Report to the Finance Committee
Review of Variable Rate Debt

MTA Finance Department
Patrick J. McCoy, Director
April 23, 2018
MTA’s Variable Rate Debt Policy

• The Authority desires to achieve the lowest possible interest cost on its debt and maintain a prudent level of interest rate risk. Therefore, the following policy shall apply:

The Authority may issue Variable Rate Debt in such amounts as deemed necessary and/or beneficial by staff to provide funding for Approved Capital Programs or to refund existing obligations of the Authority. Upon such issuance, the principal amount of Variable Rate Debt outstanding shall not exceed 25% of the aggregate principal amount of all outstanding obligations of the Authority.

Notes:
(1) MTA Board adopted the Variable Rate Policy on May 20, 2004
(2) Synthetic Fixed Rate presentation is scheduled to be presented to the Finance Committee in October 2018
Unhedged Variable Rate Debt is 6% of Total

$ in billions

- Fixed Rate: $31.70, 85%
- Term Rate: $0.98, 3%
- Unhedged Variable Rate: $2.27, 6%
- Hedged/Synthetic Fixed Rate: $2.30, 6%

Notes:
(1) Term Rate bonds have a fixed rate for a defined period (until the mandatory tender date) but do not have a fixed rate for the entire life of the bonds
(2) Fixed Rate includes $1.5 billion Bond Anticipation Notes
(3) Excludes $34.5 million State Service Contract Bonds, $277.7 million Special Obligation Bonds, and $1.057 billion Hudson Rail Yard Trust Obligations
Variable Rate and Synthetic Fixed Rate Debt Diversification

$ in millions

- **Weekly VRDB**: $1,753 (38%)
- **Daily VRDB**: $986 (22%)
- **Floating Rate Notes**: $1,826 (40%)
Types of Variable Rate Debt in MTA’s Debt Portfolio

• **Variable Rate Demand Bonds (“VRDBs”), $2.7 billion outstanding**
  – Interest rate is determined on a periodic basis depending on the interest rate mode; Remarketing Agent sets the interest rate on each reset date and markets bonds tendered
  – Optional tenders are supported by bank letters of credit and standby bond purchase agreements

• **Floating Rate Notes (“FRNs”), $1.8 billion outstanding**
  – Interest rate is determined based on a set spread to a floating index (SIFMA or LIBOR)
Unhedged Variable Rate Debt has Declined

Note:
(1) All totals are as of March 31 of their respective year
• Long-term tax-exempt bond yields remain low ending 2017 at 2.54% (5-year average is 3.08%)
• Short-term rates have increased significantly since early 2016 ending 2017 at 1.71% (5-year average is 0.29%)
2017 Variable Rate Bonds Performance

MTA Variable Rate Bonds
Weighted Daily Average Rates (1)

Other Benchmark Rates (2017 Average)
- RBI: 3.89%
- 30-Year MMD: 2.85%
- 30-Year Treasury: 2.89%
- 1-Year Treasury: 1.19%
- SIFMA: 0.85%

MTA Variable Rate Bonds
Average Weighted Daily Rates (1): 1.20%

Note:
(1) Average rate is inclusive of remarketing and liquidity fees
Liquidity Expirations, FRN and Term Rate Bond Reset Dates by Year

$ in millions

- **2018 Outlook**: $1.8 billion of VRDBs and $121 million of FRNs have letter of credit expirations/tender dates remaining in 2018
Appendix

- 2018 Liquidity Expiration and FRN Tender Dates Schedule
- Remarketing Agents
- Credit/Liquidity Support Providers
### Remaining 2018 Credit/Liquidity Expirations and FRN Tender Dates Schedule

<table>
<thead>
<tr>
<th>Bond Series</th>
<th>Outstanding Par ($ millions)</th>
<th>Mode</th>
<th>Credit/Liquidity Support Provider</th>
<th>Exp/Tender Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>TBTA 2005B-3</td>
<td>190.300</td>
<td>Weekly</td>
<td>The Bank of Tokyo-Mitsubishi UFJ, Ltd</td>
<td>6/29/2018</td>
</tr>
<tr>
<td>TBTA 2001C</td>
<td>107.275</td>
<td>Weekly</td>
<td>The Bank of Tokyo-Mitsubishi UFJ, Ltd</td>
<td>8/17/2018</td>
</tr>
<tr>
<td>TRB 2005E-3</td>
<td>71.385</td>
<td>Weekly</td>
<td>Bank of Montreal</td>
<td>8/24/2018</td>
</tr>
<tr>
<td>TRB 2005E-1</td>
<td>95.180</td>
<td>Daily</td>
<td>Bank of Montreal</td>
<td>8/24/2018</td>
</tr>
<tr>
<td>TRB 2015E-5</td>
<td>48.185</td>
<td>Daily</td>
<td>U.S. Bank National Association</td>
<td>9/7/2018</td>
</tr>
<tr>
<td>TRB 2015E-4</td>
<td>48.185</td>
<td>Weekly</td>
<td>Bank of the West</td>
<td>9/7/2018</td>
</tr>
<tr>
<td>TRB 2015E-3</td>
<td>194.460</td>
<td>Weekly</td>
<td>Citibank, N.A.</td>
<td>9/7/2018</td>
</tr>
<tr>
<td>TRB 2015E-2</td>
<td>243.075</td>
<td>Weekly</td>
<td>The Bank of Tokyo-Mitsubishi UFJ, Ltd</td>
<td>9/7/2018</td>
</tr>
<tr>
<td>TRB 2015E-1</td>
<td>97.230</td>
<td>Daily</td>
<td>U.S. Bank National Association</td>
<td>9/7/2018</td>
</tr>
<tr>
<td>TBTA 2015E-1</td>
<td>107.280</td>
<td>Weekly</td>
<td>State Street Bank and Trust Company</td>
<td>9/28/2018</td>
</tr>
<tr>
<td>TRB 2002G-1f</td>
<td>42.575</td>
<td>FRN</td>
<td>NA</td>
<td>11/1/2018</td>
</tr>
<tr>
<td>TRB 2002G-1g</td>
<td>42.550</td>
<td>Weekly</td>
<td>TD Bank, N.A.</td>
<td>11/1/2018</td>
</tr>
<tr>
<td>TRB 2012G-2</td>
<td>125.000</td>
<td>Weekly</td>
<td>TD Bank, N.A.</td>
<td>11/1/2018</td>
</tr>
<tr>
<td>TBTA 2002F</td>
<td>171.555</td>
<td>Daily</td>
<td>Landesbank Hessen-Thüringen Girozentrale</td>
<td>11/1/2018</td>
</tr>
<tr>
<td>DTF 2008B-3a</td>
<td>35.000</td>
<td>FRN</td>
<td>NA</td>
<td>11/1/2018</td>
</tr>
<tr>
<td>TRB 2005D-1</td>
<td>142.750</td>
<td>Weekly</td>
<td>Landesbank Hessen-Thüringen Girozentrale</td>
<td>11/7/2018</td>
</tr>
<tr>
<td>TBTA 2005B-4d</td>
<td>43.800</td>
<td>FRN</td>
<td>NA</td>
<td>12/1/2018</td>
</tr>
<tr>
<td>TBTA SUB 2013D-2a Taxable</td>
<td>58.020</td>
<td>Weekly</td>
<td>Bank of America, N.A</td>
<td>12/14/2018</td>
</tr>
<tr>
<td>TBTA SUB 2013D-2b Taxable</td>
<td>90.450</td>
<td>Weekly</td>
<td>Bank of America, N.A</td>
<td>12/14/2018</td>
</tr>
</tbody>
</table>

Complete schedule is available at [http://web.mta.info/mta/investor/](http://web.mta.info/mta/investor/)
Variable Rate Demand Bonds Liquidity Providers

$ in millions

- The Bank of Tokyo-Mitsubishi UFJ, Ltd: $691 (25%)
- TD Bank, N.A.: $444 (16%)
- Bank of America, N.A.: $342 (13%)
- Citibank, N.A.: $385 (14%)
- U.S. Bank National Association: $145 (5%)
- Bank of the West: $48 (2%)
- Landesbank Hessen-Thüringen Girozentrale: $409 (15%)
- State Street Bank and Trust Company: $107 (4%)
- Bank of Montreal: $167 (6%)
- The Bank of Tokyo-Mitsubishi UFJ, Ltd: $691 (25%)
Variable Rate Demand Bonds Remarketing Agents

$ in millions

Mitsubishi UFJ Securities (USA), Inc.
$150 6%

TD Securities
$402 15%

Citigroup
$735 27%

Morgan Stanley & Co. LLC
$393 14%

Merrill Lynch, Pierce, Fenner & Smith Incorporated
$485 18%

JP Morgan Securities LLC
$172 6%

Loop Capital Markets
$120 4%

US Bancorp
$145 5%

Jefferies
$95 3%

Goldman Sachs & Co.
$43 2%