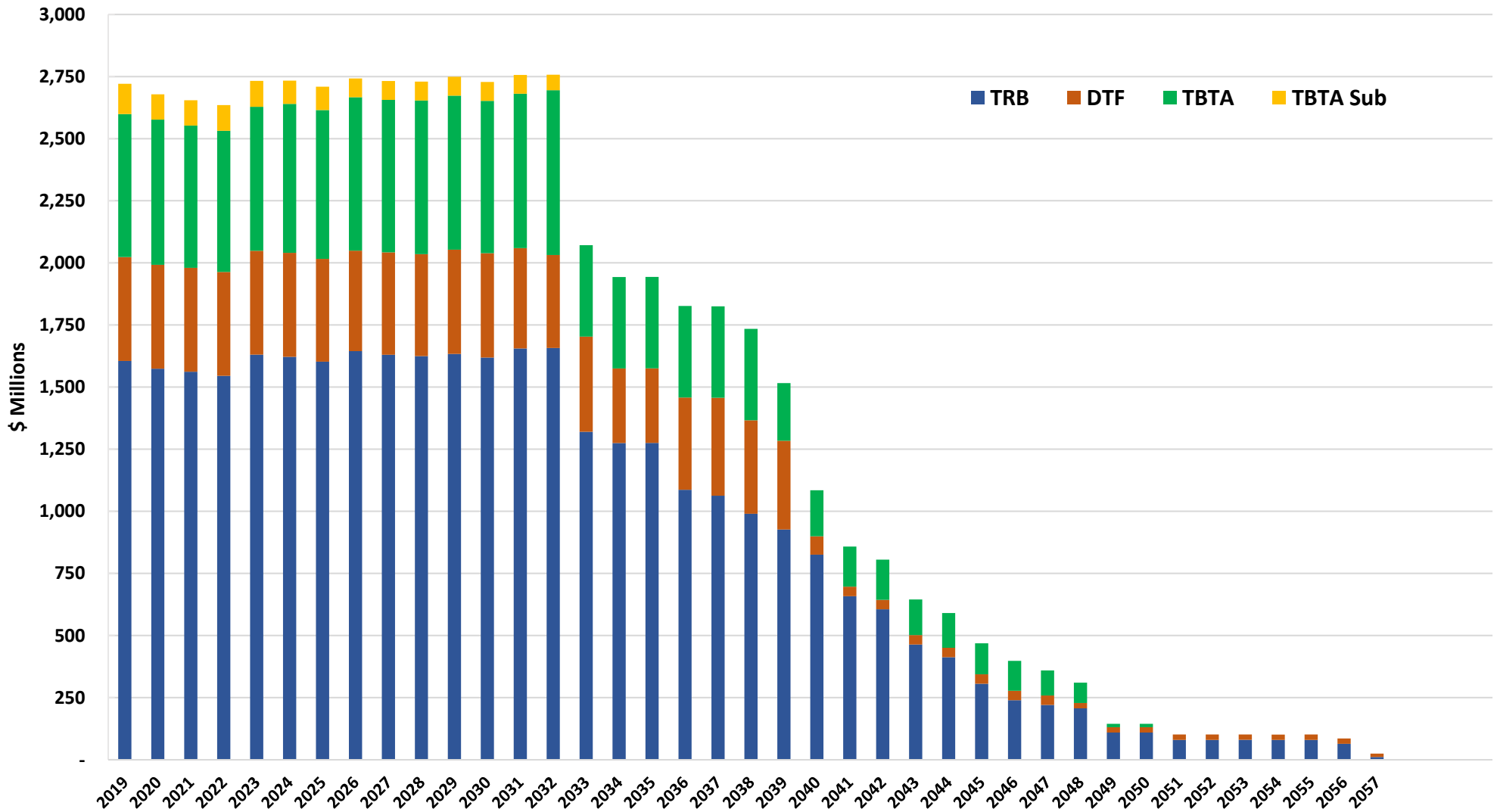
- Approximately \$1 billion of long-term debt was retired through normal amortization in 2018
- Year over year change in outstanding debt was approximately \$2.1 billion
- All-In True Interest Cost (TIC) 3.27%

Notes:

- 1) Debt Outstanding 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) Debt by Credit chart incorporates BANs into their respective credits
- 3) Term Rate bonds have a fixed rate for a defined period (until the mandatory tender date) and do not have a fixed rate for the entire life of the bonds
- 4) Excludes \$246.4 million Special Obligation Bonds and \$1.057 billion Hudson Rail Yards Trust Obligations
- 5) Numbers may not total due to rounding



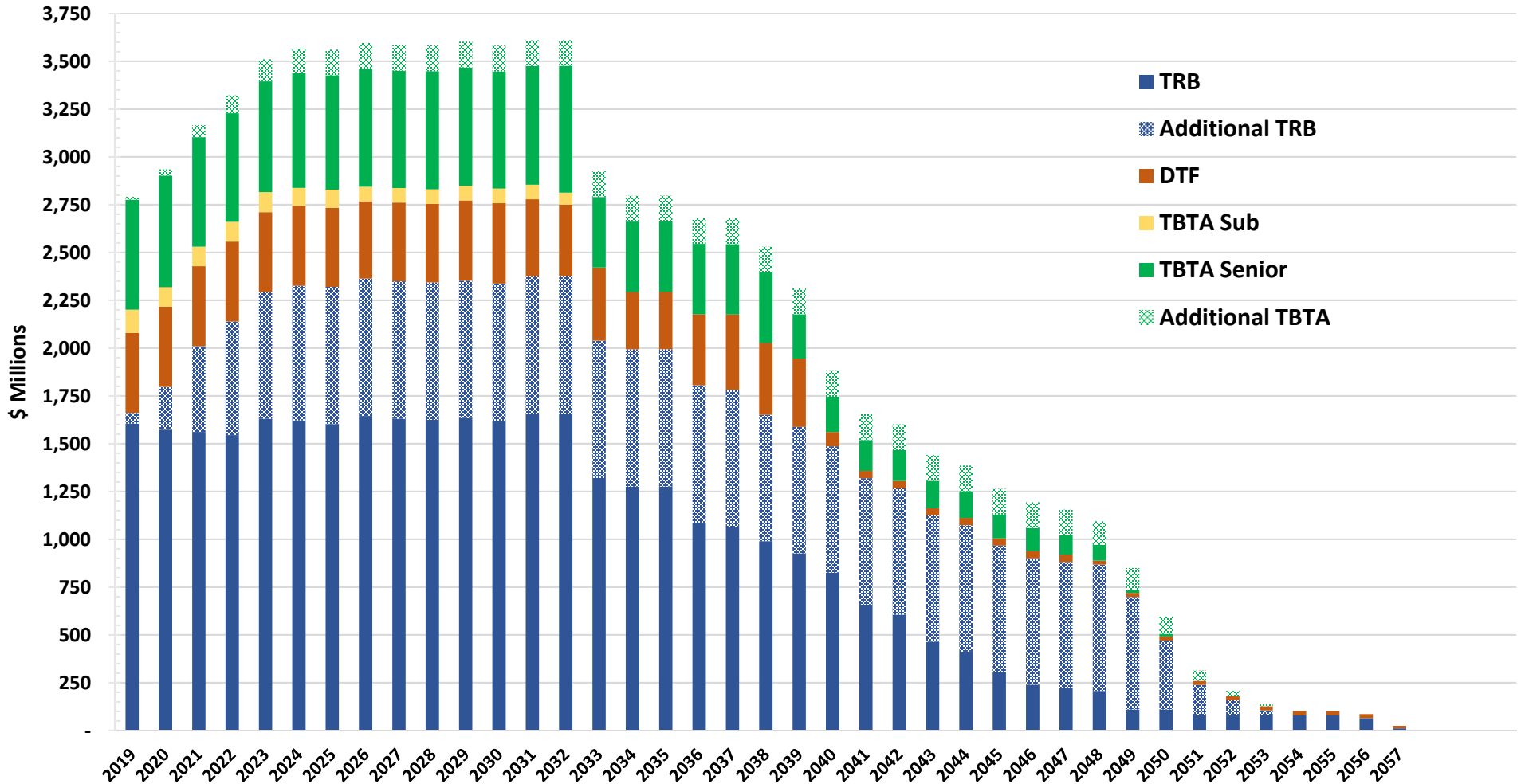
# Stated Debt Service on Outstanding Bonds by Credit



Note:  
1) Stated debt service as of 12/31/2018



# Stated Debt Service on Outstanding Bonds and Additional Debt Service Budgeted in November Financial Plan



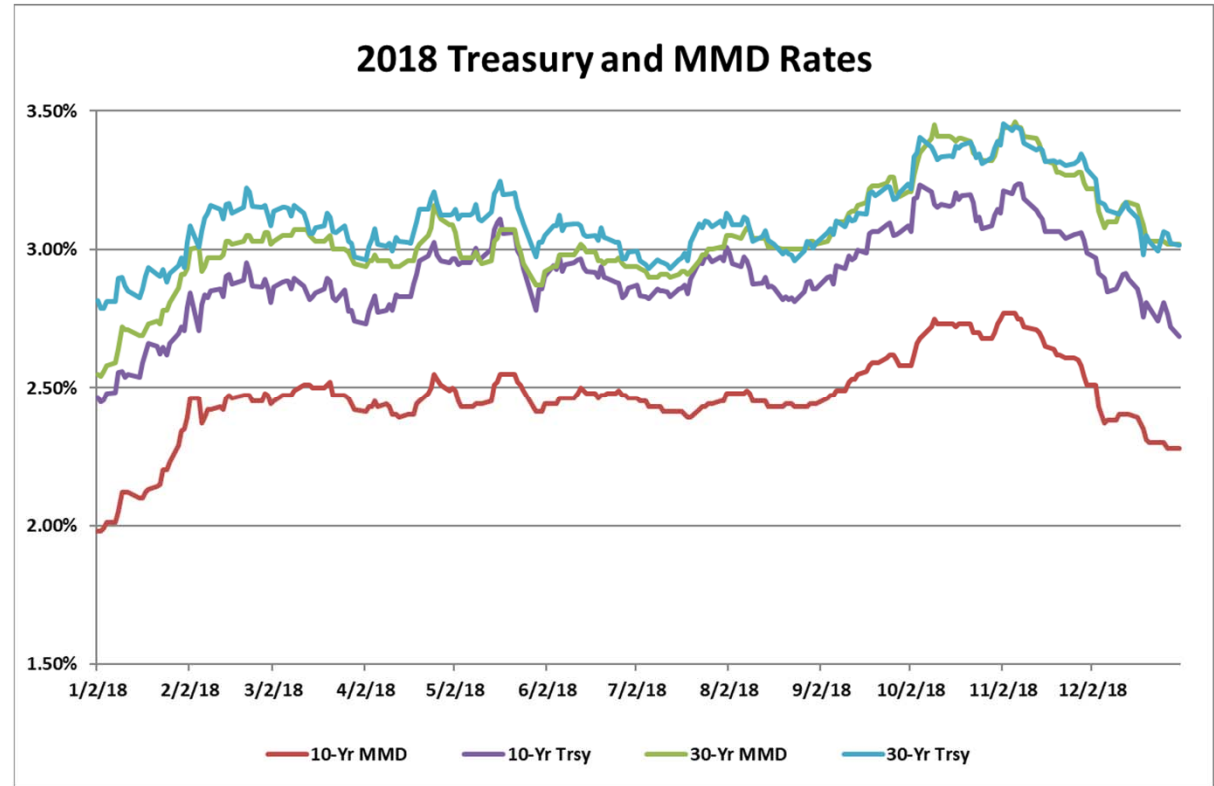
Notes:

- 1) Debt outstanding is stated debt service as of 12/31/2018
- 2) Additional Debt Service is as budgeted in the MTA 2019 Final Proposed Budget and November Financial Plan 2019-2022



# 2018 Market Recap and 2019 Outlook

- 2018 has been a volatile year; MMD and Treasury rates have increased
- Municipal yields underperformed Treasuries on the long end of the curve
- Concerns about the trade war between US and China, global economic slowdown, Brexit uncertainty, a divided US government, and the Fed's monetary policy have led to the worse stock market performance in December since 1931 and declining bond yields from their November peaks
- An inverted Treasury yield curve on the short-end during late-2018 hints at the possibility of a recession
- Tax reform, including lowering of the corporate marginal tax rate reduced demand from banks and prohibition of tax-exempt advance refundings increased volume in late-2017
- Issuance volume in 2018 dropped 24% to \$339 billion from a record of \$449 billion in 2017; volume is expected to increase in 2019 Municipal bond funds experienced twelve consecutive weeks of outflows from late-September to mid-December
- The Fed raised the Fed Funds rate four times in 2018; however, the pace of rate increase is expected to slow or no increase in 2019



2018 Rates	Average	Low	High	01/02/18	12/31/18	Diff. (bps)
10-Yr MMD	2.47%	1.98%	2.77%	1.98%	2.28%	30
10-Yr Trsy	2.91%	2.45%	3.24%	2.46%	2.69%	22
30-Yr MMD	3.05%	2.54%	3.46%	2.55%	3.02%	47
30-Yr Trsy	3.11%	2.79%	3.46%	2.81%	3.02%	20

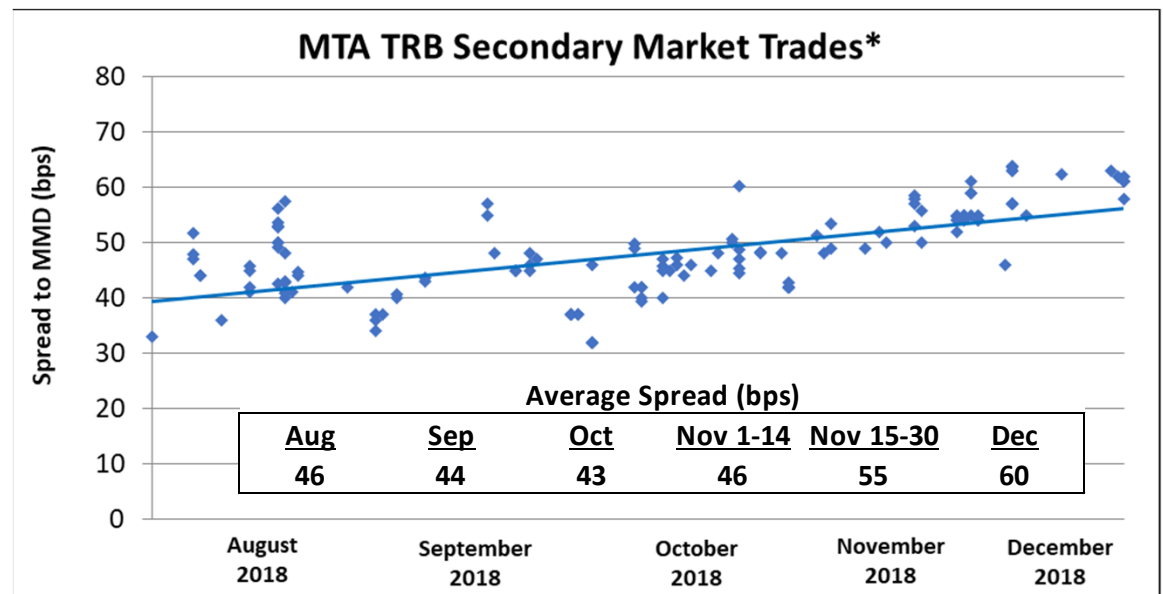
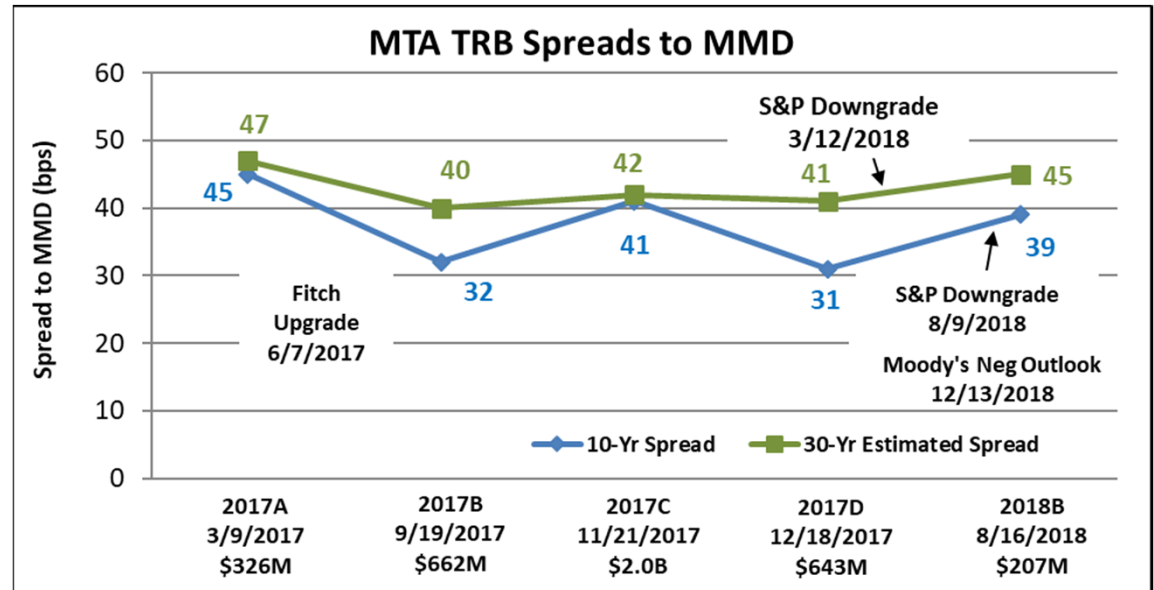
Note: MMD = Municipal Market Data

Sources: Bloomberg, The Bond Buyer, and Thompson Reuters as of December 31, 2018



# Widening TRB Credit Spreads

- MTA's TRB credit spreads have increased during the latter part of 2018
- The widening of TRB credit spreads could be attributed to a combination of the following:
  - General market conditions
  - Negative headline risk associated with MTA
  - Rating downgrades by S&P in March and August 2018 and Moody's negative outlook in December of 2018
  - Saturation of the TRB credit, with \$25 billion principal amount outstanding
- Secondary market trades for long TRBs show spreads widening by approximately 15 bps from August to December 2018.
  - Trades were on average at spreads to MMD of 46 bps in August, increased to 55 bps in mid-November, and increased to 60 bps in December
- Spreads for other large New York issuers have also widened by approximately 5 bps, but less than MTA's TRBs



\* Trades for 5% coupon bonds with maturities in 15 years or longer and trade size of \$500K or greater  
 Source: MSRB



## 2018 Transactions Summary - \$6.6 billion

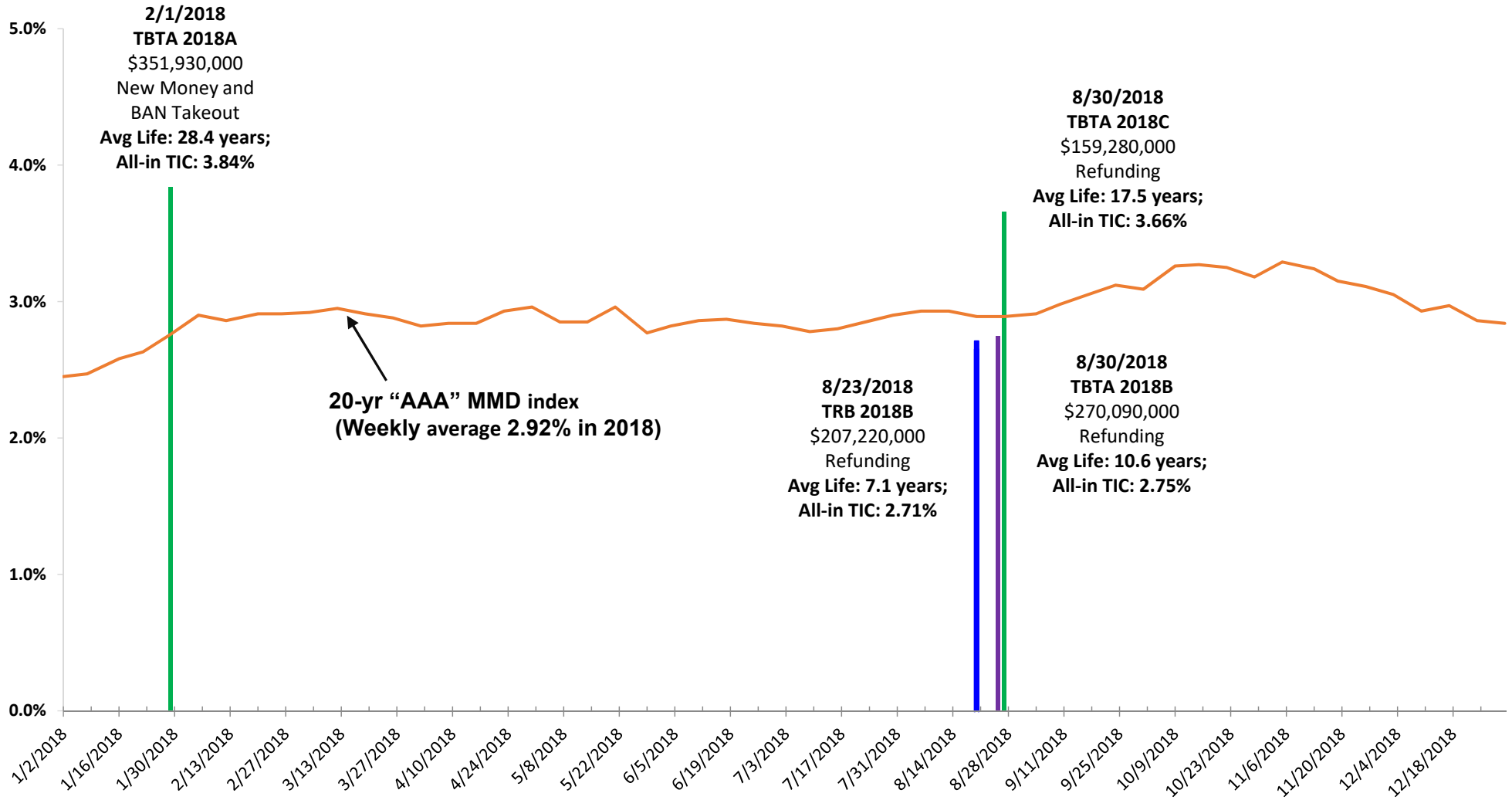
- **\$3.3 billion New Money borrowing**
  - \$324.9 million fixed rate bonds
  - \$3.0 billion bond anticipation notes (BANS)
- **\$624.3 million long-term fixed rate bonds to retire BANS**
- **\$636.6 million Refunding bonds**
  - Achieved Present Value savings of \$110.3 million, or 14.8% of par refunded
  - Total Refunded par was \$743.8 million
- **\$2.0 billion Remarketing of Tendered Obligations**
  - \$382.7 million remarketed as FRNs
  - \$1,010.8 million remarketed as variable rate debt with bank support in daily mode
  - \$385.4 million remarketed as variable rate debt with bank support in weekly mode
  - \$193.6 million remarketed via a Direct Purchase (as 5 year SIFMA FRN)

Notes:

- 1) Does not include \$245 million of Letter of Credit extensions on the following subseries:
  - \$77.5 million TRB 2015E-1, extended for three years (daily mode with bank support)
  - \$42.6 million TRB 2002G-1g, extended for three years (weekly mode with bank support)
  - \$125 million TRB 2012G-2, extended for three years (weekly mode with bank support)
- 2) Numbers may not total due to rounding



# 2018 MTA Fixed Rate Bond Issuances



Note:

1) Fixed Rate TICs calculated as of issuance of Fixed Rate bonds





## 2018 Remarketing Transactions

<u>Bond Series</u>	<u>Par</u>		<u>FRN Rate/Index</u>	<u>Letter of Credit Expiration/</u>	
	<u>Remarketed</u>	<u>Mode</u>		<u>Put Date</u>	
TBTA 2001B	\$ 107,280,000	SOFR FRN	67% of SOFR + 43 basis points	9/26/2019	
TBTA 2005B-2	190,300,000	Daily VRDB	NA	1/23/2021	
TRB 2002D-2b	100,000,000	LIBOR FRN	69% of LIBOR + 30 basis points	4/1/2021	
TRB 2002G-1f	38,270,000	LIBOR FRN	67% of LIBOR + 65 basis points	7/1/2021	
TRB 2005D-1	137,175,000	LIBOR FRN	67% of LIBOR + 65 basis points	7/1/2021	
TRB 2005E-1	95,180,000	Weekly VRDB	NA	8/20/2021	
TRB 2005E-3	71,385,000	Weekly VRDB	NA	8/20/2021	
TRB 2015E-4	70,350,000	Weekly VRDB	NA	9/3/2021	
TBTA 2002F	162,995,000	Daily VRDB	NA	10/29/2021	
TBTA 2003B-1	122,635,000	Daily VRDB	NA	1/21/2022	
TBTA 2005B-4c	82,500,000	Daily VRDB	NA	5/26/2022	
TRB 2015E-3	154,850,000	Daily VRDB	NA	9/2/2022	
TBTA 2013D-2a2b (via TBTA 2018E Taxable)	148,470,000	Weekly VRDB	NA	12/12/2022	
TBTA 2001C	107,275,000	Daily VRDB	NA	6/26/2023	
TBTA 2005B-3	190,300,000	Daily VRDB	NA	6/26/2023	
TRB 2015E-2 (Direct Purchase)	193,565,000	SIFMA FRN	SIFMA + 60 basis points	9/5/2023	
	<u>\$ 1,972,530,000</u>				

Notes:

- 1) During 2018, SIFMA averaged 1.41%; 1-month LIBOR averaged 2.02%
- 2) Does not include \$245 million of Letter of Credit extensions on the following subseries:
  - \$77.5 million TRB 2015E-1, extended for three years (daily mode with bank support)
  - \$42.6 million TRB 2002G-1g, extended for three years (weekly mode with bank support)
  - \$125 million TRB 2012G-2, extended for three years (weekly mode 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
- \$5.6 billion total outstanding green bonds



# 2018 Rating Agency Ratings and Outlooks

- **Rating Agency actions in 2018 reflected concerns over the need for sustainable revenues, debt service coverage on a net basis, and upcoming capital program needs**
  - S&P Global Ratings downgraded MTA’s Transportation Revenue Bonds twice in 2018, on 3/12/18 and 8/9/18, lowering rating from AA- to A and keeping MTA on negative outlook
  - Moody’s put the Transportation Revenue Bonds on negative outlook on December 13, 2018
- **In person meetings with all four rating agencies in 2018**
- **Year-round regular communications and updates**

Credit	Moody’s	S&P	Fitch	Kroll
Transportation Revenue	<b>A1</b> Negative	<b>A</b> Negative	<b>AA-</b> Stable	<b>AA+</b> Stable
Dedicated Tax Fund	NAF*	<b>AA</b> Stable	<b>AA</b> Stable	NAF*
TBTA – General Resolution	<b>Aa3</b> Stable	<b>AA-</b> Stable	<b>AA-</b> Stable	<b>AA</b> Stable
TBTA – Subordinate Resolution	<b>A1</b> Stable	<b>A+</b> Stable	<b>A+</b> Stable	<b>AA-</b> Stable

\* NAF – Not applied for



## 2018 Investor and Green Market Outreach

- **Year-Round:** Investors may reach MTA Finance staff directly via email and phone
- **February 2018:** MTA Finance Director participated in the Milken Institute Panel Roundtable on Financial Innovations Lab: Growing the U.S. Green Bond Market
- **April 2018:** MTA Finance presented at the annual J.P. Morgan Public Finance Transportation & Utility Conference and hosted more than twenty 1:1 meetings with institutional investors
- **April 2018:** MTA Finance Deputy Director participated on panel for event hosted by Bloomberg - Investing in a Sustainable Energy Future
- **June 2018:** MTA Finance participated on panel in Citibank's SMA Investor Conference
- **September 2018:** MTA Finance held 1:1 meetings with institutional investors while they were in NYC for various conferences
- **September 2018:** MTA Finance presented at the Bank of America 2018 New York Municipal Investor Conference
- **September 2018:** MTA Finance Director participated on panel at the Environmental Finance 2018 Green Bonds America Conference
- **October 2018:** MTA Finance Director participated in live interview with Bloomberg Radio
- **October 2018:** MTA Finance interviewed for municipal green bond research by academic entity in United Kingdom
- **December 2018:** MTA Finance Director participated on panel at SEC Municipal Securities Disclosure Conference



# 2019 Financing Quarterly Calendar

(\$ in millions)

Purpose	Q1	Q2	Q3	Q4	Total
New Money <sup>(1)</sup>	\$700	\$750	\$500	\$750	\$2,700
BAN Takeout	500	500	500	-	1,500
Remarketing <sup>(2)</sup>	-	100	102	422	624
Current Refunding <sup>(3)</sup>	-	-	100	-	100
<b>Total</b>	<b>\$1,200</b>	<b>\$1,350</b>	<b>\$1,202</b>	<b>\$1,172</b>	<b>\$4,924</b>

**All information in the 2019 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, new money projections based on forecasted debt in MTA 2019 Final Proposed Budget and November Financial Plan 2019-2022
- 2) FRNs and VRDBs with mandatory put dates or liquidity facility expiration dates in 2019
- 3) Fixed rate TRB and TBTA bonds callable in November 2019



## Appendix

- 1) Bond Financed Capital Investments in 2018
- 2) 2018 Debt Issuance and Remarketing Activity
- 3) 2018 Cost of Issuance Summary



# Bond Financed Capital Investments in 2018

- **MTA financed \$3.7 billion in capital expenditures from bond proceeds in 2018<sup>(1)</sup>**
- **Capital Construction - \$880 million<sup>(2)</sup>**
  - East Side Access - \$736 million
  - Second Avenue Subway Phase 1 - \$30 million
  - Second Avenue Subway Phase 2 - \$51 million
  - Misc. Engineering / Program Support - \$37 million
- **New York City Transit/SIR/MTA Bus - \$1.783 billion**
  - Passenger Stations - \$549 million
  - Mainline Track and Switch - \$313 million
  - Bus Purchase - \$251 million
  - Signals and Communications - \$224 million
  - Traction Power - \$96 million
  - Line Structures - \$81 million
  - Depot Rehab, Reconstruction and Improvements - \$54 million
- **Commuter Railroads - \$699.6 million**
  - LIRR - \$518.4 million, including Positive Train Control, Double Track and Station Improvements
  - MNR - \$181.2 million, including Positive Train Control, Harmon Shop improvements, and Network Communication Equipment
- **Bridges and Tunnels - \$340 million**
  - \$41 million - Open Road Tolling and New Toll Initiatives
  - \$154 million - various Structure Painting / Rehabs and Utilities
  - \$130 million - Roadways and Decks

Notes:

- 1) Does not reflect expenditures on projects related to Superstorm Sandy
- 2) Includes Security, Police, Administration and Lower Manhattan Projects
- 3) Specific items listed under subheaders reflect only major cost categories and projects, so may not add up to totals reflected



# 2018 Debt Issuance and Remarketing Activity

Settlement Date	Credit	Subseries	Amount	Structure	Senior Manager/Special Co-Seniors	Purpose	Assignment Basis
1/23/2018	TRB	2018A BANs	\$ 500,000,000	BAN	Competitive (multiple winners)	New Money	Competitive
2/1/2018	TBTA	2018A	199,930,000	Fixed	Competitive (Bank of America Merrill Lynch win)	New Money	Competitive
6/19/2018	TRB	2018B BANs	1,600,000,000	BAN	Competitive (multiple winners)	New Money	Competitive
10/4/2018	TBTA	2018D	125,000,000	SOFR FRN	J.P. Morgan/TD Securities, Loop Capital Markets	New Money	Merit
10/10/2018	TRB	2018C BANs	900,000,000	BAN	Competitive (multiple winners)	New Money	Competitive
<b>Subtotal New Money Bonds and BANs</b>			<b>3,324,930,000</b>				
1/23/2018	TRB	2018A	472,310,000	Term	Competitive (Bank of America Merrill Lynch win)	BAN Takeout	Competitive
2/1/2018	TBTA	2018A	152,000,000	Fixed	Competitive (Bank of America Merrill Lynch win)	BAN Takeout	Competitive
<b>Subtotal BAN Takeout Bonds</b>			<b>624,310,000</b>				
8/23/2018	TRB	2018B	207,220,000	Fixed	J.P. Morgan/Academy Securities, Alamo Capital, The Williams Capital Group and PNC Capital Markets	Refunding	Rotation
8/30/2018	TBTA	2018B	270,090,000	Fixed	Jefferies/Blaylock Van, Drexel Hamilton, Stern Brothers	Refunding	Merit
8/30/2018	TBTA	2018C	159,280,000	Fixed	Jefferies/Blaylock Van, Drexel Hamilton, Stern Brothers	Refunding	Merit
<b>Subtotal Refunding</b>			<b>636,590,000</b>				
1/24/2018	TBTA	2003B-1	122,635,000	Daily VRDB	Bank of America (Liquidity Provider), Bank of America Merrill Lynch (Remarketing Agent)	Remarketing	Merit
1/24/2018	TBTA	2005B-2	190,300,000	Daily VRDB	Citi (Liquidity Provider), Citigroup (Remarketing Agent)	Remarketing	Merit
3/29/2018	TRB	2002D-2b	100,000,000	LIBOR FRN	Competitive (J.P. Morgan win)	Remarketing	Competitive
6/27/2018	TBTA	2001C	107,275,000	Daily VRDB	State Street (Liquidity Provider), Goldman Sachs (Remarketing Agent)	Remarketing	Merit
6/27/2018	TBTA	2005B-3	190,300,000	Daily VRDB	State Street (Liquidity Provider), Jefferies (Remarketing Agent)	Remarketing	Merit
8/22/2018	TRB	2005E-1	95,180,000	Weekly VRDB	PNC Bank (Liquidity Provider), PNC Capital Markets (Remarketing Agent)	Remarketing	Merit
8/22/2018	TRB	2005E-3	71,385,000	Weekly VRDB	PNC Bank (Liquidity Provider), PNC Capital Markets (Remarketing Agent)	Remarketing	Merit
9/5/2018	TRB	2015E-3	154,850,000	Daily VRDB	Bank of America (Liquidity Provider), Bank of America Merrill Lynch (Remarketing Agent)	Remarketing	Merit
9/5/2018	TRB	2015E-4	70,350,000	Weekly VRDB	PNC Bank (Liquidity Provider), PNC Capital Markets (Remarketing Agent)	Remarketing	Merit
9/5/2018	TRB	2015E-2	193,565,000	SIFMA FRN	Direct Purchase with RBC Capital Markets	Remarketing	Merit
9/26/2018	TBTA	2001B	107,280,000	SOFR FRN	J.P. Morgan/TD Securities, Loop Capital Markets	Remarketing	Merit
10/30/2018	TRB	2002G-1f	38,270,000	LIBOR FRN	Citigroup/Cabrera Capital Markets, Drexel Hamilton, Stern Brothers	Remarketing	Merit
10/30/2018	TRB	2005D-1	137,175,000	LIBOR FRN	Citigroup/Cabrera Capital Markets, Drexel Hamilton, Stern Brothers	Remarketing	Merit
10/30/2018	TBTA	2002F	162,995,000	Daily VRDB	Citi (Liquidity Provider), Citigroup (Remarketing Agent)	Remarketing	Merit
11/28/2018	TBTA	2005B-4c	82,500,000	Daily VRDB	US Bank (Liquidity Provider), US Bancorp (Remarketing Agent)	Remarketing	Merit
12/12/2018	TBTA	2013D-2a2b (via 2018E Taxable)	148,470,000	Weekly VRDB	Bank of America (Liquidity Provider), Bank of America Merrill Lynch (Remarketing Agent)	Remarketing	Merit
<b>Subtotal Remarketing</b>			<b>1,972,530,000</b>				
<b>Total 2018 Transactions</b>			<b>\$ 6,558,360,000</b>				

Note:

1) Does not include \$245 million of Letter of Credit extensions completed in 2018





## 2018 Cost of Issuance Summary

	New Money	BAN Takeout	Refunding	Remarketing	Total
<b>NYS Bond Issuance Fee</b>	-	-	-	N/A	-
<b>Underwriter's Discount</b>	\$2,650,739	\$614,003	\$2,959,739	\$1,073,273	\$7,297,754
<b>Bond Counsel</b>	346,443	121,482	333,016	1,223,070	2,024,011
<b>Disclosure Counsel</b>	206,405	91,287	165,526	474,485	937,703
<b>Financial Advisor Fee</b>	241,602	64,484	239,143	213,489	758,717
<b>Rating Agency Fees</b>	653,342	219,428	365,750	171,000	1,409,519
<b>Trustee</b>	22,500	6,000	25,000	51,200	104,700
<b>Printing and Distribution</b>	12,294	4,849	12,608	27,202	56,953
<b>Miscellaneous</b>	68,708	-	58,482	424,474	551,664
<b>Total</b>	<b>\$4,202,032</b>	<b>\$1,121,532</b>	<b>\$4,159,264</b>	<b>\$3,658,192</b>	<b>\$13,141,020</b>

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 2018 were waived by NYS DOB on all MTA bond transactions
- 2) Underwriter's Discount includes fees paid to Underwriters, Underwriter's Counsel, and other expenses
- 3) Financial Advisor Fee reflects a flat fee paid monthly for a 12-month period, rather than a per transaction cost; and fees paid for special assignments
- 4) Miscellaneous includes: Independent Engineer, Verification Agent, TM3 wire fees, Contingency, Insurance Cancellation, Green Bond Certification, and Bank Counsel Fees
- 5) Earnings for M/WBE and SDVOB (% of total compensation, underwriters discount net of expenses) for State Fiscal Year 2018-19 will be reported to the Board in April 2019
- 6) Numbers may not total due to rounding