# Transaction Recap of the Metropolitan Highway System Fixed-Rate Refunding Bonds

October 24, 2019

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# Quick Review – From September's F&A Meeting

- Bonds were originally issued by the Turnpike Authority in 1997 and advance refunded in 2010. We have a one-time historic opportunity to current-refund the original bonds for a significant savings.
- Optimal market conditions exist for MassDOT to issue current refunding MHS bonds for substantial savings:
  - Approximately $830 million of senior and subordinate lien bonds
  - **Approximately $161 million in net present value savings (NPV); $10 million in savings annually**
  - Annual savings available to further support the capital needs of the MHS and related projects (Allston)
- Savings from this transaction (around $10 million annually) can further support additional capital needs for the MHS and Allston project.
- This refunding **does not impact/change/amend** toll rates (determined by the Board) or toll locations (restricted by statute).

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# Final Cash Flow Calculation

2019 Senior and Subordinate Refunding
Verified Final Pricing Numbers

| Date | Prior Debt Service | Refunding Debt Service | Savings | Present Value to 10/23/2019 @ 1.7658331% |
|---|---|---|---|---|
| 06/30/2020 | 20,716,940.63 | 6,272,575.00 | 14,444,365.63 | 14,396,477.99 |
| 06/30/2021 | 83,768,881.26 | 67,697,750.00 | 16,071,131.26 | 15,774,268.00 |
| 06/30/2022 | 83,114,031.26 | 67,068,250.00 | 16,045,781.26 | 15,473,379.34 |
| 06/30/2023 | 83,585,031.26 | 67,139,000.00 | 16,446,031.26 | 15,580,439.61 |
| 06/30/2024 | 76,943,031.26 | 62,007,250.00 | 14,935,781.26 | 13,904,044.16 |
| 06/30/2025 | 60,007,031.26 | 47,743,500.00 | 12,263,531.26 | 11,220,872.21 |
| 06/30/2026 | 98,357,531.26 | 77,952,500.00 | 20,405,031.26 | 18,326,349.88 |
| 06/30/2027 | 92,087,281.26 | 72,667,000.00 | 19,420,281.26 | 17,136,396.66 |
| 06/30/2028 | 26,905,250.00 | 21,593,500.00 | 5,311,750.00 | 4,618,495.85 |
| 06/30/2029 | 40,272,850.00 | 32,028,000.00 | 8,244,850.00 | 7,033,576.11 |
| 06/30/2030 | 91,657,350.00 | 72,881,500.00 | 18,775,850.00 | 15,714,363.27 |
| 06/30/2031 | 97,289,850.00 | 77,766,750.00 | 19,523,100.00 | 16,051,788.50 |
| 06/30/2032 | 96,751,600.00 | 77,353,500.00 | 19,398,100.00 | 15,668,418.14 |
| 06/30/2033 | 95,733,600.00 | 76,402,750.00 | 19,330,850.00 | 15,339,220.48 |
| 06/30/2034 | 96,160,637.50 | 76,744,750.00 | 19,415,887.50 | 15,135,309.44 |
| 06/30/2035 | 77,829,425.00 | 62,449,250.00 | 15,380,175.00 | 11,778,650.15 |
| 06/30/2036 | 621,462.50 | 494,000.00 | 127,462.50 | 96,313.93 |
| 06/30/2037 | 13,231,462.50 | 10,374,000.00 | 2,857,462.50 | 2,112,634.84 |
| | 1,235,033,246.95 | 976,635,825.00 | 258,397,421.95 | 225,360,998.55 |

| | |
|---|---|
| PV of savings from cash flow | 225,360,998.55 |
| Less: Prior funds on hand | -81,058,654.00 |
| Plus: Refunding funds on hand | 38,005,445.56 |
| Net PV Savings | 182,307,790.11 |

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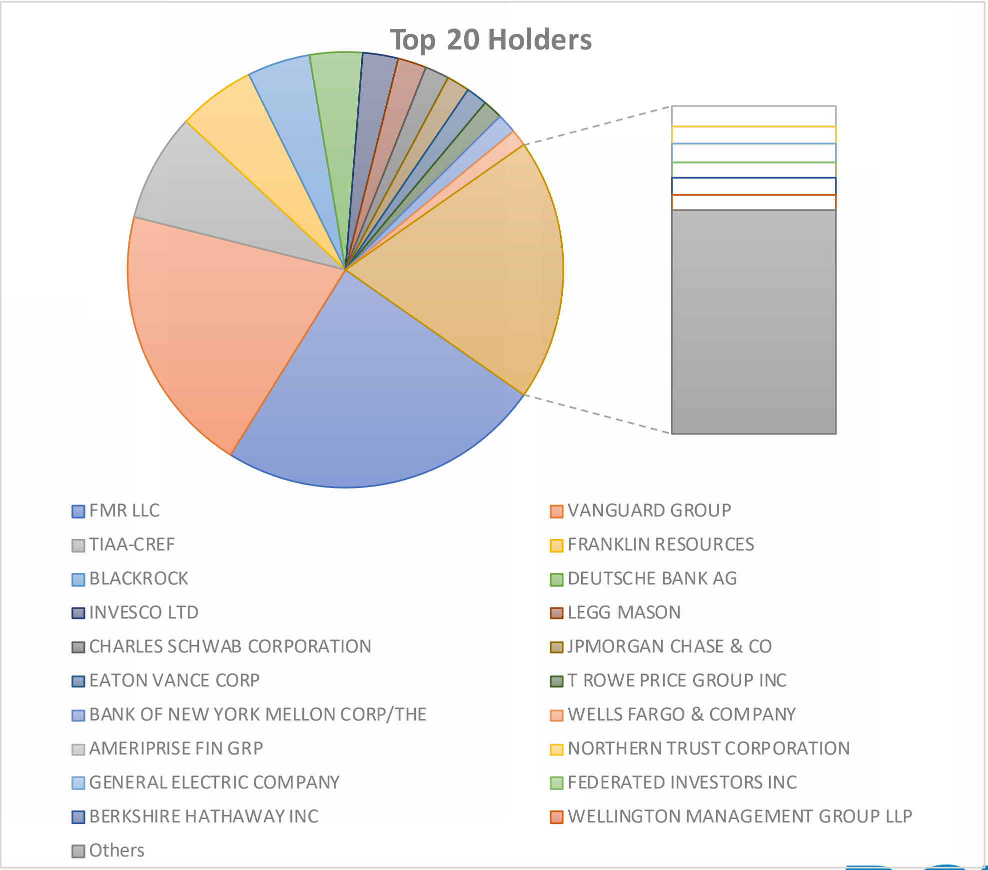
# Holders of Mass DOT Bonds

Top 20 Holders Matrix
All Mass DOT Bonds
As of October 15, 2019

| # | Managing Firm Name | Total |
|---|---|---|
| # | **Total** | **958,255,033** |
| 1 | FMR LLC | 231,020,000 |
| 2 | VANGUARD GROUP | 192,279,485 |
| 3 | TIAA-CREF | 76,858,889 |
| 4 | FRANKLIN RESOURCES | 55,180,000 |
| 5 | BLACKROCK | 44,675,336 |
| 6 | DEUTSCHE BANK AG | 37,517,500 |
| 7 | INVESCO LTD | 25,195,000 |
| 8 | LEGG MASON | 20,350,000 |
| 9 | CHARLES SCHWAB CORPORATION | 17,136,250 |
| 10 | JPMORGAN CHASE & CO | 16,326,821 |
| 11 | EATON VANCE CORP | 15,120,000 |
| 12 | T ROWE PRICE GROUP INC | 14,078,167 |
| 13 | BANK OF NEW YORK MELLON CORP/THE | 14,000,000 |
| 14 | WELLS FARGO & COMPANY | 11,911,587 |
| 15 | AMERIPRISE FIN GRP | 11,180,000 |
| 16 | NORTHERN TRUST CORPORATION | 10,509,804 |
| 17 | GENERAL ELECTRIC COMPANY | 10,000,000 |
| 18 | FEDERATED INVESTORS INC | 9,500,000 |
| 19 | BERKSHIRE HATHAWAY INC | 9,463,277 |
| 20 | WELLINGTON MANAGEMENT GROUP LLP | 8,616,532 |
| | Others | 127,336,385 |
| | | 958,255,033 |

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