



\$138,250,000*

Massachusetts Department of Transportation
Metropolitan Highway System Revenue Refunding Bonds (Subordinated)
Commonwealth Contract Assistance Secured
2018 Series A

Board of Directors Meeting

David W. Pottier, Chief Financial Officer

March 19, 2018

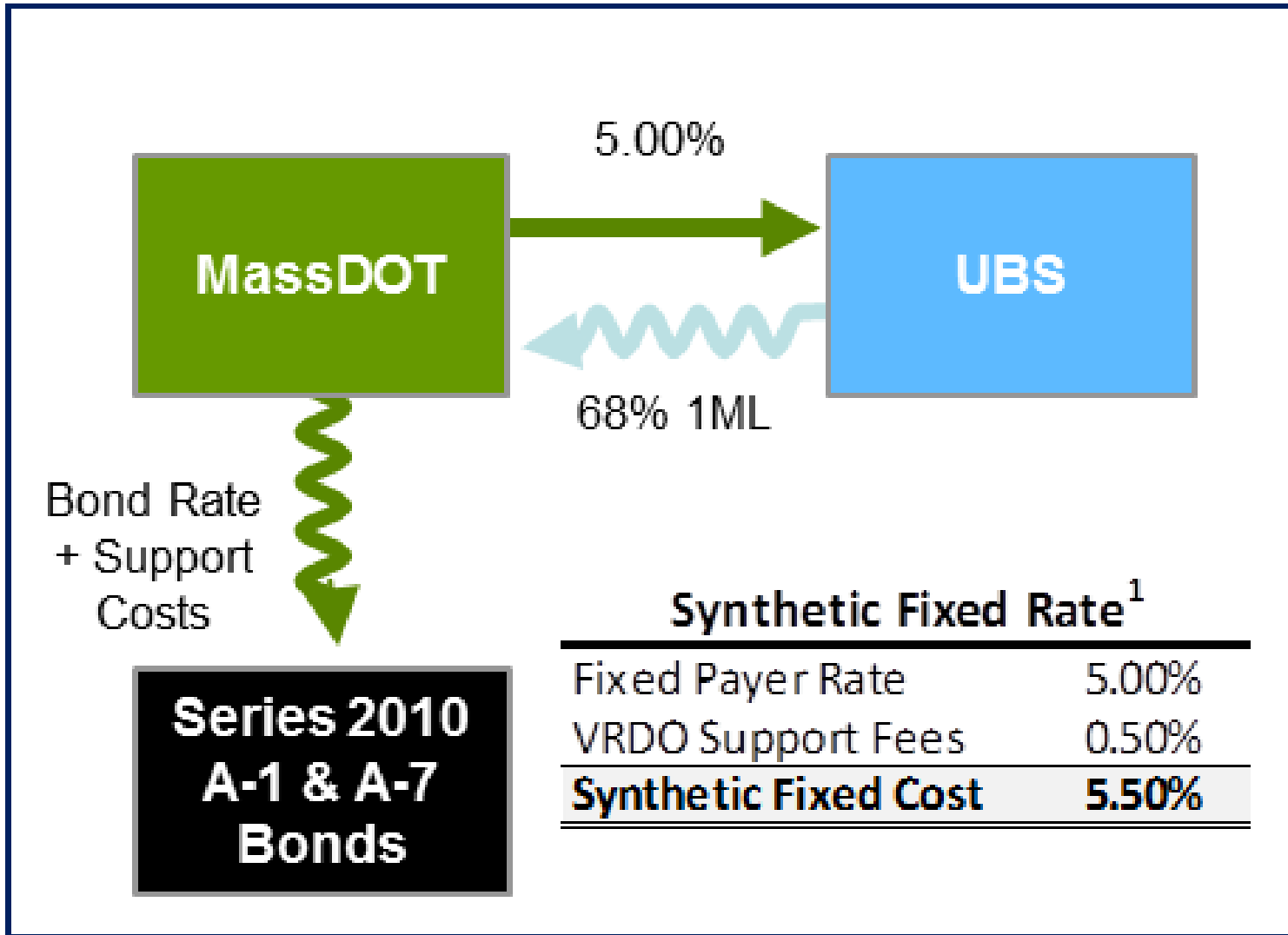
* Preliminary, subject to change.

Overview of Refunding & Swap Termination Transaction

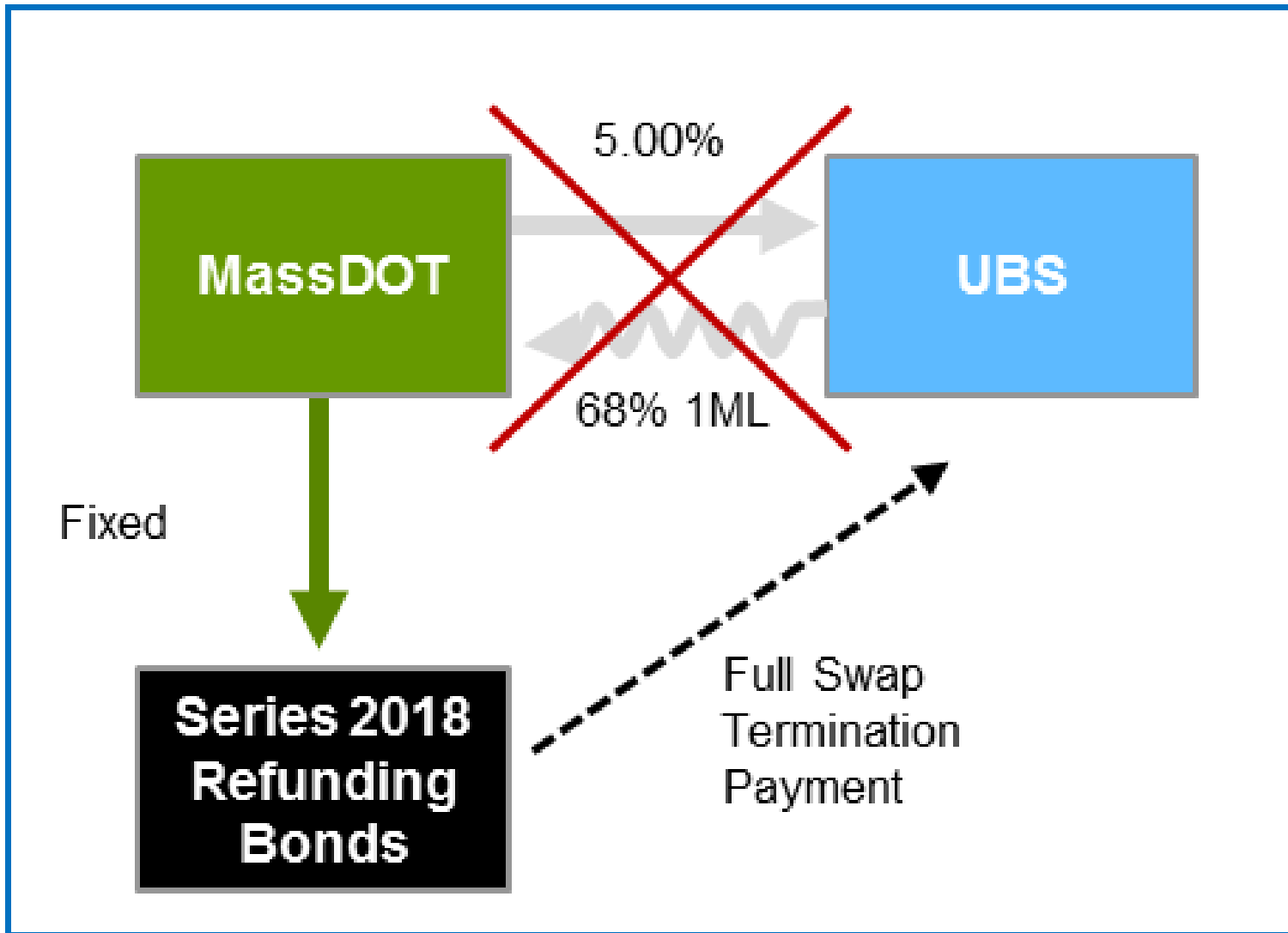
- Proposed financing structure: traditional fixed-rate current refunding and termination of associated UBS swaps
 - Issue fixed rate bonds: \$138,250,000¹ Revenue Refunding Bonds (Subordinated) Commonwealth Contract Assistance Secured, 2018 Series A
 - Refund variable rate bonds: \$137.855 million Subordinated Variable Rate Demand Obligations 2010 Series A-1 and A-7
 - Terminate \$137.855 million of notional amount of UBS swaps associated with 2010 Series A-1 and A-7 Subordinated bonds
 - Fixed rate refunding structured to produce level/uniform savings – net present value savings = \$323k¹

¹ Based on March 5, 2018 rates, subject to change.

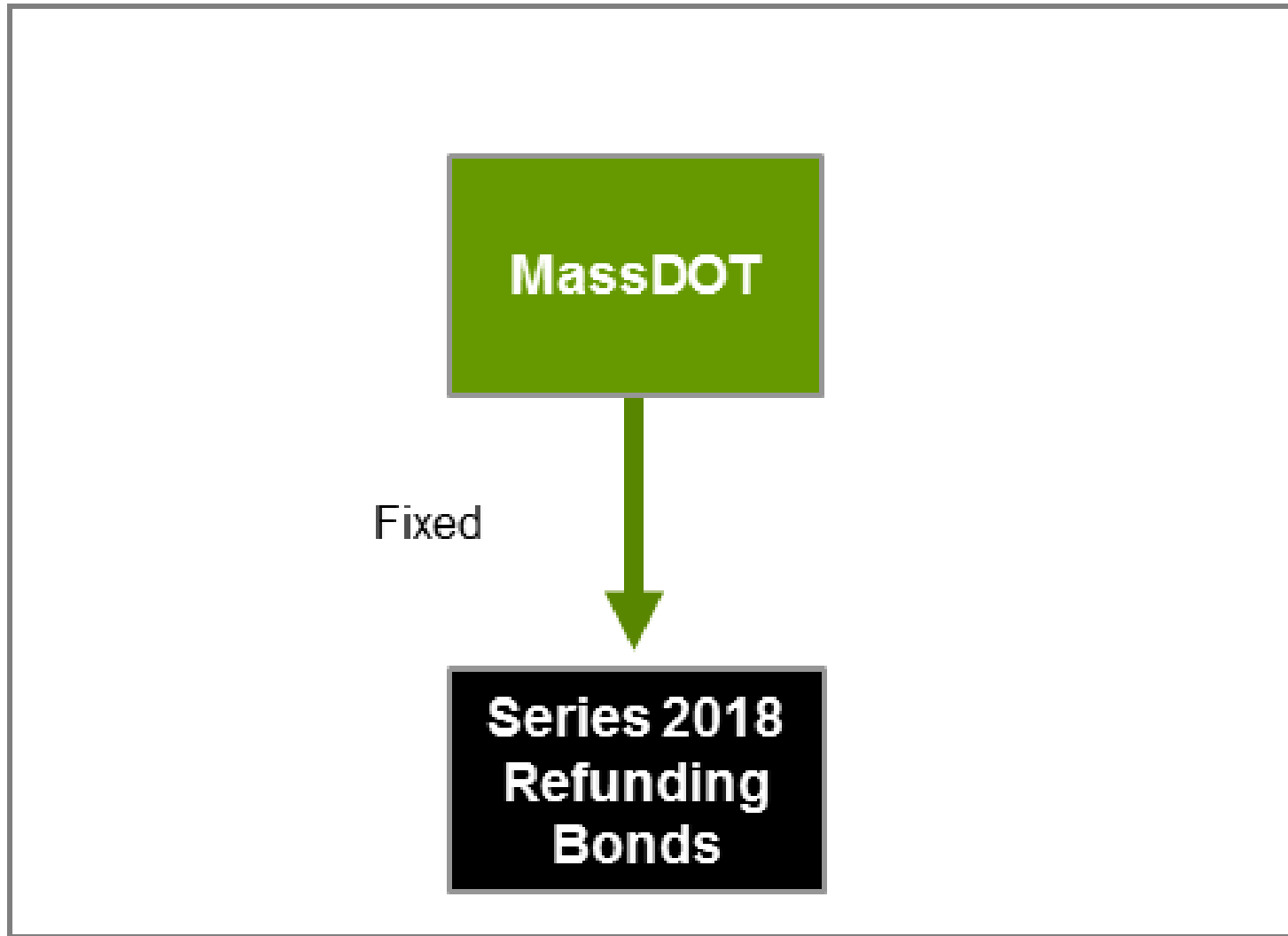
Existing Synthetic Fixed Rate Debt



Refunding + Swap Termination



Result: Traditional Fixed Rate Debt



Transaction Highlights

- Refunding bond maturities will not be extended
- \$8.361 million released from subordinated debt service reserve fund reduces the size of refunding bonds issued
- Refunding economics primarily impacted by:
 - Relationship between benchmark tax-exempt MMD rates and taxable LIBOR swap rates
 - Credit spreads on i) fixed rate refunding bonds and ii) variable rate refunded bonds
 - Swap termination discount provided by UBS
- Transaction meets Risk Management (§ 8) and Refunding (§ 14) guidelines of MassDOT's Debt Issuance and Management Policy²

¹ Based on March 5, 2018 rates, subject to change.

² Policy dated February 10, 2016.

Transaction Benefits

Benefits

- **Substitute variable rate debt with fixed rate debt**
- **Lower interest costs**
- **Terminate swaps, eliminate \$34.5mm MTM**
 - Termination payment funded out of tax-exempt refunding bond proceeds
- **UBS Discount on Swap Termination**
- **Eliminates VRDB associated risks**
 - No bank support required
 - No bank covenants
 - No renewal risk of SBPA or LOC agreements
 - No annual liquidity or remarketing fees
- **Eliminates swap associated risks**
 - No basis risk: variable rates received on swap do not equal variable rates paid on bonds
 - No tax risk : change in tax rules or other factors increases variable rate costs
 - No forced termination risk upon a downgrade
 - Reduces MTM exposure on swap portfolio
- **Creates additional credit capacity**

Transaction Considerations

Considerations

- **Transaction is subject to market conditions**
 - Moderate to neutral savings
 - Relationship between tax-exempt MMD rates and taxable LIBOR swap rates
 - Credit spreads
 - UBS Discount
 - Negative savings at time of sale possible based on market conditions
- **Forego potential positive basis**
 - Basis risk is the difference between floating rates received on swaps based on LIBOR and payments made on bonds based on tax-exempt rates
 - Basis risk can be positive or negative
- **Forego call flexibility of VRDBs**

Outstanding VRDB Debt and Swaps - MHS

Detailed Summary of Variable Rate Debt as of 3/1/2018

Series	Indenture & Lien	CUSIP	Mode	Avg Coup	Bond Maturity	Ratings M/S/F	Amount Issued	Outstanding
Metropolitan Highway System (Senior)								
2010 Series A-1	MHS SR	57563CBF8	VRDB LOC	VR	1/1/37	VMIG1/A-1/F1	\$ 100,000,000	\$ 100,000,000
2010 Series A-2	MHS SR	57563CCZ3	VRDB LOC	VR	1/1/37	VMIG1/A-1/F1	\$ 107,665,000	\$ 107,665,000
Metropolitan Highway System (Subordinated)								
2010 Series A-1 ¹	MHS SUB	57563CAA0	VRDB SBPA	VR	1/1/29	VMIG1/A-1+/F1+	43,625,000	43,625,000
2010 Series A-2	MHS SUB	57563CAB8	VRDB LOC	VR	1/1/37	VMIG1/A-1/F1+	83,100,000	83,100,000
2010 Series A-3	MHS SUB	57563CAC6	VRDB LOC	VR	1/1/39	VMIG1/A-1/F1+	92,845,000	92,845,000
2010 Series A-4	MHS SUB	57563CAD4	LIBOR FRN	VR	1/1/39	N/A	92,845,000	92,845,000
2010 Series A-5	MHS SUB	57563CAE2	LIBOR FRN	VR	1/1/39	N/A	92,845,000	92,845,000
2010 Series A-6	MHS SUB	57563CAF9	VRDB SLOC	VR	1/1/39	VMIG1/A-1/F1+	92,845,000	92,845,000
2010 Series A-7 ¹	MHS SUB	57563CAG7	VRDB SBPA	VR	1/1/29	VMIG1/A-1+/F1+	94,230,000	94,230,000
Total							\$ 800,000,000	\$ 800,000,000

Outstanding Swaps as of 3/1/2018

#	Counterparty	Pay	Receive	Initial Notional	Outstanding Notional	Effective Date	Maturity Date	Hedged Bonds	Full MTM
1	UBS AG	4.750%	68% of 1M LIBOR	207,665,000	207,665,000	07/01/08	01/01/37	2010 Senior A-1 & A-2	-83,410,000
2	UBS AG	4.875%	68% of 1M LIBOR	83,100,000	83,100,000	01/01/08	01/01/37	2010 Sub. A-2	-31,015,000
3	UBS AG	5.000%	68% of 1M LIBOR	43,625,000	43,625,000	01/01/08	01/01/29	2010 Sub. A-1 ¹	-10,570,000
4	UBS AG	4.750%	68% of 1M LIBOR	371,380,000	371,380,000	01/01/09	01/01/39	2010 Sub. A-3, A-4, A-5 & A-6	-159,065,000
5	UBS AG	5.000%	68% of 1M LIBOR	94,230,000	94,230,000	01/01/09	01/01/29	2010 Sub. A-7 ¹	-23,960,000
6	JPM Chase	SIFMA	67% of 3M LIBOR	100,000,000	100,000,000	10/01/02	07/01/29	N/A	-3,250,000
Total				900,000,000	900,000,000				-311,270,000

¹ Represents \$137.855 million notional amount or 17% of UBS swap portfolio. MTM on the highlighted A-1 and A-7 swaps = \$34.53 million as of 3/5/2018 and does not reflect any discount offered by the swap counterparty.

Disclosure Requirements

- The 2018 A Refunding Bonds are being issued as Subordinated Bonds under the Trust Agreement
- Contract Assistance Payments received under the 2009 Contract constitute “Dedicated Payments” under the Trust Agreement and are deposited directly to the Subordinated Debt Service Fund
 - On June 30, 2009, the Turnpike Authority and the Commonwealth entered into a Contract for Financial Assistance (the “2009 Contract”) that obligates the Commonwealth to pay MassDOT \$100 million per fiscal year
 - The obligation of the Commonwealth to make such payments to MassDOT constitutes a general obligation of the Commonwealth for which the full faith and credit of the Commonwealth are pledged
- The 2009 Contract Assistance Payments cover 100% of the debt service on all outstanding Subordinated Obligations, including the 2018 A Refunding Bonds
- Since the repayment source is solely from the 2009 Contract Assistance Payments, not revenues of MassDOT:
 - Ratings on the 2018A Refunding Bonds are based on the Commonwealth’s General Obligation credit
 - The Commonwealth’s most current Information Statement is incorporated by reference into the POS
 - The POS informs prospective purchasers that no financial or operating information about MassDOT is included in the POS because the Dedicated Payments pledged as security for the 2018 A Refunding Bonds are anticipated to exceed the total amount of debt service on Subordinated Obligations, including the 2018 A Refunding Bonds, in each year that the 2018 A Refunding Bonds are outstanding

Steps Taken to Date

- Senior underwriters selected via RFP process
- Negotiations with UBS on swap termination / novation
- Draft documents prepared by bond counsel and disclosure counsel for the refunding bonds
 - Preliminary Official Statement for Subordinated lien bonds scheduled for distribution following Board approval (April 20th)
 - Commonwealth disclosure updated (appendix in POS)
 - Eleventh Supplemental Metropolitan Highway System Trust Agreement by and between MassDOT and The Bank of New York Mellon, as trustee
- Rating meetings scheduled: Moody's / S&P / Fitch (April 11th)

Transaction Schedule

- Sept. 14, 2017 –Underwriter RFP Issued
- Feb. 8, 2018 – F&A Committee Briefing
- Mar. 19 – MassDOT Board Meeting, Seek Transaction Approval
- Apr. 11 – Ratings Agency Meetings
- Apr. 19 – Presentation and Vote by State Finance and Governance Board
- Apr. 20 – Mail POS
- Apr. 23 – F&A and MassDOT Board Meeting, Update
- Apr. 30 / May 1 – Retail / Institutional Pricing
- May 17 – Closing

Summary of Refunding - Subordinated Bonds¹

Description	Subordinated Bonds
Dated Date	5/10/2018
Delivery Date	5/10/2018
Arbitrage yield	5.484196%
Bond Par Amount	138,250,000
True Interest Cost	2.672865%
Net Interest Cost	2.940615%
Average Coupon	5.000000%
Average Life	8.635
Par amount of refunded bonds	137,855,000
Average coupon of refunded bonds	5.750000%
Average life of refunded bonds	8.675
PV of prior debt to 04/25/2018 @ 5.502711%	142,841,546
Net PV Savings	323,581
Percentage savings of refunded bonds	0.234726%
Sub Series A1 Swap Termination	10,570,000
Sub Series A7 Swap Termination	23,960,000
Total Swap Termination	34,530,000

¹ Based on March 5, 2018 rates, subject to change.

Outstanding Debt - Metropolitan Highway System

Outstanding Debt as of 3/1/2018

Series	Indenture & Lien	Base CUSIP	Type	Avg Coups	Final Maturity	Ratings M/S/F	Amount Issued	Outstanding
<u>Metropolitan Highway System (Senior)</u>								
1997 Series A CABs	MHS SR	576018	Fixed	5.62%	1/1/29	A3/A+ /A+	\$ 42,006,617	\$ 42,006,617
1997 Series C CABs	MHS SR	576018	Fixed	5.49%	1/1/23	A3/A+ /A+	89,136,006	51,286,175
2010 Series A	MHS SR	57563C	Variable	VR	1/1/37	See Below	207,665,000	207,665,000
2010 Series B	MHS SR	57563C	Fixed	4.98%	1/1/37	A3/A+/A+	882,310,000	632,060,000
Subtotal							\$1,221,117,623	\$ 933,017,792
<u>Metropolitan Highway System (Subordinated)</u>								
2010 Series A	MHS SUB	57563C	Variable	VR	1/1/39	See Below	592,335,000	592,335,000
2010 Series B	MHS SUB	57563C	Fixed	4.98%	1/1/35	Aa2/AA/AA+	261,220,000	261,220,000
Subtotal							\$ 853,555,000	\$ 853,555,000
Total							\$2,074,672,623	\$1,786,572,792